



OECD Regional Development Studies

Global Compendium of Land Value Capture Policies



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Please cite this publication as:

OECD/Lincoln Institute of Land Policy, PKU-Lincoln Institute Center (2022), *Global Compendium of Land Value Capture Policies*, OECD Regional Development Studies, OECD Publishing, Paris, <https://doi.org/10.1787/4f9559ee-en>.

ISBN 978-92-64-51699-1 (print)
ISBN 978-92-64-69088-2 (pdf)
ISBN 978-92-64-84352-3 (HTML)
ISBN 978-92-64-69316-6 (epub)

OECD Regional Development Studies
ISSN 2789-7990 (print)
ISSN 2789-8008 (online)

Photo credits: Cover © cosveta/Getty Images

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Preface

The pressures on cities are mounting. They must meet the demands of a growing population while responding to urgent needs arising from the digital and green transitions. The Sustainable Development Goals (SDGs) remain an important guide in their efforts to adapt and improve urban infrastructure in response to these pressures, and local leaders are rising to the challenge. Yet public resources – which have been stretched by the response to the COVID-19 pandemic – often do not match the level of ambition that is required. Land Value Capture provides a set of fiscal instruments that can help fill that gap. Equally importantly, well-designed Land Value Capture mechanisms can do so in a tailored, targeted and fair way. Yet these instruments are still not widely used, or even widely known.

This Global Compendium of Land Value Capture Policies fills this knowledge gap. It reflects a successful collaboration between the OECD and the Lincoln Institute of Land Policy, building on the expertise of both organisations in innovative policies concerning land and its use. GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) also contributed their expertise and support throughout the process, making the Compendium a truly collaborative effort.

This Compendium will provide policymakers with a unique and important resource as they develop ambitious plans to make cities more liveable and sustainable. It reveals the huge potential for land value capture to unlock important new infrastructure and land uses: from social housing to transport, from water to energy. It provides numerous practical examples to illustrate key opportunities as well as the risks that must be managed. In doing so, we hope this Compendium will inspire, as well as inform, policymakers in their efforts to build cities fit for the future.



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Foreword

Urbanisation is a global megatrend. It is estimated that an additional 1.5 billion people will live in cities by 2050. This will inevitably increase demand for public services, and, in turn, land equipped with the appropriate supporting infrastructure. At the same time, cities are also confronted with challenges to become climate-neutral and reduce their environmental footprints, which will also require investment in public transport, sustainable water supplies, renewable energy, among other items, together with the need to provide green open spaces for the well-being of citizens.

Whilst the private sector has a role to play in these transitions, public investment will also be critical, and governments will need to identify funding sources to meet these challenges. Land value capture comprises a set of fiscal instruments that allows public projects to be funded by uplifts in land values generated by public action. However, despite its promise, land value capture is not utilised to its full potential in many cases, in part due to a lack of knowledge on good practices and a common conceptual framework.

This Compendium aims to address these gaps by bringing together land value capture practices of 60 countries across the globe, providing analyses and examples of the application of these tools across a variety of settings. The Compendium also provides a common taxonomy of land value capture instruments that facilitates cross-country comparisons. It reveals trends and common obstacles based on unique survey data across countries. It includes detailed accounts of the enabling environment, legal frameworks and the practical application of individual land value capture instruments in each country. The Compendium aims to be a guide for policymakers seeking to learn from good practices and effectively implement land value capture, and opens up new inquiries for future research.

This report was carried out as part of the OECD's Regional Development Policy Committee (RDPC) Programme of Work. The RDPC provides a unique forum for international exchange and debate on regional economies, policies and governance. The report was discussed at the 46th session of the RDPC on 12 May 2022. The report was approved by the RDPC [CFE/RDPC/URB(2022)3] via written procedure on 1 June 2022.

Acknowledgements

This report was jointly produced by the OECD Centre for Entrepreneurship, SMEs, Regions and Cities (CFE), led by Lamia Kamal-Chaoui, Director, and the Lincoln Institute of Land Policy (Lincoln Institute), led by George W. McCarthy, President and CEO. This report was produced as part of the Programme of Work of the Regional Development Policy Committee (RDPC). Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) provided further financial and administrative support.

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The OECD and Lincoln Institute would like to thank Aparna Das (GIZ), Alix Loisier Dufour (GIZ) and Barbara Scholz (GIZ) for their collaboration and contribution to the Compendium. In addition, special thanks are directed to the following experts for their participation in the advisory group and for completing the questionnaire for each country: Illari Cristina Aguilar Sanguinetti, Gabriel Ahlfeldt, Ahmed Tarek Ahmed Awad Alahwal, Albina Aleksiené, Yakubu Aliyu Bununu, Rachelle Alterman, David Amborski, Camilo Arriagada, Patricia Austin, Armands Auziņš, Joseph Ayitio, Izabella Barati, Charl-Thom Bayer, Ashiru Bello, Stephen Berrisford, Samuel Banleman Biitir, Myungshik Choi, Tony Crook, Musharraf Cyan, Aparna Das, Jean Du Plessis, Richard Dunning, Agustinus Yunastiawan Eka Pramana, Peter Ekbäck, Moha El-Ayachi, Marcela Roman Forastelli, Georgia Giannakourou, Brano Glumac, Julius Golej, Maria Cristina Gomezjurado Jaramillo, Margarita Greene, Sonia Guelton, Astrid Haas, Jean-Marie Halleux, Enamul Haq, Andreas Hengstermann, Yu Hung Hong, Du Huynh, Evelin Jürgenson, Minjee Kim, Julie Kim, Ignacio Kunz, Julie Lawson, Anka Lisec, Dirk Löhr, Yogita Lokhande, Dulce Lopes, Manuel Martin Lozada Checa, Melinda Lis Maldonado, María Mercedes Maldonado, Carlos Marmolejo Duarte, Andrii Martyn, Pablo Molina Alegre, James Muldowney, Tony Mulhall, Jin Murakami, Berit Irene Nordahl, Luise Noring, Martim O. Smolka, Sock Yong Phang, Laura Pogliani, Sonia Rabello, Francisco Salazar, Paulo Sandroni, Arthur Schindelegger, Annette Tejada, Frew Mengistu Truneh, Şevkiye Şence Türk, Erwin Van der Krabben, Eliška Vejchodská, Kauko Viitanen, Anis Wahabi, Dalia Wahdan, Jiawen Yang and Tomasz Zaborowski.

Pilar Philip co-ordinated the production process of the report, and Nikolina Jonsson and Carlos Lerma Poveda provided editing support.

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Executive summary

The global population living in cities has doubled over the last 40 years and will increase another 1.5 billion to reach 5 billion by 2050. This will drive intense demand for land equipped with infrastructure. Land use and infrastructure will also need to become consistent with global environmental challenges: cities will need to become climate neutral, reduce other environmental footprints and deal with unavoidable global warming. This will require new investment in sustainable public transport, water supplies, renewable energy, and green open space, among others.

Used appropriately, land value capture (LVC) can contribute to meeting these challenges. LVC encompasses a set of policy instruments that allow governments to capture the land value uplifts generated by public interventions, such as infrastructure investments or administrative actions, like land use changes. However, despite the benefits that can be provided by LVC policies, the success of countries in applying them varies greatly. In addition, a lack of a common analytic framework hinders the exchange of good LVC practices and innovative policy ideas.

This Compendium assesses the LVC practices of 60 countries across the globe. It presents a common taxonomy of LVC instruments that facilitates comparative analyses. Using unique cross-country survey data, it reviews the legislative and administrative frameworks and the barriers to LVC implementation.

The OECD-Lincoln taxonomy of LVC instruments

The OECD-Lincoln taxonomy standardises the terminology and definitions for the following LVC instruments, allowing for meaningful cross-country comparisons while minimising confusion.

- **Infrastructure levy:** taxes or fees levied on landowners possessing land that has gained value due to government-initiated infrastructure development
- **Developer obligations:** cash or in-kind contributions that defray costs for additional infrastructure or services that need to be provided due to private development
- **Charges for development rights:** cash or in-kind contributions payable in exchange for development rights or development potential above a set density baseline
- **Land readjustment:** the practice of pooling fragmented land parcels for joint development, with owners transferring a portion of their land for public use
- **Strategic land management:** the practice of governments actively buying, developing, selling and leasing land to advance public needs and recoup value increments borne through public action

Key findings

- The majority of countries lack a legal definition of or justification for LVC. Incorporating these definitions into law can reduce legal disputes and promote citizen support, two major obstacles to LVC across countries.

- Legal disputes are most common for the infrastructure levy, as fees are charged for public works initiated by the public sector. Legal disputes for developer obligations and charges for development rights are less common, as fees are levied as a response to private development initiatives.
- Local governments play a critical role in the implementation of the infrastructure levy, developer obligations and charges for development rights. Responsibilities for land readjustment and strategic land management, however, tend to be shared more with the national government, other public entities, and private sector actors, including landowners.
- Lower-income countries tend to award less discretion to local officials for implementing LVC compared to high-income countries, mainly due to fears of corruption and lack of trust in local governments.
- The most common obstacle in LVC implementation is resistance by property owners. Lack of administrative capacity is also a common obstacle, especially in lower-income countries.
- All countries surveyed, excluding Uganda, use some form of LVC at least on an occasional basis. Developer obligations are the most used instrument, followed by strategic land management. Charges for development rights are least common.
- European countries rely more on developer obligations and strategic land management, while the use of charges for development rights is more common in the Asia-Pacific. The use of land readjustment in the Americas is particularly rare.
- Lower-income countries rely more on strategic land management and land readjustment than higher-income countries but make little use of developer obligations. This may be due to rapid urbanisation in lower-income countries necessitating urban conversion of rural land, made possible through active public development of land and land readjustment schemes. A lack of local government administrative capacity and fear of corruption in lower-income countries can also make implementing developer obligations difficult, as they require negotiations with private developers.

Key considerations

- **Eliciting greater public support is key to successful implementation.** Land value increments are collected more successfully when consultation channels with landowners and stakeholders exist and the benefits from a proposed public intervention and/or administrative action are clearly laid out at the outset. However, consultation processes with property owners that are affected by LVC instruments are lacking or insufficient in many countries.
- **Establishing clear and fair rules for LVC through legal definitions, legislation and effective law enforcement is important.** LVC is better accepted by landowners when charges are derived from the amount of land value uplift a public improvement generates, as opposed to being charged based on public costs. Considering the socioeconomic status of landowners by differentiating LVC charges based on income levels improves public reception while fulfilling redistributive goals.
- **The successful implementation of LVC requires developing greater local government capacity.** In most countries, local governments have responsibility for determining which landowners are affected by LVC, setting the fees, negotiating with landowners and developers, and managing land assets, among others. However, in many cases, local governments lack the capacity to carry out these tasks. National governments need to provide lower-level governments with adequate administrative support, policy guidelines, and accurate cadastre and land transaction data for LVC implementation. Local governments should also take greater action on capacity building for LVC. In addition, spatial planning frameworks should clearly define the roles of different levels of government in preparing plans and land-use regulations that serve as the baseline for LVC administration.

1 Land value capture across the globe

This chapter presents an overview of the use of land value capture across 60 countries included in the Global Compendium of Land Value Capture. It begins with an introduction of the principles of land value capture and the motivation for the Compendium. It presents the OECD-Lincoln taxonomy of land value capture instruments, which provides a common framework for comparative analyses of land value capture practices across countries. It briefly discusses the large scale survey and data collection process for the data underlying the Compendium. The enabling environments for land value capture across countries are discussed, with a distinction between higher and lower income countries. Subsequently, the chapter briefly overviews cross-country findings for each land value capture instrument. It concludes with some common considerations for land value capture implementation.

Introduction

By mid-century, two thirds of the world population will live in urban centres (OECD/European Commission, 2020^[1]), driving intense demand for land equipped with infrastructure. This pressing demand for serviced land is strong especially in the urban periphery. At the same time, cities will need to become climate neutral and sharply reduce other environmental footprints, such as from raw materials use. It requires different and more upfront infrastructure investment, including in public transport, sustainable water supplies, renewable energy, and green open space, among others. It also requires better urban planning to make jobs and facilities in cities accessible with low energy input and zero emissions. The land value capture instruments discussed in this Compendium can contribute to meeting these challenges.

The altering of land use or provision of public services by governments often triggers significant increases in the value of land. Making even some of this additional value available for public investment can significantly help make cities more liveable and sustainable. This is because land is one of the most valuable forms of capital. In eight OECD countries, land makes up approximately 40% of the total capital stock. For the entire OECD, this amounts to USD \$152 trillion (OECD, 2017^[2]).

While local governments increase land value with public investment and changes in land use regulation, they often grapple with fiscal shortfalls holding back efforts to finance and manage urban development. Traditional fiscal policies largely ignore the fact that the cost of providing urban infrastructure is public, but some of the economic benefits, notably those that materialise in higher prices of land are private, meaning that landowners typically reap unearned wealth (Smolka, 2019^[3]). A common example is when rural land is converted to residential or commercial uses.

Policymakers need to think creatively about policy instruments to mobilise the resources to pay for needed investment. Land value capture (LVC), also known as land value recovery, is one method that enables governments to recover and reinvest land value increases that result from public decisions. By tapping into the windfall profits public investment and urban planning generates in land ownership, it may also avoid the distortions that taxation imposes on economic incentives. In this way, it may help direct efforts away from rent-seeking behaviour, for example to acquire land for the mere purpose of realising value gains, towards gainful economic activity.

The growing appeal of LVC also includes its potential to put fiscal decentralization into practice. It allows local governments to raise local funds for cities and communities' urban planning and infrastructure needs (Smolka, 2019^[3]).

The principles of LVC: How does it work?

LVC is based on the simple premise that public action should generate public benefits. It refers to policies that allow public authorities to recover increases in land values which result from government actions, including the development of land, infrastructure and service deployment, and the alteration of land use regulations (OECD, 2017^[2]). This recovered land value serves to fund urban infrastructure and public services.

LVC constitutes three basic steps. First, there is a value creation stage. This is when the government or public administration takes some action on or adjacent to private land, that results in increased land value. This action may be an investment or a change in administrative or regulatory statutes conditioning the use of land. Second, there is the value recovery stage. This is when the full or partial value increase is recovered by the public. Finally, there is the value distribution stage. This is when the recovered land value is reinvested in public benefits.

Hence LVC includes the following elements:

- It refers exclusively to increments in the value of the land.

- It requires a definition of how public action generates land value gains, so they can be recovered.
- Land value increments derived from such public action need to be mobilised by creating LVC instruments. These are commonly fees or in-kind contributions, among others (Smolka, 2013^[4]).

From an equity perspective, LVC policies can distribute both the costs and benefits of urbanization and land development, because value capture allows a community as a whole to reap the benefits of development more fully. If land value increments due to public action are not recovered, those increments will remain with private property owners.

This *Global Compendium of Land Value Capture* (hereafter ‘the Compendium’) shows that successful LVC requires overcoming a number of challenges, as with any other policy tools. These include building an adequate legal framework and developing administrative and technical capacity to assess land value gains from public actions. Additionally, there can be challenges to secure support from stakeholders. For example, there may be disagreement about how contributions to LVC should be distributed.

While LVC can mobilise additional resources sustainable and more equitable urban development requires, LVC also needs to be implemented in a way that serves this purpose. Land value gains can result from developing land in an unequitable, unsustainable way. If it is not linked to good planning practices and consistent enforcement of land use regulations, LVC can lead to overdevelopment and increased built-up area, resulting in adverse environmental impacts. As LVC is highly dependent on changes in land values, it can also result in unstable and cyclical fiscal revenues during boom-bust cycles in macroeconomic markets and construction activity (Kim and Dougherty, 2020^[5]). Equity benefits will also depend on how the resources mobilised by LVC are used. The Compendium illustrates these issues with examples.

Motivation for the Compendium

Many countries use LVC policies to some degree, but the instruments and methods as well as the success in applying them differ greatly. The implementation of LVC depends on different historical traditions, the context of land markets, institutional capacity, along with constitutional and legal frameworks and experience in applying them. For example, the history of active land policy in the Netherlands is closely linked to considerable public land holdings and municipalities’ capacity for large-scale land management (van Oosten, Witte and Hartmann, 2018^[6]). Latin America’s long tradition of utilising infrastructure levies and developer obligations (*contribución de valorización* and *contribución por mejoras*) can partly be attributed to historic influences from Spanish law (Henoa González, 2005^[7]). Land readjustment in Japan and Korea developed with industrialisation after World War II, where it led to rapid urbanisation which increased demand for serviced urban land (OECD, 2022^[8]).

Previous case studies are typically limited to developed economies. They already document a wide range of approaches to LVC and of their success. But little systematic, comparable information has been available about the instruments countries use, as well as about the enabling conditions at national and regional levels which can guide local governments toward greater use. There is also no uniform application of basic terms and names of LVC instruments. These barriers present challenges for policymakers in embracing the more frequent and robust use of LVC to advance societal goals, manage urban development, and mitigate social and spatial inequalities. As a result, few governments use LVC on a large scale.

The Compendium, a joint project by the OECD and the Lincoln Institute of Land Policy (hereafter ‘Lincoln Institute’), is hence an ambitious undertaking to understand the full landscape of LVC instruments, how they are configured and deployed as well as their enabling conditions across the globe in OECD and Non-OECD countries. The Compendium features an overview of the LVC approaches in 60 countries, the governance and legal frameworks in which they are embedded as well as enabling factors and barriers for their further development. It highlights the differences and similarities across countries. They show which countries have a mature LVC practice, and in which countries they are nascent or remain undeveloped.

This introductory chapter provides a concise overview of LVC practices across countries included in the Compendium. Importantly, the chapter should not be taken to be an exhaustive summary of the state of LVC across the globe, but rather a harbinger for further research on LVC. The following chapter provides country fact sheets with a wealth of comparable information, focusing on aspects that are important for the systematic adoption of LVC. The Compendium allows local and national governments to compare their approaches, learn from each other as well as understand and apply good practices in different context. It can help researchers and policy makers recognise what it would take to unleash their full potential. It can help countries develop the capacity and competences for LVC to understand the opportunities, trade-offs, and pitfalls to avoid when configuring legal, governance, and other enabling frameworks. It can help deploy tools that provide the resources we need for sustainable urban development.

The OECD-Lincoln taxonomy of LVC instruments

Providing common definitions for the fiscal or regulatory instruments that comprise LVC is difficult, especially at a global scale, because these instruments are in many cases tightly integrated with broader legislative frameworks, planning practices and property rights that are unique to countries or regions. They are also diverse in scope. They include instruments that levy taxes or fees, in-kind contributions in the form of land or infrastructure, and government practices for managing land and its development.

The ‘OECD-Lincoln taxonomy’ of instruments developed for the Compendium stems from extensive debate between the OECD, the Lincoln Institute and leading academics in the field. This taxonomy allows meaningful cross-country comparisons, cutting through the heterogeneous definitions and uses of instruments across the globe. The taxonomy recognises how similar instruments are referred to differently across countries, for example how ‘betterment levies’ in Colombia are similar in scope to ‘special assessments’ in the United States. It also minimises confusion by identifying a common set of underlying characteristics for each instrument, thus recognising how, for example, ‘infrastructure levies’ in Israel and Poland are in fact ‘developer obligations’ in other countries.

Reflecting the practical difficulties in defining the scope of LVC instruments, the OECD-Lincoln taxonomy is not exhaustive. Firstly, the taxonomy does not include land and property taxes. This is not to say that such taxes do not function as LVC instruments. With the right tax structures, they can indeed effectively recover the value increments triggered by public interventions. However, in practice, it is difficult to delineate and define the role of land taxes as a separate LVC instrument, as they are typically used in a more general fiscal context. This is especially the case as these taxes are usually levied in a uniform manner without distinguishing property owners that are affected by public interventions. Similarly, other tools such as joint ventures, public-private partnerships, or tax increment finance are not included in the taxonomy or the Compendium due to difficulties in delineating their role in capturing value increments.

The following sections present the OECD-Lincoln taxonomy of LVC instruments. For each instrument, the taxonomy provides a name, definition, and short description that outlines the defining characteristics of the instrument in question.

Infrastructure levy

An infrastructure levy is a tax or fee levied on landowners possessing land that has gained in value due to infrastructure investment initiated by the government.

With an infrastructure levy, landowners pay a tax or fee for public infrastructure from which they specifically benefit, for example nearby public roads, transport, utilities and parks. The decision to build infrastructure is generally initiated by the government, and is not a consequence of private development interests. The government identifies the catchment area in which landowners are deemed to benefit from public works and pay the levy. The amount of the levy should be based on the amount of land value benefit obtained

and can be either a one-time payment or payable over a longer period. Other common terms for the infrastructure levy include betterment contributions, betterment levies or special assessments.

Developer obligations

A developer obligation is a cash or in-kind payment designed to defray the costs of new or additional public infrastructure and services private development requires.

Developer obligations mainly apply when developers seek development approval or special permissions. The obligations can consist of cash or in-kind contributions. In some countries, developers are required to build affordable housing in exchange for approval. This practice, called inclusionary zoning, can be viewed as a form of developer obligation. Unlike the infrastructure levy, developer obligations are triggered by the initiative of private developers and land owners. The obligations can be either negotiated between the government and developers, or calculated using a fixed formula. Common developer obligations include impact fees, negotiated exactions, or development charges.

Charges for development rights

Charges for development rights are cash or in-kind contributions payable in exchange for development rights or additional development potential above a set baseline.

Charges for development rights may be levied to build at a higher density beyond an established baseline that is defined by a jurisdictional ordinance or regulation. Thus, they require clear, predefined land-use and zoning regulations that set baseline and maximum densities. Developers may also be charged for development rights when governments alter zoning or relax density regulations. In some cases, limited development rights, for example in protected environmental areas, can be transferred to a different plot better suited to higher density development. Usually, the types and amounts of cash or in-kind charges are defined in advance in ordinances or local regulations. Related terms include sale of development rights, sale of air rights, and transfer of building rights.

Land readjustment

Land readjustment is the practice of pooling fragmented land parcels for joint development, with owners transferring a portion of their land for public use to capture value increments and cover development costs.

Land readjustment is where privately-owned, contiguous plots of land are pooled and developed jointly. It is often accompanied by zoning changes or relaxed density regulations so that newly developed land becomes more valuable. In turn, landowners provide a share of their plots for public infrastructure and services, such as public roads, utilities and parks. Landowners are returned a smaller plot of land that is nonetheless more valuable due to the improvements made. Land readjustment can be initiated by local governments or private landowners. The instrument is referred to as land pooling in some countries.

Strategic land management

Strategic land management is the practice of governments actively taking part in buying, developing, selling and leasing land to advance public needs and recoup value increments borne through public action.

With strategic land management, governments buy land or use existing land holdings to extract values from them, which can in turn be used to fund public infrastructure and services. If governments acquire land at predevelopment prices, they can fully capture increases in land value that are due to public development or regulatory changes. Governments can recover land value gains with the sale or lease of rezoned and developed plots that are greater in value. Similarly, governments can lease usage rights, capturing value increments through higher rents.

Box 1.1. Examples of LVC instrument use in practice

Infrastructure levy (Colombia)

The legal basis for the infrastructure levy (contribución de valorización) in Colombia has a long history, dating back to 1921. It applies to public roads, public transport, public utilities and green space, among others. It has been widely used in large and intermediate cities to finance road infrastructure.

The total levy usually amounts to the estimated total cost of public works. In some cases, the levy is proportional to the land value increment, which is often preferred by landowners. Recovery of up to 30% of administrative costs is also allowed by law, although in practice local governments usually charge less than 10%. Affected landowners are identified based on market-based approaches that estimate the distance within which public works increase land values. Landowners pay the levy according to a fixed formula, based on the distance to the new infrastructure, location, size, quality and property value.

Developer obligations (Germany)

Two types of developer obligations exist in Germany, both which are regulated by the Building Code (Baugesetzbuch). ‘Urban development contracts’ (städtebauliche Verträge) cover a wide range of costs generated by private developments, and are always applicable. They are based on formulas that consider the size, type and value of land, or based on negotiations. Charges usually cover a significant share of public costs. They can be paid through affordable housing, for example in Frankfurt where up to 30% of housing units are required to be affordable rental units. Local governments can also charge ‘development contributions’ (Erschließungsbeiträge) in addition to städtebauliche Verträge for costs associated with utilities and road construction in the immediate vicinity of private development, if not already covered by the städtebauliche Verträge. These contributions can amount to 90% of public costs.

Charges for development rights (Brazil)

Developers pay charges for development rights for zoning changes (density and use) and for higher density above a baseline determined by local plans and ordinances. Such charges are common in large capital cities such as São Paulo, where the real estate market is dynamic and the Floor Area Ratio (FAR) is low, either historically or through legal reforms. The charge is calculated as a proportion of the extra FAR multiplied by average land price per square meter in some cities, while others such as São Paulo and Curitiba determine charges through an auction market. Development rights can be transferred within the city or a specific zone. Local governments spend collected revenues throughout the city, and some cities have created urban development funds through which revenues are invested.

Land readjustment (Japan)

Land readjustment has been used since the late 19th century, and was formalized in 1954 with the Land Readjustment Act. It is used for urban expansion, urban development or renewal, disaster prevention and reconstruction. An average of 870 land readjustment projects are conducted yearly. Land readjustment projects can be initiated by governments, special public bodies, private entities, and land owners and leaseholders. Land readjustment first needs approval from prefectures, similar to urban planning projects, as well as the consent of at least two-thirds of involved landowners and leaseholders. Typically, 30-40% of readjusted plots are reserved for public improvements including infrastructure and utilities. Newly readjusted areas also typically include publicly owned plots for sale, which are used to recover development costs.

Strategic land management (Netherlands)

Strategic land management (called Active Municipal Land Policy) plays a crucial role in spatial planning, housing policy, and land value capture in the Netherlands. The instrument is mainly used in the largest

cities of Amsterdam, Rotterdam, The Hague and Utrecht. The legal basis is defined in "Besluit Begroting en Verantwoording Provincies en Gemeenten" (BBV) and the "Mededingingswet" (Competition Law), which outlines conditions for how municipalities must act as market players in the land market. Typically, local governments acquire vacant, abandoned or unproductive land through debt financing (e.g. bonds), in advance of needs for the purposes of urban development, spatial planning, and capture of capital gains. After rezoning, municipalities service the land through physical preparation and the building of public spaces and infrastructure. Local governments recover initial investments through the sale or lease of the developed plots.

Source: Authors' elaboration based on OECD-Lincoln LVC survey

Data and survey methodology

The analysis presented in this chapter and throughout the Compendium are based on unique data from a large-scale questionnaire covering aspects of LVC instruments and their legal and enabling frameworks. The 'OECD-Lincoln LVC survey' was a joint initiative of the OECD and the Lincoln Institute, with significant contributions from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Country-level data for 60 OECD and non-OECD countries was collected over the course of 2020 and 2021. Box 1.2 provides further details concerning the survey methodology.

Box 1.2. The OECD-Lincoln LVC survey

Data collection for the OECD-Lincoln LVC survey began with the OECD developing a comprehensive questionnaire in close collaboration with the Lincoln Institute. The methodology and content of the questionnaire also benefited from consultation with an expert advisory group set up by the OECD and the Lincoln Institute, comprised of leading urban planning, economics and law experts. The questionnaire was first piloted in three countries—Brazil, Japan, and the Netherlands—to identify potential issues, and the final version of the questionnaire was completed online during the course of 2020 and 2021 by a pool of academic experts having substantial expertise of LVC practices in each country. These experts were identified jointly by the OECD and the Lincoln Institute, with special contribution from GIZ. The completed questionnaires were reviewed by the OECD Secretariat, after which revisions were conducted until early 2022.

The questionnaire covered all main aspects of LVC, including the legislative and administrative frameworks, enabling factors and obstacles, along with detailed information concerning the use of individual LVC instruments in a particular country. The questionnaire included over 350 queries. Respondents were given 6 to 8 weeks to complete the questionnaire, with extensions provided upon request. As much as possible, respondents were asked to refer to typical scenarios of LVC use in the country within the last 10 years. Respondents were asked to choose cities, municipalities, or states that are as representative as possible of the entire country, according to individual best judgement.

The main aim of the questionnaire was to collect data comparable across countries on the use of LVC, while also considering each country's nuances and specificities. While it relied mostly on closed-ended questions to obtain comparable, factual information, responders were asked to provide additional information in open-ended format to contextualise the standardised responses. To reduce confusion, the questionnaire also refrained from referring to instruments by name, rather giving detailed descriptions and use-case scenarios to describe the instrument in question.

Table 1.1 provides a tabulation of the countries studied based on location and income levels. 27 (45%) of countries are located in Europe, followed by 12 (20%) in the Asia-Pacific region, 11 (18%) in the Americas, and 10 (17%) in the Middle East and Africa. 35 (58%) of the countries studied are high-income economies. Notably, data was also collected for 11 (18%) lower-middle income countries, as well as 2 (3%) low-income countries (Ethiopia and Uganda).

Table 1.1. Countries in the Compendium by continent and income level

	Americas	Asia & Pacific	Europe		Middle East & Africa
High-income	Canada Chile United States	Australia Hong Kong Japan Korea New Zealand Singapore	Austria Belgium Czech Republic Denmark Estonia Finland France Germany Greece Hungary Ireland Italy Latvia	Lithuania Luxembourg Netherlands Norway Poland Portugal Slovak Republic Slovenia Spain Sweden Switzerland United Kingdom	Israel
Upper-middle income	Argentina Brazil Colombia Costa Rica Dominican Republic Ecuador Mexico Peru	China	Turkey		Namibia South Africa
Lower-middle income & Low-income		Bangladesh India Indonesia Pakistan Vietnam	Ukraine		Egypt Ethiopia Ghana Morocco Nigeria Tunisia Uganda

Note: Classification of countries into income groups is based on World Bank country and lending groups for 2022, utilising 2020 GNI per capita calculated using the Atlas method. Low-income countries are those with a GNI per capita of \$1,045 or less; lower middle-income countries are those with a GNI per capita between \$1,046 and \$4,095; upper middle-income economies are those with a GNI per capita between \$4,096 and \$12,695; high-income economies are those with a GNI per capita of \$12,696 or more.

Source: World Bank (2022^[9]), World Bank Country and Lending Groups, <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups> (accessed on 25 Feb 2022); OECD-Lincoln LVC survey

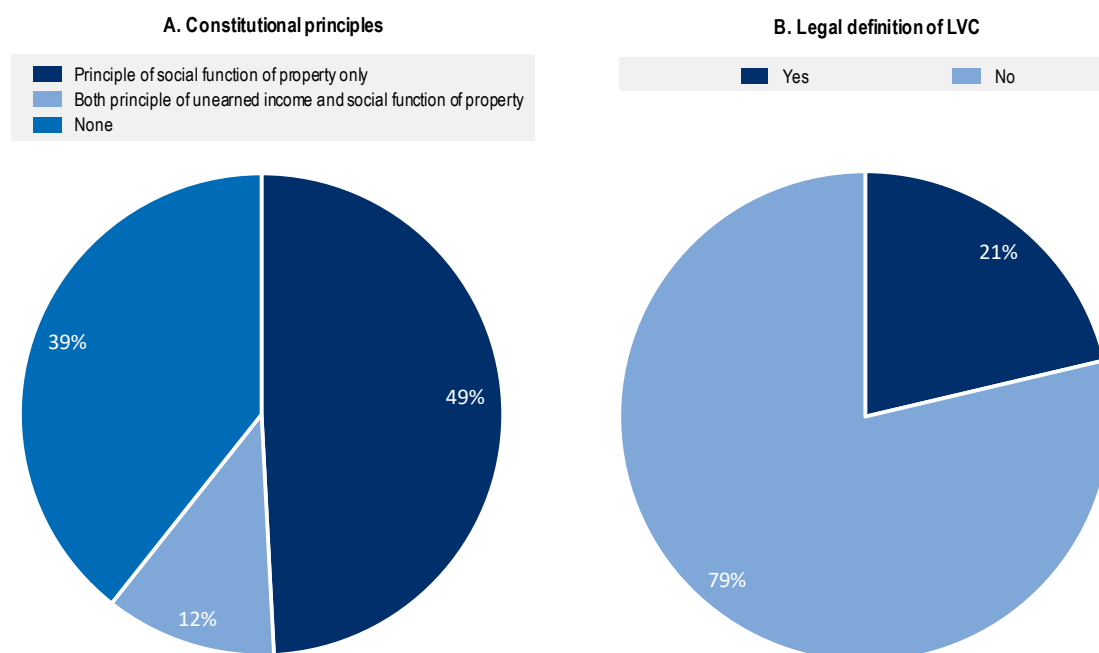
The enabling environment for Land Value Capture

Implementation of LVC instruments depends on the enabling environment, including the constitutional and legal frameworks along with the administrative system. Legislative frameworks are important for setting the legal basis for LVC, defining procedures and coordinating intergovernmental interests, among others. Administrative systems such as the planning system, land registries, cadastres and land valuation mechanisms are critical to implementing LVC. Differences in these frameworks and systems leads to a wide variation in LVC utilisation across countries. The following sections highlight these observations.

Constitutional and legal frameworks

LVC is closely linked to the principle of social function of property and the principle of unearned income. The former implies that private property rights are limited by an obligation to use property (including land) in ways that benefit society as a whole. The latter implies that no citizen should accumulate wealth that does not result from his or her own effort. The majority of surveyed countries have at least the principle of social function of property embedded in their constitutions, while 12% of countries, mostly in South America and Africa, also embed the principle of unearned income (Figure 1.1, panel A). However, only 21% of countries specifically define LVC in legislation (Figure 1.1, panel B). Incorporating these definitions into law can reduce legal disputes and garner citizen support, two issues commonly stated to be major obstacles in LVC implementation across many countries. For example, the *Organic Law of Spatial Planning, Land Use and Management* of Ecuador establishes LVC as the “equitable distribution of the benefits of public actions, and decisions on the territory and urban development in general”, while stating that “society has the right to participate of these benefits under the social function of property”. In Spain, Article 47 of the 1978 Constitution states that “the society will participate in the land value gains produced by the urban actions of public entities”.

Figure 1.1. Legislative frameworks for LVC



Note: Principle of unearned income refers to principles stating that no citizen should accumulate wealth that does not result from his/her own efforts. Principle of social function of property refers to principles stating that private property rights are limited by an obligation to use property in ways that benefit society as a whole. For Panel A, no countries have a principle of unearned income only.

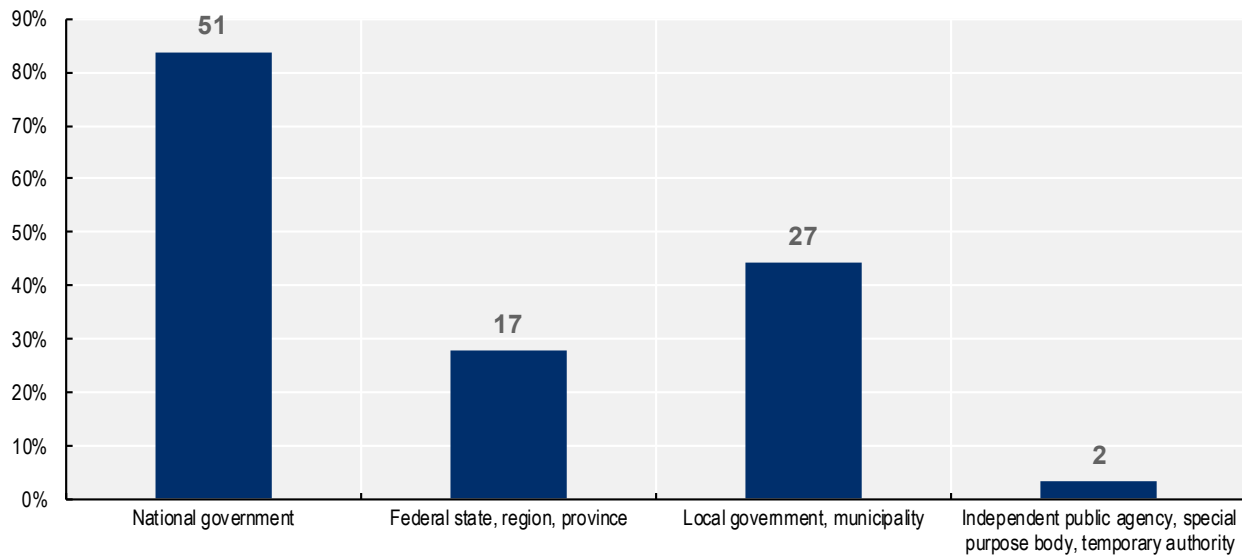
Source: Authors' elaboration based on OECD-Lincoln LVC survey

The national government is in charge of creating the framework legislation for LVC in most countries (Figure 1.2). This is in contrast to the actual implementation of LVC, which is largely the responsibility of subnational actors in most countries. Out of the 51 countries where national governments play a role, 43% do not share legislative responsibilities with subnational governments, while only 35% shared responsibilities with local governments or municipalities. Whether the hierarchy of responsibilities in defining legal frameworks for LVC has an effect on local government initiative and capacity to effectively

use LVC is an open area of research. Further understanding of the drivers and motivating factors for local governments in implementing LVC is needed.

Legal frameworks are closely connected with governance traditions of countries. In unitary countries or centralised federal countries, guidelines and a legal basis for LVC provided by national governments could be helpful in implementing LVC more effectively. Conversely, in federal countries where states have strong levels of autonomy, a national legal basis for LVC may not necessarily be useful, or realistic. In the United States, Canada and Australia for example, states are responsible for LVC frameworks and implementation (OECD, 2017^[10]). How legal frameworks determine the frequency and effectiveness of LVC implementation differently across a range of government structures is another topic open to research.

Figure 1.2. Governments involved in LVC legislation

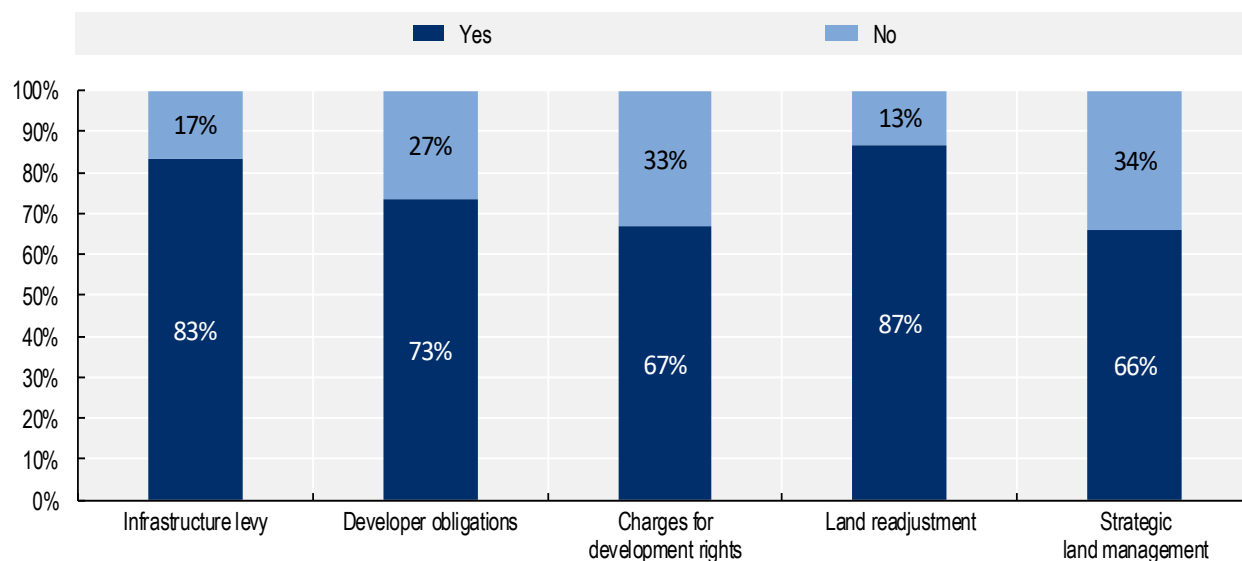


Note: Multiple responses allowed. Labels indicate the number of countries in each category.

Source: Authors' elaboration based on OECD-Lincoln LVC survey

While most countries do not specifically define LVC in national legislation, the majority of surveyed countries do have a legal basis for individual LVC instruments (Figure 1.3). Over 80% of countries utilising infrastructure levies and land readjustment have a basis for them in law that outlines implementation procedures and criterion for use. The legal basis for charges for development rights and strategic land management is comparatively less widespread, with roughly one-third of surveyed countries indicating no such basis in legislation. For charges for development rights, this may be due to the fact that the instrument, and its use, is comparatively new. Legislation in most countries, when present, has only been in place since the late 1990s. For example, related legislation was only enacted in 2001 in Brazil, a country well-known for the use of Certificates of Additional Construction Potential (known locally as CEPACs, or *Certificados de Potencial Adicional de Construção*). For strategic land management, many of the activities that constitute LVC are regular government tasks, possibly making specific legislation unnecessary or difficult to enact.

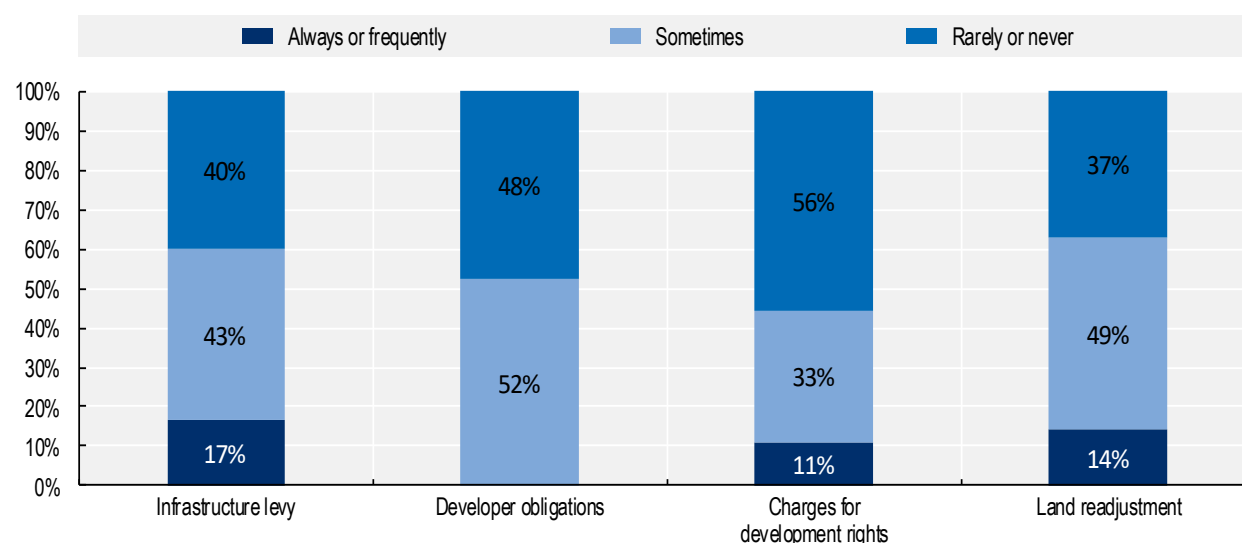
Figure 1.3. Presence of legal basis for LVC instruments



Source: Authors' elaboration based on OECD-Lincoln LVC survey

Legal appeals against the use of LVC instruments are common, although variation exists across instruments (Figure 1.4). They are most common for the infrastructure levy and land readjustment. Appeals against developer obligations and charges for development rights are comparatively less common. Such patterns likely relate to individual instrument characteristics. The infrastructure levy is commonly charged against the interests of property owners for infrastructure investments that benefit the general public, and not individual owners. Similarly, land readjustment requires that private land owners give up a portion of land for the public good, as a result of government action. Appeals are more likely to arise in such cases, compared to developer obligations and charges for development rights which apply when developers take the initiative to apply for development approval, and not involuntarily through government action.

Figure 1.4. Frequency of appeals against the use of LVC



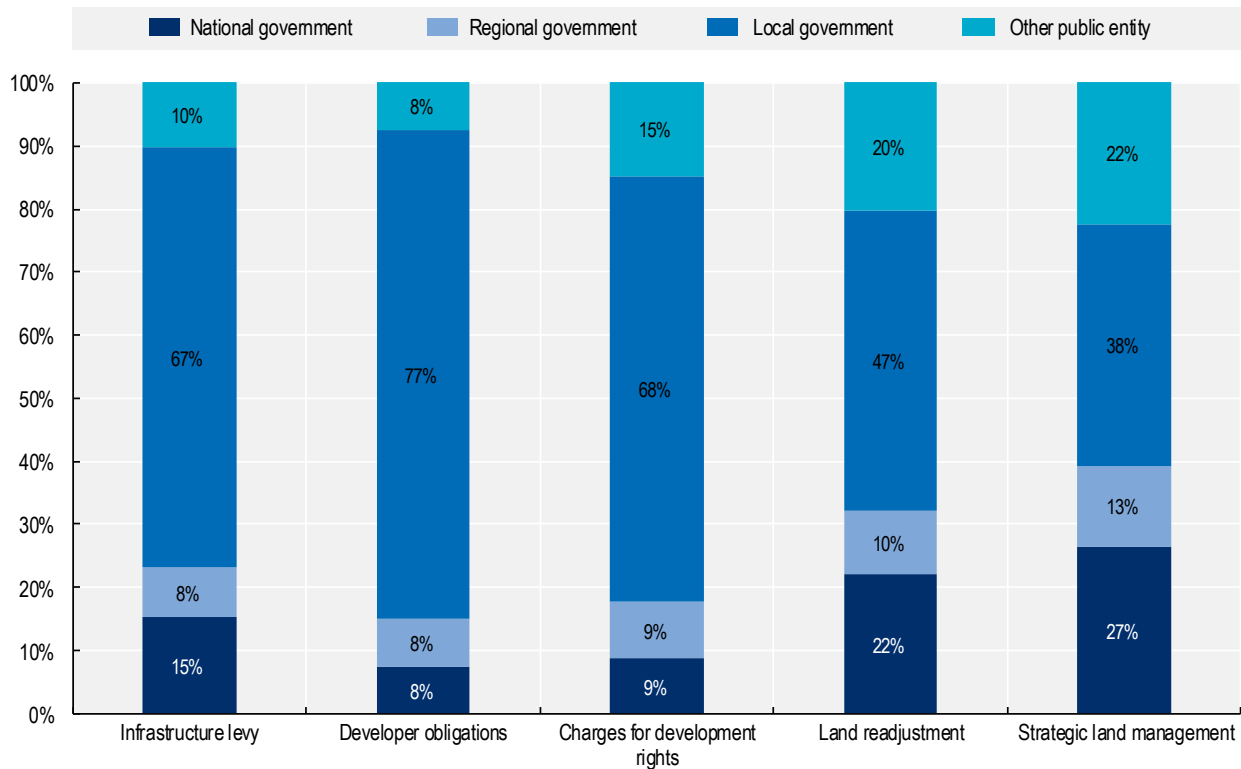
Note: Not applicable for strategic land management.

Source: Authors' elaboration based on OECD-Lincoln LVC survey

Administrative system

The implementation of LVC is mostly the responsibility of local governments (Figure 1.5). However, some variation exists across instruments. The majority of countries task local governments with the implementation of the infrastructure levy, developer obligations and charges for development rights. Responsibilities for land readjustment and strategic land management, however, tend to be shared with the national government and other public entities, such as government-owned corporations.

Figure 1.5. Administrative responsibilities for LVC implementation



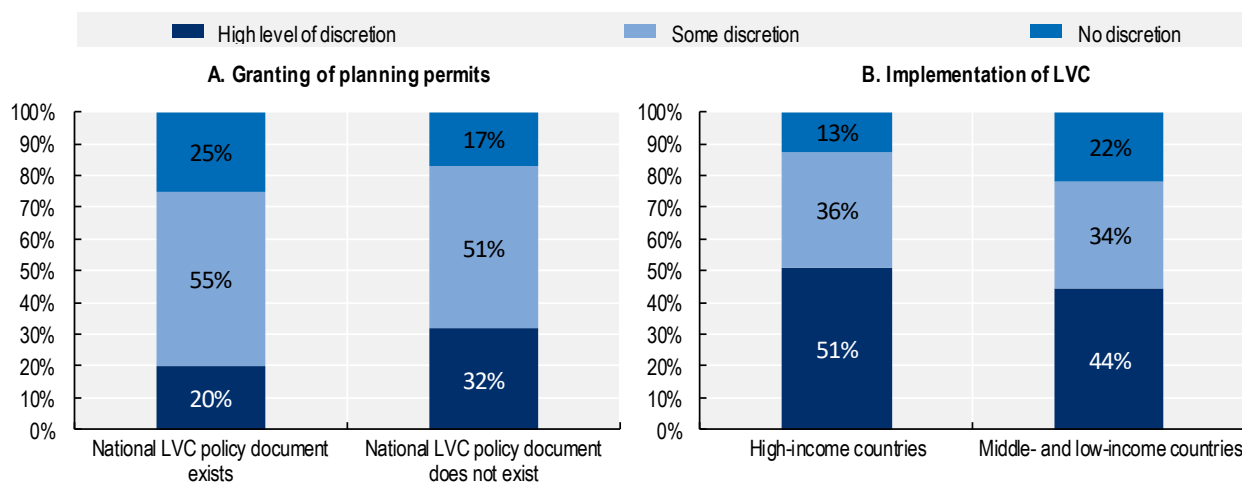
Note: Administrative responsibilities include levying fees, issuing development approvals, selling development rights, and pooling, rezoning, and managing land, depending on the instrument. Other public entities may include independent public entities, special purpose bodies, publicly owned non-profit organisations, and temporary authorities. Multiple responses allowed.

Source: Authors' elaboration based on OECD-Lincoln LVC survey

Local officials have at least some level of discretion in granting planning permits in 49 out of 60 countries surveyed. Countries having national policy documents concerning LVC tended to award a lower level of discretion to local officials (Figure 1.6, panel A). It is important to note that higher discretion for local officials does not necessarily preclude the need for a LVC policy document at the national level, as such documents may be important in aligning interests and initiatives across government levels while providing the working conditions for LVC implementation. Denmark, Norway, and Egypt are examples of countries that award a high level of discretion to local planners while still maintaining national policy documents.

Middle and low-income countries tend to award a lower level of discretion to local officials for implementing LVC compared to high income countries. For example, local officials in countries such as the Dominican Republic, Nigeria, Peru, and South Africa have no discretion in estimating LVC fees or in reinvesting collected funds. Among other issues, fear of corruption and lack of trust in local governments is a common reason for limiting the discretion awarded to local officials in implementing LVC.

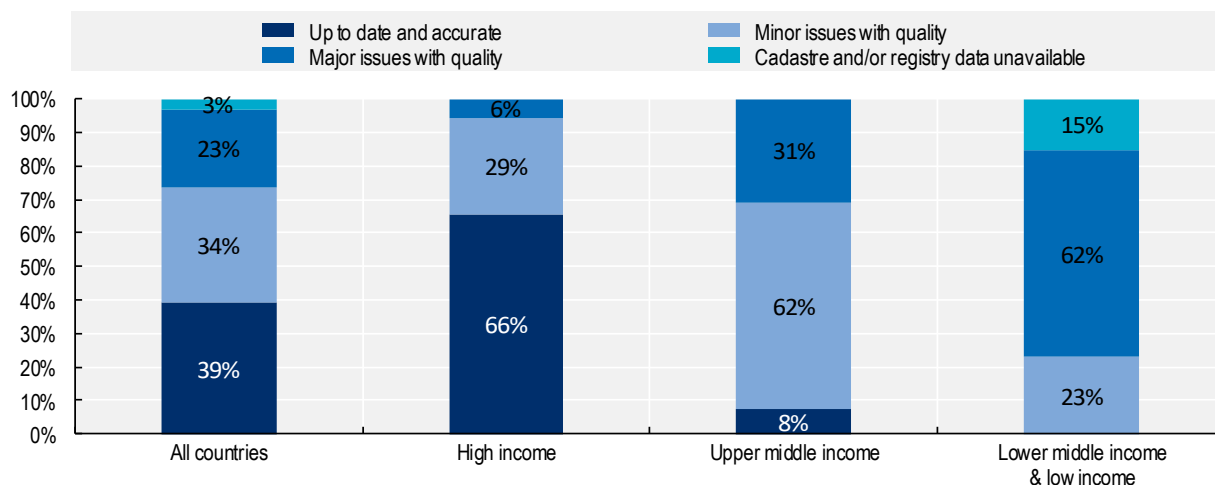
Figure 1.6. Level of discretion awarded to local officials



Note: Country income groups determined based on World Bank country and lending groups for 2022. See Table 1.1 notes for further information. Percentages for panel B are an average over all relevant instruments. Source: Authors' elaboration based on OECD-Lincoln LVC survey

The survey highlights a gap in quality cadastre or registry data for local governments especially in middle- and low-income countries. This makes it difficult for local governments to properly implement LVC, as accurate data on land is essential for carrying out key administrative tasks. Across all countries, 26% either had no land cadastre or registry data available or had major issues in the quality of this data (Figure 1.7). The problem is particularly pronounced in lower middle-income and low-income countries, with 10 out of 13 having major issues or no available data altogether. Providing this data to local governments possibly through independent bodies or with help from the central government is needed to boost administrative capacities and properly implement LVC instruments. For higher income countries, the administrative capacity to analyse existing cadastres and registries in implementing LVC is often cited as a common obstacle, rather than availability of the underlying data per se.

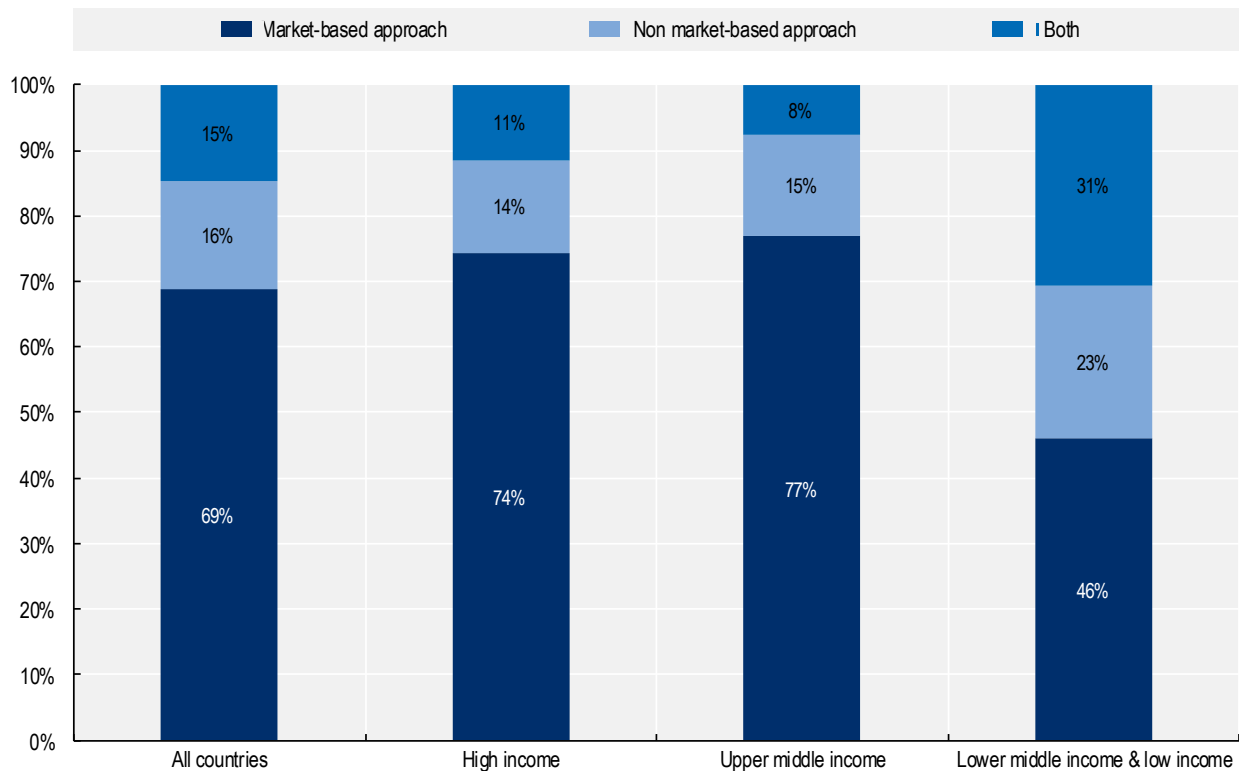
Figure 1.7. Quality of cadastres and land registries



Note: Country income groups determined based on World Bank country and lending groups for 2022. See Table 1.1 notes for further information. Source: Authors' elaboration based on OECD-Lincoln LVC survey

The lack of quality cadastres and registry data results in more lower-income countries resorting to non-market-based approaches for land valuation (Figure 1.8). Market-based approaches for land valuation are generally preferred due to their accuracy and ability to differentiate plot values at a granular level. Such approaches also better justify the value capture process and can reduce legal conflicts. For lower-income countries, providing cadastre and registry data to local governments together with administrative support measures is necessary to promote effective use of LVC. The cases of Costa Rica, Ghana, India, Indonesia, Nigeria, and Peru among others, highlight in particular the need for such measures.

Figure 1.8. Methods for land valuation

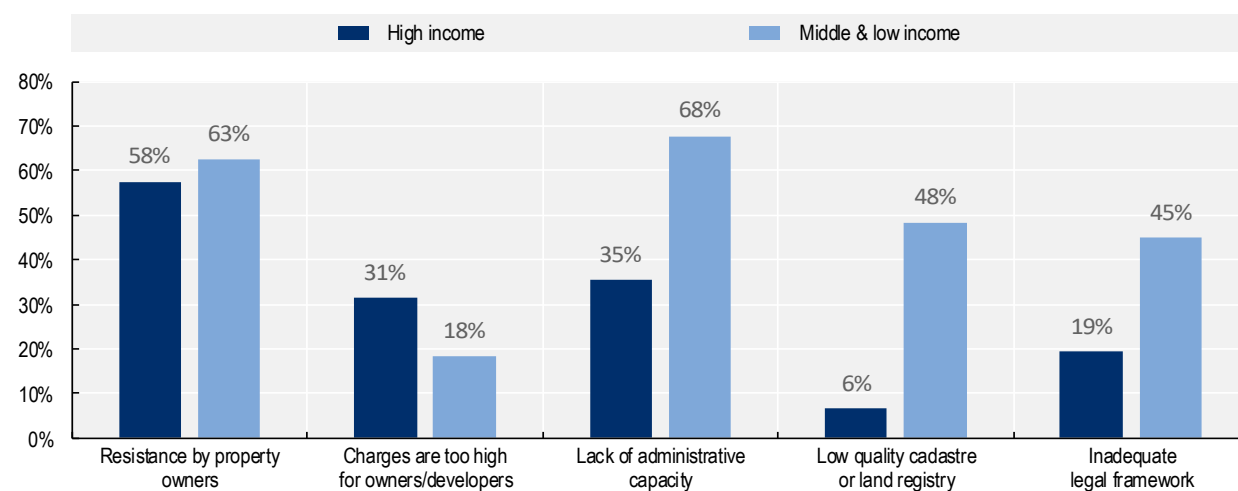


Note: Country income groups determined based on World Bank country and lending groups for 2022. See Table 1.1 notes for further information.
Source: Authors' elaboration based on OECD-Lincoln LVC survey

Obstacles for LVC implementation

Across all countries, the most common obstacle in LVC implementation is resistance by property owners, followed by lack of administrative capacity (Figure 1.9). Owners' resistance is a common obstacle for the majority of countries regardless of income levels, while middle- and low-income countries in particular are burdened by a lack of administrative capacity. For high-income countries, the charges or fees that are levied on land owners and developers are often too high, compromising the successful implementation of LVC instruments. For middle- and low-income countries, low quality cadastres and land registries together with inadequate legal frameworks are common obstacles in the successful implementation of LVC. Among other obstacles not shown in Figure 1.9, by far the most common was political will, stated as a major obstacle in countries regardless of income levels.

Figure 1.9. Common obstacles for LVC implementation



Note: Country income groups determined based on World Bank country and lending groups for 2022. See Table 1.1 notes for further information. Percentages are an average over all relevant instruments.

Source: Authors' elaboration based on OECD-Lincoln LVC survey.

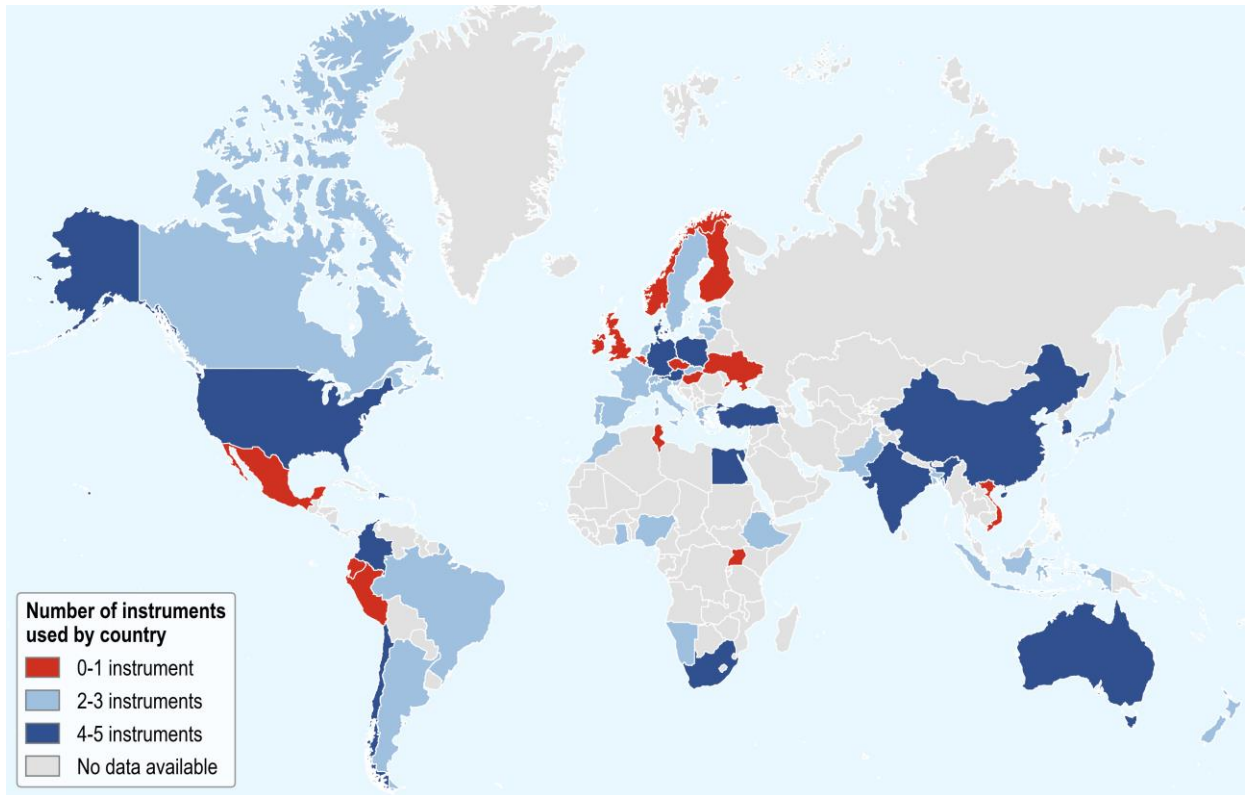
An overview of LVC instrument use across the globe

Figure 1.10 depicts the number of instruments used by countries in the Compendium, and Annex 1.A provides maps of the frequency of use of individual instruments. All countries excluding Uganda use some form of value capture at least on an occasional basis. Developer obligations are the most common instrument, followed by strategic land management (Figure 1.11). Charges for development rights were least common. European countries tend to rely more on developer obligations and strategic land management, while the use of charges for development rights is relatively rare. Most Middle Eastern, African and Asia-Pacific countries utilise strategic land management. Charges for development rights are common in the Asia-Pacific, while land readjustment in the Americas is particularly rare.

Low- and lower middle-income countries use an average of 2 LVC instruments at least on an occasional basis, compared to 2.5 for high- and upper middle-income countries. Chile, Egypt and India use all five instruments on a regular basis. Low- and lower middle-income countries rely more on strategic land management and land readjustment compared to high- and upper middle-income countries (Figure 1.12). This is likely due to the rapid urbanisation occurring in lower-income countries. Urbanisation necessitates the strategic management of land by local and national governments, evident in countries such as China, Egypt, Ethiopia and Vietnam. Land readjustment is also a useful planning tool in the urbanisation process as value increments from converting rural to urban land are high, such as in the cases of China and India. High- and upper middle-income countries use developer obligations much more frequently than countries with lower income levels (e.g., Chile, France, Greece, Israel, Italy, Korea, Netherlands). Possible reasons for such patterns include that developer obligations are generally more administratively demanding, and that expected standards for infrastructure and services are higher in higher-income countries, necessitating a transfer of some of these additional costs from the government to developers. However, basic government services are needed in poor countries as well. With the right governance frameworks, making greater use of developer obligations in poor countries, especially for new developments, could provide additional funding for governments in providing infrastructure and key services. For example, countries such as Egypt and Ghana use developer obligations frequently during approval processes for developments. Nonetheless, issues including corruption, low-quality cadastres and land registries, along with administrative capacity are cited as common obstacles for their effective implementation.

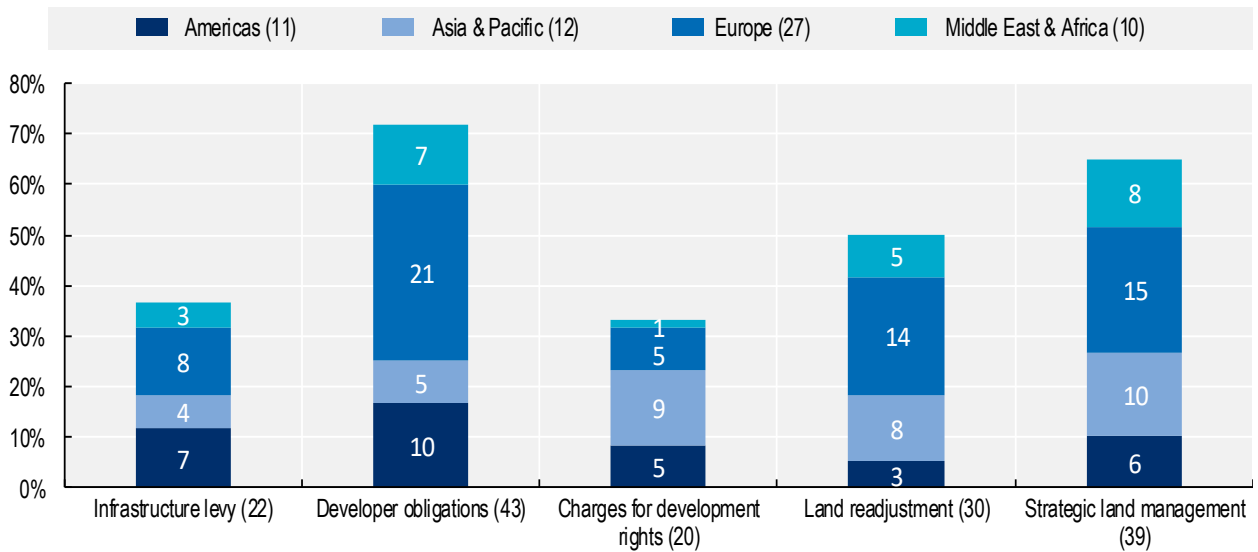
Figure 1.10. Use of LVC instruments across countries

Number of LVC instruments countries use at least on an occasional basis



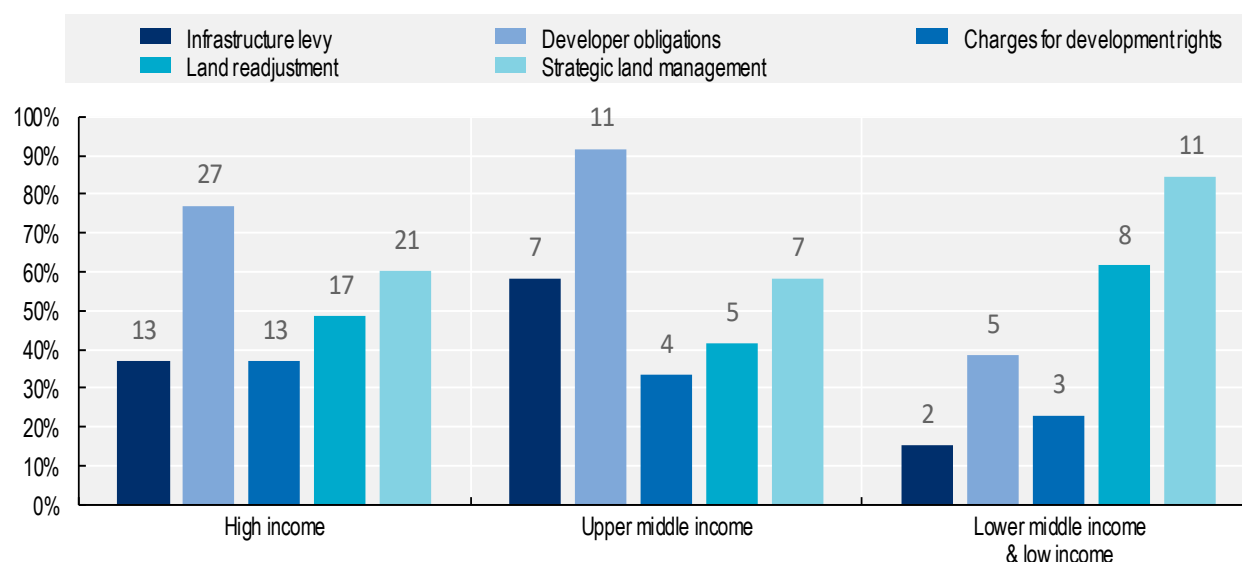
Note: Instruments that are used only rarely are excluded from counts.
 Source: Authors' elaboration based on OECD-Lincoln LVC survey

Figure 1.11. Frequency of LVC instrument use



Note: Countries using the instrument only rarely are excluded from counts. Labels indicate the number of countries in each category.
 Source: Authors' elaboration based on OECD-Lincoln LVC survey

Figure 1.12. Use of LVC instruments by country income levels



Note: Countries using the instrument only rarely are excluded from counts. Country income groups determined based on World Bank country and lending groups for 2022. See Table 1.1 notes for further information. Percentages are calculated based on the number of countries in each income group. Labels indicate the number of countries in each category.

Source: Authors' elaboration based on OECD-Lincoln LVC survey.

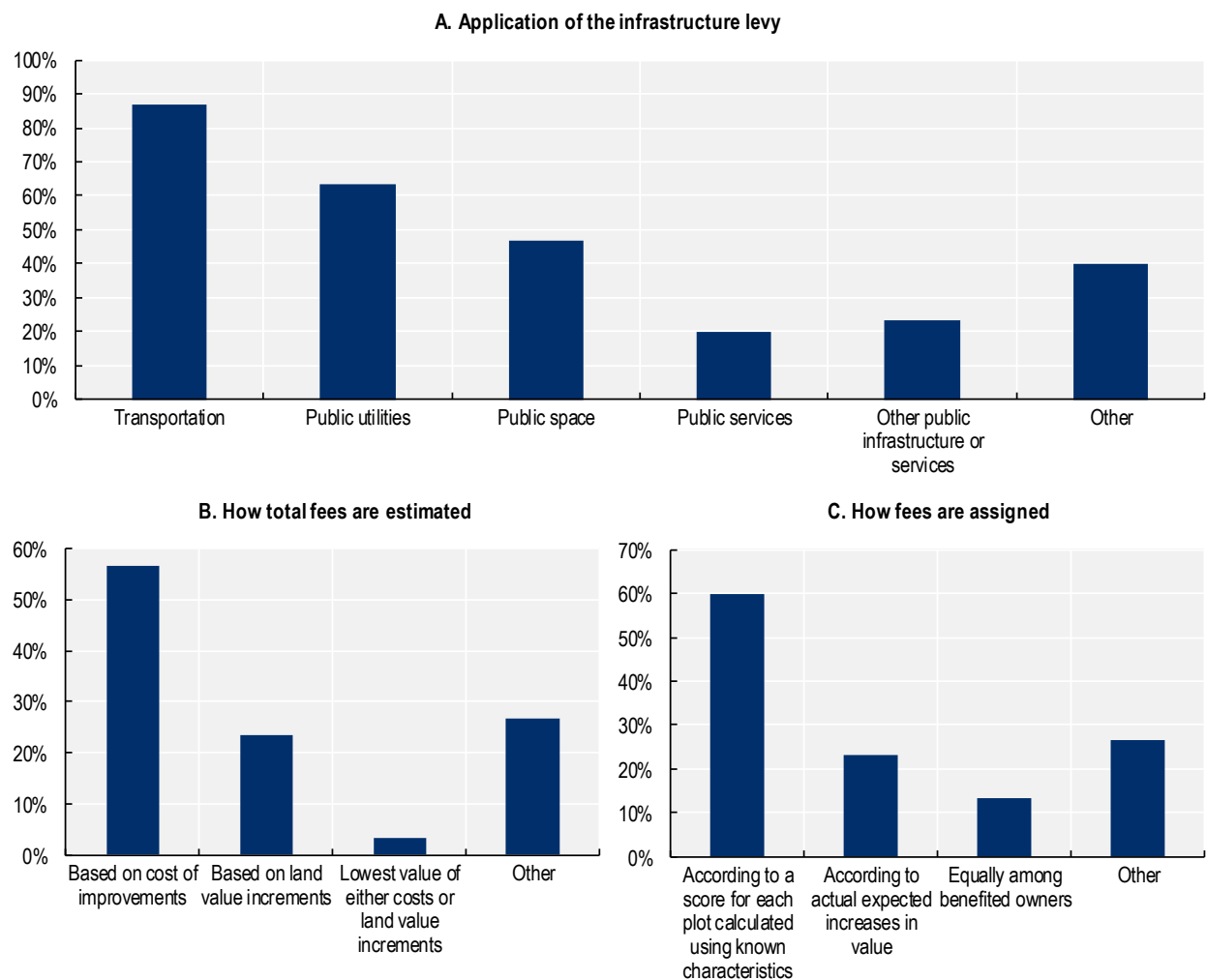
Infrastructure levy

The infrastructure levy most often applies to transportation infrastructure (Figure 1.13, panel A), followed by public utilities and public space. The common use of the infrastructure levy for transport and utilities is related to the fact that their catchment areas are relatively straightforward to define, facilitating the identification of paying owners and minimising the likelihood for disputes. Among other applications, countries use the infrastructure levy for urban management, such as services related to crime, and for sustainability efforts such as soil rehabilitation and noise reduction. In Mexico, the infrastructure levy can be applied theoretically to any public investment.

The amount of fees that need to be collected through the infrastructure levy for a particular infrastructure project are usually estimated based on the cost of the improvement (Figure 1.13, panel B). Only 23% of countries estimate the amount of total fees based on actual land value increments. This is likely because estimating value increments for land is difficult, especially for local governments that often lack administrative capacity and expertise. Additionally, there may be opportunities for localities to make administrative processes more efficient. However, basing fees on the cost of improvements rather than actual value increments risks controversies and disputes with land owners, as fees may not necessarily coincide in proportion to land value gains. Perhaps not by coincidence, appeals against the infrastructure levy are most common out of all instruments (Figure 1.4).

The fees levied are assigned mostly according to a score based on known characteristics of plots (Figure 1.13, panel C). These typically include area, zoning, density levels, taxable values, and distance from the improvement. Countries such as Colombia and Spain use a variety of characteristics of plots, while others such as France and the United Kingdom calculate fees based on land area alone. The prevalent use of known characteristics is likely because calculating actual value increments is administratively challenging, while levying fees equally among owners is often controversial.

Figure 1.13. Implementation of the infrastructure levy



Note: Multiple responses allowed.

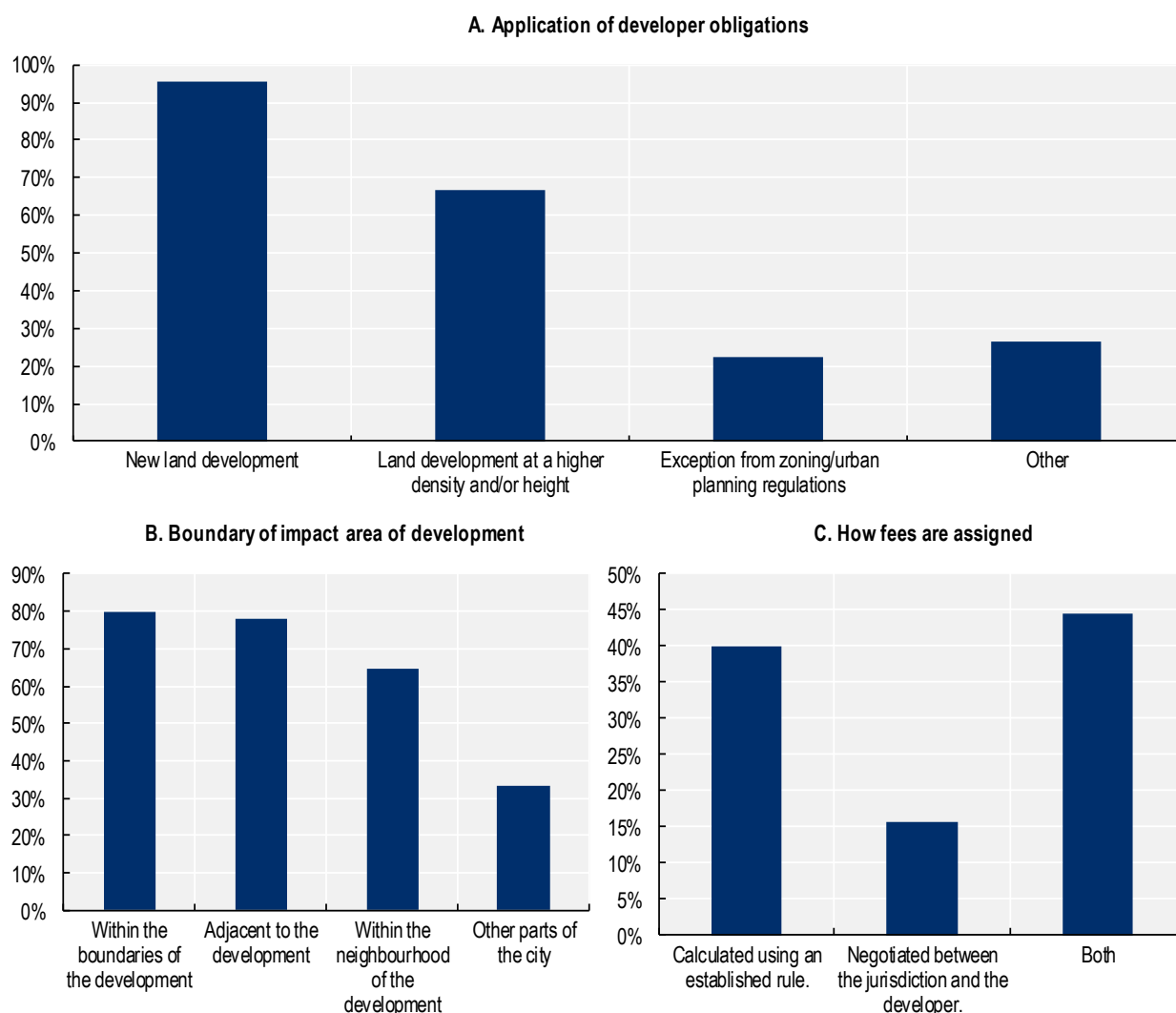
Source: Authors' elaboration based on OECD-Lincoln LVC survey

Developer obligations

Developer obligations are in essence fees or contributions developers pay in exchange for development approval, which fund or directly provide for public services. Of countries that utilise the instrument, over 90% apply them towards new land development applications, while over 60% of countries apply them when developers file for approval for higher density developments (Figure 1.14, panel A). The application of developer obligations for exemptions from planning regulations is less common. Among other use cases, Norway and Poland use developer obligations for urban redevelopment, while Finland applies developer obligations when local governments alter land use plans.

Defining the impact area of the development is important for implementing developer obligations, as this area determines where new infrastructure is required. 79% of countries consider the impact area to be within the boundaries of development, and charge fees or mandate contributions for infrastructure within these boundaries (Figure 1.14, panel B). In countries such as Finland, France, and the Netherlands, the impact area stretches out to other parts of the city, meaning that in principle, fees and contributions can be levied for infrastructure works across the city or jurisdiction.

Figure 1.14. Implementation of developer obligations



Note: Multiple responses allowed for panels A and B.

Source: Authors' elaboration based on OECD-Lincoln LVC survey

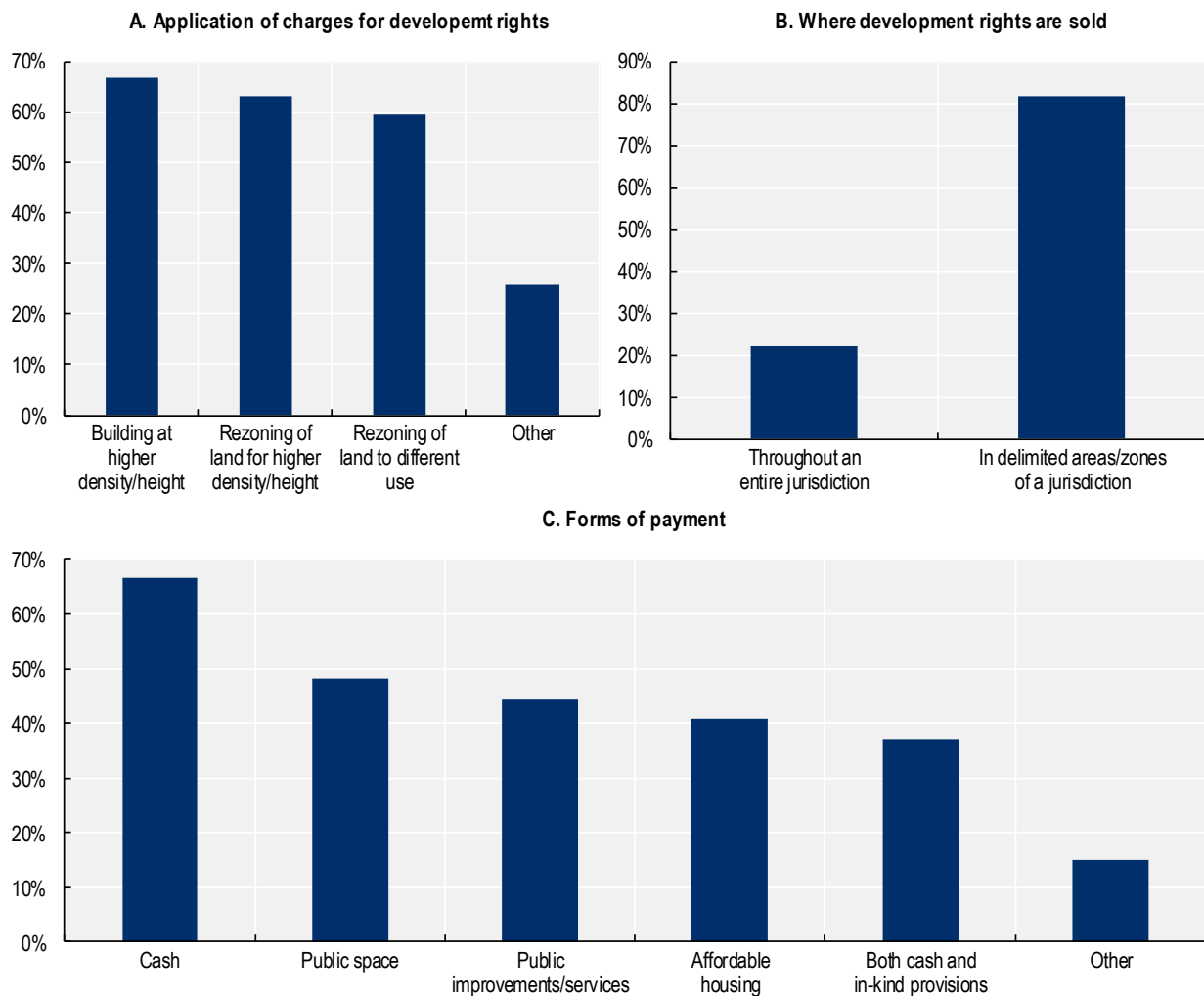
Developer obligations tend to be assigned more frequently based on established rules, rather than through negotiations between the jurisdiction and the developer alone (Figure 1.14, panel C). This is likely to reduce legal disputes and streamline the development approval process. However, many countries also use both established rules and negotiations. For example, France uses two different types of developer obligations, the *taxe d'aménagement* and the *contributions d'aménagement*. The former levies a fixed cash charge per square metre, while the latter levies cash or in-kind contributions based on negotiations with developers in designated urban development zones. Local governments increasingly use the rule-based method to streamline procedures and reduce costs.

Charges for development rights

In most countries, developers mainly pay charges for development rights for building at higher density, and when applying for zoning changes that increase permitted densities or alter land use (Figure 1.15, panel A). In countries such as Brazil, China, and Italy, these charges apply for a broad range of development

activity related to building and rezoning. In other countries such as Canada, charges for development rights apply only when development at a higher density actually takes place, and not for zoning changes. Among other use cases, in China and Singapore, charges for development rights are used when renewing land leases.

Figure 1.15. Implementation of charges for development rights



Note: Multiple responses allowed.

Source: Authors' elaboration based on OECD-Lincoln LVC survey

In the majority of countries, charges for development rights apply to specific zones within a jurisdiction (Figure 1.15, panel B). Such zones commonly include areas demarked for environmental protection, or historical preservation districts. In the United States for example, Incentive Zoning and Density Bonusing apply to specific areas within jurisdictions determined by ordinances. In countries such as Brazil, development rights are sold throughout the entire jurisdiction, by charging for additional development rights above an established baseline but within the maximum density permitted by local plans.

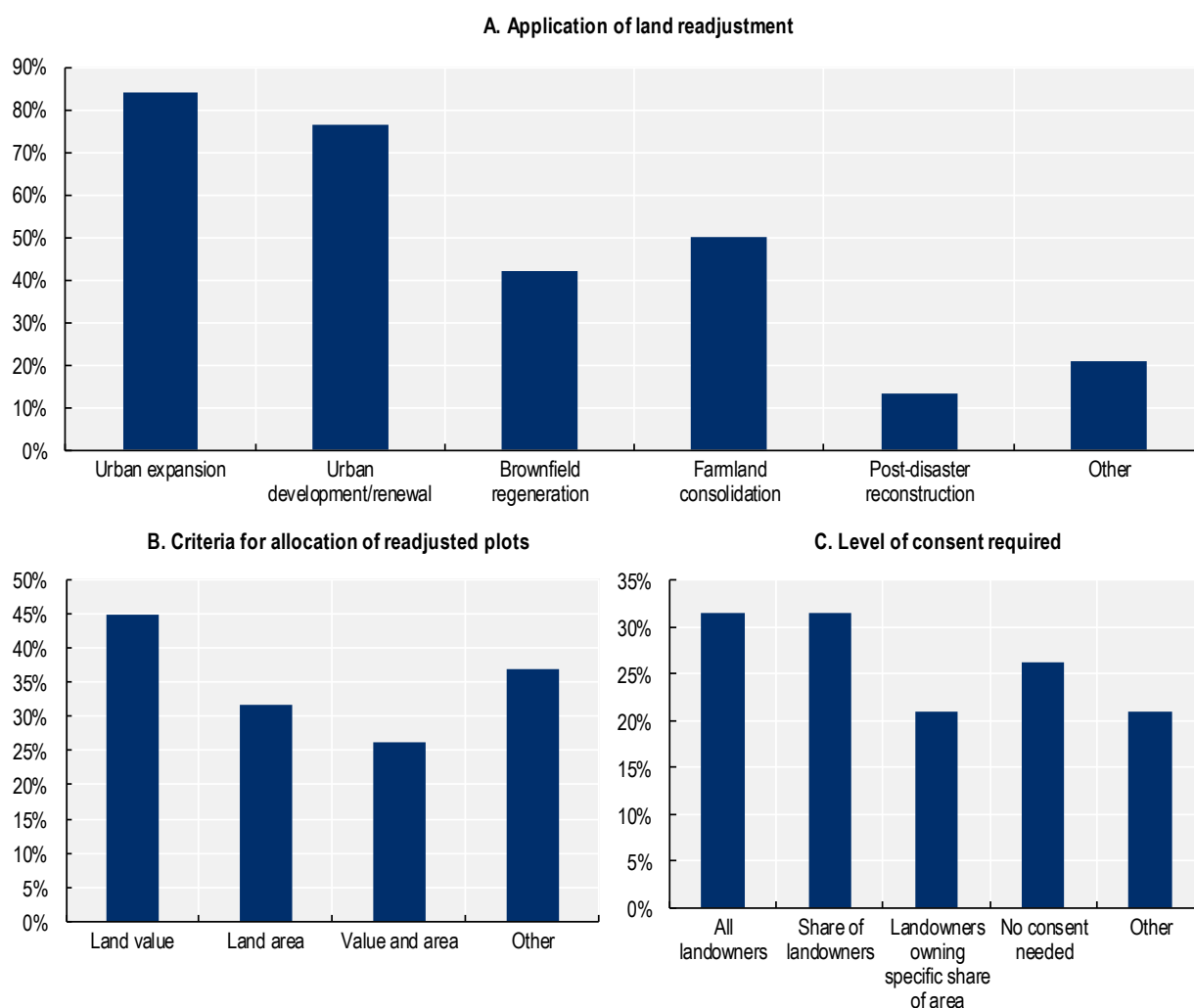
Charges for development rights can be paid for in a variety of ways (Figure 1.15, panel C). The majority of payments take the form of cash, followed by in-kind contributions including the provision of public space, infrastructure and services, as well as affordable housing. While still less common, the provision of affordable housing in particular has become increasingly popular. In Korea for example, new national

legislation was introduced in 2009 outlining affordable housing requirements for housing development projects in the Seoul Metropolitan Area, and in 2011 for the rest of the country. Under the law, affordable housing units remain affordable for up to 30 years, and benefit households with an income below 70% of the median income of the area.

Land readjustment

Land readjustment has traditionally been used extensively in converting from rural to urban land use. Over 80% of countries use land readjustment for this purpose (urban expansion), which is still the most common use case today (Figure 1.16, panel A). Another common use of land readjustment is for urban developments and renewals, followed by farmland consolidation and brownfield regeneration projects. Countries including India, Italy and Japan also utilise land readjustment for the reconstruction and reservicing of plots affected by natural disasters. Among other uses, land readjustment is also used to consolidate forests (Finland), construct railways (Estonia), and to simplify complex property ownerships in areas where government owned land is interspersed with private plots (Israel).

Figure 1.16. Implementation of land readjustment



Note: Multiple responses allowed.

Source: Authors' elaboration based on OECD-Lincoln LVC survey

Countries utilise a variety of approaches to reallocate plots that have been readjusted. Most commonly, land is reallocated proportionally based on the value of the original plots (Figure 1.16, panel B). Other countries such as Indonesia, Italy, and Turkey exclusively use the area of the original plots as the criteria for reallocation, while countries such as Chile and China use a combination of value and area-based criteria. Notably, Israel and Hong Kong apply vertical land readjustment practices, where land owners are reallocated housing units or specific portions of buildings rather than plots of land.

The level of consent required among landowners to commence land readjustment projects also varies significantly across countries (Figure 1.16, panel C). A roughly equal number of countries require either the consent of all land owners, a certain share of landowners, or no consent whatsoever. When a share of landowners are required to consent, this share is typically two-thirds of all affected owners, although Colombia and Korea only require a simple majority (i.e. 51%). In Austria, land readjustment typically occurs for agricultural areas, where there is no need for property owners' consent. In countries such as Portugal, landowners face expropriation in instances where full consent is not achieved.

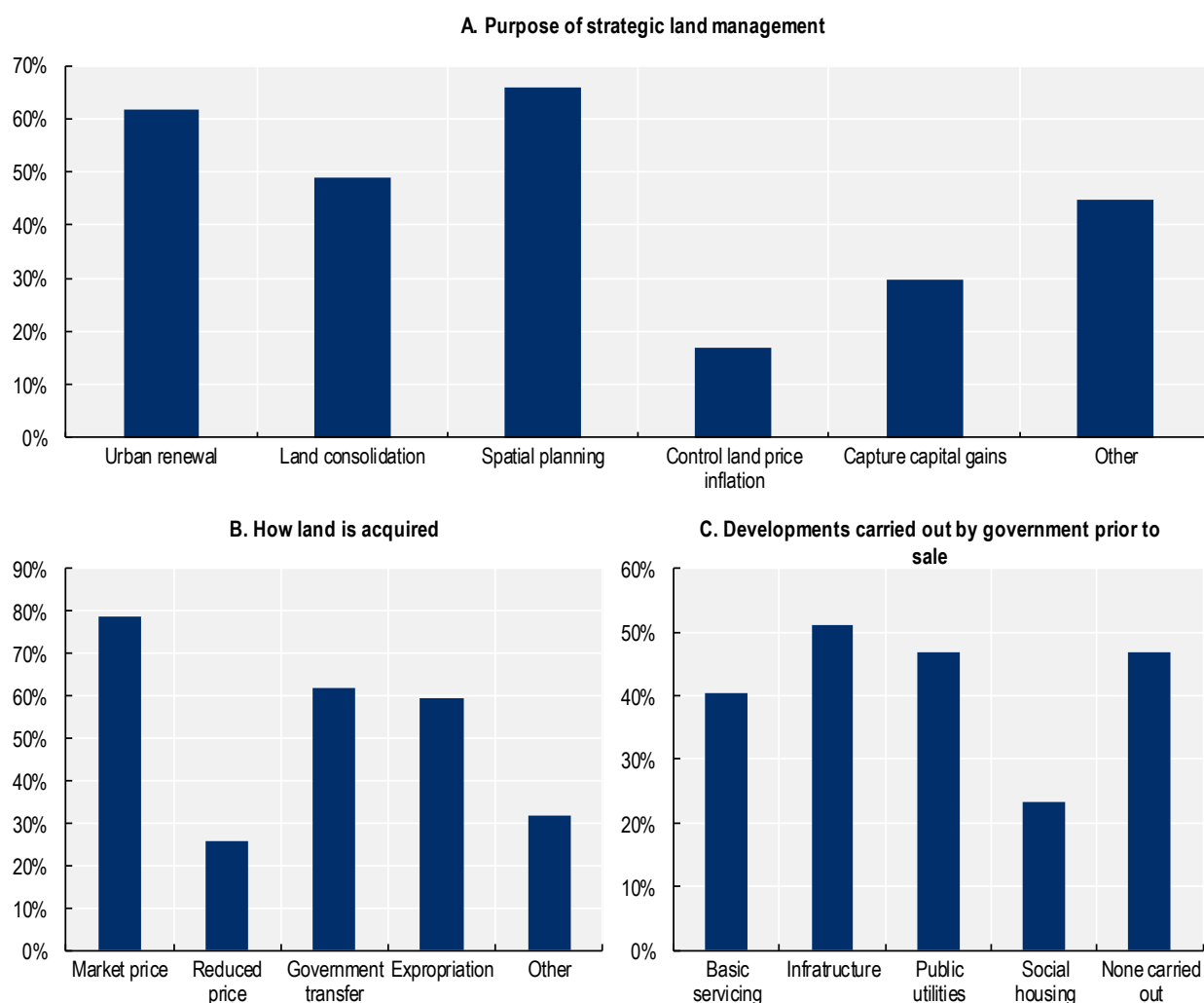
Strategic land management

Governments engage in strategic land management mainly to promote coherent spatial development, including for spatial planning, urban renewal, and land consolidation (Figure 1.17, panel A). In countries such as Singapore and Switzerland, governments also engage in strategic land management to control land price inflation. Among other purposes, strategic land management is often used to provide for social housing in countries such as Australia, Canada, Colombia. Mexico uses the instrument to promote strategic projects related to tourism, while Ethiopia uses it to control the spread of informal settlements.

Most commonly, governments acquire land for strategic management through purchases at market prices (Figure 1.17, panel B). Nonetheless, many governments also acquire land through expropriation. In Latvia for example, land is typically acquired through expropriation to provide public infrastructure, although the government does not have the authority to freeze land prices prior to announcing public involvement. In Ethiopia, public land is scarce and governments acquire land through expropriation, which is in turn used for various purposes including land banking and public land lease. In other countries such as China, Estonia and Turkey, governments already own significant portions of land suitable for strategic management.

Once land is acquired, governments can service the land, provide infrastructure and utilities, and in some cases develop the land for other purposes together with developers (Figure 1.17, panel C). In some countries however, governments do not participate in direct development. In Australia for example, states acquire vacant or unproductive land in greenfield and brownfield areas, but do not redevelop the land, rather selling land plots to developers at public auctions or leasing for public interest goals. In other countries, strategic land management plays a crucial role in spatial planning and housing policy. As part of the practice of 'active land policy' in the Netherlands for example, strategic land management is carried out by local governments by actively acquiring land in advance of needs for the purposes of urban development and renewal. Local governments not only rezone land and provide basic servicing, but also provision infrastructure and participate in development through joint ventures and public-private partnerships.

Figure 1.17. Implementation of strategic land management



Note: Multiple responses allowed.

Source: Authors' elaboration based on OECD-Lincoln LVC survey

Implementing LVC: common considerations

While countries' experiences vary significantly, the OECD-Lincoln LVC survey highlights some common issues that need to be addressed for effectively implementing LVC. The following sections discuss some key considerations.

Eliciting public support

The OECD-Lincoln LVC survey highlights how a lack of public support hinders the successful utilisation of LVC. Across all relevant instruments, resistance by property owners was identified as a major obstacle for LVC implementation in the majority of countries surveyed. Understandably, any increase in fees on land and property is likely to be unpopular because such fees are clearly visible. As a result, governments often lack the political will to adopt LVC. Conversely, countries such as Brazil and Colombia have successfully implemented LVC instruments in part due to strong political will that stems from public support and supportive legislation.

Eliciting greater public understanding, support and participation is key to successfully implementing LVC. Land value increments are captured more successfully when communication channels with land owners and stakeholders exist and the benefits from a proposed public intervention are clearly laid out. Landowners may more readily accept contributions to well-chosen projects which raise wellbeing substantially and are perceived to do so. The survey nonetheless highlights how consultation processes with property owners that are affected by LVC instruments are lacking or insufficient in many countries. Providing opportunities for dialogue between affected owners and the government is important to share information and garner public support. For example, communication channels and dialogue are a key component of successful LVC implementation in Japan, where communication procedures are laid out in legislation (OECD, 2022^[8]). Dialogue can also be very important when LVC concerns minority peoples that are typically marginalised, such as in the case of indigenous groups whom have different understandings of land (OECD, 2019^[11]).

Establishing fair and transparent rules

Establishing clear and fair rules is particularly important for LVC as it involves the potentially contentious agenda of sharing costs to enjoy the benefits of a public good. However, the survey highlights how such legal frameworks are lacking in many countries. The vast majority of countries lack a legal definition of LVC. Clear legislation concerning LVC, its processes, the determination of fees and taxes, affected property owners, and procedures for resolving disputes may reduce conflict, elicit public support, and bring LVC to the political mainstream.

The OECD-Lincoln LVC survey provides insights into how LVC rules can be designed. Examples from Colombia, Finland, and Israel suggest how fees are better accepted by land owners when they are charged in relation to the increase in land values that a public improvement generates, as opposed to when they are charged to simply cover the costs of the improvement. In addition, examples from countries such as Colombia, Ecuador, Mexico, and Sweden emphasise the importance of equity issues. Specifically, these examples highlight how LVC fees are better accepted when they consider the characteristics of landowners, by providing provisions for exemptions or discounts based on socioeconomic status.

Developing local government capacity

In the majority of countries surveyed, local governments take the leading role in many tasks concerning LVC, including defining land owners affected by the instrument, setting the rates for fees and contributions, negotiating with land owners and developers, and managing land assets, among others. In addition, successful LVC requires sound planning and land use principles.

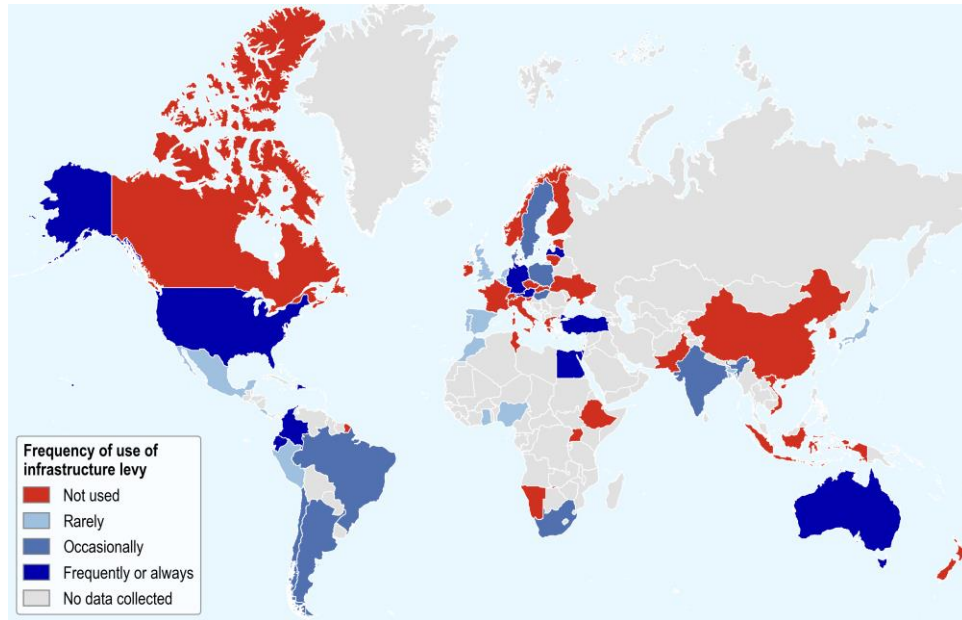
The OECD-Lincoln LVC survey highlights how a lack of such capacities is one of the key obstacles for successful implementation of LVC across all instruments studied. In particular, local governments in many countries struggle with identifying affected owners and levying fees due to a lack of cadastre and registry data and related expertise. In this context, national governments should provide lower-level governments with adequate administrative support, policy guidelines, and accurate data to facilitate the proper implementation of LVC as a fiscal tool. For example, major cities in Germany (such as Frankfurt) successfully utilise developer obligations to provide for affordable housing, made possible in part due to strong local government capacity stemming from administrative support structures (OECD, 2021^[12]). In addition, spatial planning frameworks should clearly define roles of different levels of government in preparing plans and land use regulations that serve as the baseline for LVC administration, such as in the case of Ecuador, Israel, and the Netherlands.

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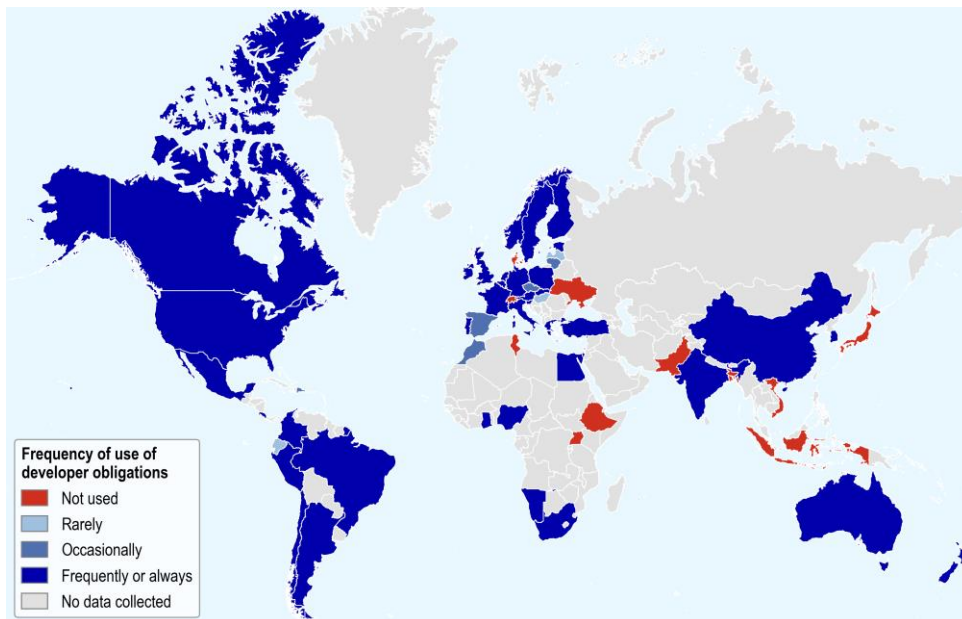
Annex 1.A. Frequency of LVC instrument use across the globe

Annex Figure 1.A.1. Use of the infrastructure levy by country



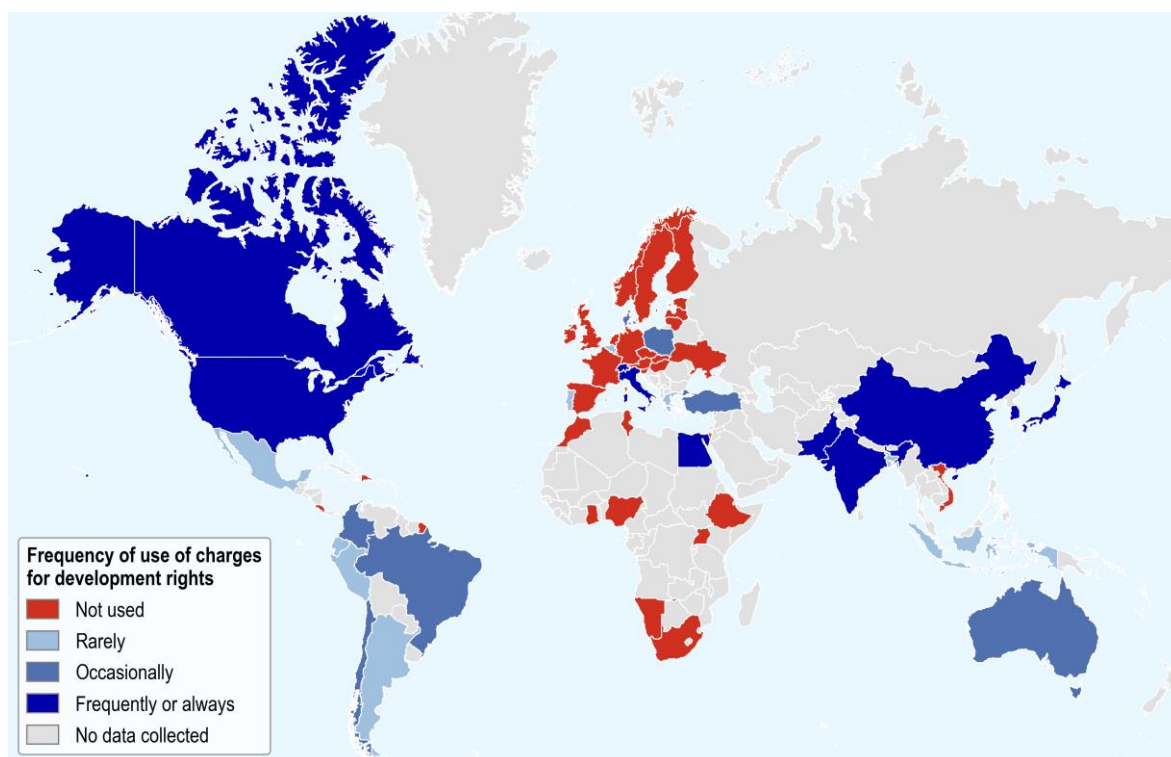
Source: Authors' elaboration based on OECD-Lincoln LVC survey

Annex Figure 1.A.2. Use of developer obligations by country



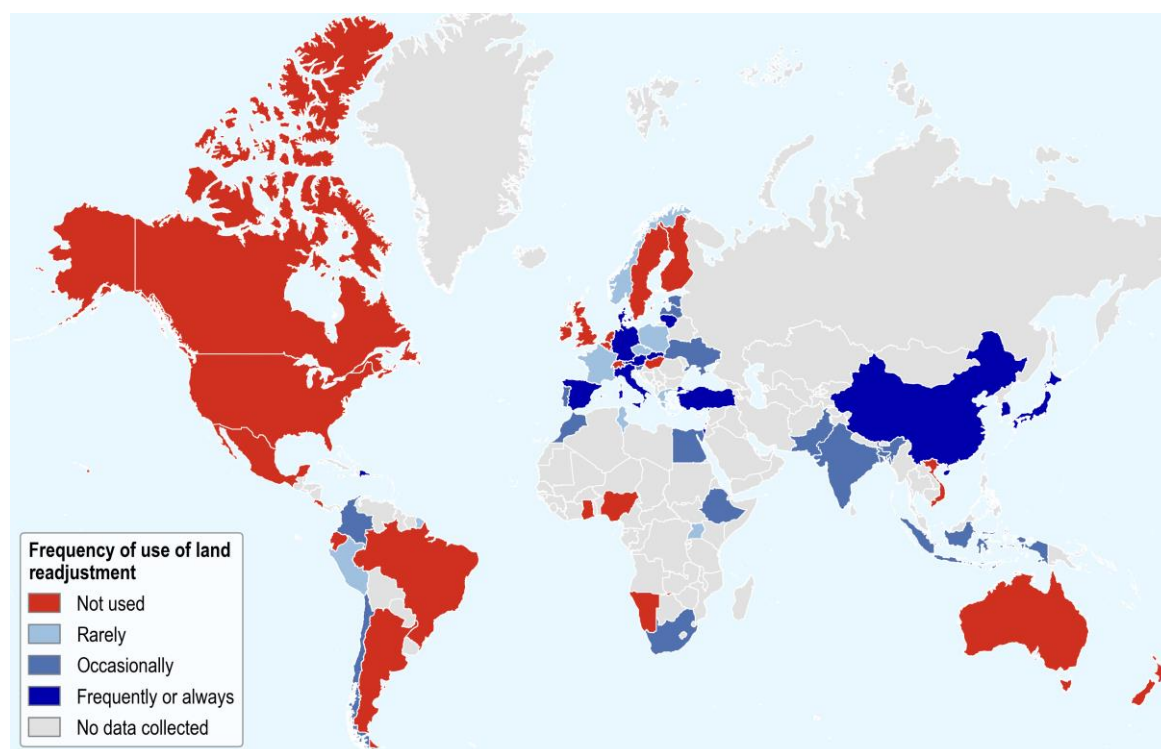
Source: Authors' elaboration based on OECD-Lincoln LVC survey

Annex Figure 1.A.3. Use of charges for development rights by country



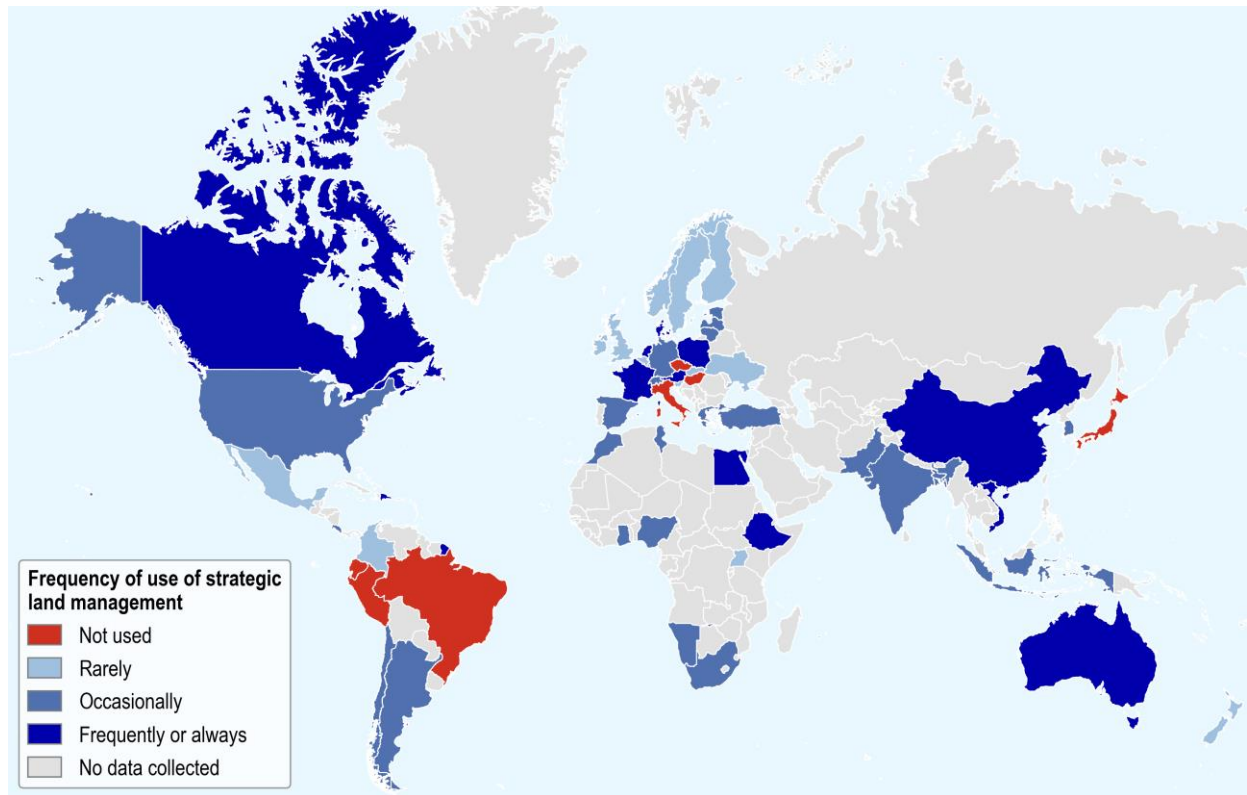
Source: Authors' elaboration based on OECD-Lincoln LVC survey

Annex Figure 1.A.4. Use of land readjustment by country



Source: Authors' elaboration based on OECD-Lincoln LVC survey

Annex Figure 1.A.5. Use of strategic land management by country



Source: Authors' elaboration based on OECD-Lincoln LVC survey

2 Country notes

This chapter presents country notes on the use of land value capture in each country included in the Global Compendium of Land Value Capture. For each country note, an overview of the main instruments used along with an explanation of the enabling frameworks is provided. This is followed by detailed accounts of the use of each individual instrument, including the legal frameworks, administrative procedures, and implementation obstacles, among other items.

Argentina

Land value capture in Argentina

Several land value capture instruments are used across provinces and municipalities, with a considerable degree of variation (Table 2.1). Infrastructure levies have widespread use, being charged to recoup the costs of public works. Developer obligations consist of in-kind contributions designed to address impacts on infrastructure, made in exchange to basic development rights. Local governments rarely adopt charges for development rights for additional development rights or rezoning. The three levels of government rarely make use of strategic land management. Provinces have not yet implemented land readjustment.

Table 2.1. Argentina: Main instruments

Instrument (OECD-Lincoln taxonomy)*	Local name	National legal provision	Implementation	Use
Developer obligations	Urban Obligations of developers (Obligaciones urbanísticas/ de desarrolladores)	None	Regional and local governments	Frequent
Infrastructure levy	<i>Betterment contribution (Contribución por mejora)</i>	None	Local governments	Moderate
Charges for development rights	Varied.	None	Local governments	Rare
Strategic land management	<i>Land bank (Banco de tierras)</i>	Art. 3-b of Resolution N° 19/20 of the Ministry of Territorial Development and Habitat	National, regional and local governments, as well as special purpose bodies	Moderate
Land readjustment	<i>Reajuste inmobiliario o de tierras</i>	Art. 1.IV.g of Resolution 2/2021 of Ministry of Territorial Development and Habitat	Regional governments	Never

Note: * Here and hereafter, refer to chapter 1, section “The OECD-Lincoln taxonomy of LVC instruments” for the full OECD-Lincoln taxonomy.

Enabling framework

Argentina is a federal republic with a two-tier subnational government structure: 23 provinces and the Autonomous City of Buenos Aires at the regional level and 2 301 municipalities at the local level (OECD/UCLG, 2019, p. 438^[1]). Provinces have a strong degree of autonomy, with their own legislative, executive and judicial powers. The scope of municipal autonomy is largely determined in the provincial constitutions (OECD/UCLG, 2019, p. 438^[1]).

Provinces and municipalities create the legal framework of land value capture. Four regional governments have laws concerning land value capture instruments: Buenos Aires, Mendoza, Jujuy and the Autonomous City of Buenos Aires. The principle of the social function of property is explicit in many provincial constitutions.

Developer obligations

Developers are required to make a payment, cash or in-kind, to obtain basic development rights, or for a project in disconformity with standard urban planning regulations. The charge is a compensation for the impacts of the proposed development on local infrastructure, notably due to the higher demand of public utilities and services in the area. The first provincial laws pertaining this matter date from 1951 in Mendoza, 1967 in the Santa Fe province and 1977 in the Buenos Aires province. Provinces and local governments frequently adopt this instrument.

The charge may follow an established rule or be negotiated in a case-by-case basis. If negotiated, the procedure is not rigidly structured and public agents have discretion in deciding the types of impacts to be compensated and the moment to fulfil the obligation. Developers must provide in-kind contributions of land, public space, roads or parking. As a general rule, cash substitutions to offset development impacts are not allowed.

The main implementation challenges are the lack of an adequate national legal framework and of clear local development norms and land use regulations. Local governments face low levels of administrative capacity. Developers have regarded the fee as economically unfeasible, which has reduced engagement levels.

Infrastructure levy

Infrastructure levy is a traditional instrument used to finance local public works in the country. Landowners pay a fee for public improvements that benefit their property, notably road construction, parking, street pavement and public utilities, such as water, electricity and sewage. Local governments make moderate use of this instrument and collect the revenues.

Local governments can impose the levy when the benefitted property owners are identifiable, have capacity to pay and are in sufficient number to provide funds for the public improvement. The local legislative power must approve by law each infrastructure levy that ought to be applied. According to case law of the Supreme Court of Justice, the charge cannot exceed thirty percent of the cadastral property value, otherwise it would have confiscatory purposes, what is forbidden.

The charge is paid in cash, before public service completion. Nevertheless, sometimes local norms allow payment after the improvement is concluded.

Benefitted properties are those within a certain distance to the improvement. For instance, in the Buenos Aires' subway expansion, properties located within a radius of 400 meters of a subway entrance fell under the obligation to pay the infrastructure levy (National Law 23.514/1987). Local governments may also take into consideration floor area and position in relation to the public service.

One obstacle to adoption of this instrument is that property owners often cannot afford to pay the fee. Without the necessary funds, the goal to conduct a public improvement that is partially funded by adjacent landowners is defeated. Another obstacle is the lack of local administrative capacities to identify the affected property owners and distribute the costs proportionally.

Charges for development rights

The legal provision of charges for development rights is more recent and scattered, in comparison with infrastructure levy and developer obligations. It consists of a few isolated local regulations, and adoption is still exceptional. Examples of local regulations are the Law 6.062/2018 of the Autonomous Province of Buenos Aires, the Ordinance 2.963/11 of the city of Posadas, the Ordinance 2.854/2010 of the city of Rio Grande, the Ordinance 2.080/2010 of the city of Bariloche and the Ordinance 7.799/2004 of Rosario.

Landowners or developers whose land is located in an area that has been rezoned to allow for higher density or for more productive uses, such as from rural to urban, may have to pay a fee. Local governments charge this fee and collect the revenues. Local governments rarely adopt this instrument.

Because the charge relates to an administrative decision of rezoning, it is directly linked to an area or zone. Hence, the charge refers to that delimited zone and the right associated to it cannot be transferred to other locations of the jurisdiction.

The payment is in cash or through the in-kind provision of land, public spaces or public improvements, depending on the local norm. If in cash, the charge is calculated according to the estimated value of

development rights, measured in relation to the market value of land. The charge must be paid when the project is completed. Yet, some governments provide intermediate modalities between building permit application and project completion.

The collected funds are earmarked for the purposes of investing in public space, public transport, roads, parking space and heritage protection within the collecting jurisdiction. To illustrate, in the Autonomous Province of Buenos Aires, 94% of the collected funds must be spent on housing, social facilities, transport, service infrastructure, public spaces or socio-spatial integration, while the remaining 6% must be spent on heritage protection (Law 6062/2018).

The main obstacles to implementation are the lack of local norms and of local administrative capacities. When they exist, local land use regulations and development norms are unclear. Inaccurate land registries bring insecurity to real estate transactions. The demand for building at higher density is low in second-tier cities, thereby making the adoption of the instrument less desirable.

Strategic land management

The priorities of strategic land management are construction of affordable and social housing, land consolidation, control of urban growth patterns and transformation of abandoned property into productive uses. The national, regional and local governments have special purpose bodies that are responsible for acquiring, retaining and selling land in a strategic manner. Each level of government collects their own revenues. The instrument is rarely used in the country.

The government can acquire land through market purchases, donations, expropriation or automatic forfeiture, in case of non-payment of tax obligations or building code violations. They prefer to acquire vacant or unproductive land, scattered across the jurisdiction. The government may retain the acquired land for how long it estimates to be pertinent.

The government redevelops the acquired land, building public space, public utilities, administrative facilities and affordable and social housing. Afterwards, the government may auction the developed plots to private actors or transfer them without cost to another public entity. Although the primary purpose is to improve land management, not to recoup revenues, the government does recover investments through the sale or leasing of the developed plots.

Public land leasing attends the purposes of generating public revenues, providing land for real estate development and facilitating urban development. There is no typical lease length. The ground rent must be paid annually. Public or non-profit entities may be exempt from payment, as well as entities who develop projects with a public purpose.

The main obstacles to implementation are the lack of legal framework, lack of administrative capacities, lack of coordination between public entities and lack of financing for land acquisition. Leaseholders do not consider the rents to be economically feasible. The revenues raised with strategic land management operations do not justify the costs of conducting them.

Land readjustment

The Province of Buenos Aires has a regulation on land readjustment since 1977 but has never adopted it (Article 89 Decree-Law 8912/77). A recent national programme establishes the mandatory content of legislation that provinces should enact to use land readjustment (Resolution 2/2021 of Ministry of Territorial Development and Habitat).

As of today, the legal framework at the subnational levels is insufficient, and local governments lack the necessary administrative capacities. Another significant challenge is to compel resisting landowners to participate and, when that is not possible, to expropriate their land parcels, which would be controversial and expensive.

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Australia

Land value capture in Australia

Several land value capture instruments are systematically used in the country (Table 2.2). With considerable variation across states, infrastructure levies, developer obligations, land leasing and land banking are the most adopted instruments. Charges for development rights have been implemented recently, in limited capacities, in South Australia, New South Wales and the Australian Capital Territory, to provide affordable and social housing. Land readjustment is only adopted in the state of Western Australia, and rarely so. Common challenges to implementation are unclear development norms and land use regulations, the lack of adequate legal framework and the lack of administrative capacities.

Table 2.2. Australia: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Infrastructure levy	Improvement Tax or Infrastructure Contribution	State legislation	Local and state governments	Frequent
Developer obligations	Development contributions (impact fees) and Planning Agreements (exactions)	State legislation	Local and state governments	Frequent
Charges for development rights	Inclusionary Zoning	State legislation	State and Local governments	Moderate
Strategic land management	Urban Land Corporation	State land banking agencies	State governments, independent public entities or similar bodies	Frequent

Enabling framework

Australia is a federation with two levels of subnational government: 6 states and 2 self-governing territories with state-like powers at the regional level, and 562 local governments at the local level, which are mostly called “Cities” or “Shires” (OECD/UCLG, 2019, p. 157^[1]). Local governments depend directly on state governments, whose *Local Government Acts* define their status, power and responsibilities (OECD/UCLG, 2019, p. 157^[1]).

States create the legal framework for land use planning and land value capture. In practice, states delegate the responsibility to enact land use planning instruments to local governments, who develop *Local Planning Schemes* and *Metropolitan Plans* (OECD, 2017, p. 52^[2]). Therefore, planning powers and instruments vary substantially across states and even across municipalities within a same state.

Infrastructure levy

Landowners that request approval for development have to pay a levy in reason of public improvements that will be conducted in the same area of the city or metropolitan region. The national government does not interfere in the recovery of land value increases. States are in charge of the legal framework, which results in some degree of variation. In all, states and municipalities frequently charge landowners a special purpose tax or contribution to cover the costs of public improvements and collect the revenues.

The levy is paid in cash or through the in-kind provision of land or infrastructure, depending on the state regulation. If in cash, the contribution is based on land value or land area and is destined to an infrastructure funding pool. The payment may be done upfront or in installments. Exemptions to payment may be granted.

The State of Victoria and the State of Western Australia each provide relevant examples of infrastructure levies.

In Victoria, developers pay the *Growth Areas Infrastructure Contribution* (GAIC) to contribute towards the cost of essential infrastructure in Melbourne's growth areas. The charge is paid in cash, proportionally to the land area. Instead of paying the levy in cash, developers can sign an agreement with the state government, in which they agree to transfer land or carry out infrastructure works. Public authorities, land consumer transactions and property owners under financial hardship are exempt from contributing.

In Western Australia, the *Metropolitan Region Improvement Tax* (MRIT) is a special purpose tax destined to finance public improvement works, such as roads, public parks and public facilities. The charge is paid in cash, proportionally to the land value. Owners whose principal place of residence is the property or whose land is used primarily for agriculture are exempt from payment. The collected revenues go to a metropolitan fund, to finance future or ongoing public works in several metropolitan local districts.

By adopting infrastructure levies, the States of Victoria and Western Australia have generated a small but growing contribution to infrastructure funds. Nonetheless, the scale of the funds raised is insufficient to ensure quality urban infrastructure and housing supply.

The main obstacles to implementation are the lack of local administrative capacities and the resistance of property owners. For low-income owners, even if there was willingness to pay, the fees are not viable.

Charges for development rights

Municipalities occasionally levy charges from developers that request a change of land use or approval for development at higher density. The Australian Capital Territory and the state of Queensland apply the instrument when lease conditions or development use rights are changed leading to higher land values. In Queensland a scheme for this process is clearly prescribed.

Some states, such as South Australia and New South Wales, charge for development permission via the in-kind provision of affordable housing units. This scheme is called inclusionary zoning. The number of units is either negotiated between a developer and planning authority during the planning assessment process, or is a fixed requirement specified as a proportion of housing or development value.

The model varies by state. In South Australia and Queensland, it is mandatory, meaning that any new development that requests to build at higher density will have to provide a certain percentage of social housing units. In other states, as New South Wales, the scheme is voluntary and incentive-based: a project with a certain share of affordable housing units is awarded a density bonus.

Developers have to build units on-site, by completion of the market-rate project. The share of units varies by zone and may go up to 15% of the total of units, depending on the jurisdiction. The units must remain affordable for a given period of time, for instance 10 years in New South Wales. The affordable units have different sizes, design standards and amenities than the market-rate ones. Beneficiaries are households whose income level falls below a specific percentage of the area's median income level. The Victorian government has established affordability requirements, but to date few units have been produced via this route and there is uncertainty over how affordability and allocation requirements should be regulated.

The provision of affordable housing through charges for development rights remain modest, and there are only a small number of schemes in place. Common challenges are the changing dynamics of the housing and land development market, the resistance of residents against higher density projects in their neighborhood and limited public resources to enforce agreements. In addition, unclear development norms, monitoring and land use regulations and the lack of administrative capacities also pose obstacles to implementation.

Developer obligations

State ordinances foresee that developers have to pay a charge when they submit a new development or development at higher density, given that these developments generate impacts on local infrastructure. In order to raise funds to build this additional infrastructure, states and municipalities frequently charge developer obligations and collect the revenues, with the aim of funding additional local infrastructure.

The charge is paid in cash or through the in-kind provision of land or public improvements, such as roads, service facilities and public spaces, or a combination of both. In New South Wales, for instance, the charge, called “contribution towards provision or improvement of amenities or services”, may be satisfied through the dedication of land free of cost, the payment of a monetary contribution or both. In any case, the charge must be paid before or at the time the development receives approval.

The charge may be calculated using an established rule or negotiated through a structured procedure. Most states refer to the principles of “nexus” between the contribution and the development; “fair apportionment” of the share of service attributable to the development; “reasonableness” of the amount charged; and “transparency” in calculating contributions and managing and spending the revenues collected. In many states, negotiated obligations may coexist with established fees.

If calculated, the formula takes into consideration the costs of the development’s impact on infrastructure, as well as the size, type and market value of the development. In some states, because of the principle of “reasonableness”, the capacity to pay of developers is also considered. Most schemes use a transparent calculation method to apply developer obligations, but procedures differ locally.

Developers can be exempt from paying the charge if the project provides social benefits, such as social housing, public hospitals, childcare facilities and other community or educational facilities. If the development is smaller than a specific size, the impact on infrastructure is assumed not significant, and exemptions may be granted.

If negotiated, developers enter into a voluntary planning agreement with the government as to how best satisfy the contributions. Developers have flexibility to satisfy the infrastructure requirements according to the needs of the project. Public authorities secure the infrastructure needed without having to obtain additional funds and directly carry out public works.

Some practical challenges to implementation remain. Rules and formulas used to calculate the charges are often unclear or excessively complex. The revenues raised sometimes do not cover the costs of levying and collecting the charges.

Strategic land management

States manage their land portfolio directly or through an special purpose body created for that purpose, such as urban land corporations or land banking authorities. Since the 1980s, some land agencies have been operating on a commercial basis as land developers, while others have focused on the production of allotments or on the wholesaling of land. Overall, a strategic approach to land management, which includes acquisition, leasing and development of land in view of public interest goals, is common in states.

States acquire vacant or unproductive land with the purposes of consolidating planned states in greenfield areas and developing urban renewal projects in brownfield areas. Direct government financing supports the purchase at market price. Acquired land is typically rezoned, but not redeveloped. After being rezoned, land is sold at market price in public auctions, using the highest bidder criterium, or leased for public interest goals, for instance to develop recreation areas or social housing.

Public land may be leased to facilitate development with a public purpose or planned urban development. To illustrate, the State of Queensland leases land for pastoral use, industrial development and mining projects, among others. In Western Australia, there are pastoral leases, perpetual leases over agricultural

land, leases to other government entities, leases to Aboriginal Parties and general leases which may be granted for commercial, residential or industry uses.

Public land lease systems vary across state and territories. The Australian Capital Territory is uniquely developed under a 99-year leasehold system for all land and does not have any freehold land. In most states, however, there is freehold land, and leasing is but a strategy to enable communities to use, benefit from and enjoy public land, particularly through the provision of recreational, cultural and sporting facilities.

Lease length depends on the permitted land use. In some states, the length is fixed, such as Victoria, where leases are typically of 21 years. Exemptions or discounts to payment may be granted to public entities or nonprofit entities or if land is destined for public purposes, notably affordable and social housing. Other aspects of land leases vary across states ordinances, such as the value of ground rents, the frequency of periodic readjustments the possibility to transfer leases in the market and so on.

The main challenges to strategic land management are the tension between public policy goals and commercial imperatives. Freehold land markets predominate, there is high concentration and key industry stakeholders are powerful. Most public land agencies are expected to deliver dividends to their state Treasury, which limits the potential and incentive for any surplus revenue they generate to be reinvested in non-commercial initiatives. Progress with establishing and maintaining legal framework at state level for strategic mechanisms reliant on co-operation of private land holders have been slow and intermittent, and consequently there is a lack of administrative capacities in monitoring and regulating outcomes.

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Austria

Land value capture in Austria

Austria uses several land value capture instruments (Table 2.3). However, most instruments recover relatively little value or a small part of public infrastructure costs. Three main obstacles limit the use of more land value capture. First, it is not always a political priority. Local governments do not try to fully cover public infrastructure costs because at the intermediate government level states generously subsidise local infrastructure investment. Second, the planning system favours private landowners over the public sector. When a planning decision increases land values, private landowners or developers get the full benefit or have to pay low contributions even if the planning decision is costly. Moreover, when planning authorities take a decision that reduces land values, they may have to compensate landowners. Third, some instruments lack a specific legal basis. Those instruments fit within the constitutional boundaries and could work well, but would require comprehensive legislation.

Table 2.3. Austria: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Infrastructure levy	<i>Aufschließungs- und Erhaltungsbeiträge</i>	No	Local governments	Always
Land readjustment	<i>Baulandumlegung</i>	No	States, local governments and private landowners	Frequent
Strategic land management	<i>Aktive Bodenpolitik</i>	N/a	Government-owned companies, state land funds and local governments	Frequent
Developer obligations	<i>Vertragsraumordnung, Städtebauliche Verträge (civil law planning contracts)</i>	No	Local governments	Frequent

Enabling framework

Austria is a federal republic with three levels of government: the national level, nine federal states including Vienna, the capital city, and 2,093 municipalities (OECD, 2022^[3]). The national government does not have formal planning responsibilities, but it plans and finances major infrastructure projects such as national roads and railways. The states hold most powers related to planning and pass their own legislation to organise spatial and land-use planning. Even so, most states have structured their planning systems in comparable ways. However, the intensity with which state governments try to influence local land-use policies, differs. Municipalities are responsible for local planning and the mayor issues building permits (OECD, 2017, p. 55^[2]). The mayor has high discretion when issuing building permits.

The legal system considers that property has a social function, which implies obligations on owners, though such a provision does not exist in legislation. As a result, the government may limit the use of private property rights in the public interest. The national and state government levels create the legal framework for land value capture.

Infrastructure levy

Landowners pay a levy for local roads, water and sewer infrastructure built by the government and from which they specifically benefit. The levy has existed in all states for more than 50 years. Each state has its own laws and ordinances. Local governments are in charge of implementation and receive the revenues. Local governments always use the levy to cover at least part of public works' cost.

Landowners whose plots benefit from direct access public roads or utilities are charged. The levy amounts to a fixed rate per landowner or to a rate based on property size. It is independent of public works' cost or the estimated increase in land values public works generate. Therefore, it covers public works' cost well in densely populated areas only, where infrastructure provision costs are lower. Local governments recover about 60-80% of roads and utilities' cost in urban areas but this drops to below 40% in rural areas. The levy must not exceed public works' cost. Another obstacle is its limited scope as it applies to roads and utilities only. Local governments must provide other infrastructure, such as public transport or schools, fully with public funds. The levy raises approximately EUR 2 billion yearly.

The levy is a one-time charge usually upon completion of public works or once landowners request a building permit in newly serviced areas. Some states allow local governments to regulate the levy through ordinances, for instance to charge it as soon as land is rezoned for development. This helps local governments that lack upfront resources to finance infrastructure investment. Landowners can pay through a lump sum or instalments. No landowner is exempt.

Land readjustment

Land readjustment is used for urban development or renewal. States' planning laws regulate land readjustment. States, local governments and private landowners are in charge of implementation. Land readjustment use varies widely across states. Western states like Tyrol and Vorarlberg frequently use it as they lack suitable publicly-owned land for development and historically have a small plots structure not suitable for large urban projects. Other states do not apply readjustment schemes at all. The issue is that the increase in land values from readjustment projects mostly goes to private landowners. Thus, for example in Vienna, developers have used the instrument as a way to increase their land's value without providing any public benefits, while generating high public costs due to readjustment projects' lengthy procedures. For this reason, Vienna has used land readjustment only a few times and has largely abandoned the instrument, though it remains legally in force.

Local governments can initiate a readjustment project at their own initiative, in which case landowners are compelled to participate. Private landowners can initiate a readjustment project if they represent at least half of the landowners and own at least half of the readjustment area. Once these requirements are met, landowners who do not consent are compelled to participate. Landowners participate in consultations in both publicly and privately initiated projects.

Typically, landowners must provide around 10% of readjustment areas for public infrastructure and services, such as roads, utilities and parks.

After readjustment, landowners receive a plot of a value and size proportional to their original holdings and located on or as close as possible to their original land. Depending on the project, they can exchange reallocated plots for cash. Owners of readjusted plots that are less valuable than original plots do not receive any compensation. Yet, this rarely happens as all landowners typically experience a land value increase. Owners of readjusted plots that are more valuable are not required to pay any compensation.

Strategic land management

The national government, being the legal successor of the Austro-Hungarian Empire, owns a lot of land, which it manages through government-owned companies. States, except Vienna, do not own much land but some of them have created land funds to support local governments with land purchases. Local governments are the most active public actor in the land market. They buy land for commercial development, affordable housing, public facilities, urban renewal, land consolidation and to control urban growth.

Local governments buy plots at market price or at a reduced price in return for granting landowners a stake in development projects. Usually, they buy unused land or old buildings in city centres. Occasionally, they

buy brownfield sites. There is no limit to the length of land retention. Local governments typically rezone the land for residential or commercial development. They then sell it at market price to the highest bidder or at a lower price for example to housing associations for affordable housing construction. Selling land at a lower-than-market price requires use in the public interest. States have a land transfer authority that controls land transactions, but local governments are mostly free to buy and sell any land. Local governments also develop the land themselves to provide social infrastructure, services and municipal housing. For example, Vienna owns nearly a third of all the city's dwellings.

The national government, states and local governments may also lease their land to provide land for real estate development and encourage development with a public purpose. Leaseholds on urban land are rare but are becoming more frequent.

Developer obligations

Local governments issue development rights through land-use plans (*Flächenwidmungsplan*) and detailed development plans (*Bebauungsplan*). However, there is no legal basis to charge for development rights. They are granted for free. For instance, there is no established instrument requiring developers to compensate the cost of stronger public infrastructure and services use resulting from their developments. The existing infrastructure has to suffice. Otherwise, the government cannot issue a building permit or must provide the public works private development requires with public funds.

Therefore, the government cannot recover the increase in land values zoning changes, higher density building rights or development approvals generate. As local plans give building rights for an unlimited implementation period, developers may also postpone development speculatively. On the other hand, when planning authorities make a decision that reduces land values, they may have to compensate landowners.

Recovering the land value increment from planning decisions for the public good would fit within the constitutional boundaries. The legal discussion started in the 1970s but political attempts to pass such an instrument have been unsuccessful. For instance, in 1990 several states started to introduce civil law planning contracts – a form of developer obligations – into their planning laws. Such contracts were a condition for planning decisions and allowed local governments to negotiate in-kind contributions with developers in exchange for development rights. They were useful to routinely provide some of the public infrastructure or services private development requires. However, the Constitutional Court ruled them unconstitutional in 1999. It argued that planning contracts can be voluntarily accepted by developers but cannot be a condition for planning decisions. Thus, though local governments might ask developers to provide some of the public infrastructure or services their developments require, developers may not accept.

Contracts that pass on some of the public infrastructure costs to developers are frequent. However, due to their voluntary nature, contracts that demand the direct provision of infrastructure are rare. Typically, local governments only manage to obtain such contracts with developers for areas zoned for urban development for the first time, covered by a detailed development plan for the first time or where developers want higher density building rights. The latter happens especially in Vienna where the city administration negotiates planning contracts especially for large tower developments.

The problem is there are no regulations on how local governments should use these contracts and determine the developer contributions. Moreover, local governments do not need to publish the contracts, which leads to non-transparent use. The negotiated content is only reviewed if either party is sued because it fails to meet contractual terms. In Austria, planning contracts along the lines of developer obligations could work well but would need a consistent and transparent legal framework.

Planning contracts' negotiation is specific to each development approval. However, no local government tries to fully cover the public costs private development generates because states generously subsidise local infrastructure investment.

Developers may have to sell or rent a share of the newly built flats at affordable prices similar to subsidised social housing prices. Usually, affordable units are on the lower floors and face north but are comparable to market-rate units in terms of size, design standards and amenities. Flats remain 'affordable' between seven and ten years. All households and individuals with an income below a certain threshold are eligible to buy or rent affordable housing. Yet, planning contracts provide a handful affordable units only, an insignificant amount compared to the thousands of subsidised social housing units built every year.

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Bangladesh

Land value capture in Bangladesh

Several land value capture instruments are used in Bangladesh (Table 2.4). The national legal framework foresees charges for development rights and infrastructure levies, but they are rarely implemented, due to insufficient administrative capacities. There is no legal framework for developer obligations. Large-scale development projects sometimes adopt land readjustment. Land management is used little for strategic purposes.

Table 2.4. Bangladesh: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Charges for development rights	Land use conversion fees	Section 75 of the Town Improvement Act (1953)	Local governments and special purpose bodies	Rare
Land readjustment		Private Residential Land Development Rule (2004) (2012 amendment)	Local governments, special purpose bodies and private entities	Moderate
Infrastructure levy	Betterment fee	Section 94 of the Town Improvement Act (1953)	Local governments and special purpose bodies	Rare
Strategic land management		Non-Agricultural Khas Land Settlement Policy, (1995), Khas Land Settlement Policy (1997) and State Acquisition and Requisition Act (2017)	National, district and local governments and special purpose bodies	Moderate

Enabling framework

Bangladesh is a unitary parliamentary democracy. At the regional level there are 8 divisions. These are further divided into 64 districts and 495 sub-districts, which include municipalities, union councils and city corporations. All these local government bodies are constitutionally autonomous and not hierarchical (OECD/UCLG, 2019, p. 163^[1]).

City corporations, municipalities and union councils are in charge of public services and land use planning. However, most do not have master plans and do not make use of land value capture, owing to lack of capacities and resources. National-level organizations assist them on this endeavor.

The national government is responsible for creating the legal framework for land value capture.

Charges for development rights

Local governments and special purpose bodies can implement charges for development rights and collect the revenues. They may levy the charge when developers or landowners apply for land use rezoning. Although the charge is foreseen in national law and local authorities have high discretion in issuing planning permits, it is rarely implemented. Since very few cities have formal zoning plans, it is seldom possible for the authorities to check the allowed construction type against the actual construction type.

The charge is paid in cash at the time the land use conversion is authorized. For instance, in the city of Dhaka, an assessment committee proposes a conversion fee on the basis of an area-wide land valuation. In the city of Chattogram, the valuation is case by case. Smaller municipalities with no land use plans charge the fee when building use changes.

Large cities adopt charges for development rights more often. In Dhaka and Chattogram, the special purpose bodies in charge of urban development set the charge by zone, granting permission for land use change and collecting the revenues. These bodies have sufficient technical capacity to assess and charge the fee. However, not all cities count with similar levels of capacity.

Significant obstacles to the implementation of the charge are the lack of land use plans and local ordinances and the low technical capacity to assess and charge the fee. Moreover, the quality of land registries is low, with most areas lacking a formal ownership record.

Land readjustment

Land readjustment is used for the purposes of urban expansion and farmland consolidation. Local governments, special purpose bodies and private developers frequently implement land readjustment projects, most commonly in greenfield land. Local governments and special purposes bodies collect the revenues.

In private-led projects, developers must submit a detailed land-use plan for approval by the local government. In addition, all landowners must give their consent, with at least 75% of them agreeing to transfer their land to the leading entity before the project starts. The participation of the remaining 25% may be enforced through expropriations, with compensation at three times the registered land value. The government carries out the necessary expropriations only occasionally.

For projects initiated by local governments and special purpose bodies, participation is mandatory against compensation, according to the *State Acquisition and Requisition Act* (2017).

A share of 30% of the area is reserved for public improvements and services, such as public roads, public utilities, schools, parks and green space – from which participating landowners will benefit. Local authorities may reserve plots for future sales or leases, to generate revenues. Third party investors can receive readjusted plots in return for their investment.

After readjustment, landowners receive an area proportional to their original holdings. In private projects, landowners must receive a plot with a surface area not less than 50% of their original holdings. They may be reallocated to different plots within the area. They cannot exchange reallocated plots for cash but may be required to pay compensation if the readjusted plots are more valuable than the original ones.

Although national guidelines recommend utilizing land readjustment as a primary land development tool, a legal framework to guide land readjustment schemes has not yet been developed. Other obstacles that limit the use of land readjustment are the low quality of land cadastres as well as legal mandates to protect areas of environmental, cultural or historic significance.

Infrastructure levy

Landowners can be required to pay a levy for government-built infrastructure from which they specifically benefit, for example for public roads, public utilities and green space. Local governments and special purpose bodies need permission from the national government to implement the levy and receive the revenues. They rarely implement the levy, being Rajshahi city the only practising example.

The Rajshahi Development Authority (RDA) applies infrastructure levies to road construction projects. The levy should amount to 50% of the land value gains resulting from project execution according to the *Town Improvement Act* (1953). Nonetheless, the Rajshahi Development Authority only charges 10% of those.

Local governments can resort to a fixed impact radius to identify affected landowners. The RDA considers the properties within 300 feet from the project to benefit from road construction. Within these 300 feet, there are three scales for payment. The fee must be paid upon completion of public works, and no exemptions or discounts are admitted. This fee is revised every 3-5 years based on the land records approved by the general committee meeting of RDA.

Landowners often resist paying the levy. To facilitate collection, local governments charge the fee only when landowners ask for building approvals or ex post facto clearance of land use or building status. Sometimes it takes years to collect all fees for a single project.

The lack of individual town planning ordinances setting infrastructure levies hampers the widespread use of the instrument. Most municipalities lack administrative and technical capacities to calculate and levy the fee. The unwillingness of owners to pay the fee is a significant obstacle.

Strategic land management

The priority of strategic land management is to facilitate development with a public purpose, foster planned urban growth and take into account local infrastructure needs. National, district and local governments, as well as special purpose bodies, carry out strategic land management and receive related revenues. Local authorities need permission from the national government to do so. If the acquired land is bigger than 50 *bighas* (125419 square meters), the Ministry of Land takes over the responsibility of land acquisition.

The government can freeze land prices before the announcement of a public investment or zoning change and buy land at that price. This mechanism allows capturing the increase in land values created by the announcement of public projects.

The government rezones and redevelops the acquired land, alone or in partnership with private developers, which raises land prices. Afterwards, the government may either sell or lease the land, transfer it to another public entity or retain it. In the capital Dhaka, the retention time varies between 1-2 years, but in other jurisdictions it tends to be longer. The government recovers investment in land acquisition and development through selling or leasing developed plots.

Leasing has been introduced with the aim to increase government revenues and to facilitate social housing development projects. The ground rent is calculated as a percentage of the land value, based on the land transaction record of the previous 12 years. Local governments or special purpose bodies award the lease to the highest bidder. Revenues are modest, as the government holds little land to lease.

In all, large-scale strategic land management has limited use. With scarce land resources, governments find difficult to purchase land in advance. New projects respond to ongoing demand rather than to strategic planning.

The lack of financing, low capacity of local governments and lack of coordination between public entities also hold back implementation. Furthermore, for some projects, the rate of return is small, which does not always justify the cost of the operations.

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Belgium

Land value capture in Belgium

Belgium uses several land value capture instruments (Table 2.5). However, those instruments seem to recover relatively little value. A strong culture of private property rights makes landowners resistant to these instruments, which hampers their political acceptance at the local level. The lack of culture in strategic spatial planning and the low levels of administrative capacities challenge strategic land management. Land readjustment has not been significantly used since the reconstruction efforts after World War II, except for agricultural development purposes and, on occasion, for natural resource development purposes.

Table 2.5. Belgium: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	Legal provision	Implementation	Use
Developer obligations	Urban planning conditions (<i>conditions d'urbanisme</i> in French and <i>stedenbouwkundige voorwaarden</i> in Dutch) and urban planning charges (<i>charges d'urbanisme</i> in French and <i>stedenbouwkundige lasten</i> in Dutch).	Regional territorial development codes	Local governments	Frequent
Infrastructure levy	Reimbursement tax (<i>taxe de remboursement</i> in French and <i>verhaalbelasting</i> in Dutch)	Municipal tax laws	Local governments	Rare
Charges for development rights	Taxe sur les bénéfices résultant de la planification (French) and Planbatenheffing (Dutch)	Regional planning codes (Flanders and Wallonia)	Regional governments	Rare
Strategic land management		National Civil Code Regional planning codes (Brussels, Flanders and Wallonia)	Local governments and special purpose bodies	Rare

Enabling framework

Belgium is a federal state with three tiers of subnational governments: 6 federated entities at the regional level (3 regions and 3 communities), 10 provinces at the intermediate level and 581 municipalities at the local level (OECD/UCLG, 2019, p. 285^[1]). The three regions are Flanders, Wallonia and Brussels-Capital, and the three communities, which cut across the regions, are Flemish, French and German-speaking (OECD/UCLG, 2019, p. 285^[1]).

The national government and the regions create the legal framework for land value capture. There are regional variations in the design and use of land value capture tools. Regions delegate significant authority to municipalities in matters of land use and spatial planning (OECD, 2017^[2]). Municipalities implement most land value capture tools, except for charges for development rights. Municipalities with higher land values have had more expertise in levying developer obligations than municipalities where land values are lower.

Developer obligations

Developers are subject to obligations to obtain approval for new development. They are designed to compensate the cost of stronger use of public infrastructure and services resulting from development. Regional legislations establish the guidelines and local governments implement the obligations and receive the revenues.

Although there are differences between the three regional legislations, the basic principles are the same. In Flanders and Brussels, the obligations consist of cash or in-kind payments. In Wallonia regulations, payment in cash is not admitted. In-kind obligations consist of providing land for local roads, public facilities or public space; providing public infrastructure directly; or building affordable housing.

In Flanders and in Wallonia, there are two types of developer obligations: planning conditions and planning charges. Planning conditions refer to obligations that are judged “necessary” for the feasibility of the project, such as public utilities and roads. By contrast, planning charges are negotiated with developers supposedly to compensate the wider impacts of the project upon the neighbouring area.

The obligation is paid at the time the new development receives approval. If this cannot be done, developers must provide financial guarantees beforehand. Exemptions to payment can be granted during the negotiation process. Small developments, for example adding a floor to an existing house, and projects that provide a social benefit that outweighs their impact on infrastructure usually receive a payment waiver. Social housing projects and brownfield redevelopment are illustrative of such projects.

Affordable housing requirements are more common in the regions of Flanders and Brussels, and less so in Wallonia. Some municipalities require between 15 and 25% of units in the project to be affordable units. The affordable units are built within the boundaries of the market-project, but not necessarily with the same building standards (size and quality). Households with an income of below the region’s median income level, households with one or more disabled individuals and single parents are eligible to affordable housing. Sometimes there is a ban on resale to prevent speculative reselling of units.

Developer obligations have faced resistance from developers and construction companies. They argue that the obligations would not be economically feasible, and that affordable housing requirements would particularly jeopardise the projects’ financial viability.

Other relevant obstacles to implementation are inadequate legal frameworks, complicated formulas to calculate the charges and lack of administrative capacities at the local level, notably to estimate the costs and negotiate with developers.

Infrastructure levy

Landowners may have to pay a levy for local roads, sidewalks and sewer infrastructure built adjacent to their land by the government and from which they specifically benefit. Local governments are in charge of implementation and receive the revenues. They have high discretion in charging the levy and reinvesting the funds. This instrument is rarely used.

Local governments have two techniques at their disposal to charge the levy, the reimbursement tax and the urbanisation tax. The reimbursement tax is a mandatory levy for the remuneration of a public service, charged after the service is rendered. If municipalities do not charge the levy upon completion of the public works, they can impose the urbanisation tax, which is an annual flat rate tax. Although always annual, the period of the year in which the tax is due may vary from one municipality to one another.

Local governments use the levy to cover at least part of public works’ cost. Municipalities can choose how the tax is calculated, provided that there is an apparent and reasonable relationship between the tax and the public works. In practice, the tax collection falls largely below the actual costs.

Landowners whose plots are adjacent to public roads or utilities are charged. The levy is usually calculated according to a fixed formula, based on position and frontage length of private land. Landowners can pay through a lump sum or instalments. Exemptions to payment can be given to owners of non-buildable land along an equipped road; for taxes related to sewers, to owners of a plot which cannot be connected to the sanitation systems; and for state-owned land.

The main obstacle to implementation is resistance by property owners, in particular a cultural factor of strong belief in individual property rights that helps to foster a negative perception of the instrument.

Therefore, local governments tend to avoid it. Local governments already have an important and stable income source deriving from land, which is the recurrent tax on immovable property. Another reason why municipalities refrain from implementing the levy, is also related to concerns around negative societal perceptions, due to the fact that it is not the municipality that finances most improvements or services, but other levels of government.

Charges for development rights

Landowners pay charges for development rights for zoning changes. The charge must be paid in cash when a non-buildable land becomes buildable land. The price of the charge is determined according to the estimated gains from rezoning and must not exceed them. The regions of Wallonia and Flanders have created such charges, but not Brussels-Capital. In all, regions rarely use the instrument and collect the associated revenues.

The main challenge to widespread adoption is how rarely zoning changes occur. Given the oversupply of buildable land in the country, zoning changes seldom take place, and, when they do, the rates tend to be low. Another obstacle is the lack of legal framework in Brussels Capital Region.

Strategic land management

The government does not hold a significant amount of land available to lease or to manage strategically. Even if at limited scale, local governments and special purpose bodies buy land to develop a project that they have not anticipated the need for before. The purposes of such projects can be urban renewal, affordable housing provision and industrial development. In all, strategic land management is weak, and a strategic approach to recover increasing land values is rare.

Local governments and special purpose bodies acquire vacant or unproductive lands through sales at market price or expropriations. Acquired land may be retained for some time. After retention, local governments and special purpose bodies sell the land at market prices to the highest bidder. Apart for industrial developments, local governments and special purpose bodies do not typically rezone or redevelop it before selling, what limits the potential of capturing land value gains.

Local governments and special purpose bodies can lease public land to facilitate developments with a public purpose. The national legal basis is in the Civil Code, which incorporated provisions from Dutch laws of 1824. There is a legal distinction between the owner of land and the owner of what is developed on land. Leases can occur through granting land use rights or surface rights (emphyteusis rights and surface rights, respectively). Both can be renewed indefinitely.

The rent of emphyteusis rights is symbolic, for instance in the case of the municipality of Louvain-la-Neuve. Therefore, revenues are symbolic. Concerning surface rights, the rent is the same of social housing. Due to the limited number of developments, revenues are also limited. One recent example of usage is in the city of Etterbeek.

Strategic land management is hampered by the small amount of land available to lease or sell, the absence of a legal framework, the lack of strategic planning culture or active land policies and the reduced levels of administrative capacities. The recent legislation on Community Land Trust may lead to further usage.

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Brazil

Land value capture in Brazil

Several land value capture instruments are used in the country, namely: charges for development rights, infrastructure levy and developer obligations (Table 2.6). Their adoption varies considerably, being more significant in large capital cities such as São Paulo, Rio de Janeiro, Belo Horizonte and Curitiba. The main obstacles to implementation, considering other cities, are the low demand for building at higher density, the low quality of land registries, the lack of local administrative capacities and reduced political will. There is no legal framework for land readjustment or strategic land management.

Table 2.6. Brazil: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	<i>Diretrizes para parcelamento do solo</i>	Art. 4, I, Art. 6º, Art. 7º and Art. 12 of Federal Law 6.766/1979	Local governments	Frequent
Charges for development rights	<i>Outorga Onerosa do Direito de Construir</i>	Art. 4º, V, "n", Art. 28, Art. 29 and Art. 30 of Federal Law 10.257/2001	Local governments	Moderate
Infrastructure levy	<i>Contribuição de melhoria</i>	Art. 145, III of Federal Constitution and Art. 4º, IV, "b" of Federal Law 10.257/2001	Local governments	Moderate

Enabling framework

Brazil is a federal state with three autonomous levels of government: the Federal Union, the states (26 states and 1 federal district) and the 5 570 municipalities (OECD/UCLG, 2019, p. 448^[1]). Each entity has their own constitution, which must follow the Federal Constitution of 1988 (OECD/UCLG, 2019, p. 448^[1]).

All three levels of government can legislate about Urban Law, but the responsibility for implementing land use rules and ensuring adequate territorial development lies with municipalities (Articles 24, I and 30, VIII of the Constitution). Local planning authorities have high levels of discretion in issuing development approvals, negotiating with developers and collecting funds.

The *City Statute* provides the framework of the national urban policy, which includes instruments and rules about land value capture (Federal Law 10.257/2001). The constitutional principle of social function of property establishes that urban lands must be developed in accordance with the territorial development rules enacted in the Master Plan of each city.

Developer obligations

Developers are subject to in-kind obligations to obtain approval for new development or development at higher density. The obligations are designed to compensate the impacts of development on public infrastructure and services adjacent to it. Local governments frequently adopt developer obligations, since they are part of the regular land use planning procedure for formal land subdivisions.

Developer obligations are negotiated between developers and local governments. Local governments have high discretion in issuing planning permits and negotiating with developers. The in-kind provisions can include land, public spaces, green areas, new roads, paving and parking space and must be executed during project development. No cash substitution is admitted.

The negotiation process is structured via the emission of project guidelines. Developers request project approval to the local planning authority, with assigned areas for roads, parking, public spaces and public utilities, according to the density and uses allowed in the zoning plan. The local authority may approve the project or, more commonly, indicate necessary changes, by presenting guidelines. The guidelines are specific to each project and take into consideration the adjacent urban grid, in terms of green spaces, traffic flows, public facilities and such. Developers must follow the guidelines to obtain building permission.

The main challenge to implementation is the lack of local administrative capacities. Another obstacle is the low levels of land formality, making it so that many developments are carried out without previous approval from the local planning authority. Without that approval, land subdivisions are considered illegal and cannot be registered in the title deed (art. 50 of the Law 6.766/1979).

Charges for development rights

Developers pay charges for development rights for zoning changes (density and use) and for building at higher density beyond an established baseline but within the maximum density permitted by local plans. Local governments make moderate use of this instrument and collect the revenues. Implementation is more prominent in large capital cities, such as São Paulo, where the real estate market is dynamic and the Floor Area Ratio is low, either historically or through legal reforms.

Local Master Plans and ordinances must specify the conditions and rules of operation, as well as the maximum Floor Area Ratio allowed in an area. The calculation method varies across cities too. In some cities, the charge is calculated as a percentage of the extra Floor Area Ratio multiplied by the average land price per square meter in the zone. In other cities, such as in São Paulo and Curitiba, the value of the charged is ultimately defined in the auction market. Either way, the charge is paid in cash at the time the development rights are issued.

The development rights can be transferred within the city or within a specific zone. When developers pay the charge, they are paying for the right to build at higher density, whenever the Master Plan allows them to do it. Therefore, they can choose to use the developments rights in one project or another, or even sell them to other developers. The local planning authority will constantly calculate the density that a given zone still supports in order to decide whether to approve a project with higher density or not.

Local governments may spend the revenues collected within a specific zone or within the whole city. Some cities have created urban development funds through which revenues are invested for urban development purposes, such as public spaces, public transportation, roads and parking, public improvements and social housing. Other cities invest the revenues in infrastructure and public transportation at designated urban renewal areas called Special Urban Operations (*Operações Urbanas Consorciadas*).

The main challenge to implementation is the low demand for building at higher density in secondary cities. Many cities lack local ordinances and sufficient technical capacity to design and implement the charges. There is considerable opposition from landowners and developers, who pressure local governments to reduce or even eliminate the charges. The low quality of land registries and reduced political will constitute additional obstacles to implementation.

Infrastructure levy

Landowners may be required to pay a contribution to offset the costs of public works adjacent to their property, notably road construction, parking and street pavement. The infrastructure levy is the oldest land value capture instrument in the country, having been first enacted in 1934 and maintained since then. Local governments make moderate use of this instrument and collect the revenues.

The infrastructure levy is charged when the public improvement increases the value of benefited property owners' land parcels and landowners have the capacity to pay. Benefitted property owners are identified

according to distance to the public improvement. For pavement works, the distance is calculated longitudinally, whereas for projects with a specific location, the distance is measured axially.

The calculation formula takes into account the costs of public works and the estimated land value gains. The total amount of fees charged must aim to equal the total of land value gains generated, but it can never surpass the cost of the public improvement. Landowners must pay the fee in cash, upon completion of the public improvement.

The instrument does not yield significant revenues to local governments, because it is little used. Many cities lack local ordinances to enable implementation. When it is used, 70% to 90% of the costs of the public improvement are typically recovered through the fees paid by benefited property owners.

The main obstacles to adoption are resistance by property owners, reduced political will and lack of local administrative capacities to estimate the land value gains. Since the country adopts a non-market land valuation system, the land registries do not reflect actual market values. Hence, land value gains have to be calculated for every case. It is debated whether the fee should be estimated in a case-by-case basis, which would be fairer, or set beforehand in a municipal ordinance, which would facilitate collection.

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Canada

Land value capture in Canada

Several land value capture instruments are systematically used, notably developer obligations, charges for development rights, public land leasing and public land banking (Table 2.7). There is sufficient administrative capacity and political will to implement these tools. The main challenges refer to the absence of provincial regulations and resistance by developers and landowners. There is no specific legal framework for land readjustment or infrastructure levy.

Table 2.7. Canada: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Charges for development rights	Density Bonus, Bonus Zoning, Community Amenity Contributions or Community Benefit Contributions	None	Local governments	Frequent
Developer obligations	Development cost charges or lot levies	None	Local governments	Frequent
Strategic land management	None	None	National, regional and local governments, and special purpose bodies	Frequent (except land leasing)

Enabling framework

Canada is a federal state with two levels of subnational government: 10 provinces and 3 territories at the regional level and 3 959 municipalities at the local level (OECD/UCLG, 2019, p. 528^[11]). Municipal structures vary considerably, among towns, municipalities, townships, cities, rural municipalities, municipal districts and villages. In addition, there are Indian reserves, Indian settlements and unorganized territories.

There is no national land use planning. However, there is a National Housing Policy, which provides some synergies with land value capture tools. Provinces and territories have one or more *Regional Plans*. Provinces create the legal framework of land value capture. They also define the powers and competencies of local governments (OECD/UCLG, 2019, p. 527^[11]).

Without Constitutional status, municipalities are “creatures of the provinces”. They enact Master Plans and may prepare detailed plans for smaller geographic areas called *Community Plans*. Municipalities can typically create land value capture instruments and define their operational rules.

Charges for development rights

Local governments frequently implement charges for development rights and collect the revenues. Developers who make a request to build at higher density have to pay a combination of cash and in-kind provisions, such as day care facilities, subway station connections and affordable housing units. The value of contribution may vary according to the zone.

If the contribution is affordable housing units, they must be built on-site and be comparable to market-rate ones, in terms of size, design standards and amenities. For units be rented or sold at affordable prices, the project must have a minimum share and size of units, which can vary by jurisdiction and zone. Beneficiaries are households eligible to social welfare programmes.

The collected funds are earmarked for specific purposes, as detailed in local Municipal Plans or Community Plans. Hence, local governments spend the collected funds within the same geographic area of collection.

Numerous local governments have applied this instrument, such as Toronto, Ottawa, Burlington, Vaughan, Halifax, Calgary and Vancouver. It has provided significant revenues for them.

The main challenge to implementation is the lack of clear development norms and land use regulations. In the province of Ontario, for instance, the lack of clear guidelines for negotiation of Density Bonuses constituted an obstacle, which led to the preferred adoption of Community Benefit Contributions, in which the maximum contribution is set as 4% of the land value before project approval.

Developer obligations

Developers that submit an application for new development or development at higher density may have to offset the impacts of the project on the local infrastructure. For greenfield development, developers must provide in-kind contributions of public utilities and services at municipal standards, such as sewer, water, roads and parking. In addition, developers make cash payments for all external growth related capital costs. Local governments frequently levy developer obligations and collect the revenues.

The calculation formula takes into account the costs of additional infrastructure, as well as the size and type of development. In some provinces, such as British Columbia, local governments calculate the fee separately for each category of infrastructure – water, sewer, drainage, parks, and roads. Once collected, the fee goes to separate reserve funds for each of these categories.

Developer obligations for off-site growth related to capital costs are always paid in cash, whereas for services internal to the subdivision the contribution is in the form of public spaces, roads, parking and other public improvements for the neighborhood. Park land may be either a percentage of the land, for instance, 5% in the province of Ontario, or a cash equivalent in value. It may also be a combination of cash and in-kind. Developers must pay the charge before or at the time the development receives approval.

If the contribution is affordable housing units, the units must be built on-site, within project boundary. The government may grant exemptions from contribution. To illustrate, in the Toronto Region, social housing and nonprofit providers are exempt, especially in the case of high density multifamily developments.

The main challenge to implementation is the lack of legislation in some provinces, without which municipalities cannot charge developer obligations. However, where there is legislation, it is clear and operationalizable. In Ontario, for instance, the *Development Charges Act* (1989) foresees cash contributions for off-site growth-related developments and in-kind provision for internal services in land subdivision projects.

Strategic land management

The priority of strategic land management is to facilitate the provision of social and affordable housing. National, regional and local governments have public departments or agencies in charge of strategic land management. At the federal level, it is the Canada Lands Corporation. Only small municipalities do not have such bodies.

The government acquires vacant or unproductive land, either empty or with structures, through market purchases, government transfers or expropriations. The government typically rezones acquired land but does not redevelop it. There are a number of strategies to assign the land: auctioning it to the highest bidder criterion, selling it in public tenders, leasing it for public projects, such as of social housing, or transferring it to another public entity.

In some circumstances, local governments partner with private actors, forming Public Private Partnerships. The objective is to facilitate the redevelopment of social housing, but also to improve neighborhood facilities

such as schools, parks and sports stadiums. Recently, the Toronto Community Housing Corporation has undertaken a comprehensive approach to rebuild over 2,000 social housing units in Regent Park. The private developer received land to build private market condo units and in exchange will rebuild social housing units and provide community facilities and public parks.

Community Land Trusts are non-profit corporations that act in strategic land management, especially due to recent surges in housing prices. They buy land to develop or facilitate the development of social housing. They can operate as a cooperative, under a lease-to-own model or act mainly as a facilitator of further development. The challenge is to acquire reasonably priced land to start or expand the land trust, preferentially in blocks of concentrated parcels. Government support in the form of sale below market values or subsidies may be required.

Land leasing serves to generate public revenues and provide land for development with public purpose. Lease length varies with the permitted uses: residential, social housing or other social purposes tend to be long term, whereas commercial purposes tend to be shorter.

However, leasing is uncommon. For one, the government holds little land available to lease. Moreover, this practice is not widely accepted in Canadian property culture. Real estate developers have resistance to building on land that they do not own. Still, there are examples of social housing projects on publicly leased land in the cities of Vancouver and Toronto.

The main challenges to strategic land management are the lack of financing for land acquisition, the insufficient amount of land to lease, the aforementioned property culture and the lack of coordination between public entities. To this point, it is worth mentioning the work of the National Executive Forum on Public Property, which is an organization of federal, provincial and municipal agencies in charge of public real estate and land portfolio. Although it is not a formal coordination mechanism per se, it functions as a knowledge-sharing forum to advance common practices and establish ways to optimize the management of public real estate in Canada.

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Chile

Land value capture in Chile

The most common land value capture instruments are charges for development rights, especially in large cities, and land readjustment projects in urban expansion areas or sparsely built land. The levy for road and pavement works is less common, since it yields small revenues to municipalities. The lack of adequate legal frameworks and the lack of technical local capacity are obstacles to the use of the levy. Developer obligations are part of the regular procedure for planning approval and in this sense are always used for new developments. Strategic land management, recently adopted, is in the process of consolidation.

Table 2.8. Chile: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Cesión de tierras, Aportes al espacio público	Executive Order 458/1976 and National Law 20.958/2016	Local governments	Always
Charges for development rights	Zonas de Desarrollo Urbano Condicionado, Planes de Desarrollo Urbano Controlado	General Law of Urbanism and Building	National and local governments and private developers	Moderate
Infrastructure levy	Contribución de pavimentación	National Law 8.946/1949; National Budget Law and DS 114/1994 MINVU	Local governments	Moderate
Land readjustment	Reajuste de tierra	National Law 19.865/2003	Regional and local governments and private actors	Moderate
Strategic land management	Banco de Suelos		National government	Moderate

Enabling framework

Chile is a unitary country with two tiers of subnational government: 16 regions and 345 municipalities (*comunas*) (OECD/UCLG, 2019, p. 453^[11]). A reform enacted in 2013 transferred to municipalities tools, capacities and financial resources to improve their autonomy and performance (OECD/UCLG, 2019, p. 453^[11]). The country is also divided into 54 provinces for administrative reasons (OECD/UCLG, 2019, p. 453^[11]).

Chile has an advanced urbanization process and an important concentration of the population living in metropolitan areas. Since 2017, the housing deficit increased, and so have informal settlements. The right to access to the city and the right to housing are some of the main issues under discussion for the new Constitution.

The main planning instruments at the national level are the General Law of Urbanism and Building (*Ley General de Urbanismo y Construcción*, DFL 458/1976), and the National Urban Policy (*Política Nacional de Desarrollo Urbano*), enacted in 2014. Regions and municipalities must follow the general provisions and principles of these two laws in their policy process.

All levels of government are responsible for the legal framework of land value capture.

Developer obligations

Municipalities always implement developer obligations, which are part of the regular planning practice. In all urbanization, that is, the process of parceling and servicing urban land, developers must provide free land for green areas, mobility, public equipment, sports and recreational activities. Developers make these in-kind contributions to offset the impacts that their project has on local infrastructure. The land given as contribution may not exceed 44% of the total land to be developed (art. 70 of DFL 458/1976).

Municipalities use the received land to develop local infrastructure and public equipment. However, if the location is not considered suitable, municipalities may opt to exchange or sell the land and install the corresponding facilities in a more suitable location.

In 2020, the national government created a new type of developer obligation, associated with infrastructure of urban mobility, called *contributions to public space* (General Law of Urbanism and Building). Developers must compensate the impacts of a project of urban expansion or densification by making contributions to public space and mobility infrastructure. The contributions may be fulfilled elsewhere in the jurisdiction.

The contributions may be provided in-kind (*mitigación directa*), through the implementation and operation of transportation infrastructure and related services, such as exclusive bus lanes, terminals, signaling, bicycle lanes and road improvements or adaptations. For projects that contribute to urban densification, developers may be required to pay the obligation in cash (*aportes al espacio público*), as defined in municipal ordinances or intercommunal plans.

Contributions to public space have not been systematically implemented across municipalities, since first they must be included in local Mobility and Spatial Infrastructure Investment Plans (*Planes de Inversión en Infraestructura de Movilidad y Espacio, PIIMEP*). This is the main obstacle to the adoption of contributions.

Charges for development rights

State and local governments frequently adopt charges for development rights and collect the revenues. Developers that make a request to build at higher density or to benefit from rezoning or change in building parameters have to pay the charge. The charges are associated with specific land use parameters, and cannot be transferred or resold to other locations.

The charge may be due in cash or in-kind. If in cash, the charge is paid when the project is complete or deferred until the land sale. In-kind contributions must be executed during project development and may consist of the provision of land, creation of public spaces, construction of affordable housing units, or of a combination of cash and in-kind provisions.

In the *Zones of Conditioned Urban Development* of the municipality of Santiago, development outside the urban limits is admitted against a compensation in cash or in-kind, such as construction of roads and the provision of green areas and parks. The construction of social housing units, albeit foreseen, was never achieved.

In the Valparaiso region, the *Controlled Urban Development Plans (Planes de Desarrollo Urbano Controlado, PDUC)*, approved in 2003, contain a similar provision than in Santiago: building rights beyond the baseline might be granted if the developer compensates the corresponding impacts. Differently from Santiago's zones, the charges have no specific location and are authorised in successive stages.

The collected funds are earmarked for public improvements, such as public spaces, roads or parking, local infrastructure and affordable and social housing. The funds must be spent within the jurisdiction collecting the charge. Notwithstanding, if the project is of metropolitan interest, a portion of the funds may be redirected to other local or regional jurisdictions.

The most important challenge to implementation is the lack of legal frameworks at the regional and local levels. Up to this date, only the Metropolitan Regions of Valparaiso and Santiago have regulated charges for development rights.

Infrastructure levy

Municipalities sometimes charge an infrastructure levy for road and pavement works conducted by public entities. Called *contribución de pavimentación*, this instrument exists in the national legal framework since 1949, through the Law 8.946, whose latest modification dates from 2006.

The levy is collected from property owners benefiting from the public improvement that have capacity to pay. The levy includes the cost of 5 meters of road pavement width and the total cost of the sidewalk in front of the property. The levy is collected before project completion, and the payment scheme takes into consideration the capacity to pay of benefitting property owners. Social housing projects or houses whose value falls below a threshold may be exempt from payment.

In 1994, the Ministry of Housing (MINVU) enacted the *Participative Pavement Programme*, under which benefitting property owners and municipalities enter into a legal arrangement with private construction firms similar to a public-private partnership. In this arrangement, benefitted property owners contribute 5 to 25% of the cost of the paving project, regardless of their capacity to pay, and the municipality pays up to 25% of the cost. The rest is financed by the Ministry of Housing, and the construction firms are responsible for the road and sidewalk works.

The main challenges to implementation are low levels of revenue collection and low social acceptance. Low-income and elderly residents lack the financial capacity to pay the levy. Residents of central areas have often resisted the levy, arguing that deterioration of pavement is caused by heavy traffic rather than by residents themselves.

Land readjustment

Land readjustment is frequently used to repurpose vacant or sub-utilized land plots, such as deactivated public equipment or unexploited vineyards. Private landowners and public entities may pool and readjust underused lots for the purposes of urban expansion, development and renewal, as well as for brownfield regeneration and farmland consolidation.

The executing entities may be private landowners and regional and local governments. Nonetheless, only local governments are entitled to receive the revenues from cash compensations, which are paid by landowners after receiving the readjusted land plots.

Previously to the project, the executing entities must carry out a consultation process with landowners and interested third parties, in order to define the uses and limits of the project (*General Law of Urbanism and Building* and *Citizenship Participation Law*). Landowners must consent to the realization of the project. Participation of resisting landowners is enforced through land expropriation. Because expropriations are effective, land readjustment projects are typically always executed.

The public sector builds public equipment – school, health center, justice center and others – from which landowners will benefit. After readjustment, landowners receive a plot with an area proportional to their original holdings. Instead of their original plot of land, they may receive a residential or commercial unit in another location, based on the value and surface area of the new land. If the reallocated plots do not satisfy the landowners, they may exchange them for cash.

Land readjustment projects are typically always executed. The fact that most projects take place in empty or abandoned land facilitates landowners' participation. Moreover, when there is resistance, expropriation successfully enforces their participation. In all, the remaining challenges to implementation are the lack of adequate legal frameworks and the low levels of technical capacity at the subnational level.

Strategic land management

The national, regional and local governments may acquire and retain land in advance of needs, for the purposes of future land consolidation or development projects and to control urban growth and land price fluctuations. The acquired land may be retained either to raise revenues or to allow private or public entities to conduct projects of public interest. Strategic land management is, in all, only moderately used. This picture may change in the upcoming years, given that, in 2020, the Ministry of Housing put land banking into evidence in the *Management Plan for Land Use*.

The government may sell, offer for lease, concede or assign use to public lands. The government typically rezones and develops land before selling, alone or through public-private partnerships. Development includes basic land preparation and servicing, construction of public space, roads, parking, public utilities, and, in some cases, housing units. The developed land is then sold to the highest bidder in a public auction or at market price. Alternatively, for the purpose of housing policy, land is sold to the project that best incorporates social housing into the public equipment. The government recovers investments by selling developed land at higher prices.

There is no significant amount of land available to lease and no policy of public land lease. Public land leasing, although scarce, may be used to generate public revenues, facilitate development with public purposes, e.g., social housing, and facilitate urban growth. There is no typical lease length. The ground rent can be paid upfront or through recurring payments. Public entities or non-profit entities may be exempted from paying the rent.

Challenges to the implementation of strategic land management include lack of administrative capacities, lack of financing for land acquisition and lack of co-ordination between the relevant public entities.

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China, People's Republic of

Land value capture in China

Several land value capture- instruments can be observed in China (Table 2.9). Given that all land is publicly-owned, strategic land management is a policy priority. Local governments have strong land banking systems and collect substantial revenues from selling land use rights. Local governments often charge developers for building at higher density (charges for development rights) and for the impacts that their projects have on local infrastructure (developer obligations). Land readjustment is frequently used to redevelop old city centers. There is no legal framework for infrastructure levy, reflecting the view that public services should be paid from the general budget.

Table 2.9. China: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Strategic land management	土地储备	Government ordinance titled "土地储备管理办法" Regulations on land banking	Local governments and special purpose bodies	Always
Charges for development rights	土地批租收益	None	Local governments	Always
Developer obligations	开发商配建	None	Local governments	Frequent
Land readjustment	用地调整	Article 13 of the Constitution	Local governments, private entities, property owners and non-governmental organisations	Frequent

Enabling framework

China is a unitary country with three levels of subnational government: 31 regional entities including provinces, autonomous regions and centrally administrated municipalities; 334 prefectures and prefecture-level municipalities at the intermediate level; and 2 851 local entities including municipal districts, county-level municipalities and autonomous counties (OECD/UCLG, 2019, p. 171^[1]). Metropolitan areas and megacity regions are not administrative units, being managed by provinces. Cities, as a geographic concept, exist at each of the three administrative levels (OECD/UCLG, 2019, p. 171^[1]).

Public ownership of land is organized as follows: urban land is owned by the State, while rural land is collectively owned by village communities. All levels of governments have the power to control and regulate land use, convert rural land into urban land and sell land rights to private developers (OECD/UCLG, 2019, p. 174^[1]). Land use rights sales, attributed through land leasing, are the basis upon which other land value captures tools can be applied, with different degrees of innovation and experimentation.

The national and local governments create the legal framework of land value capture.

Strategic land management

All land is government-owned and cannot be sold. Nonetheless, land use rights are commercialized in the real estate market since the mid-1990s. Through land leasing, private actors acquire, use and transfer land use rights. Land is leased for multiple decades.

Local governments own the urban land available to lease. They set the baseline lease rate and decide which land to lease. The transaction price is typically decided at public auctions. Land leasing is very common and serves a myriad of purposes, including to generate public current revenues, which is seen

as an unsustainable use by many observers, including the OECD (2015^[4]; 2017^[5]; 2021^[6]), provide land for real estate development or facilitate planned urban growth.

Lease length varies according to the permitted use: 70 years for residential land, 50 years for industrial uses and 40 years for retail and entertainment, for example. The rent is paid in one lump-sum payment, and no periodic readjustments are foreseen.

Leaseholders may transfer or sell the lease in a secondary market. Sub-leasing is possible, but informally. Public entities such as state-owned-enterprises may transfer or sublease land rights to private developers.

Together with land leasing, land banking is an important land value capture tool in the country. Local governments acquire and retain land use rights in advance of needs for the purposes of urban renewal, land consolidation, control of urban growth and the capture of capital gains. Most commonly, they acquire greenfield land within their jurisdiction and rezone it to a different use.

Governments acquires rural land or urban land use rights at negotiated prices, which are regulated by the government itself. Before the announcement of public investment or rezoning, the government may freeze land transactions between other entities, and the local government buys land development rights at a specified price.

The government sells the land development right to the highest bidder or transfers it to government-owned corporations free of charge.

Every local government makes use of strategic land management. Land right sales constitute an important source of local revenues, which are likely unsustainable (OECD, 2015^[4]). For instance, in 2014, land right sales revenues accounted for 40% of total revenues in Chongqing, Anhui and Zhejiang (OECD/UCLG, 2019, p. 174^[11]), which may partially reflect strongly expanding development.

The main implementation challenge has been empty auctions of land leasing in a down-turn market or when the base rate is set too high. Yet, this challenge is often overcome by organising a successive auction at a lower base rate. Dependence of local governments on land right sales for revenues reinforces incentives to rezone and develop land for commercial use, which can contribute to adverse environmental impacts, rising debt to pay for development and a weak funding basis for funding local public services (OECD, 2021^[6]).

Charges for development rights

In exchange for planning permits to build at higher density (Floor Area Ratio), developers have to pay the charge for development rights. Local governments always use the instrument and collect the revenues.

The charge is paid in cash or through in-kind provisions of land, public improvements or affordable housing units. Cash payments occur when the development rights are issued, and in-kind provisions must be completed upon project completion. If requested, developers can defer payment to the sale of land rights.

When paid in cash, the fee can vary by zone. The price may be calculated according to the estimated value of the additional floor space or be defined in public auctions, according to the offers made by willing buyers.

The fee may be embedded in the price of granting development approvals. For instance, a local government that sells land use rights of a plot in proximity of a metro station will set the price as to include the right to build at higher density. Therefore, developers cannot differentiate between a price for baseline development and a price for development at higher density.

When the in-kind payment is through affordable housing provision, the units must be built on-site. Units do not have to be comparable to market-rate units. After building, developers must transfer the units to the government, to be sold at discounted prices or rented. The units should remain affordable for as long as

the local government manages them as such. Developers are not permitted to satisfy this requirement by paying a fee in cash.

Local governments may establish the share of affordable housing units beforehand, by including it as a factor that will help select the winner at a public auction. In the latter case, the local government establishes the maximum density (Floor Area Ratio) and the maximum land lease fee. During the auction, private developers bid by increasing the percentage of floor area to be destined to affordable housing. The developer that offers to build more affordable housing units for the same land lease fee wins the auction.

Challenges to implementation are the lack of administrative capacities and the risks associated with fluctuating dynamics of real estate markets as well as the lack of recourse to independent judicial review. Another practical obstacle is that developers often add floor area to their project without notifying the city government. In this case, they will have to pay a fine. This type of irregular construction, although rectifiable, hinders the regular functioning of the instrument.

Developer obligations

Local governments frequently charge developer obligations when developers request approval for new development or development at higher density. Developers have to compensate the impacts that the development has on infrastructure use within and adjacent to the project by building more infrastructure. This infrastructure may refer to new public spaces, public utilities or other public improvements.

To calculate the charge, local governments take into consideration the costs on infrastructure use, as well as the size, type, location and physical characteristics of the development. Other local governments negotiate the charge with developers. Negotiation follows a structured procedure to define which types of infrastructure are more adequate for the area, and in which amount they are necessary. Either way, the charge is not allowed to be paid in cash. To illustrate, in Shenzhen, developers may be asked to provide floor space to host high-tech firms.

The charge is paid upon project completion. Large developers usually provide all public infrastructure on site and then transfer the equipment and land to the city government. If the project is small and the impact on infrastructure is not important, developers are exempt from payment.

Developer obligations are an important tool to finance urban infrastructure. Local governments can recover all the public costs created by private developments by asking them to provide the necessary infrastructure. Noticeable obstacles exist for the redevelopment of urban villages, where adequate legal frameworks and relevant government regulations do not exist. In this case, the developer obligation has to be negotiated on a case-by-case basis.

Land readjustment

Land readjustment is used for the purposes of urban development and regeneration of old city cores. Through land readjustment, land plots are pooled, reshaped and redeveloped. As a result, a new urban pattern emerges, whereby the lots are integrated into the urban grid and well-served by infrastructure. Local governments, private entities, property owners and non-governmental organisations frequently adopt the instrument. Local governments collect the revenues of land readjustment in redevelopment projects. In undeveloped land, no money transfers are typically involved.

If the project is to take place on undeveloped land, 75% of property owners should give their consent. On developed land, the share is 95%. The required consent is frequently reached, which enables the project to be carried out. If the project is publicly-led or has a public interest, participation is compulsory. Public entities sometimes carry out expropriations to enforce the participation of resisting property owners. The compensation varies in principle according to the property's market value, although property rights holders have limited possibilities for appeal of valuations.

A share of 30% of the readjusted area may be reserved for public improvements, such as public utilities, public spaces and public transportation – from which property owners will benefit. The exact percentage may vary city by city and project by project. No collectively-owned plots are reserved for future sales or leasing.

After readjustment, landowners may choose to receive readjusted plots with a value proportional to their original holdings or compensation in cash. It is common that leaseholders receive floor areas in high-rise apartment buildings. In any case, if the readjusted plots are less valuable than the original ones, the affected owners are entitled to compensation. Third party investors may in principle receive readjusted plots in return for their investments.

The main obstacles to implementation are the resistance of property owners, who sometimes appeal against the decision to pool their land, and the high costs of expropriations, which are needed to enforce the participation of resisting property owners in projects of public interest.

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Colombia

Land value capture in Colombia

Several land value capture instruments are used systematically in Colombia (Table 2.10). The capital city, Bogotá, and about ten other cities concentrate the most relevant experience. However, more than 100 cities would have the potential to use land value capture considering their size and socioeconomic dynamics. Two main obstacles limit the broader use of land value capture: landowners' resistance and local governments' lack of administrative capacity.

Table 2.10. Colombia: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Infrastructure levy	<i>Contribución de valorización</i>	<i>Law 25/1921; Law 113/1937; Law 1/1943; and Decree 1604/1966</i>	National government, departments and local governments	Frequent
Developer obligations	<i>Obligaciones o cargas urbanísticas</i>	Articles 15, 37 and 39 of <i>Law 388/1997</i>	Local governments	Frequent
Charges for development rights	<i>Participación en plusvalías</i>	Articles 73 and following of <i>Law 388/1997</i>	Local governments	Occasional
	<i>Edificabilidad básica y adicional</i>	Articles 50 and 88-89 of <i>Law 388/1997</i> ; and <i>Law 9/1989</i>		No
	<i>Pago de la participación en plusvalías mediante derechos de construcción</i>	Article 2.2.4.1.5.2 of <i>Decree 1077/2015</i>		
Land readjustment	<i>Reajuste de terrenos e integración inmobiliaria con base en planes parciales y unidades de actuación urbanística</i>	Article 77 of <i>Law 9/1989</i> ; and Articles 39 and following of <i>Law 388/1997</i>	Landowners, developers or public entities through real estate trusts	Occasional
Strategic land management	<i>Banco de tierras</i> (land banking)	Article 70 of <i>Law 9/1989</i>	Local and metropolitan governments through land banks	Rare

Enabling framework

Colombia is a unitary state with three levels of government: the national level, 32 departments and the Capital District of Bogotá as well as 1,103 municipalities (OECD/UCLG, 2019^[1]). The Constitution assigns the competence of land-use planning to municipalities. Land-use plans and land management instruments are regulated by national law and approved by municipal councils at the mayor's initiative.

According to Article 58 of the Constitution, property has a social function, which implies obligations. An ecological dimension is inherent to property. When a law enacted for reasons of social interest conflicts with the rights of individuals, the social interest prevails. Moreover, the Constitution establishes as a collective right public entities' participation in land value increases resulting from public actions.

Infrastructure levy

Landowners pay a levy (*contribución de valorización*) for infrastructure built by the government and from which they specifically benefit, for example public roads, public transport, public utilities and green space. All levels of governments implement the levy and receive the revenues. The levy dates back to 1921 and has been widely used in large and intermediate cities to finance road infrastructure. Despite some resistance in specific municipal contexts; delays in public works' delivery or criticism of its calculation and distribution methods, the levy remains a crucial and frequently used instrument.

The levy amounts to the estimated total cost of public works. The law also allows recovering up to 30% of the levy's administrative costs, but local governments rarely charge more than 10%. To identify landowners who will benefit and be charged, local governments estimate the distance within which public works increase land values using market-based approaches. Local governments use different criteria to estimate public works' area of influence and the distribution of costs among landowners, such as the distance to the new infrastructure, size, shape and land use of landowners' properties. When benefit criteria other than land value increases were used (for example improvements in the city's general accessibility), there was greater public opposition and discussion. Landowners' ability to pay and their socioeconomic characteristics are also taken into account to set the amount each landowner has to pay. Lower-income landowners and church properties are granted exemptions.

The levy can be charged in advance or up to five years upon public works' completion. If infrastructure is not provided as originally planned or within the due date, the money is returned to landowners. There are mechanisms for citizen participation in the monitoring of the levy's collection and public works' execution.

Developer obligations

Developers are subject to obligations (*obligaciones o cargas urbanísticas*) to obtain approval for new development or densification. The obligations mainly consist of land dedications for public uses, such as roads, public space and social facilities. Alternatively, they can be equivalent cash payments. The obligations are designed to compensate the cost of stronger public infrastructure and services use resulting from private development. National-level legislation establishes the general guidelines, and local master plans elaborate them. Local governments implement the obligations and receive the land or revenues.

Developer obligations are widely used for new development but more controversial for densification. Nevertheless, several cities apply them. In large cities like Bogotá they allow to recover a relatively large share of the land value increase in urban expansion projects but a lower share in urban renewals.

The obligations must not exceed the land value increase development approvals generate. Local governments also determine whether it is feasible to extend public service networks, road infrastructure and the necessary additional public space.

Local governments use different methods to calculate the obligations. National law does not establish specific norms. For instance, some local governments use formulas based on a percentage of the land developed or on standards (for example square metres per inhabitant), multiplied by the cadastral value or by market prices using mass appraisal. It has been customary to use the rule adopted in Bogotá in 2000, which requires land provisions of 17% of private development areas for public space and 8% for social facilities, plus the land necessary for local roads. Developers can pay the equivalent value in cash when their developments are very small or are densifications. Local governments must use the revenues to create public space, build public roads or buy land in protected environmental areas.

For urban expansion projects, national law also requires that at least 20% of development areas is dedicated to affordable housing. Affordable units should have a maximum price of 90 legal minimum wages (one monthly minimum wage is around USD 300) and should be for households with monthly incomes of up to two minimum wages. This land requirement for affordable housing automatically applies in municipalities with over 100,000 inhabitants or located in the area of influence of cities with over 100,000 inhabitants. It is accepted that land destined for affordable units can be transferred to other development projects or paid in cash to the municipal entities responsible for social housing programmes.

Charges for development rights

Participación en plusvalías

Law 388 of 1997 established the *participación en plusvalías* as the main instrument for land value capture. It allows local governments to recover between 30% and 50% of the land value increase resulting from changes in land-use regulations or building indexes (the number of square metres that can be built on a plot).

However, the instrument has faced problems because of the difficulty to estimate land value increases and complex legal requirements and procedures. As a result, the governments of the largest cities have strengthened the alternative of developer obligations (see section above).

Edificabilidad básica y adicional

Law 388 of 1997 allows the sale of development rights beyond an established baseline but within the maximum density local plans permit. This instrument may also serve as an alternative collection mechanism for the *participación en plusvalías* (*pago de la participación en plusvalías mediante derechos de construcción*).

Law 9 of 1989 allows the transfer of development rights to other plots to ensure equitable treatment among landowners when private land is declared for public use or environmental or architectural protection.

However, no city has so far used these three instruments.

Land readjustment

Land readjustment is used for incorporating rural land into urban development and for urban renewal. Usually, landowners, developers or public entities set up a real estate trust to implement a readjustment project.

Land readjustments follow partial plans, which may be a public or private initiative the municipal planning office approves. Partial plans are mandatory for urban expansion projects in any municipality and for urban renewals when so established in municipal plans. In partial plans local governments may make mandatory the formation of *unidades de actuación urbanística* ('urban action units'), which must be developed through land readjustment. The original plots cannot obtain individual building permits. Local governments establish in their zoning plans the minimum areas required for partial plans and *unidades de actuación urbanística*.

Partial plans can be approved without the participation or consent of all affected landowners. However, for land readjustments the approval of landowners who own at least 51% of the *unidades de actuación urbanística* area is required. Once this requirement is met, local governments can expropriate landowners who do not consent. However, expropriation has generated resistance, especially in urban renewal projects.

Local governments finance land readjustments' urbanisation costs through developer obligations (see section above), with an equitable distribution of burden and benefits among landowners. Landowners must provide a share of their plots for public improvements and services, such as roads, utilities, schools, parks and green space. Moreover, for urban expansion projects, at least 20% of the partial plan area must be allocated to affordable housing. Local governments may also set baseline and maximum building indexes in readjustment areas and charge landowners for development rights beyond the baseline but within the maximum (see section above).

Land readjustment is usually more effective than strategic land management (see section below) because it involves landowners' participation to obtain land for public improvements or services. Nevertheless, three

main obstacles limit readjustment projects: landowners' resistance, local governments' lack of administrative capacity and the lack of temporary resettlement options for affected landowners during readjustments in urban renewal projects.

Strategic land management (banco de tierras)

The priority of strategic land management in Colombia is to create land banks for affordable and social housing. Other aims include environmental protection, urban development, creating urban public spaces, regularising informal settlements and relocating settlements. Local and metropolitan governments manage land banks in line with national regulations. The legislation dates back to 1989, but land banks have rarely been used.

Plots for land banks are expropriated or bought through preemption rights (*derecho de preferencia*). In areas local plans previously designate, landowners who want to sell their plots must first offer them for sale to the municipal entity in charge of housing programmes. The entity has three months to accept or refuse the sale offer.

Regarding expropriation, local governments can decide to expropriate land at the price before the announcement of a public project. This instrument (known as 'project announcement') is part of the expropriation process and allows recovering the increase in land values public projects generate.

Strategic land management is hampered by the lack of resources for land purchases, local governments' lack of administrative capacity, delays in judicial expropriations and high compensations for expropriations.

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Costa Rica

Land value capture in Costa Rica

Several land value capture instruments are used in Costa Rica, with developer obligations being the most common one (Table 2.11). Local governments rarely apply the infrastructure levy, due to the lack of specific regulations. The national legal framework foresees the instruments of charges for development rights and land readjustment, but they have never been implemented. Land management is used little for strategic purposes, and public land leasing takes place in maritime or riverside zones, as well as rural areas.

Table 2.11. Costa Rica: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Cesiones obligatorias	Articles 32, 28 and 60 of Urban Planning Law (1968) and Regulation of Fractionation and Urbanizations (2019)	National and local governments	Frequent
Infrastructure levy	Contribución especial	Article 1 of Law 74 (1916), Article 86 of Law 7794 (1998) (Municipal code) and Article 4 of Law 4755 (1999) (Tax code).	National and Local governments	Rare
Strategic land management	Expropiación	Expropriation Law (1995)	National and local governments and special purpose bodies	Moderate
Charges for development rights	Concesión de Mayor Edificabilidad por Inversión en Espacio Público	Article 17 of Urban Renewal Regulation (2017)	Local governments	Never
Land readjustment	Reajuste de Terrenos	Articles 51, 52 and 53 of Urban Planning Law (1968) and Article 18 of Urban Renewal Regulation (2017)	National and local governments, private developers and landowners	Never

Enabling framework

Costa Rica is a unitary presidential democracy with one autonomous level of subnational government, the municipalities (*cantones*). Provinces exist at regional level, but only for administrative purposes. The 82 municipalities are responsible for managing local interests and services in each canton (OECD/UCLG, 2019, p. 461^[11]). There are 484 administrative districts to contribute to the work of municipal councils at the local level (OECD/UCLG, 2019, p. 461^[11]).

The national and local governments create the legal framework for land value capture.

Developer obligations

Developers that request approval for a development that is new, at higher density, or adjacent to major highways must compensate for the impacts of the project upon adjacent infrastructure. Compensation is provided in the form of land, public space, public utilities, roads, and parking, upon project completion. The national and local governments frequently apply developer obligations.

The obligation is either calculated using an established rule or negotiated between the jurisdiction and the developer. If calculated, the rule takes into account the size, type, and area of development. If negotiated, the procedure is structured. Local governments have some discretion to negotiate, especially in the case

of large projects adjacent to highways or major roads. Subdivisions of urbanized parcels of less than 900m² or lots smaller than 90m² are exempt from the obligation to cede areas for parks and communal facilities.

By imposing developer obligations, the government can recover around 70% of the public costs created by developments. When it concerns the creation of public spaces and roads, cost recovery amounts to 100%. When developers build public utilities, such as water and sewerage, the necessary adaptations to connect to the public network are sometimes lacking, which compromises their functioning.

The main obstacle to implementation is the lack of administrative capacities.

Infrastructure levy

Landowners can be required to pay a levy for government-built infrastructure from which they specifically benefit, for example for public roads, public space and neighbourhood facilities. Local governments rarely implement the levy, with 6 of them having approved specific regulations thus far.

Local governments estimate the levy according to the costs of the public improvement, up to the total. In the few cases where there is a local regulation, up to 50% of the costs of the public improvements have been recovered through the fees paid by benefited property owners. One example is the rehabilitation of Avenue 78 in the capital city of San José in 2019.

Before charging the levy, a consultation process with landowners must be in place. The levy is collected upon completion of the public improvement. If the improvement is executed in stages, the accrual will occur in sections too – landowners pay the levy in installments. Medical-social or educational assistance institutions and projects of social interest are exempt from payment (Article 70 of Urban Planning Law).

The main obstacles to implementation are lack of political will to enact local regulations, lack of local administrative capacities and the fact that landowners always appeal the requirement to pay the levy.

Strategic land management

National and local governments, as well as special purpose bodies, carry out land management for the purpose of facilitating development with a public purpose. The national and local governments collect the revenues from leases, which are earmarked for specific purposes.

The government acquires scattered land, both greenfield and brownfield, via purchases at market price or expropriations. The government does not rezone or redevelop the acquired land. The government can retain the acquired lands for about 10 years or transfer them to another public entity.

The government leases public land for development of tourism activities in the seacoast and of productive projects in rural areas. The ground rent is 0.15% of the land value and paid in installments during the term. Leases are adjusted every 5-10 years. Public or non-profit entities may be exempt from paying the rent.

Lease length varies with the purpose for which land is leased, between 5 and 20 years in the coastal maritime zone and between 25 and 50 years in the riverside alongside the border with Nicaragua. Leaseholders cannot transfer the lease in the secondary market nor sublease it to third parties.

The lack of legal framework, the low administrative capacities and the lack of coordination between public entities hold back implementation. Furthermore, there is no official consolidated registry of public land at the national or local level.

Charges for development rights

Local governments can grant the right to build at higher density to developers that promote practices of social interest or that improve the urban fabric. Although the instrument is foreseen in national law and local authorities have high discretion in issuing planning permits, local governments rarely implement it.

The following practices qualify developers to receive the permission to build at higher density: donation of land for public use; restoration of heritage properties of municipal or national interest; transfer of area for public space above the legal minimum; integration of riverbeds and streams to the project; provision of pedestrian, vehicular, and bicycle paths; mixed-use projects; construction of public equipment for education or health; implementation of energy-saving, clean energy and water reuse systems. Greater buildability functions as an incentive to adopt any of these practices.

The incentive is obtained upon receiving the planning permit. Municipalities must calculate the incentive in proportion to the benefits obtained, in order to guarantee equitable distribution of charges and benefits. There is great discretion in the decision of each municipality.

Significant obstacles to the implementation of the charge are the low demand for building at higher density, inadequate legal framework and lack of public administrative capacities.

Land readjustment

Land readjustment is mentioned in the *Urban Planning Law* (1968), but the regulation that enables it to be implemented was only created in 2017 (Urban Renewal Regulation). Since the national urban renewal regulation was enacted, 8 municipalities have introduced the instrument – *Montes de Oca, La Unión, Goicoechea, Cartago, Paraíso, Alvarado, Osa and Golfito*. So far, none of them have initiated or approved a land readjustment project. For that to happen, municipalities must create a benefit-sharing agreement for each urban renewal project, in a case-by-case scenario.

The national and local governments can initiate land readjustment projects, as well as landowners and private developers. A consensus between the parties is required, although no specific level is mentioned in the regulation. The participation of resisting landowners is enforced via expropriation. After readjustment, landowners receive a developed plot, albeit smaller than the original one, or compensation in cash.

The main challenges to implementation are the recent approval of the national regulation, the lack of political will of local governments, and the lack of administrative capacities.

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Czech Republic

Land value capture in the Czech Republic

Land value capture is used in the Czech Republic but not systematically (Table 2.12). Local governments occasionally use developer obligations only. The main obstacles are local governments' lack of administrative capacity and inadequate legislation.

Table 2.12. Czech Republic: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	<i>Plánovací smlouvy</i>	Sections 66 and 88 of the <i>Building Act 183/2006</i> (in force until 2023); and Sections 130-132 of the <i>Building Act 283/2021</i> (in force from 2023 onwards)	Local governments and building offices	Occasional
	<i>Poplatek za zhodnocení stavebního pozemku možností jeho připojení na stavbu vodovodu nebo kanalizace</i>	<i>Act 565/1990</i> on local fees		
Land readjustment	<i>Dohoda o parcelaci</i>	Section 43 of the <i>Building Act 183/2006</i> (in force until 2023). The new <i>Building Act 283/2021</i> (in force from 2023 onwards) does not include land readjustment.	Local governments and landowners	Rare
Strategic land management	N/a	No	n/a	No

Enabling framework

The Czech Republic is a unitary state with three levels of government: the national level, 14 regions and 6,258 municipalities (OECD, 2022^[3]). The national government, through its Ministry for Regional Development, is responsible for the legislative framework that defines the planning system. The Ministry for Regional Development supervises and guides the planning of lower levels of government.

Administratively, municipalities are divided into two main types: those with extended delegated competences for state administration and those without. Municipalities without extended competences are assigned to a municipality with extended competences that fulfils several administrative functions for them and in particular serves as their planning authority and building office. Municipalities with extended competences procure local plans for their own territory and for that of adjunct municipalities without extended competences. However, these plans are requested and approved by the affected municipalities' municipal councils, no matter whether with or without extended competences. Building offices issue planning and building permissions.

Regional offices of the national government (deconcentrated state administrations) serve as the planning authorities for areas of supra-local importance within their territory. They also issue planning permissions for developments that affect several municipalities with extended powers (OECD, 2017, p. 75^[2]).

The national and local government levels create the legal framework for land value capture.

Developer obligations

Local governments use developer obligations to cover the public infrastructure needs private development generates. The obligations consist of cash or in-kind payments. Usually, this leads to partial compensation of the public infrastructure costs, mainly public utilities and transport infrastructure within private development areas. Local governments use the obligations in four main cases.

First, developers are subject to obligations before obtaining approval for new development from local building offices. These obligations are based on the public utilities and transport infrastructure requirements of new development. Developers need to include the investment in such infrastructure in their development projects. After construction, they need to prove the required infrastructure's existence. Private development projects may also require investment in public utilities and transport infrastructure outside the development area: for example, the sewerage system capacity needs to be increased. In that case, developers also need to prove the existence of a contract with the public infrastructure provider about the capacity extension. Usually, the provider requires developers to cover the costs of infrastructure capacity extension.

Second, developers may ask for zoning plan changes to better suit their needs. Usually, local governments change zoning plans without charging developers. Recently, some local governments have started negotiating cash obligations with developers. The negotiations' outcome are private law contracts. Therefore, these obligations are linked to developers, not to plots. If developers transfer their land to other legal entities after the zoning plan changes or go bankrupt, they may not be liable to the obligations. Developers – mostly in large cities – sometimes also use private law contracts to pay small voluntary cash contributions to accelerate the planning approval process and increase its chances of success. In Prague (the capital city), these cash contributions amount to USD 25-100 per square metre of gross floor area.

Third, local governments have planning law contracts, an instrument that can help them finance infrastructural needs large private projects generate. In the past, planning contracts have been rarely used due to inadequate legislation. The new 2021 Building Act defined the instrument more precisely. For instance, it allows local governments to require cash or in-kind obligations for private developments that cannot proceed without zoning plan changes. However, the Act's current wording does not allow using planning contracts for developments not requiring zoning plan changes. Local governments can, in zoning plans, condition new development by planning contracts, but the condition expires four years after zoning plans' approval. Since planning contracts are subject to developers' approval, developers may simply wait for the planning contracts condition to expire. They may be better off waiting four years than committing to larger obligations.

Last, local governments may charge fees in areas developed by small individual investors, typically areas with family houses where each house is built by a different individual. When such private development requires water or sewerage utilities and local governments provide them, developers may have to pay local governments a fee if their plots increase in value due to the connection to the water or sewerage system. This fee does not apply to other types of infrastructure. Local governments set it in generally binding decrees. It cannot exceed the difference in value between land with and without the possibility of connection to the water or sewerage system. The fee is based on the specific plot surface dedicated to the water or sewerage system connection, not the total gross floor area developed. Therefore, it does not take into account the increased water or sewerage system capacity that development may require.

Land readjustment

Land readjustment has been included in legislation for brownfield redevelopment and the conversion of rural to urban land.^{1*} The 2006 Building Act regulates land readjustment until 2023, and local governments and landowners are in charge of implementation. However, they have very rarely used it. The main

obstacle is that all landowners need to consent, which has proved unrealistic especially if land ownership is fragmented. The new 2021 Building Act, in force from 2023 onwards, dropped the instrument.

Under the 2006 Building Act, it is local governments that can initiate a readjustment project: they can condition an area's development by a land readjustment agreement. If all landowners consent, they must provide a share of their plots for public infrastructure, such as roads, or must tolerate some public infrastructure on their land. There is no limit to the share of plots local governments can demand if it is necessary for public infrastructure provision. However, landowners usually agree only to the minimum amount of public infrastructure necessary for development. The amount of land that owners provide for public infrastructure is negligible.

The readjustment and reallocation of plots are based on readjustment contracts between all landowners in the readjustment area and the local government. There are no set rules for the readjustment process other than these contracts' requirements. After readjustment, landowners can exchange reallocated plots for cash. Third party investors can buy readjusted plots.

Strategic land management

Strategic land management is not used. On the contrary, the national and local governments tend to sell publicly owned land to private entities. Public authorities only buy land from private landowners if they need to build public infrastructure.

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Note

¹ Land readjustment is also used to ensure accessibility of farmland. Act 139/2002 (previously part of Act 229/1991) regulates land readjustment on farmland. However, it is beyond the scope of the Compendium, and the rest of this section focuses on land readjustment in urban areas.

Denmark

Land value capture in Denmark

Infrastructure levy, land readjustment, and strategic land management are the land value capture instruments systematically used in the country (Table 2.13). In Copenhagen, property owners who benefit from adjacent public improvements such as subway expansion have to pay an infrastructure levy. The government adopts land readjustment in large-scale development projects. Charges for development rights allow higher density projects in exchange for affordable and social housing. Strategic land management is a key tool for forward-looking urban development and planning.

Table 2.13. Denmark: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National Legal provision	Implementation	Use
Infrastructure levy	N/A	None	Local governments	Moderate
Strategic land management	N/A	None	Local governments and special purpose bodies or temporary authorities	Frequent
Land readjustment	N/A	None	Local governments and special purpose bodies or temporary authorities	Frequent
Charges for development rights	N/A	None	Local governments	Moderate

Enabling framework

The country has three levels of government: the national government, 5 regions and 98 municipalities, with at least 20 000 inhabitants each (OECD, 2017, p. 81^[2]). The major cities – Copenhagen, Aarhus, Aalborg and Odense – enjoy a special administrative and political structure (OECD/UCLG, 2019, p. 539^[1]).

The national level prepares an annual national planning report and a quadrennial report called *National Interests in Municipal Planning* that serve as guidelines for local land use planning (OECD, 2017, p. 81^[2]). Municipalities conduct forward-looking strategic planning and prepare detailed municipal plans. These plans contain provisions about zoning and land use that inform the adoption of land value capture instruments. Municipalities also create Local Plans for every major development project (OECD, 2017, p. 81^[2]).

The national government and the local governments create the legal framework for land value capture. Albeit not written in a national law, the concept of land value capture is incorporated into regular planning practice, especially through strategic land management and large-scale development projects, such as the developments of Copenhagen City & Port Development Corporation.

Land value capture is a commonplace practice in Denmark, with substantial variations across cities and towns. In Copenhagen, for instance, land value capture financed city-wide public transit investments to propel economic development. In other cities, such as Aarhus, land value capture delivers affordable and social housing. Yet in other cities, land value capture is coupled with a strong vision that grants the town a unique strategic position with a competitive edge. In Holstebro, an art school was constructed that attracts young people from the whole country.

Developer obligations

Developers are subject to obligations to obtain approval for new development or densification. The obligations consist of in-kind provision of roads, parking, neighborhood facilities and affordable housing units. They are designed to compensate the cost of stronger use of public infrastructure and services resulting from development. Local governments and special purpose bodies frequently implement the obligations.

The obligations are due upon completion of the new development. No exemptions to payment are admitted. Once built, the infrastructure is handed over to local authorities, who will manage the equipment, such as roads and parking spaces. Neighborhood facilities are sometimes handed over to local community organizations for management.

In every development area, between 25-30% of units must be dedicated to affordable and social housing. This is a government demand that can be negotiated with developers on a case-by-case basis. In some development projects, private ownership and affordable housing are combined in the same area of project development, while in others the affordable units can be built off-site, anywhere within the jurisdiction. The units must remain affordable for as long as they are managed by housing cooperatives.

The private developers often negotiate with housing cooperatives to hand over to them the delivery and management of social housing. Many housing cooperatives are large and have been operating for 150 years, which means that they have considerable accumulated funds. All rental revenue is reinvested back into maintenance of the existing housing stock and further affordable and social housing.

There are no challenges to implementation.

Infrastructure levy

Local governments can charge a levy from property owners for public improvements adjacent to their property. Public improvements include the provision of green spaces, parks, parking and pavement projects and public transport equipment. While Copenhagen adopts the infrastructure levy and collect the revenues, the same does not occur in other parts of the country.

Through the Copenhagen City & Port Development Corporation or associated community organisation, the municipality charges two types of infrastructure levy. The metro fee is charged if a metro station is established within a 50-meter radius of the property. The charge is paid in cash, in the form of a property tax increase. Specifically, benefitted property owners have to pay an additional 11.41 USD per square meter of office buildings or 5.71 USD per square meter of residential properties annually, for 60 years after the metro station is created. The levy is paid continuously and accumulatively.

The community fee is charged for the maintenance of green spaces, parking, houses, etc. CPH City & Port Development invests continuously in public amenities, which creates value, enhances quality and attracts developers. When the area is fully populated, City & Port transfers the management of the area to a community organisation. The fee amounts to a percentage of the land value gains, without aiming to cover all the costs. The fee is equally assigned among the benefitted property owners, which are all property owners within the area of intervention of CPH City & Port Development.

There are no administrative challenges to implementation. The fee is set according to a fixed criterion, which is relatively simple, and is equally distributed among benefitted owners. Property owners are willing to paying the fees since it is a small increment to the property tax.

Land readjustment

Local governments and special purpose bodies frequently carry out land readjustment projects for the purposes of urban expansion or renewal and brownfield regeneration. They collect the revenues from the projects. The projects usually take place on derelict or abandoned land that is publicly owned.

The government acquires private property at market value and private landowners receive cash compensation. Participation of private landowners is compulsory. The participation of resisting owners in projects of public interest is enforced through expropriations. In practice, expropriations are rarely carried out.

Land is pooled together, rezoned and divided. After readjustment, the land can be sold in the private market or used to implement major development projects of public interest, as was the case for the city-wide metro system financed by the urban developments of Copenhagen City & Port Development Corporation.

A share of the readjusted plots is reserved for public improvements, such as public roads, public transportation, parks and green space – from which landowners will benefit. In addition, the land readjustment project typically reserves plots for future sales, to generate further public revenues.

The main consideration to implementation is the obligation to protect areas of significance, such as environmental reserves and cultural heritage sites, which cannot be readjusted and must be preserved.

Strategic land management

Local governments and special purpose bodies created by the government for strategic land management acquire and retain lands in advance of needs, for the purposes of urban renewal, land consolidation, control of urban growth patterns and capture of capital gains. In all, they frequently use the instrument, which constitutes an important feature of the country's forward-looking urban development and planning.

The government purchases land adjacent to the city and zoned for unproductive uses, such as former industrial and harbour areas, natural protection areas and military training grounds. Afterwards, they rezone and redevelop the land, integrating it into urban plans. They provide basic physical preparation, public utilities, public spaces, roads, parking and public transport, alone or in partnership with the private sector.

The government sells or leases the developed land. It is sold at market price to the highest bidder as the purpose is to raise capital to repay the loan for land acquisition, infrastructure investments and to invest in further developments. Sales occur through public tenders with the aim of promoting a flagship, vision-driven development. The bulk of the revenue is generated through augmenting the value of the land through maturing, rezoning and infrastructure investments and then selling the land at this new higher value.

Public land can be leased to generate public revenues, provide land for real estate development or facilitate developments with a public purpose. The length of the contract depends on the intended use or purpose. Leaseholders cannot transfer the lease in the market but may sublease it to third parties.

The ground rent is paid through recurrent payments. Projects with public purposes or that comply with specified uses can receive discounts, e.g., commercial use on the ground floor of a residential unit. The collected revenues are earmarked to invest in public spaces, public transportation, roads and parking.

Strategic land management operations tend to be costly, and the revenues raised do not always justify undertaking them, which hinders more frequent adoption. Leaseholders often consider the ground rent to be economically unfeasible.

Charges for development rights

Local governments can charge developers for an administrative decision to rezone land to a different use, typically more productive and of higher density. The charge is paid through the in-kind provision of land or public space or the construction of affordable housing units. No cash substitution is allowed. Local governments make moderate use of this instrument.

When land is rezoned to a more productive use, there are land value gains. To compensate these gains, developers have to include a percentage of affordable and social housing in the project. In exchange, they can be allowed to build at greater density. In the Greater Copenhagen area, the affordable and social housing (red. *Alment boligbyggeri*) percentage is of 30% of the total of units, and in the rest of the country it is of 25%.

The affordable units must be built on-site and be comparable to market-rate units in terms of size, design standards and amenities. Developers do not have permission to own the affordable housing units. Hence, they transfer the ownership and management to a housing cooperative, which sometimes is also in charge of construction. The units have to remain affordable for as long as the project exists. Beneficiaries are households eligible for social welfare programmes already residing in the city.

The instrument contributes to the significant provision of affordable and social housing in the country, with 20% of the total population living in affordable and social housing managed by housing cooperatives. A challenge to implementation is the low demand for building at higher density in most cities. Developers rarely appeal against the charges, so resistance is not an obstacle.

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Dominican Republic

Land value capture in the Dominican Republic

The most prominent land value capture instruments in the country are infrastructure levy and developer obligations (Table 2.14). The infrastructure levy is a charge on landowners who benefit from irrigation works conducted by the national government. Developer obligations are fees paid by developers in cash to compensate the impacts of new development on adjacent infrastructure. Land readjustment serves for urban expansion and renewal. Strategic land management is limited to public land leasing. There is no legal framework for charges for development rights.

Table 2.14. Dominican Republic: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Use	Implementation
Infrastructure levy	Cuota Parte	Article 70 of National Law on Quota Part (126/1990)	Always	National government
Developer obligations	Normas y ordenanzas	Law n° 675	Moderate	National government
Land readjustment		None	Frequent	National and local government
Strategic land management	Contratos de Arrendamiento	Law 233/1971	Frequent	National and local government

Enabling framework

The Dominican Republic is a unitary state with one level of subnational government, which is composed of 158 municipalities and the Santo Domingo National District (OECD/UCLG, 2019^[1]). Provinces and regions exist for administrative purposes, not political ones. The national government enacts the framework of land value capture and is in charge of implementing developer obligation and infrastructure levies, which are the two most important tools in the country.

Municipalities have normative, administrative and land use powers, as well as budgetary autonomy. They are responsible for land use planning, environmental and risk management, economic and social development and they are in charge of the regulation and management of public space, municipal works, roads and transport. They largely rely on transfers from the central government and do not collect own tax revenues.

Infrastructure levy

The national government charges infrastructure levies whenever an irrigation project is carried out in rural areas. When the State builds irrigation canals, the benefiting landowners must transfer a share of their land to the government, proportionally to the benefit. This contribution is called “Quota-Part”.

Since the irrigation canal allows the private lands to become more productive, it is a public improvement that increases the value of land. Private landowners may be left with smaller, but more valuable agricultural land.

The benefited owners are identified as those whose property falls within the area of influence of the new irrigation project. When the land plot benefiting from the new irrigation project is less than 6 hectares, the owners are exempt from payment. Property owners who have paid a Quota-Part for past irrigation projects are also exempt from contributing again.

Overall, affected property owners rarely appeal against the levy. The main obstacle to the implementation of the Quota-Part system is the lack of administrative capacity at the national level. New plans and institutional strategies need to be created, without political interference.

Developer obligations

Developers who request approval for new development, for development at higher density or for a project in disconformity with standard urban planning regulations may be charged a fee. The fee, to be paid in cash, is intended as compensation for the impacts of proposed development on local infrastructure, notably due to higher demand of public utilities and services in the area. The national government makes modest use of this instrument.

The charge may be calculated using an established rule or negotiated between the government and the developer. Negotiations respect the standard urban planning regulations. If calculated, it takes into consideration the size, type, area and physical characteristics of the development. The charge must be paid in cash, before or at the time the development receives approval. No exemptions or discounts to payment are foreseen.

In all, developers rarely appeal against the requirement to pay the fee. The fee is complicated to calculate, and the complexity and lack of clarity of the formulas constitute an obstacle to implementation. The legal framework does not define the calculation formulas and other operational aspects sufficiently.

Land readjustment

The national government and local governments frequently use land readjustment for the purposes of urban expansion, urban development or renewal. If local governments want to pool and readjust plots, they need prior approval from the national government.

All land readjustment projects are publicly-led or have a public interest. Participation of landowners is therefore compulsory. Their participation may be enforced through expropriation, with compensation based on the market value of the original plot. Landowners rarely appeal against the requirement to pool their lands or against the compensation.

A share of readjusted plots is typically reserved for public improvements, which may include public utilities, such as water, sewer and drainage, public spaces, roads and parking space. On the other side, the newly readjusted area does not include the creation of publicly owned plots to be sold or leased in the future.

After readjustment, the landowners receive readjusted plots located as close as possible to their original land. They cannot choose to exchange the plots for cash. However, if the readjusted plots are less valuable than the original ones, the affected landowners are entitled to compensation in cash. Third party investors, e.g., developers, can receive readjusted plots in return for their investment in the project.

Obstacles to the implementation of land readjustment are the lack of enabling framework at the national level and the low quality of land registries. Limits of lots and landowners cannot be identified. Even though expropriations are frequent, they remain controversial and expensive to the government.

Strategic land management

The Dominican Republic does not have a system of land banking and does not carry out strategic land acquisition. Nonetheless, public land leasing is frequent, with the goals of generating public revenues and facilitating development with public interest. The national government and local governments often lease public lands, but do not hold a significant amount of land available to lease.

An enabling framework for strategic land acquisition and development is largely absent, and the national framework pertaining public land leasing has some gaps and inadequacies. Land registries are deficient and informality levels are high. Coordination among the relevant public entities is insufficient, and the administrative capacity to deal with the technical aspects of land management is also lacking.

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Ecuador

Land value capture in Ecuador

The infrastructure levy is the only systematically used land value capture instrument in Ecuador (Table 2.15). It has a longstanding tradition and works well. The capital city, Quito, and two other major cities, Cuenca and Guayaquil, concentrate the most relevant experience. The 2016 *Organic Law of Spatial Planning, Land Use and Management (LOOTUGS)* provides a national legal framework for urban planning and land management that includes land value capture concepts and instruments that were new to the majority of local governments. However, implementation of the *LOOTUGS* has been slow. Only Quito and Cuenca have started to institutionalise and implement land value capture instruments beyond the infrastructure levy. The main obstacles are the lack of political will to charge landowners and developers, as well as smaller local governments' lack of administrative capacity. Less than 20 large or intermediate cities may have sufficient urban planning and land management capacity to use land value capture instruments beyond the infrastructure levy. Most other cities are small and do not have the technical, political and financial capacity to exercise their urban planning and management competencies.

Table 2.15. Ecuador: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Infrastructure levy	<i>Contribuciones especiales por mejoras</i>	Articles 186, 578 and 569 of the <i>COOTADI/2010</i>	Local governments	Frequent
Charges for development rights	<i>Concesión onerosa de derechos</i>	Article 72 of the <i>LOOTUGS/2016</i>	Local governments	Rare
Developer obligations	<i>Proyectos urbano arquitectónicos especiales (PUAEs)</i>	No	Local governments	Rare
Land readjustment	<i>Reajuste de terrenos</i>	Article 55 of the <i>LOOTUGS/2016</i>	n/a	No
Strategic land management	<i>Bancos de suelo and derecho de superficie</i>	Articles 69 and 70 of the <i>LOOTUGS/2016</i>	n/a	No

Enabling framework

Ecuador is a unitary state with a four-tiered government system: the national level and Decentralised Autonomous Governments at the provincial, municipal and parochial levels. There are 24 provinces, 221 municipalities and 1,500 parishes (OECD/UCLG, 2019^[1]). Municipalities are the planning authorities and decide on land use and management. Local officials have high discretion when issuing planning permits. Municipalities are also responsible for property valuation. Property value is appraised using a market-based approach, by comparing with the price of recently sold properties with similar characteristics in a specific area.

According to Article 31 of the Constitution, property has a social and environmental function. Articles 3, 5 and 7 of the *Organic Law of Spatial Planning, Land Use and Management (LOOTUGS)* define land value capture as the equitable distribution of the benefits of public actions, decisions on the territory and urban development in general. Society has the right to participate in these benefits. The national and local government levels create the legal framework for land value capture.

Infrastructure levy

Landowners pay a levy (*contribuciones especiales por mejoras*) for infrastructure built by the government and from which they specifically benefit, for example public roads, public transport, public utilities and green

space. Local governments implement the levy and receive the revenues. The levy dates back to 1971 and is widely used, especially in the largest cities, Quito, Guayaquil and Cuenca. In most cases, it is accepted by landowners.

To expand the instrument in smaller local governments, the Development Bank of Ecuador created a subsidised line of credit in 2010 and offers technical assistance for its implementation. More than 80 out of the 221 local governments have used the line of credit and implemented the levy. The levy's use by smaller local governments despite the administrative effort shows that the benefits are high compared to the costs. The levy is one of the main revenue sources for local governments.

The levy amounts to the estimated total cost of public works. Thus, local governments do not need to estimate the increase in land values. At the national level, a fixed impact rule based on the type of public work identifies landowners who will benefit and be charged. For instance, for new public roads and sidewalks, adjacent properties are charged. For sewer and water infrastructure, landowners are charged whose plots directly access these public utilities. For large projects such as bus rapid transit systems, all landowners in the municipality or entire neighbourhoods are charged. Oftentimes, even smaller projects such as sidewalk beautifications charge – up to a certain percentage – all landowners in the municipality. Local governments can set their own impact rules through ordinances.

Landowners then pay the levy according to a fixed formula, based on the distance to the new infrastructure, size and value of their properties. Local governments may grant discounts on or exemptions from the levy based on the socioeconomic characteristics of landowners. In Quito, landowners whose plots are valued below USD 70,000 are for example exempt. Else, landowners who participate in community works (*mingas*) can be exempt.

The levy is charged upon partial or full completion of public works. In Quito, it is charged annually together with the property tax over a period of years. In 2019, local governments raised USD 104,000,000 (0.1% of GDP) with the infrastructure levy. The main obstacle is local governments' lack of political will to charge landowners.

Charges for development rights

Developers pay charges for development rights (*concesión onerosa de derechos*) to change the zoning of their plots or build at a higher density beyond an established baseline but within the maximum density permitted by the local plan or other specific planning instruments. These charges date back to a 2011 ordinance of the local government of Quito. The *Organic Law of Spatial Planning, Land Use and Management (LOOTUGS)* extended them nation-wide in 2016. Currently, only Quito uses them, albeit rarely. Local governments are responsible to implement charges for development rights and receive the revenues.

In Quito, charges for development rights are mainly used for the construction of eco-efficient buildings. Developers can buy building rights up to double the height planned in the city's land-use plan. This happens in defined areas, including along bus rapid transit and metro systems.

However, the instrument has not been efficient. A complex model determines buildings' eco efficiency. Moreover, development rights are sold without following urban planning objectives, mostly in already dense areas where the real estate market is dynamic. This has resulted in already-dense areas' further development while underdeveloped serviced areas have not been densified. Often, charges for development rights were also minor improvements of the public space in the same areas where the developments took place. Thus, they have failed to be a redistributive instrument.

The price of development rights is calculated using a fixed formula, based on the estimated land value increase development rights generate. Developers can negotiate to pay in cash or provide serviced land, social amenities, public infrastructure or affordable housing. If developers choose to provide affordable

housing, they must provide at least 10% of their project areas. The amounts of cash or in-kind charges, locations of sale of development rights and the density baseline are defined in advance in a jurisdictional ordinance or regulation.

In 2019, Quito raised USD 3,206,148 with charges for development rights (Municipality of the Metropolitan District of Quito, 2020^[7]). No in-kind payments were made so far in exchange for development rights as developers prefer to pay in cash.

Developer obligations

In addition to charges for development rights (see section above), in Quito developers are subject to obligations to obtain approval for 'special urban architectural projects' (*proyectos urbanos arquitectónicos especiales, PUAEs*), such as large developments. The obligations consist of cash or in-kind payments. They are designed to compensate the cost of stronger use of public infrastructure and services resulting from private development. The local government is in charge of implementing the obligations and receives the revenues. However, it rarely uses the obligations.

There is a lack of political will to charge developers. Moreover, high discretion in negotiations often favours developers, reducing recovery. In recent years, this facilitated unsustainable and inequitable urban growth as a growing number of exclusive housing projects in high-demand suburban areas were approved.

The obligations are calculated using a fixed formula, based on the estimated land value increase development approvals generate. In most cases, developers negotiate to pay most of the charge in-kind. They provide land, public infrastructure or sometimes build affordable housing. Yet, in-kind payments have usually covered less than 50% of the public costs private development generated. Sometimes, developers may be required to pay in cash. Cash payments have usually covered less than 10% of the public costs private development generated.

Land readjustment

Land readjustment has not yet been used but has a legal basis. It is an instrument through public or private initiative to achieve an equitable distribution of the costs and benefits of development. However, the development and redevelopment of areas is still carried out on a plot-by-plot basis.

In 2019, the city of Cuenca started to transform its public housing company into an urban operator capable of managing complex urban interventions, including land readjustments. The urban operator proposed three partial plans regulating land readjustments, inclusionary housing, charges for development rights and other instruments, with relatively high acceptance by landowners.

Strategic land management

Strategic land management has not yet been used but has a legal basis. The 2016 *Organic Law of Spatial Planning, Land Use and Management (LOOTUGS)* mandates that local governments with more than 50,000 inhabitants create land banks to strategically manage their land. Implementation of the *LOOTUGS* has been slow. At the time of writing, only Quito has incorporated the concept of land banking into their new 2021 land-use plan.

To develop public land, the government can transfer construction rights (*derecho de superficie*) to private developers, which then develop public land in conformity with city planning regulations. The conditions of transfer, costs and period of validity of construction rights have to be specified in a contract between the government and private developer.

Historically, most local governments have provided public services without managing their land to recover land value gains that result from the new public services provision. They lack administrative capacity to buy land for public purposes as well as resources for land purchases, and face landowners' resistance.

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Egypt

Land value capture in Egypt

Several land value capture instruments are used systematically (Table 2.16). Local governments are typically in charge of collecting the payments in cash, but the revenues belong to the regional level (*governorates*). The low levels of administrative capacities and the inaccuracy of land registry systems are common challenges to implementation.

Table 2.16. Egypt: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Developer exactions	Articles 49, 51 and 52 of Law 119/2008	Local governments and special purpose bodies	Always
Charges for development rights	None	Law 119/2008	Local governments and special purpose bodies	Frequent
Infrastructure levy	Betterment Levy	Law 222/1955	Local governments	Frequent
Land readjustment	None	Articles 20 and 24 of Law 119/2008	National government, local governments, non-governmental organisations and private stakeholders	Moderate
Strategic land management	None	Article 3 of Law 100/1964	All levels of government	Frequent

Enabling framework

Egypt is a unitary republic with a three-tier subnational government structure, divided into 27 *governorates* at the regional level, 187 districts (*Markaz*) and 91 neighborhoods (*Hay*) at the intermediate level and 1264 local units and 225 cities at the local level (Law 43/1979). The 4737 villages are administrative divisions subordinated to cities or local units. The 7 economic regions exist for planning purposes (Law 475/1977).

The national government is responsible for the legal framework for land value capture. The country has a complex and overlapping regulatory landscape. Local public entities have little financial autonomy. The national government sets and control their budgets and collects all taxes and charges.

There are four categories of land in the country: public-domain land that cannot be disposed of; state private-domain land that can be transferred, assigned or held privately; private land; and waqf land held in religious trust. Several independent public agencies control state private-domain land and have substantial land banks.

Developer obligations

Developers are subject to obligations to obtain approval for new development or development at higher density. The obligations are designed to compensate the impact of development on public infrastructure and services needs and resulting costs. Local governments always charge the obligation and collect the revenues.

Local governments have high discretion in issuing development approvals, but less so in establishing the impact rule or reinvesting the collected funds. Independent public agencies can implement the charge and collect the revenues for projects developed on desert lands, which have a specific legal regime.

The obligation is generally paid in cash before or at the time the development receives approval. The charge is a fixed fee or percentage of land value, varying with the type of development, e.g., residential, commercial or industrial. No exemptions to payment are admitted.

In some cases developers may be asked to provide infrastructure within the jurisdiction, transfer land or donate cash to the local municipality. Sometimes deals were made outside of the legal framework, in which a developer provides infrastructure in exchange of free land. For this reason, the mechanism of issuing building permits against a cash payment has been associated with corruption.

The inadequate legal framework and low administrative capacity at the local level render implementation difficult. Other obstacles to implementation include the risks associated with real estate markets and low-quality land cadastres.

Charges for development rights

Local governments and development authorities frequently implement charges for development rights and collect the revenues. Local entities need permission from the central government in order to adopt this instrument, specifically from the Supreme Council for Planning and Urban Development and the Ministry of Defense. The charge is levied when developers request to build at higher density or when the government imposes land use changes or building constraints.

The charge is paid at the time the development rights are issued, in cash or through the in-kind provision of public improvements. For instance, in New Cairo, land developers are asked to beautify or add greenery to streets.

The charge is calculated based on the estimated value of extra density or land use change. The actual fee is set as 50% of the incremental value. As such, it may vary across areas or zones of the jurisdiction. It is primarily being implemented in cities where there is demand for building at higher density and the conversion of land uses happens at a significant scale.

Challenges to implementation include inadequate legal frameworks, low demand for building at higher density in many cities, low levels of administrative capacities and the overall low quality of land registry systems. Landowners and developers sometimes file claims against the requirement to pay the charges.

Infrastructure levy

Landowners frequently have to pay a levy for government-built infrastructure from which they specifically benefit, for example public roads, public transport, public utilities and green space. Local governments always implement the levy when they undertake public infrastructure improvements. It is not legally possible for them to recover the land value increases when the national government funds the works. Collection falls under the jurisdiction of each municipal council and the revenues belong to the *governorates*.

There are variations in how land value increases are estimated. In Cairo, for instance, value increases is calculated on the basis of the land sale value difference before and after public improvement. The fee amounts to 50% of this difference.

The criteria to identify benefitting property owners subject to the levy is physical location. There is a fixed impact radius, based on the type of public improvement or service: 150 meters radius from roads, 300 meters radius from bridges and 100 meters radius from sewage connections.

Local governments often lack the administrative capacity to implement the levy, but also the incentive to do so, since the revenues accrue to the *governorate* level. Landowners frequently appeal against the requirement to pay the levy, which makes implementation contentious and prone to litigation.

Strategic land management

The main purposes of strategic land management are to generate public revenues and provide land for industrial, agricultural and urban development. The four levels of government implement strategic land management operations. 90% of all land in the country is public land, including unused desert land, river and coastal lands, as well as unregistered urban land.

The government acquires vacant or informally occupied land through expropriations from private actors or transfers between public entities. The government can freeze land prices before the announcement of a purchase or rezoning to buy the land before prices go up.

Following rezoning the purchasing entity typically auctions the land to private developers or transfers it without payment to a public entity specialised in land development. These actors will then build public amenities or execute land development projects. The government's role is to intermediate land transfers in order to facilitate public development.

Although land sales are more common, the national government and local governments may also resort to land leasing. The ground rent is imposed by the national government. Lease length is 50 years at most, varying with the permitted land use, if agricultural, agricultural industrial or urban communities.

In all, land management facilitates public development projects by intermediating land transactions that otherwise would be costly and lengthy. Still, the historically diverse and overlapping types of tenancy and unclear patterns of land occupancy render land transactions contentious and burdensome. Lack of financing for land acquisition, low administrative capacities at the local level and lack of intra-governmental coordination constitute significant challenges to implementation.

Land readjustment

Land readjustment is used for urban expansion, urban development and farmland consolidation on a case-by-case basis. The current legal framework, in place since 2008, is never followed. The national and local governments as well as non-governmental organisations make moderate use of this instrument. National, district and local governments collect the revenues.

Publicly-led land readjustment takes place over three stages: selection of areas by the Supreme Council for Planning and Urban Development, in consultation with governors; negotiation between a local public committee and landowners to obtain agreements; and the implementation stage. Even though allowed by law, no private-led land readjustment projects have been conducted so far.

All landowners whose plots are located within the readjustment area must be willing to participate. Participation of landowners is compulsory for projects initiated by public entities and that have a public purpose. If landowners resist land contributions, their land plots are expropriated with compensation.

In slum upgrading, a share of around 30% of the readjusted plots is reserved for public improvements, such as public roads and public utilities. In other types of projects, a different share may be negotiated between landowners and the government. In addition, a land readjustment project typically includes the creation of publicly owned plots that are reserved for future sales, in order to generate revenues.

Landowners receive a plot with an area that is proportional to their original holdings. They may receive a residential or commercial unit instead of their original land plot. They cannot exchange reallocated plots for cash. Owners of small plots are compensated in cash.

Obstacles to implementation include an inadequate legal framework, low administrative capacities, unclear land records and the lack of resettlement alternatives for affected tenants and informal residents. High costs of expropriation and resistance from landowners make the enforcement of contributions difficult.

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Estonia

Land value capture in Estonia

Two land value capture instruments are used in Estonia (Table 2.17). Developer obligations are used to compensate for the impact of developments on public infrastructure, while strategic land management is used to provide infrastructure and public services. However, the structure and application of these instruments differs greatly across local governments. While the national government permits certain forms of land value capture, specific terms and procedures are not defined, leading to differing applications of instruments across municipalities. The main obstacles that limit the broader use of land value capture include a lack of a consistent framework across municipalities, resistance or inability to paying fees by property owners, and a lack of financing for strategic land management.

Table 2.17. Estonia: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	n/a	Section 131, <i>The Planning Act</i> /2015	Local governments	Frequently
Strategic land management	n/a	<i>Acquisition of Immovables in Public Interest Act</i> /2018	Local governments	Occasionally
Land readjustment	Ümberkrunti mine	Section 131, <i>The Planning Act</i> /2015 Sections 2, 16 of the <i>Land Consolidation Act</i> /1995	Local governments, Land Board (Ministry of Environment)	Never in urban areas

Enabling framework

Estonia is a unitary state with one subnational level of government: 79 local governments (OECD, 2022^[3]). The national government influences spatial and land-use policies directly through the National Spatial Plan and indirectly through a variety of sectoral agencies (OECD, 2017, p. 87^[2]). While Estonia's national government provides the legislative framework that enables land value capture, land-use planning is primarily conducted by urban and rural municipalities. Local officials have a high level of discretion when deciding the granting of planning permits.

The principle of a social function of property is included in Estonia's constitution.

Developer obligations

Developers are subject to obligations to obtain approval or support for new land development. Obligations can consist of cash or in-kind contributions to compensate for the impact of developments on infrastructure. Developers can pay in-kind charges after a development is approved, but charges must be paid before receiving use permits. Local governments frequently charge for development approvals.

The legal basis for developer obligations is provided by national law, albeit not explicitly. The Planning Act of 2015 gives municipalities the right to make a contract with a developer, but does not elaborate on exactions or fees specifically and does not define when or how developers can be charged. Thus, developer obligations are applied on a case-by-case basis in municipalities.

The lack of a framework for land value capture broadly, and for developer obligations specifically, means the latter are regulated at the local level, where regulations differ widely. Local governments have a high level of discretion in charging developers, and the national government does not interfere in the recovery

of the land value increases. Local governments can charge property owners, set the amounts, and reinvest funds without approval from a higher level of government, and retain the revenue generated. Notably, private entities can also charge developers if the former provides the service impacted.

Because every municipality can make their own rules, calculations differ. Charges are negotiated between the jurisdiction and the developer on an ad hoc basis. The charge is typically based on the cost incurred by the jurisdiction due to the developer's impact on infrastructure, the size and type of development, or the value of land on which it is built. Developers can be exempt from obligations if their developments meet certain criteria, also determined ad hoc. They rarely appeal against required charges.

Payments can take the form of cash, provision of public improvements or services, affordable housing, or a combination. Public infrastructure or services provided by developers in exchange for approvals include public spaces such as parks or roads, parking, facilities such as schools or elderly care, and public utilities. The provision of affordable housing in exchange for development approval is rare, and limited to a few examples in Tallinn.

One major obstacle to developer obligations is that in the absence of any national law or framework, regulation is left to local governments that differ widely in their capacity to effectively charge developers. The wide range of obligations across local governments, as well as their capacity to charge developers, causes confusion and friction costs for developers that ultimately hamper development.

The most common obstacles include the lack of a consistent legal framework across municipalities due to the absence of any national law, and an insufficient demand for development to justify a charge. Substantial charges would foreseeably hamper development.

Strategic land management

The aim of strategic land management is to provide public infrastructure and services such as schools, parks, public transport, roads or parking, public utilities, and administrative buildings and services. Land is typically acquired within the administrative jurisdiction, including both brownfield and greenfield sites.

National and local governments acquire land through purchase at market price, transfer from public entities, or expropriation. However, they cannot freeze land prices before announcing public investment or rezoning, and then buy the land at that price. There is no time limit that land acquired can be retained.

Because strategic land management is predominantly used to facilitate the provision of public infrastructure and services, land acquired is typically not sold after development. Rather, the government typically retains ownership for land use related to such public purposes as referenced above. Development is typically carried out through public-private partnerships that acquire and develop the land. Both local and national level governments participate in such public private partnerships, often composed of contracts where the private entity is responsible for financing and developing the land. Under such schemes, a land plot is divided between use for development and for public infrastructure such as streets. The land belongs to the developer during development, who builds the streets with their own resources, sometimes with financial support from the municipality. After completion, the developer transfers ownership of the streets over to the municipality.

Land is typically acquired and retained by local governments, the Land Board operating under the national government's Ministry of Environment, and private non-profit corporations created by the government. Both national and local governments receive revenues associated with development. Municipal governments do not need approval from higher levels of government to conduct strategic land management.

The main obstacle to strategic land management is a lack of financing for the acquisition of land.

Land readjustment

Governments occasionally conduct simple forms of land readjustment in urban areas, as enabled by the Planning Act of 2015. Land is marked for readjustment through the General and County Spatial Plans. The main obstacles to greater land readjustment use in urban areas include innovation and technical capacity.

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Ethiopia

Land value capture in Ethiopia

The land value capture system is poorly developed in the country. The most prominent instrument is strategic land management, due to the land lease policy in place since 1993. Land readjustment takes place when the government initiates a redevelopment project. There is no legal framework for charges for development rights or developer obligations. Although national guidelines indicate that infrastructure provision must be based on the principles of cost recovery and cost sharing, further legislation on infrastructure levy has not been developed yet. The high level of land informality and the lack of administrative capacities constitute challenges to the use of land value capture instruments.

Table 2.18. Ethiopia: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Use	Implementation
Land readjustment	Meret ye mastekakele (Land readjustment)	Article 45 of Proclamation n° 574/2008	Moderate	Local governments
Strategic land management	Ye lease awaje (Lease proclamation)	Proclamations n° 80/1993, n° 272/2002, n° 135/2007 and n° 721/2011	Frequent	National and local governments

Note: Ministry of Urban Development and Construction officials do not consider the practice to correspond to land readjustment, but international practice recognises it as such (UN-Habitat, 2018).

Enabling framework

Ethiopia is a federation of multi-ethnic nations composed of 10 regions and 2 chartered cities (Addis Ababa and Dire Dawa) at the regional level and hundreds of local governments, which are called cities (*woredas*) and city administrations (OECD/UCLG, 2019, p. 55^[1]). In larger cities there are sub-cities, which are an intermediary administrative division between cities and city (administrations. The regional states have their own constitutions, in which city governments are created.

The principle of social function of property states that the right to property must be exercised in a manner compatible with the rights of other citizens (Article 40 of the 1995 Constitution). The right to expropriate private property for public purposes is subject to payment in advance of compensation (Article 40 of the 1995 Constitution).

The national government is responsible for creating the legal framework of land value capture. The *Urban Development Policy* of 2013 makes reference to strategic land management. Even though there is no legal definition of land value capture, the *Urban Integrated Infrastructure Provision Strategy*, published in 2014 by the Ministry of Urban Development and Construction, mentions that financing infrastructure should be based on the principles of cost recovery and cost sharing.

Land readjustment

Local governments resort to land readjustment in urban renewal, urban upgrading and land reallocation to improve living standards and promote efficient land utilization. As a project that enables changes in the shape of land plots and infrastructure improvements, it serves for informal settlement upgrading. The Ministry of Urban Development and Construction nevertheless does not consider it to correspond to land readjustment as an official planning tool. Local governments make moderate use of land readjustment.

The land readjustment process, which is always led by public entities, must encompass public participation. A consultative meeting is announced, in which 3/4 of affected landowners, tenants and informal residents need to participate. If not, a second announcement is made and 1/2 of those affected need to participate. If failed, then a third announcement will be made, and the meeting will be held with those who are present. The project needs to be approved by all those who are present.

After approval, if landowners do not transfer their land willingly, their participation may be enforced through expropriation, and compensation will be due. Landowners rarely appeal against the requirement to pool their lands or against the compensation paid by the government.

A share of 40% to 80% of the readjusted plots is reserved for public improvements, such as affordable and social housing, public roads, public utilities, schools, parks and green space – from which landowners will benefit.

After readjustment, landowners will receive readjusted plots that may be located in different areas than the original plots. They cannot exchange reallocated plots for cash. A portion of land plots is reserved to future sales or leasing. Around 70% of the cost of public improvements is recovered through the sale or lease of readjusted lots.

The obstacles to land readjustment pertain expropriation and resettlement alternatives. Even though the expropriations are frequently carried out, they remain controversial and expensive. In addition, most land readjustment projects lack adequate resettlement alternatives for affected tenants and informal residents.

Strategic land management

The government carries out proactive land acquisition, banking and registration of properties for the purposes of urban renewal, land consolidation, market regulation and control of informal settlements. This practice is guided by the *Urban Land Development and Management Policy and Strategy* of the Ministry of Urban Development and Construction. Local governments frequently apply strategic land management, while the federal government's practice is restricted to land banking.

There are land banks for both federal properties and at city level. Land banks identify public vacant plots, make them ready for development and transfer them to potential developers. The Federal Land Bank and Development keeps records of lands occupied by federal public organisations and develops the underutilised portion of such land plots or renovates built up properties that have become obsolete.

Land is acquired mostly through expropriations. It is retained for 2 years in average while redevelopment projects take place. Typically, the government builds roads and public utilities in the area. However, this does not mean that all land plots must be developed, since some plots may be targeted for lease.

Public land leasing is a system of land tenure by which the right to use urban land is acquired under a contract of definite time. To lease public land, local governments need a general authorization from the regional council of the region. Local governments lease land with the goals of generating public revenues, providing land for real estate development and facilitating public development, such as social housing.

Lease length is determined by the permitted use of land. Typical length is 99 years for residential uses, science and technology development, administrative buildings, charitable organizations and religious institutions; 60 to 70 years for industry and commerce uses; and 15 years for urban agriculture uses.

Leases are granted via public tenders and allotment. Due to the uncertain frequency and the limited offer of lease tenders, the cumulative effect of this system was the rise of a monopolistic tendency in the urban land lease market, culminating in the exclusion of low-income and middle-income citizens. Moreover, lease transactions lack transparency and are far from being efficient and effective in supporting urban development.

The lease is paid through one upfront lease premium plus recurrent lease payments, with no periodic readjustments. Leaseholders are allowed to transfer the lease in a secondary market or sublease it. Exemptions and discounts to payment may be granted to non-profit entities or for projects with a public purpose, such as affordable housing.

Strategic land management is hampered by the low amount of public land available to lease, the lack of administrative capacities and the lack of co-ordination between the relevant public entities. In all, the revenues raised do not justify the costs of strategic land management operations.

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Finland

Land value capture in Finland

Several land value capture instruments are used systematically in Finland (Table 2.19). Many local governments raise high revenues through developer obligations and strategic land management. The main obstacles are land value capture charges' high cost for landowners, the lack of political will to charge landowners and complex legislation.

Table 2.19. Finland: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	<i>Maankäyttösopimukset</i> (land use agreements)	Chapter 12a of the <i>Land Use and Building Act/2003</i>	Local governments	Frequent
	<i>Kehittämiskorvaus</i>			Rare
	<i>Katualueen ilmaislouutusvelvollisuus</i>	Section 104 of the <i>Land Use and Building Act/1999</i>		Frequent
	<i>Katualueen korvaus</i>	Section 105 of the <i>Land Use and Building Act/1999</i>		No
Strategic land management	<i>Kunnan maapolitiikka</i> (municipal land policy) and <i>kunnan lunastusoikeus</i> (municipal compulsory purchase right)	Section 5a of the <i>Land Use and Building Act/2003</i> and Chapter 13 of the <i>Land Use and Building Act/1999</i>	Local governments	Rare (for value capture purposes)
Land readjustment	<i>Rakennusmaan järjestely</i>	Chapter 12 of the <i>Real Estate Formation Act/1995</i>	National and local special purpose bodies	No

Enabling framework

Finland is a unitary state with 309 municipalities. There are 19 regional councils but only one has an autonomous administration (the island region of Åland); the other 18 regional entities are statutory joint municipal boards (OECD, 2022^[3]). The Ministry of Environment drafts national land-use objectives and provides guidance on the land-use planning process and regulation of building activities (OECD, 2017, p. 93^[2]). Regional councils and municipalities are respectively in charge of regional and local land-use planning. Municipalities are also responsible for planning and issuing building permits. Finland has a hierarchical system of plans, so lower levels of government have to take into account the plans of higher levels of government (*ibid*). Nevertheless, local officials have high discretion when preparing plans and issuing building permits. The national government level creates the legal framework for land value capture.

Developer obligations (*Maankäyttösopimukset, Kehittämiskorvaus, Katualueen ilmaislouutusvelvollisuus and Katualueen korvaus*)

Regular developer obligations

Local governments use developer obligations to:

- Capture some of the land value increases that local detailed land-use plans (which guide development in specific areas within municipalities) generate;
- Cover the cost of stronger public infrastructure and services use resulting from private development.

The obligations consist of cash or in-kind payments or a combination of both. There are three types of obligations.

First, landowners may ask for local detailed plan changes or for a new plan to better suit their needs. In those cases, landowners usually enter into land-use agreements (*Maankäyttösopimukset*) with the local government to get the planning process started and negotiate the obligations. Land-use agreements have a longstanding tradition although after the 1970s they were unpopular before the current legislation from 1999 and 2003. Local governments implement them and frequently use them. The agreements raise high revenues for local governments' general budgets.

Usually, agreement is sought with landowners. However, they are charged even when agreement is not reached, based on the land value increases local detailed plans generate or the public infrastructure investment private development requires. Anyway, landowners cannot develop their plots without a land-use agreement if their developments require local detailed plan changes or a new plan. The negotiation is specific to each development approval, but the agreements can only be concluded after a draft detailed plan has been published. Landowners pay in cash and/or provide land or local public infrastructure like roads and utilities.

Second, landowners may be subject to charges without land-use agreements if the local government decides to draw up or amend a local detailed plan that grants landowners significant benefit (*Kehittämiskorvaus*). In this case, local governments cannot force landowners to develop their plots to meet the new plan. However, local detailed plans grant building rights only for a limited implementation period of generally 13 years, to reduce opportunities to postpone development speculatively. These charges are rare.

For professional real estate developers the charge may amount up to the total land value increase local detailed plans generate. For non-professional developers the charge must not exceed 60% of the land value increase. Local governments may set a lower threshold – even zero. Exemptions from the charge apply if developments provide a social benefit that outweighs their impact on public infrastructure costs or if residential developments' gross floor area is less than 500 m². Local governments may set a higher threshold. Land value is appraised mainly by comparing with the price of recently sold properties with similar characteristics in the area. Land may also be valued based on the income it generates or its cost if it were bought to build equivalent buildings.

Third, when a local detailed plan is approved for the first time, local governments gain possession of any street area not previously in their possession. This instrument (called *Katualueen ilmaislouvuusvelvollisuus*) is frequently used. However, landowners have to be compensated if they lose more than 20% of their plots' area. Conversely, local governments have the right to charge landowners who lose less than 20% of their plots the equivalent value in cash. But in practice, this charge (called *Katualueen korvaus*) is not used.

The obligations' main challenges especially in smaller cities are the low demand for new development or densification and the lack of political will to charge landowners. In bigger cities, the obligations can be high for landowners.

Developer obligations in special development areas

Local governments may designate special development areas for a maximum period of ten years for specific purposes including urban renewal, environmental protection, improvement of the living environment and zoning changes.

Special development areas may require developer obligations, which apply instead of the regular developer obligations (see above). Landowners are charged according to the benefits from development activities in special development areas and the costs of developing those areas. However, local governments almost never use developer obligations in special development areas because the procedure

is complicated and the benefits for local governments are low. They prefer the regular developer obligations, which are more flexible.

Strategic land management

Most cities own a lot of land. For example, Helsinki, the capital city, owns two thirds of its land area. Older cities were granted land from the crown when they were founded, and both older and younger cities have been active in the land market.

Strategic land management is used to redevelop urban areas, control urban growth and capture land value gains. Local governments are in charge of implementation and receive the revenues. The amount of land managed and the revenues raised vary strongly across local governments.

Local governments buy land at market price or expropriate it. If local governments seek land in connection to the decision to draw up or amend a local detailed land-use plan, they can expropriate land at the price before the announcement of the plan. This allows recovering the increase in land values local detailed plans generate. However, this instrument (called *Kunnan lunastusoikeus*) is rarely used. It may be used as a threat to get land-use agreements from landowners (see developer obligations section above). Usually, local governments buy or expropriate unused land, agricultural land and land zoned for urban construction. They can buy land within and outside their territory. If they own land in another municipality's territory they are treated like any other landowner.

There is no limit to the length of land retention. Local governments typically procure a local detailed plan, which raises land prices. They then sell the planned land at market price to the highest bidder or through public tenders that involve criteria beyond the sales price, such as private development project plans' quality. Private developers or public-private partnerships develop the planned land, including basic physical preparation and servicing, public utilities and roads. Local governments also increasingly lease their land nowadays, for example to encourage affordable and social housing construction. They recover investments in land purchase through the sale or lease of planned land.

Land readjustment

Land readjustment is not used in urban areas but has a legal basis. The first piece of legislation that included urban land readjustment dates back to 1960 and the first proposal to 1924. Local governments are not interested in using the instrument; they prefer developing land through developer obligations (see section above), expropriation or even normal land purchase.

Land readjustment can be used for the conversion of rural to urban land and should be specified in an area's first local detailed land-use plan. Local governments and private landowners can initiate a readjustment project, and one national and one local special purpose body are in charge of implementing it. Landowners are compelled to participate.

After readjustment, landowners should receive a plot with a value proportional to their original holdings and located on or as close as possible to their original land. Owners of readjusted plots that are less valuable than original plots should receive a compensation. Conversely, owners of readjusted plots that are more valuable are required to pay a compensation.

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France

Land value capture in France

France uses systematically developer obligations and strategic land management (Table 2.20). Local governments always use developer obligations to recover the public costs private development generates. Many local governments manage land strategically for urban development purposes, such as affordable housing construction. However, the impact and revenues of these instruments vary widely across local governments. Larger cities with high land prices can have higher land value capture charges without reducing incentives for development compared to smaller cities with low land prices. Smaller local governments also lack administrative capacity.

Table 2.20. France: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	<i>Contributions d'urbanisme: taxe d'aménagement et participations aux équipements publics</i>	<i>Loi 1253 d'orientation foncière/1967; Articles L331-1 to L332-30 of the Code de l'urbanisme/1975; Article 7 of the Loi 1208 relative à la solidarité et au renouvellement urbains (SRU)/2000; and Loi 1658 de finances rectificative pour 2010/2010</i>	Local governments and the <i>départements</i> (the intermediate level of government)	Always
Strategic land management	<i>Politique foncière</i>	Article 4 of the <i>Loi 1253 d'orientation foncière/1967</i> ; Articles L221-1 to L221-3 and Article L300-1 of the <i>Code de l'urbanisme/1975</i> ; <i>Loi 13 d'amélioration de la décentralisation/1988</i> ; <i>Ordonnance 460 relative à la partie législative du code général de la propriété des personnes publiques/2006</i> ; and <i>Loi 366 pour l'accès au logement et un urbanisme rénové (ALUR)/2014</i>	Local governments and public land agencies	Frequent
Land readjustment	<i>Remembrement foncier</i>	<i>Loi 1253 d'orientation foncière/1967</i> ; Articles L322-1 to L322-11 of the <i>Code de l'urbanisme/1975</i> ; and <i>Loi 366 pour l'accès au logement et un urbanisme rénové (ALUR)/2014</i>	Private consulting firms	Rare

Enabling framework

France is a unitary state with three subnational levels of government: 18 regions, 101 departments (*départements*) and 34,965 municipalities (OECD, 2022^[3]). The national government creates the legal framework for land value capture. Moreover, together with regions the national government plans and finances large scale infrastructure projects, such as highways, railways and universities. Municipalities create local land-use plans and issue planning permits. Inter-municipal associations in larger urban areas also play an important role in the planning system. They create strategic plans that provide a coherent strategy for the entire urban agglomeration. These plans are legally binding for local land-use plans. Inter-municipal associations are to replace municipalities for local land-use plans' creation in larger urban areas. The intermediate level of government between regions and municipalities (the *départements*) does not have formal land-use planning responsibilities (OECD, 2017, p. 99^[2]).

Article 17 of the *Declaration of the Rights of Man and of the Citizen* and Article 545 of the *Civil Code* allow to restrict private property for a public purpose through a fair and pre-established compensation.

Developer obligations

Developers are subject to obligations (*contributions d'urbanisme*) to obtain approval for new development, densification or exceptions from urban planning regulations. The obligations consist of cash or in-kind

payments or a combination of both. They are designed to compensate the cost of stronger public infrastructure and services use resulting from private development. The legislation dates back to 1967. Local governments and sometimes the *départements* (the intermediate level of government) implement the obligations and receive the revenues. Local governments always use the obligations but the revenues vary strongly across them.

In 2019, local governments and the *départements* recovered EUR 1,784 million from the obligations, which corresponds to 4% of the total public costs private development generated. The obligations are higher in large cities with high land prices and thus cover a larger share of the public costs private development generates compared to smaller cities.

There are two types of developer obligations:

1. The *taxe d'aménagement* (development tax), a cash charge per square metre built. Local governments mainly take into account the public costs private development generates to set the charge.
2. The *participations aux équipements publics* (development contributions), which local governments and developers negotiate in designated urban development zones (*zones d'aménagement concerté* or *projets urbains partenariaux*). Developers must pay in cash; provide land for public roads, utilities, parks, schools, libraries, gymnasiums or other public facilities; or provide this infrastructure directly. Local governments may also use inclusionary zoning policies in local land-use plans: the requirement on developers to provide a share of housing units in new developments as social housing units. The *participations'* negotiation procedure is similar for each development approval.

Before 2010, local governments usually preferred the *participations aux équipements publics* in the *zones d'aménagement concerté*. However, the *zones d'aménagement concerté* have special procedures that are long and rigid. Thus, local governments increasingly use the *taxe d'aménagement* or *participations aux équipements publics* in *projets urbains partenariaux*, which have shorter and more flexible procedures than the *zones d'aménagement concerté*. Social housing construction and buildings for crafts activities can be exempt from the *taxe d'aménagement*.

Developer obligations face several challenges:

- Until 2000, local governments sometimes required obligations that were higher than public costs from developers. The legislation became stricter: the obligations are now linked to the cost of stronger public infrastructure and services use resulting from development. Nevertheless, the cost of the obligations can remain high for developers, especially in smaller cities with low land prices. Developers frequently challenge the obligations in court.
- Often, the revenues raised or public infrastructure developers provide are low compared to the public costs private development generates.
- Smaller local governments lack administrative capacity, for example to estimate the public costs private development generates.
- During economic downturns, there is political pressure to lower the obligations to kick start the construction sector.

Strategic land management

Some local governments own a lot of land thanks to strategic purchase, donations or transfers after the revolution, while others own none. After 1960 and until 2000, the government restricted public land purchase to reduce spending as well as intervention into private property rights. Things are changing quickly. The national and local governments increasingly create national and local public land agencies to buy and manage land for the following:

- Affordable housing and industrial projects;
- To create green space around cities;
- To support urban growth, for example through the redevelopment of middle town centres.

Local governments and the public land agencies implement strategic land management (*politique foncière*) and receive the revenues.

Land is bought at market price or expropriated. Local governments and land agencies can buy or expropriate land at the price before the announcement of a public investment or zoning change. This allows recovering the increase in land values public investments or zoning changes generate. Expropriations in relation to the Grand Paris Express, a set of metro lines under construction in the Paris metropolitan area, were carried out in such a way. Usually, local governments and land agencies buy or expropriate unused land as well as land in designated 'strategic' zones. They can buy (though not expropriate) land outside their administrative jurisdiction.

Land is typically retained for five to ten years although there is no limit to the length of retention. It is usually rezoned, which raises land prices. Local governments then sell the land:

- At a predetermined price to the preferred buyer, for example community land trusts (*organismes de foncier solidaires*) for affordable housing construction;
- Or through public tender with criteria beyond the sales price, such as developments' share of green space.

The national government and local governments also lease their land to encourage development with a public purpose, for example affordable housing construction. The government recovers investments in land purchase through the sale or lease of rezoned plots.

The amount of land accumulated and revenues raised through land sales and lease vary widely across local governments. The Paris region's land agency, the *Établissement Public Foncier d'Île-de-France (EPFIF)*, owns EUR 2.2 billion worth of land and recovered EUR 266 million in 2020 through strategic land management, for example. In 2014, it created together with local authorities the land company *Foncière Commune*, which buys land when owners are ready to sell, retains, consolidates and then sells or leases it to support SMEs, crafts activities and housing construction in Paris.

The main challenges for smaller local governments are the lack of resources for land purchases and their lack of administrative capacity.

Land readjustment

Land readjustment (*remembrement foncier*) is used for urban development, redevelopment and the conversion of rural to urban land. Private consulting firms, such as the *Bureau d'Aménagement Foncier et d'Urbanisme (BAFU)*, implement it. The legislation dates back to 1967 and has been reformed in 2014 to overcome landowners' resistance. Consent is now required from fewer landowners. However, land readjustment is still rare.

Typically, private landowners' associations (*associations foncières urbaines*) initiate a readjustment project, though public entities also have the authority. Landowners and local governments participate in consultations. The share of consenting landowners required depends on the type of project. For example, for public projects at least 75% of landowners as well as landowners who own at least 75% of the readjustment area need to consent. Readjustment projects that significantly reduce the floor area ratio of plots require the consent of at least 50% of landowners. For private redevelopment projects, all landowners need to consent. Once these requirements are met, landowners who do not consent can require the other landowners to buy their land. Landowners are compelled to participate in readjustment projects with a public purpose.

Landowners must provide a share of their plots for public infrastructure and services. After readjustment, they receive a plot with an area proportional to their original holdings. They can exchange reallocated plots for cash. The distribution of costs and benefits should be fair. Nevertheless, owners of readjusted plots that are more valuable than original plots are not required to pay any compensation.

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Germany

Land value capture in Germany

Land value capture is used systematically in Germany (Table 2.21). Large cities with high land values often recover an important share of the public infrastructure investment cost private development requires. In smaller cities with lower land values the revenues raised may not be worth the instruments' administrative cost. Small local governments may also lack administrative capacity.

Table 2.21. Germany: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	<i>Städtebauliche Verträge and Erschließungsbeiträge</i>	§ 11-12 and § 127-135 of the <i>Building Code (Baugesetzbuch)/1987</i>	Local governments	Frequent
Infrastructure levy	<i>Städtebauliche Sanierungsmaßnahmen and Straßenausbaubeiträge</i>	§ 136-164b of the <i>Building Code/1987</i> ; and states' municipal tax laws (<i>Kommunalabgabengesetze</i>)	States and local governments	Frequent
Land readjustment	<i>Umlegung</i>	<i>Federal Building Law (Bundesbaugesetz)/1960</i> ; and § 45-84 of the <i>Building Code/1987</i>	Administrative districts and local governments	Frequent
Strategic land management	<i>Kommunaler Zwischenerwerb, Bodenvorratspolitik and städtebauliche Entwicklungsmaßnahmen</i>	§ 165-171 of the <i>Building Code/1987</i>	Local governments	Occasional

Enabling framework

Germany is a federal state with four levels of government: the national level, 16 federal states, 401 administrative districts and 10,792 municipalities (OECD, 2022^[3]). Three federal states – Berlin, Hamburg and Bremen – cover only the territory of individual large cities and combine the functions of states and the municipal level. While smaller municipalities usually belong to an administrative district, larger ones with roughly 100,000 inhabitants or more are independent of districts and combine the functions of municipal and district administration.

The national and state governments have overlapping legislative authority in spatial planning matters. States largely follow national legislation but frequently pass laws that deviate in parts. This leads to a broadly comparable system across states with variations in the details. Decision-making mechanisms contain a mix of top-down and bottom-up elements. States generally develop spatial development plans for their territory that, depending on the state, impose more or less restrictive guidelines on lower levels of government. Often, states also create more detailed regional plans for so-called planning regions, each of which covers typically between 10% and 30% of a state. Regional plans are binding for local land-use plans.

States are also responsible for property valuation through public valuation boards (*Gutachterausschüsse*). Property valuation follows a national decree, the *Immobilienwertermittlungsverordnung*. Property value is appraised using market-based approaches, based on data of recently sold properties in the area with similar characteristics; the income property generates or the cost to build an equivalent building.

In most states, administrative districts have limited powers related to spatial planning, with the exception of Niedersachsen, where they are responsible for the preparation of regional plans. Municipalities have considerable powers for land-use decisions. In all states, they are responsible for the preparation of local

land-use plans and other urban planning instruments (OECD, 2017^[2]). Local officials have high discretion when issuing building permits.

According to Article 14 of the Constitution, private property entails obligations, and its use should also serve the public good. The national government level creates the legal framework for land value capture.

Developer obligations

Developers are subject to obligations to obtain approval for new development. The obligations consist of cash or in-kind payments or a combination of both. They are designed to compensate the cost of stronger public infrastructure and services use resulting from private development. The Building Code regulates the obligations and local governments implement them as well as receive the revenues. Local governments frequently use the obligations. The obligations are charged through *städtebauliche Verträge* ('urban development contracts') and *Erschließungsbeiträge* ('development contributions'). *Städtebauliche Verträge* cover a wide range of public costs private development generates, while *Erschließungsbeiträge* have a narrower scope and only cover public roads and utilities' costs in the immediate vicinity of private development.

Städtebauliche Verträge ('urban development contracts')

Städtebauliche Verträge have been in the Building Code since 1993. The charge developers have to pay is either calculated using a fixed formula or negotiated between local governments and developers. When formula-based, it takes into account the estimated total public costs private development generate as well as developments' size, type and market value, including the value of land. When negotiated, the negotiation procedure is similar for each development approval. The charge must not exceed the total public costs private development generates. Local governments cannot make a profit.

Developers must pay in cash or provide public infrastructure and services, such as roads, utilities, schools and parks. Most major cities also use inclusionary zoning. They require developers to provide a share of housing units in new developments as affordable rental units. Moreover, developments must meet energy efficiency requirements that are more far-reaching than standard building code requirements. No developer is exempt from payment or infrastructure provision.

Usually, such charges cover a significant share of the public costs private development generates. Developers must pay or provide the public infrastructure before their developments' completion.

Regarding affordable housing, some cities, for example Frankfurt, require up to 30% of housing units as affordable rental units in new developments. Developers must build the affordable units within their project sites. Affordable units are comparable to market-rate units in terms of size, design standards and amenities. They remain 'affordable' between 20 and 30 years. The following are eligible to rent affordable housing: households with an income below a certain percentage of the area's median income level; households eligible for social welfare programmes; or households with one or more disabled individuals.

Large cities with high land values, like Munich, Frankfurt, Stuttgart and Freiburg, use *städtebauliche Verträge* successfully. In smaller cities with lower land values, the revenues raised may not suffice or *städtebauliche Verträge*'s administrative costs may be too high.

Erschließungsbeiträge ('development contributions')

In addition to *städtebauliche Verträge*, local governments can charge *Erschließungsbeiträge* up to 90% of the following public costs private development generates, if *städtebauliche Verträge* do not already cover them:

- The costs to connect new properties to the electricity, gas, water, sewage, telephone and television networks;

- The costs for road construction, sidewalks, lighting, green spaces and noise protection systems.

Municipal statutes determine the *Erschließungsbeiträge* amount. It depends on a development's size, intensity of land use (the number of floors), type (residential, commercial or industrial) and location. If new development occurs far from existing public infrastructure, the costs for road construction and connection to public utilities networks are higher. In individual cases, local governments can fully or partly exempt developers from payment or allow them to pay in instalments if it is in the public interest or to avoid unreasonable hardship on developers.

Infrastructure levy

Landowners pay a levy for public infrastructure renewal initiated by the government and from which they specifically benefit. There are two types of infrastructure levies: *städtebauliche Sanierungsmaßnahmen* ('urban renewal measures') and *Straßenausbaubeiträge* ('road renewal contributions'). *Städtebauliche Sanierungsmaßnahmen* apply to a wide range of public renewal works, while *Straßenausbaubeiträge* have a narrower scope and only cover public roads' renewal costs in the immediate vicinity of landowners' plots. Some states also have community- or business-improvement-districts laws, where private landowners can initiate public renewal works for which the levies are used.

Städtebauliche Sanierungsmaßnahmen ('urban renewal measures')

Städtebauliche Sanierungsmaßnahmen apply in designated renewal areas. For example, landowners pay a levy for:

- Renewed infrastructure to reduce the pollution and noise from buildings, businesses and traffic facilities;
- The construction or expansion of renewable energy systems;
- Green and open spaces for climate protection and adaptation;
- The equipment of areas with playgrounds and sports fields.

Städtebauliche Sanierungsmaßnahmen date back to a 1971 law, and were integrated in the Building Code in 1987. Local governments implement them and receive the revenues by recovering the land value increase. The levy is widely used and accepted. Landowners, tenants, leaseholders and other affected parties have the right to participate in consultations. However, *städtebauliche Sanierungsmaßnahmen* often only cover a share of public renewal works' cost.

Landowners in renewal areas must pay the estimated full value increase of their plots resulting from public works, independently of the works' cost. When the land value increase is low, particularly in rural areas, the levy may be lower than renewal works' cost or landowners may be exempt from payment. If prices used for the levy's estimation change, the levy's amount cannot be revised. Usually, landowners pay upon completion of renewal works. However, they can also pay in advance and benefit from a discount if they do so. If infrastructure renewal is not provided as originally planned or within the due date, the money is not returned to landowners. If landowners cannot afford the levy, local governments can grant them a loan.

Straßenausbaubeiträge ('road renewal contributions')

While *Erschließungsbeiträge* (see developer obligations section above) are levied on developers for the initial construction of public roads private development requires, *Straßenausbaubeiträge* cover public roads' renewal costs, which follow initial construction. The legal basis is in states' municipal tax laws (*Kommunalabgabengesetze*). States and local governments are in charge of implementation. However, landowners and some political representatives are increasingly questioning *Straßenausbaubeiträge* due to their financial burden on landowners. Some states have stopped using them; some states are trying to abolish them; and some states leave their use up to local governments.

When used, landowners and leaseholders benefiting from public road renewal works pay in three cases:

1. Most commonly, the improvement of road infrastructure components, such as new cross-sections, wider sidewalks, improved drainage systems, etc.
2. The fundamental renewal of road infrastructure components. For instance, when a road needs to be completely renewed at the end of its useful life. Benefiting landowners and leaseholders only have to pay if a reasonable time period has passed since the road's first construction or last thorough renewal (usually more than 25 years) and if the road's worn condition is not the consequence of a lack of maintenance.
3. The construction of new road infrastructure that is added to existing road infrastructure and was not covered through Erschließungsbeiträge (see developer obligations section above). For example, when a parking lane is added to an existing road.

Municipal statutes regulate the identification of benefiting landowners and leaseholders, as well as the distribution of costs among them. Landowners and leaseholders pay the levy according to a fixed formula, based on their plots' size, use intensity (the number of floors) and type (residential, commercial or industrial).

Between 25% and 75% of roads' renewal costs are passed on to benefiting landowners and leaseholders, depending on the road type. For instance, residents are largely deemed to benefit from residential roads so they cover a large share of the costs. Main roads also benefit the city in general so nearby landowners and leaseholders cover a smaller share.

Land readjustment

Land readjustment (*Umliegung*) is used for urban development or renewal and the conversion of rural to urban land.*¹ The national legal basis dates back to 1960 and is now included in the Building Code. Administrative districts and local governments implement land readjustment. They frequently use it.

Public entities initiate a readjustment project after consultation with landowners. However, no specific share of consenting landowners is required. Landowners are compelled to participate. The main obstacle for land readjustment is landowners' resistance but expropriation is rarely necessary.

Typically, in greenfield development, landowners must provide up to 25% of their plots for public infrastructure and services, such as roads and parks. In brownfield development, this share is usually higher. There is no limit to the share of plots the government can demand.

After readjustment, landowners receive a plot with a value proportional to their original holdings. If all plots have a similar value per square metre, they may be reallocated based on area rather than value. Landowners usually receive a plot located on or as close as possible to their original land. However, they may receive newly created plots within the readjustment area. They cannot exchange reallocated plots for cash. Owners of readjusted plots that are less valuable than original plots receive the difference in cash. However, owners of readjusted plots that are more valuable are not required to pay any compensation.

Strategic land management

Strategic land management is used for public land development, land consolidation and to control urban growth as well as land price inflation. Local governments implement it and receive the revenues. There are three important models for public land development: public interim acquisition, land banking and *städtebauliche Entwicklungsmaßnahmen* ('urban development measures').

Public interim acquisition and land banking

Local governments buy land at market price. Usually, local governments buy agricultural land whose prices are low. There is no limit to the duration of public land retention. Local governments draw up a development

plan, rezone and develop the land, either themselves or through private developers. Development can include basic physical preparation and servicing, public utilities, roads, transport, parks, etc. Local governments sell the improved land mainly through public tenders that often involve criteria beyond the sales price, for example to favour families with children or affordable housing. Local governments decide on the land's use even if private developers are in charge of development.

The rezoning of agricultural to developable land and public infrastructure provision significantly increase the land's value. Therefore, local governments recover investments in land purchase and development through the sale of higher-value plots.

Unlike public interim acquisition, land banking allows to buy land for future sale or development without earmarking it for a specific purpose. For instance, land banking allows to have land available in the future for green space and parks for climate change adaptation. More and more cities buy and consolidate plots for land banking. The city of Ulm, which has been doing land banking for more than 100 years, now owns more than one third of its land. Else, the city of Münster uses public interim acquisition successfully.

Since local governments control the entire land purchase and development process, the latter is usually short in duration. However, local governments bear the price risk. They must also have enough resources for land purchases as they often face restrictions to take on additional debt. Moreover, since local governments cannot force owners to sell their land, public interim acquisition and land banking depend on owners' willingness to cooperate. Land purchase is easier when an area belongs to one or few landowners. Nevertheless, local governments may have a strong negotiating position even with many landowners. In principle, local governments can decide not to rezone an area if landowners are unwilling to cooperate and can rezone different areas if suitable alternatives are available. Anyway, landowners have an interest to participate because the purchase price is usually higher than the price of agricultural land alone.

Other obstacles, especially for smaller cities, are their lack of administrative capacity and the low revenues from public interim acquisition and land banking schemes due to low land values, which may not be worth the planning and development costs.

Städtebauliche Entwicklungsmaßnahmen ('urban development measures')

Some cities, for example Munich and Frankfurt, use the instrument '*städtebauliche Entwicklungsmaßnahmen*' ('urban development measures') to obtain land at a favourable price for land development. It allows buying or expropriating land at the price before the announcement of a public investment or rezoning. Once the land is rezoned and developed, local governments or a publicly-owned company sell it at the price of the improved land. Alternatively, owners can decide to keep their land and pay the difference between land values before and after the urban development measure. This allows recovering the increase in land values public investment or zoning changes generate.

This instrument is used for large development projects. However, landowners consider it a deep intervention in property rights so it is used occasionally only.

Public land lease

Occasionally, the national and local governments lease their land for residential development, mainly single-family houses and recently, affordable housing within multi-family houses. The national *Leasehold Law (Erbbaurechtsgesetz)* regulates public land lease since 1919. However, the government does not own a lot of land available to lease. Moreover, many local governments are under pressure to sell their land to pay back their debt. They also lack administrative capacity to properly estimate the lease rents and manage the complex contracts. Local governments often do not consider the local market conditions and set overpriced rents.

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Note

¹ Land readjustment is also used for farmland consolidation (*Flurbereinigung*). A special law (*Flurbereinigungsgesetz*) regulates land readjustment on farmland. However, it is beyond the scope of the Compendium and the rest of this section focuses on land readjustment in urban areas.

Ghana

Land value capture in Ghana

Several land value capture instruments are used in Ghana (Table 2.22), including developer obligations, strategic land management, and infrastructure levies, to recover costs from the impact of developments on public infrastructure use, to consolidate land, control urban growth and facilitate spatial planning. The main obstacles that limit broader use of land value capture include lack of administrative capacity, lack of financing for the acquisition of land, resistance from landowners, and an inadequate land registry.

Table 2.22. Ghana: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Development charges/ Building permit fees	Section 92, Local Governance Act/2016 Section 116, Land Use and Spatial Planning Act/2016	Local governments	Frequently
Strategic land management	Public land acquisition	Article 20 (1a and b); Constitution of Ghana/1992 Section 208, Local Governance Act/2016 Section 167, Land Use and Spatial Planning Act/2016 Section 223 and 235, Lands Act/2020	Local governments	Occasionally
Infrastructure levy	Betterment charges	Section 102, Local Governance Act/2016 Section 111, Land Use and Spatial Planning Act/2016 Land Use and Spatial Planning Regulations/2019 Lands Act/2020	Local governments	Rarely

Enabling framework

Ghana is a unitary country with one tier of subnational government comprising 254 municipalities (OECD/UCLG, 2019^[1]). There is no legal definition of land value capture, and major gaps exist in the accuracy of the country's land registry.

The principle of a social function of property is included in Ghana's constitution.

Developer obligations

Developer charges in exchange for development rights are increasingly popular among local authorities, partly due to the ease of implementation through fee-fixing resolutions, a local authority bylaw that sets and reviews annual fees, rates and charges that local authorities are allowed by statutes to collect as part of their internally generated funds.

Developers are subject to obligations to obtain approval for new development, densification, and exemption from zoning regulations, and consist of either cash or in-kind payments in the form of land, public space, infrastructure improvements or service provision. They are designed to compensate for the cost of increased use of public infrastructure and services, or the increased value of land due to development.

Charges are calculated and applied according to a specific local master plan, which weighs the costs that a development imposes on infrastructure, its location (e.g. neighbourhood, greenfield or brownfield), and its physical characteristics (e.g. size, density, quality, etc.).

Developers can be exempt from charges if their development provides a social benefit that outweighs its impact on infrastructure, e.g. affordable housing, or green or public space. Such charges must be paid before or at the moment that a development receives approval. Local governments issue development

approvals and receive the revenues from charges, without any need for approval from the national government. Developers sometimes appeal.

The obstacles hindering the application of development charges include a low quality land registry and insufficient capacity of public entities to determine development impact on infrastructure, negotiate charges with developers, etc.

Strategic land management

Strategic land management is used to consolidate land, control urban growth and for spatial planning. The legal basis is provided by national law and is frequently adhered to by actors involved. Land acquired for strategic land management is typically located within the jurisdiction, consists of both greenfield and brownfield sites, and is acquired either through purchase at market price or expropriation.

It is not possible for the government to freeze land prices before announcing public investment or rezoning, and then buy land at that price. However, land acquired for strategic land management is typically rezoned by the government or an authorized public entity, and is typically developed before sale. There is no limit to how long land acquired for strategic land management can be retained. Development before sale include basic physical preparation (e.g. drainage, decontamination), public space, roads or parking, public utilities, and construction of affordable or market rate housing.

Public-private partnerships can be involved in strategic land management. They include the national government and may take the form of either joint ventures or contracts between public and private entities where private entities have responsibilities for developing the acquired land and financing its development.

Land acquired via strategic land management is sold at market price, through auction, transferred to another public entity, or leased. Public land is leased to generate public revenue, provide land for real estate development, or facilitate planned urban growth or development with a public purpose.

Land is typically acquired, retained, and disposed of by both national and local levels of government, as well as independent public corporations, and all three receive revenues from sales. Subnational governments do not need approval from a higher level of government to execute strategic land management.

In an attempt to promote affordable housing, the government has acquired lands through expropriation for affordable projects such as the Saglemi Housing project, the Kpone Affordable Housing project, and the Asokore Mampong Affordable housing project, among others in regional capitals. However, these projects are still at various stages of completion, and housing units have not yet been sold.

Obstacles hindering the use of strategic land management include the lack of coordination between relevant public entities, and the lack of financing for the acquisition of land.

Infrastructure levy

Though infrastructure levies have not been used to date, they feature in legislation on local government financing, and several legislative reforms concerning infrastructure levies were undertaken between 2016 and 2020 (Table 2.17). This is mainly limited to user charges. The intent of the reforms is to require all property owners whose properties have been enhanced by public infrastructure contribute to defraying their cost. It is also applicable in compensation claims where charges may be offset against a claim of compensation for those owners whose properties have appreciated in value due to the public action.

Obstacles hindering the use of infrastructure include resistance by property owners and the lack of administrative capacity of public entities to calculate, apply, and enforce related fees.

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Greece

Land value capture in Greece

Several land value capture instruments are used systematically in Greece (Table 2.23) and some are anchored in the Constitution. Developer obligations are a key instrument for local governments to obtain the land for public infrastructure and services private development requires. The main obstacles that limit the use of more land value capture are the legislation's complexity, public entities' lack of administrative capacity, and landowners and developers' resistance. Many actors in the planning system think that intervention in property rights should be minimum.

Table 2.23. Greece: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	<i>Εισφορά σε γη και χρήμα (Eisfora se gi kai xrima)</i>	Paragraph 3 of Article 24 of the Constitution/1975; Law 947/1979; Law 1337/1983; and Law 4315/2014	National government, regional and local governments	Always
Strategic land management	<i>Διαχείριση και αξιοποίηση δημόσιας ακίνητης περιουσίας</i>	Law 2636/1998; Law 3986/2011; and Law 4389/2016	National government and special purpose bodies	Occasional (but increasing)
Land readjustment	<i>Αστικός αναδασμός</i>	Paragraphs 4-5 of Article 24 of the Constitution/1975; Articles 35-50 of Law 947/1979; Law 1337/1983; and Law 2508/1997	National government, regional and local governments	Rare
Charges for development rights	<i>Κίνητρα για την περιβαλλοντική αναβάθμιση και βελτίωση της ποιότητας ζωής</i>	Articles 10 and 10A of Law 4067/2012; and Articles 102-103 of Law 4759/2020	National and local governments	Rare

Enabling framework

Greece is a unitary state with two subnational levels of government: 13 regions and 332 municipalities (OECD, 2022^[3]). Land-use planning is highly centralised with strong oversight at the national level (OECD, 2017, p. 111^[2]). Regions and municipalities have few responsibilities for land use. Regions and municipalities mainly play advisory roles in the preparation of some spatial plans and approval of some local land-use plans, respectively.

According to Article 17 of the Constitution, property is under the protection of the state. Therefore, private property rights should not be used against the public interest. The national government level creates the legal framework for land value capture.

Developer obligations (Εισφορά σε γη και χρήμα – Eisfora se gi kai xrima)

Landowners are subject to obligations (*Εισφορά σε γη και χρήμα – Eisfora se gi kai xrima*) when the government decides to draw up statutory urban plans for new development or urban expansion. This is because urban plans are considered to increase land's value. Landowners participate in consultations. The obligations consist of cash payments or land provisions for public roads, utilities, schools, parks and public space in general. They are designed to compensate the cost of stronger public infrastructure and services use that private development generates. The legal basis dates back to the 1975 Constitution and the obligations were introduced in national planning legislation in 1979. The national government, regional

and local governments implement the obligations. They always use them. Statutory plans enabling land or cash obligations require approval from the national government. Usually, only local governments receive the revenues. However, if the national government funds the public works private development requires, it recovers the land value increase.

The cash or land obligations are calculated using a fixed formula, based on the size and use of properties included in statutory urban plans. No landowner is exempt. Cash obligations are paid through instalments.

In new development, compulsory land provisions cover on average 80% of the public space that statutory urban plans require for public infrastructure and services. Local governments provide the rest through expropriation.

The main challenges are the legislation's complexity; the government's lack of administrative capacity, for example to prepare the implementing acts for land obligations, which can lead to important delays; and landowners' resistance. Landowners often challenge paying the obligations in court. Moreover, the lack of systematic monitoring and evaluation makes it difficult to assess developer obligations' impact in practice.

Strategic land management

Land the modern Greek state obtained in 1830 after the war of independence against the Ottoman empire was considered largely national land. Most land in cities then gradually became private.

Strategic land management (*Διαχείριση και αξιοποίηση δημόσιας ακίνητης περιουσίας*) that recovers increasing land values is occasional, but becoming more frequent. The Hellenic Republic Asset Development Fund S.A. (HRADF), a public development fund, implements the privatisation programme launched in 2011. It has sold undeveloped public land through public auctions, or has rezoned and developed it before sale, which raises land values. The Hellenic Public Properties Company S.A. (HPPC), a public company, leases public land to generate revenues and boost economic development. Nevertheless, a large part of public land remains undeveloped or used below its potential value.

Strategic land management is hampered by the lack of strategic priorities, institutional fragmentation between multiple public entities and their lack of coordination.

Land readjustment

The national government, regional and local governments use land readjustment (*Αστικός αναδιασμός*) for urban development or redevelopment and the conversion of rural to urban land. Subnational governments require approval from the national government. The legal basis dates back to the 1975 Constitution, and land readjustment was introduced in ordinary legislation in 1979. However, it is only rarely used.

The main obstacles are the following:

- Local governments and landowners have not shown interest in land readjustment. Many actors in the planning system argue that intervention in property rights should be kept at a minimum.
- The legislation is complex. Landowner consent and compensation rules are unclear.
- Planning authorities have limited administrative capacity.
- There is a lack of temporary resettlement options for resident landowners during readjustment projects.

The government is planning a reform of the legislation to improve land readjustment's efficacy.

The national government, regional and local governments can initiate a readjustment project, through a statutory urban plan. Landowners participate in consultations. However, no specific share of consenting landowners is required. Landowners who do not consent can be expropriated but expropriation is rare.

Landowners must provide a share of their plots for public improvements and services, such as roads, utilities, schools, administrative buildings, parks and green space. The share of plots the government can demand is based on the size of landowners' properties. After readjustment, landowners receive a plot with a value that is equal to their original holdings and located on or as close as possible to their original land. However, landowners may receive newly created plots within the readjustment area or jointly owned plots. They cannot exchange reallocated plots for cash.

Charges for development rights

In dense areas, developers can build at a higher density (floor area ratio) if they reduce their plots coverage by buildings and provide land for common utilities areas. Landowners and developers are offered similar incentives to demolish and reconstruct buildings at a lower height or to demolish one or more upper floors of existing buildings. These planning incentives aim to reduce urban heat-island effects and clear the view of important monuments. The Ministry of Environment and Energy decides the incentives and associated charges for development rights (*Κίνητρα για την περιβαλλοντική αναβάθμιση και βελτίωση της ποιότητας ζωής*) after the opinion of the Central Council of Architecture, a consultative body responsible for the built environment's quality. Local governments are in charge of implementation through the issuance of building permits. However, landowners and developers have shown little interest in using the incentives so far.

Moreover, the government introduced a special charge for development rights in 2012 for the development of the former Athens Hellinikon airport area. The developer of the area can pay a cash charge to build at a density (floor area ratio) above the established baseline but within the maximum density permitted by the special law regulating the area's development (*Law 4062/2012*). The estimated value of development rights determines the charge. The municipalities of Athens, Piraeus as well as other neighbouring local governments receive the revenues. They may only use the revenues for the creation of green areas, public facilities and renovation of their historical centres. However, the developer has decided not to use this special instrument.

The main obstacles to charges for development rights are the limited scope for them as they apply to few specific cases; unclear development norms and regulations; and local governments' lack of administrative capacity, for example to estimate the increase in land values development rights generate.

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Hong Kong

Land value capture in Hong Kong

Several land value capture instruments are used (Table 2.24). All land in Hong Kong is under a public leasehold system. Therefore, strategic land management is a key instrument to capture land value gains. Charges for development rights are always levied upon lease modification and in initial land auctions. Local governments always charge the infrastructure levy, as part of the annual land rents or rates. Land readjustment projects are rare, as the revenues raised do not justify the costs of pooling and readjusting plots. There is no adequate legal framework of developer obligations.

Table 2.24. Hong Kong: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	Legal provision	Implementation	Use
Strategic land management		Chapter 131 of Town Planning Ordinance (1939) and Chapter 28 of Land (Miscellaneous Provisions) Ordinance (1972)	Local government	Frequent
Charges for development rights		Article 7 of the Basic Law	Local government	Always
Infrastructure levy	<i>Recurrent infrastructure levy</i>	Government Rent Ordinance (Chapter 515) and Rating Ordinance (Chapter 116)	Local government	Always
Land readjustment		None	Local government	Rare

Enabling framework

Hong Kong is a Special Administrative Region of the People's Republic of China with a two-tiered system of representative government: the Legislative Council at the municipal level and 18 district councils at the district level. The Basic Law is effective from 1997 to 2047; until then, the region has autonomy to make laws and govern itself. It can define its land use planning framework and design its fiscal policy, including land value capture instruments.

All land is under a public leasehold system. Since 1843, the government disposes of land by granting leases of 75 years or 99 years and, in limited cases, 999 years. After reunification with China's mainland in 1997, the lease term is of 50 years. Leases granted before mid-1997 are known as Crown leases and thereafter as Government leases.

The Town Planning Board is responsible for statutory planning. The main statutory plans are the *Outline Zoning Plan*, which contains land use zones and major road systems, and the *Development Permission Area Plan*, to guide and control development in rural areas. In addition, local *Outline Development Plans* contain more detailed level planning parameters.

Strategic land management

Strategic land management is focused on public land leasing. According to the Basic Law, all land belongs to the government. Therefore, land is always leased, for all purposes: to generate public revenues, to provide land for real estate development, to facilitate development with a public purpose and to foster planned urban growth. Hence, the government captures all land value gains in principle. The gradual land disposition method helps capture subsequent increases in land values due to economic development and population growth.

The government acquires land from sea reclamation. After gaining land from the sea, it leases the corresponding development rights to private developers, in order to generate income for defraying the

costs and investing in public infrastructure. In all, this means that the main strategy for land management is leasing, and revenues from land leases are used to fund public improvements.

The leaseholder system has been in place since colonial times. Leases range from 75 years to 99 years and, in limited cases, 999 years. After the 1997 unification with China, new leases under the land disposal program normally have a lease term of 50 years. Nonetheless, lands leased for public purposes may have shorter terms, ranging from 20 to 50 years.

Lessees pay two types of charges for obtaining and using the development rights of land. First, lessees pay an upfront payment (called land premium) to obtain the development rights of land initially. In most cases, the amount of premium is determined by public auction. Second, lessees also pay an annual ground rent that is calculated as 3% of the rateable value (estimated rental value) of both land and buildings through the term of the lease. No exemptions or discounts to payment may be granted. Leaseholders of public land may transfer the lease in a secondary market or sublease it to a third party.

The revenues from land leases belong to the government and are an important source of income. Between 2016 and 2019, the annual total lease revenue ranged from 19% to 27% of the yearly total budget. The collected revenues are earmarked to fund and pay for public improvements and infrastructure, such as public transport, roads and parking, affordable housing and public utilities.

Difficulties are of political and practical order. Since land is scarce, the amount of land available for new leases is not substantial, and land prices are high.

Charges for development rights

The government always levies charges for any modifications of development rights when there is a change of land use or density specified in the original land contract. Since all land is leased from the government, the fee takes the form of a lease modification charge. If the modification of land use or density does not go beyond what is specified in the land contract, there will be no modification charge, as the fee is already embedded in the auctioning price.

The government has high discretion in issuing and setting the charge for development rights. The fee is calculated according to the estimated land value gains from the rezoned land or from the additional floor space. The fee is set for delimited zones of a jurisdiction and cannot be transferred to other areas. It must be paid in cash, through a lump sum, at the time the development rights are issued.

Charges for development rights constitute an important source of local revenues, having been the second largest income generated by leasing public land for the government in the fiscal year of 2018-2019. In that year, it accounted for 27.2% of the total annual lease revenue, which, in terms of the total annual budget, corresponded to 5.4%.

The Hong Kong government keeps all land revenues in a designated land account in its budget. The purpose is to earmark these funds for land-related public development.

Lease renewal charges for capturing land value increments have not been successful among leaseholders, who have refused to pay a substantial amount of money to renew their leasehold rights, whose values have gone up many times since their contracts started 75 or 99 years ago.

Infrastructure levy

The infrastructure levy is always collected bi-annually from landowners in the forms of land rents and rates – which is equivalent to the property tax. The government combines these two levies into a single payment, so as to facilitate compliance.

The annual land rents amount to 3% of the rateable value of the property. Rates are adjustable according to the fiscal needs of infrastructure improvements. Land rents and rates are collected in cash, bi-annually,

before completion of the public improvement. The government has high discretion in issuing and setting the fees and in investing the collected funds.

Local districts or special purpose bodies may receive the funds. Typically, the fees are used to fund and pay for public improvements, such as public space, transport, roads, public utilities, safety, and public services.

Overall, a similar system has been in place since 1843 in Hong Kong, and the ongoing costs of infrastructure improvements are included in the annual lease revenues. The main challenge to implementation is sufficient administrative capacities, since setting the annual land rents and rates requires a complex and recurrent mechanism of land appraisal, as well as a bi-annual collection system.

Land readjustment

As a densely populated region, Hong Kong has only applied land readjustment in the “vertical” manner, for densification purposes. In vertical land readjustment, after the original plots are pooled and readjusted, a high-density apartment complex is built over the land, and affected property owners receive an apartment unit within the newly constructed building.

Local district councils or private developers may lead land readjustment projects. There is no share of readjusted plots reserved for public improvements. In a similar way, the readjustment does not typically include the creation of plots that could be sold or leased in the future. Yet, through land readjustment, project developers can build extra apartment units for sale at market value to recover a portion of the costs.

A consultation process with leaseholders is always set in motion. If the project is privately led, 100% of the affected landowners must consent. Because reaching consensus is difficult, private-led land readjustment projects are rare. If the project is public, participation is compulsory and therefore there is no legal consent requirement. The government may use compulsory purchases to acquire property from owners who refuse to participate in land readjustment. In this case, owners receive fair compensation, defined at the market rate based on the original use of plots.

After readjustment, landowners may opt for an apartment unit or cash compensation. In addition, if the readjusted plots are less valuable than the original ones, they shall receive due compensation. Third party investors, e.g., developers, can receive readjusted plots in return for their investments in the project.

Despite the high demand for housing in a limited land area, land readjustment projects are rare. For public projects, the difficulty is to face the political and financial costs of conducting land expropriations. Moreover, private and public executing entities are often discouraged by the tight profit margins of land readjustment. The revenues raised often do not justify the costs of pooling and readjusting plots.

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Hungary

Land value capture in Hungary

Land value capture is used in Hungary but not systematically (Table 2.25). The national government occasionally uses the infrastructure levy only. The main obstacles are local governments' lack of administrative capacity and the lack of political will at the national level to empower local governments.

Table 2.25. Hungary: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Infrastructure levy	Területfejlesztési hozzájárulás	No	National government	Occasional
Developer obligations	Befektetői kötelezettségek or területfejlesztési hozzájárulás	Decree 312/2012 (XI.8.); and Decree 31/2014 (II.12.)	Local governments	Rare

Enabling framework

Hungary is a unitary state with two subnational levels of government: 19 counties and the capital region of Budapest at the regional level and 3,155 municipalities (OECD, 2022^[3]). The national government prepares the national framework legislation that structures spatial planning at the national and subnational levels. It provides opinions on regional and local spatial plans and approves them with respect to their congruence with higher level spatial plans (OECD, 2017, p. 118^[2]). Municipalities prepare local spatial plans and enact building regulations. They are the primary contact point for public engagement in the planning process (*ibid*). Local officials have high discretion when issuing planning permits.

According to Article XIII of the *Fundamental Law of Hungary*, the country's Constitution, the ownership of property entails social responsibility. The national government level creates the legal framework for land value capture.

Infrastructure levy

Landowners pay a levy for linear infrastructure built by the government and from which they specifically benefit, for example water, sewer and gas pipelines. The national government is in charge of the instrument's implementation. It uses the levy occasionally.

The government and private landowners (through community improvement districts) can initiate public works for which the levy is used. Landowners participate in consultations.

The levy amounts to 25-40% of the estimated cost of public works. The rest is drawn from the general budget. To identify landowners who will benefit and be charged, local governments estimate the distance within which public works increase land's value. Land is valued using a formula, based on the size and location of properties, number of bedrooms, size of the basement, level of available communal services, etc. Benefiting landowners then pay the levy in equal parts. The levy is paid through instalments before the completion of public infrastructure. If the actual cost of public works differs from their estimated cost, the amount of the levy can be adjusted.

The main obstacles are landowners' resistance and local governments' lack of administrative capacity, for example to appraise increasing land values to identify benefiting landowners.

Developer obligations

Developers are subject to obligations to obtain approval for new development or densification. The obligations consist of cash payments. They are designed to compensate the cost of stronger use of public infrastructure and services resulting from development. Local governments implement and receive the revenues from developer obligations, but rarely use them.

The obligations are either negotiated between local governments and developers or calculated using a fixed formula. When negotiated, the negotiation follows a similar procedure for each development approval. When formula-based, the charge mainly takes into account the type of development.

Regarding residential development, regulations have been frequently amended in recent years and made less demanding in line with the government's family-supportive agenda. The building permit process for residential units is simple and takes less than 30 days. Units smaller than 250 m² are exempt from developer obligations.

The main obstacle is local governments' lack of administrative capacity, for example to negotiate with developers or estimate the cost of stronger use of public infrastructure and services resulting from development.

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India

Land value capture in India

Several land value capture instruments are used systematically in the country, with varying levels of success across states (Table 2.26). Upon state approval, local governments and development authorities can implement these instruments and collect the revenues. The inaccuracy of land registry systems and the lack of local administrative capacities are common challenges to implementation.

Table 2.26. India: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision*	Implementation	Use
Charges for development rights	Premium Floor Space Index and Land Use Conversion Fee	None	States, local governments and special purpose bodies	Frequent
Developer obligations	Development charge or Impact Fee	None	Local governments and special purpose bodies	Frequent
Infrastructure levy	Betterment Fee	None	States, local governments and special purpose bodies	Moderate
Land readjustment	Town Planning Schemes and Land pooling	None	States, local governments, special purpose bodies and developers	Moderate
Strategic land management	Land banking	None	Central government, states, local governments and special purpose bodies	Moderate

Note: Land is a state subject, therefore the national level cannot legislate provisions, it can only make suggestions.

Enabling framework

India is a federal republic with a two-tier subnational government structure: 28 states and 8 Union Territories at the regional level and 267 468 local governing entities at the local level, among municipalities and rural local bodies (Panchayat) (OECD/UCLG, 2019, p. 177⁽¹⁾). Local government's organizational structure is complex and differs according to each state.

The state governments are responsible for creating the legal framework for land value capture as they are in charge of land and hence land value capture. The central government legislates on behalf of Union Territories. The national policy document that guides the use of land value capture instruments is the *Value Capture Finance Policy Framework* (2017), elaborated by the Ministry of Urban Development.

The state is responsible for local laws, including Master Plans. Of the total of 4041 urban local bodies, only about 1 420 have approved Master Plans, of which 10% are regularly updated. Most master plans are prepared by State Town and Country Planning departments or Development Authorities, with inadequate participation of the Local Entities.

Land value capture rules are uniformly applicable across municipalities of the same state, with varying levels of success. Municipalities do not have substantial revenue resources and cannot increase taxes and fees without state order. The main challenges relate to the lack of an appropriate incentive framework to local governments, lack of valuation tools and techniques, lack of database, lack of local administrative capacities and the lack of updated and comprehensive urban property records.

Charges for development rights

States, local governments and development authorities can implement charges for development rights and collect the revenues from the charge. Local entities need permission from the state to adopt this instrument. They charge developers for approving changes in land use from agricultural to non-agricultural, under the state Land Revenue Codes. Town Planning Legislations and related regulations contain provisions for other changes in land use, which therefore vary from state to state. When developers request to build developments at higher density, they are charged for development rights and also have to pay developer obligations (see section below).

For conversion of land use, the levy is calculated as a percentage of the estimated increase of land value that derives from the zoning change. It may also be levied at a fixed rate per unit of area. This type of charge is extensively adopted across the country, given that, due to high urbanization rates, most cities are in the process of land expansion.

In the case of development at higher density, the excess floor area is charged at a fraction of market value, usually between 30% to 70%. Hence, it may vary across areas or zones. It is primarily implemented in large cities, where the demand for building at higher density is more significant.

The charge is paid at the time the planning permission is granted, either in cash, through the provision of affordable housing units, or a combination of both. The conversion of land use is often paid in cash. The charge for higher density is often paid with the provision of affordable housing units, with the goal of offsetting urban development externalities.

If developers are required to build affordable housing units, they cannot alternatively pay a fee. The units are built on-site, within the boundaries of the project. Beneficiary households must be classified as economically weaker sections, whose values may vary from state to state.

The lack of adequate legal frameworks at the regional level, low demand for building at higher density in many municipalities and the overall low quality of land registry systems hamper the implementation of the charges. Landowners and developers sometimes file claims against the obligation to pay charges.

Developer obligations

Developers are subject to obligations to obtain approval for new developments. Developer obligations are foreseen in several state legislations since the 1950s. They are typically levied within the framework of charges for development rights (see section above). Upon obtaining approval from the state government, local governments and special purpose bodies implement the obligations and receive their revenues. They have no discretion in issuing development approvals, establishing the impact rule or reinvesting the collected funds on their own.

The obligations consist of cash payments and/or direct provision of affordable housing units. When paid in cash, the collected revenues are used to finance improvements offsite. Some state ordinances admit exemptions to payment, for instance, if the land or building is in control or possession of public authorities or if the project is being developed by an educational, medical or charitable institution.

Cash payments are calculated using a formula that takes into account land values and the costs incurred by the public authority due to the impacts on infrastructure. In the state of Maharashtra, for instance, the fees are prescribed as percentage of market rate of land, applied separately to land area and construction area. The rates for land area range from 0.5% for residential and institutional use to 1% for commercial use. In addition, there is a charge on construction area, at 2% for residential and institutional use, 3% for industrial use and 4% for commercial use. States other than Maharashtra have prescribed the obligation in absolute Indian rupees per square meter.

If developers are required to build affordable housing units, they can do so within the boundaries of the project or off-site. The units are not comparable to the market-rate units. Beneficiaries are households who reside in the municipality and whose income falls below a specific percentage of the median income level.

Development norms and land use regulations often lack in clarity, rendering implementation difficult. In addition, many local governments lack administrative capacity to calculate and impose the charges. Other obstacles to implementation include the risks of real estate markets and low-quality land cadastres.

Infrastructure levy

Landowners pay a levy for government-built infrastructure from which they specifically benefit, for example public roads, public transport, public utilities and green space. States, local governments and special purpose bodies may implement the levy and receive its revenues. Local authorities need permission from the state government to do so. Although foreseen in the Town Planning Statutes of the states of Maharashtra, Gujarat, Andhra Pradesh and Karnataka, the instrument has only been implemented in Gujarat.

The levy is charged when granting development permissions. It can vary from 30% to 50% of the increase in value of land, depending on the state Acts. To facilitate estimations, a uniform rate for all affected land plots can be set. In Gujarat, for instance, a uniform rate per square meter is charged in order to recover the public scheme's cost.

Most local governments lack the administrative capacity to implement and collect the infrastructure levy. Moreover, the measurement and quantification of project benefits and its corresponding land value gains is difficult, particularly when real estate market is subject to cyclical changes. This can also render the adoption of the tool more contentious and prone to litigation.

Land readjustment

Land readjustment projects are used for the purposes of urban expansion, urban renewal and post-disaster reconstruction. States, local governments, special purpose bodies and developers occasionally implement them. Local governments and special purpose bodies need approval from the State to do so. They are the ones that collect the revenues from land readjustment projects.

For projects initiated by public entities and that have a public purpose, participation is compulsory. If landowners resist land contributions, their lands are acquired through expropriation, and compensation is paid. Expropriations are always carried out when necessary. In some states, for instance in Punjab, expropriated landowners have the option to choose cash compensation or developed land.

A share of 23% to 50% of the readjusted plots is reserved for public improvements, such as public roads, public utilities, schools, parks, social housing and green space – from which landowners will benefit. In addition, the land readjustment project typically includes the creation of jointly owned plots that are reserved for future sales, to generate revenues for the government.

Landowners receive a plot with an area proportional to their original holdings, on or as close as possible to the original land. But, depending on the case, they may be reallocated to different plots within the area. They cannot exchange reallocated plots for cash. Yet, owners of readjusted plots that are less valuable than the original ones are entitled to compensation which is typically adjusted against the contribution levied.

Public entities conduct analyses to define the contribution ratio that maintains the proportionality of landowners' share before and after pooling. It is also important to address small landowners, non-title-holders, tenants and vulnerable persons. For this reason, a consultation process is typically carried out with these affected groups. Nonetheless, while large owners undoubtedly benefit from the process, the case may not be the same for small and marginal landowners.

In all, land readjustment is gaining acceptance in varied project contexts, which indicates its attractiveness and potential transferability across the territory. However, some challenges remain. Many states lack an adequate legal framework of land readjustment, which hampers its adoption. Other obstacles that limit the use of land readjustment are the low quality of land cadastres, the risks of real estate markets and the resistance by landowners and other affected groups, such as tenants and informal residents.

Strategic land management

Strategic land management is used by development authorities to access, hold and manage urban land, and by states to promote investment and industrial development. The implementation of land management strategies across states has been unsystematic and has lacked planning.

States and development authorities carry out land management operations through purchases at market price and expropriations and receive the revenues from further allotment. There is a preference for acquiring vacant, unproductive or unused land, especially in urban fringes. The government can only acquire land for which the use has been predetermined in regional legislation, according to the *Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (2013)*.

Acquired land is then rezoned and developed by the government, which raises land prices. Development includes basic physical preparation, new roads and construction of residential and commercial units. Afterwards, the government may auction developed plots to private actors or transfer them to another public entity. The government recovers investments through the sale or leasing of the developed plots.

Public land is leased to generate public revenues and facilitate planned urban development, including site-specific industrial projects of mining, energy, tourism, education, sports and health. Moreover, the government makes plots available to economically and socially vulnerable groups for residential purposes.

The ground rent is calculated as a percentage of the market value of public land. Exemptions to payment may be granted to leaseholders who are not-for-profit entities or if the public land will be used for specific public purposes.

Lease lands cannot be transferred without previous sanction of states, upon the condition that the land will be used for the purpose for which it was granted. The lands cannot also be sub-leased without government permission.

In all, strategic land management is considered an important tool to conform urban development patterns in accordance with states' planning objectives. Yet, implementation challenges comprise inadequate legal frameworks at state level, lack of financing for land acquisition, low levels of local capacity and lack of coordination between public entities. Some projects face resistance from landowners, due to insufficient compensation and inadequate resettlement and rehabilitation policies.

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Indonesia

Land value capture in Indonesia

Land value capture instruments are little used in Indonesia (Table 2.27). The four levels of government make some use of land readjustment and strategic land management to provide land for urban development. Charges for development rights can be levied when there is a request by developers to build at higher density or to benefit from land use changes. Yet, implementation is scarce, since local ordinances and regulations are largely absent. Although infrastructure levies are not regulated by law, it is common to collect contributions from landowners for the improvement of public facilities, especially in rural areas.

Table 2.27. Indonesia: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Land readjustment	Land Consolidation Konsolidasi Lahan (id)	Presidential Decree 86/2018 and Ministry of Land and Spatial Planning Regulation 12/2019	National and local governments and private developers	Moderate
Strategic land management	(there is no specific name for it)	Law 02/2012, Government Regulation 71/2012, Government Regulation 28/2020 and Presidential Decree 66/2020	National government, provinces, districts, local governments and independent public agencies	Moderate
Charges for development rights	Izin Penggunaan Pemanfaatan Tanah (id) Land Use Permit	None	Local governments	Rare

Enabling framework

Indonesia is a unitary state with a three-tier system of subnational government: 34 provinces at the regional level, 416 regencies and 98 cities at the intermediate level, and 83 344 villages at the local level. The provinces represent the central government within their territories, carrying out some of its tasks. Regencies and cities are at the same level, having each their own elected government. Villages are recognized as self-governing entities since 2014, enjoying autonomy and own resources.

The principle of social function of property establishes that land shall be used to the greatest benefit of the people, that is, to the common good according to the Constitution. All rights on land have a social function, and excessive ownership and control of land that could harm the public interest are not permitted (National Law 5/1960).

The implementation of land value capture Instruments varies widely across urban areas. The Java-Bali region and selected metropolitan areas in Sumatera, Kalimantan, and Sulawesi islands have the most dynamic land development and therefore make more substantial use of land value capture. Outside the 14 metropolitan areas, municipalities often do not have the local ordinances and the sufficient administrative capacity to implement these instruments.

Land readjustment

Land readjustment is used for the purposes of urban expansion, farmland consolidation and post-disaster reconstruction. The national government, local governments and private landowners make moderate use

of this instrument. Local governments need approval from the national government to do so, via the Ministry of Land and Spatial Planning.

Land readjustment projects are conducted after a consultation process with landowners and tenants. When 60% of landowners give their consent, which happens only in some cases, they transfer their plots. The land contributions of resisting landowners are enforced through expropriations at market rates based on the original use of plots.

A share of at least 15% of the readjusted plots is reserved for public improvements, such as public roads and parking space, from which landowners will benefit. After readjustment, landowners receive a plot with a surface area proportional to their original holdings. If they prefer, they can exchange the reallocated plots for cash compensation.

The implementation of land readjustment is challenged by the low levels of administrative capacities and the lack of resettlement alternatives for displaced tenants and informal residents. Since landowners do not always give their consent, public entities need to resort to land expropriations, which are expensive and controversial.

Strategic land management

Strategic land management is used by national government, provinces, districts and municipalities, as well as public corporations and independent public agencies, to control urban growth and promote planned urban development. The *State Asset Management Agency* (LMAN) is the sole government agency responsible for managing land and property assets. As a whole, the country makes moderate use of strategic land management.

The government may acquire land in a number of ways: through purchases at market prices; via transfers between government agencies; or via expropriation, under which market-value compensations must be given. Commonly, the government retains forcibly taken land or unproductive property assets.

The government can freeze land prices at a certain level before the announcement of a public investment or rezoning and buy the land at that price. The government can also retain land before selling it, in expectation of future increases in land prices. Land is typically retained for 3 years. However, this is less common, as the government normally buys land for a specific purpose, such as to build new public infrastructure.

Acquired land is rezoned and developed by the government, which raises land prices. Development includes basic physical preparation, new roads and construction of residential and commercial units. Afterwards, the government may auction developed plots to private actors or transfer them to another public entity. The government recovers investments through the sale or leasing of the developed plots.

Public land may be leased to generate public revenues and to provide land for real estate development, facilitating development in alignment with spatial planning objectives. The ground rent is calculated as 3.33% of the land value, with no exemptions or discounts.

Lease length varies according to the purposes for which the land or property is leased. If destined for commercial use, the lease can be of 5-10 years, renewable. If the purpose is to develop infrastructure or public facilities, the maximum lease period is of 50 years.

The main challenges to strategic land management are the lack of financing for land acquisition, the lack of administrative capacities of national and local authorities and the lack of coordination between public entities.

Charges for development rights

Charges for development rights may be levied in two cases:

- when a developer makes a request to build at higher density (Floor Area Ratio) than the one allowed for the zone,
- when a developer applies for a permit to change the use of the plot from agricultural to non-agricultural.

In both cases, the charge is a compensation in exchange for the permission to develop land. Yet, local governments rarely apply this instrument, mostly because they do not have local ordinances to regulate the technical aspects.

The charge must be paid at the time the development rights are granted. Municipalities have discretion in deciding if they will charge a compensation in cash or through the provision of land and infrastructure improvements.

In many cases, the status of land in the land certificate differs from the land use expressed on the zoning regulation. For instance, agricultural land is located in a residential or commercial zone. As a result, the charge for re-zoning is rarely adopted in the country.

The main obstacles are the lack of a national legal framework and of local regulations. In addition, many local governments do not have sufficient administrative capacity. In second-tier cities the demand for building at higher density or for urban expansion is low. When the charge is actually implemented, developers frequently appeal against it, claiming that it is not economically viable to them.

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Ireland

Land value capture in Ireland

Developer obligations ('development contributions' in Ireland) are the only systematically used land value capture instrument (Table 2.28). Political resistance has ensured that other forms of land value capture have remained unacceptable. Despite the existence of many local area plans, development plans and an expanding corpus of complicated planning legislation, planning is largely developer led.

Table 2.28. Ireland: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	Development contributions	Sections 48-49 of the <i>Planning and Development Act/2000</i>	Local governments and a special purpose body	Frequent
Strategic land management	N/a	<i>Planning and Development Act/2000</i>	The national and local governments, a special purpose body and a public company	Rare

Enabling framework

Ireland is a unitary state with two levels of government: the national level and 31 local governments at the county or municipality level (OECD, 2022^[3]). In between the two levels, three indirectly elected Regional Assemblies exist.

At the national level, two main organisations have responsibility for planning: the *Department for Housing, Planning, Community and Local Government* and the *Planning Appeals Board (An Bord Pleanála)*. The Department is responsible for the planning legislation's framing, for devising a *National Planning Framework* and for issuing guidance documents in respect of national planning issues. *An Bord Pleanála* provides an arbitration forum in which any decision made by a planning authority on a planning application can be reviewed at the applicant or another interested party's request. Regional Assemblies coordinate and support strategic planning (OECD, 2017, p. 124^[2]).

Local governments are the planning authorities and decide on land use and management. Moreover, in some cases they provide non-statutory guidance, for example on the design of new developments. Every development requires planning permission from the local authority unless it is exempted development or designated as strategic infrastructure at the national level (*ibid*). Local officials have high discretion when issuing planning permits. Various state and semi-state bodies as well as local authorities have land expropriation powers.

According to Article 43.2 of the Constitution, private property rights should be regulated by the principles of social justice. Therefore, the state may limit the use of private property rights in the public interest.

The national government level can create the legal framework for land value capture. Until recently, the government has been reluctant to introduce land value capture measures. In 2021, the government published a *General Scheme Land Value Sharing and Urban Development Zones Bill 2021*. The bill proposes that communities get a greater share of land value increases arising from local planning decisions and public investment and infrastructure.

Developer obligations ('development contributions' in Ireland)

Developers are subject to obligations to obtain approval for new development. The obligations consist of cash or in-kind payments. They are designed to help defray the costs associated with the provision of

public infrastructure and services that facilitate private development. The legal basis dates back to 1963 but many changes have been introduced since then. Local governments almost always implement the obligations and receive the revenues. In a minority of cases, a special purpose vehicle is used.

Local governments frequently use the obligations. However, several obstacles hamper their efficacy:

- Developers often resist paying the obligations. In some cases, local governments agree to collect them after developments are completed and sold.
- Occasionally, developers go bankrupt and cannot afford paying the obligations. In such cases, the obligations have to be written off.
- National legislation is not detailed enough for some developer obligations schemes. In such cases, specific legislation has to be drafted to charge the obligations.
- Many local governments do not mobilise the necessary planning and legal expertise to ensure the obligations' maximum efficacy.
- The obligations may have to be returned to developers together with any interest that may have accrued while they were held by the government if the following occur: the government does not provide the public works private development requires as originally planned, does not start them within five years of developers' payment or does not complete them within seven years of developers' payment.
- During a downturn in the economy there is political pressure to waive developer obligations to kick start the construction sector.

Often, the obligations are calculated using a fixed formula, based on the size, type and location of developments as well as the estimated total public costs. If the actual costs differ from the estimated costs, the amount of the obligations may be adjusted. Depending on the developer obligations scheme, developers must pay for local public roads, transport and utilities that will benefit their developments. The payment modalities, for example whether the obligations are paid through a lump sum or instalments, depend on the payment capacity of developers. Conditions are also imposed in relation to affordable housing. Almost no developer is exempt.

If developers must build affordable housing, usually they must do so within their project sites. Occasionally, local governments have accepted affordable units within their territory but outside developers' project sites. However, this is frowned upon as it goes against achieving a social mix. The main purpose of Part V of the 2000 *Planning and Development Act* (as amended) is to capture a portion of the increase in land value resulting from a grant of planning permission for residential development (planning gain). Local authorities are allowed to buy up to 20% of private development sites at existing use value as opposed to market value. This land can then be used for the provision of social and affordable housing. Local authorities can accept completed housing units instead of a percentage of the site at existing use value. Generally, affordable housing is made available for purchase at a discount to market value by those who meet a number of eligibility criteria including upper income thresholds. Social housing is generally made available for rent at a level below market rate. Eligibility to rent such housing may include income level, employment status, family formation status, etc. Approximately 900 social and affordable units were built in 2019 by way of developer obligations. Social and affordable units are indistinguishable from market-rate units.

Strategic land management

Strategic land management is used for urban redevelopment, land consolidation, public road and rail projects, and to control urban growth. The national and local governments, a special purpose body and a public company implement it. Local governments and the special purpose body receive the revenues.

Land is bought at market price; transferred between levels of government or public entities; or expropriated (compulsory purchase). The government can buy or expropriate land at the price before the announcement

of a public investment or zoning change. This allows recovering the increase in land values public investment or zoning changes generate.

However, the government's different levels as well as public entities lack coordination and resources for land purchases. In addition, land expropriation faces specific challenges:

- There is a predisposition against expropriation at the political and administrative level.
- The expropriating public entities lack qualified personnel to carry out the expropriation process efficiently.
- The current legislation is criticised for being difficult to use and open to court challenge. A study of compulsory purchase (expropriation) law is underway to streamline the process.

There is no limit to the length of land retention. After development, land can be sold at market price to the highest bidder; at a predetermined price to the preferred buyer, especially to encourage industrial development in remote areas; through public tenders that involve criteria beyond the sales price; or it can be transferred to another public entity.

The government also leases its land to generate public revenues and encourage industrial development as well as development with a public purpose, for example the construction of schools or affordable housing.

Vacant land that was zoned for residential development but remained undeveloped was subject to an annual levy to discourage land hoarding and to release land for development in a timely fashion. The levy's imposition started in 2018 at 3% of the land's market value and rose to 7% in 2019. Certain criteria had to be met to charge the levy. Landowners could challenge the levy's imposition initially at the *Planning Appeals Board (An Bord Pleanála)* and eventually in court by way of judicial review on a point of law. However, the scheme was abandoned on the grounds that the revenues were not worth the administrative effort.

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Israel

Land value capture in Israel

Land value capture is used systematically in Israel (Table 2.29). Land value capture instruments often recover a large share of the increase in land values, and the revenues they raise are sometimes a major part of local budgets. Due to high urban density and demand, urban development and redevelopment may be highly profitable even after land value capture charges.

Table 2.29. Israel: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	היטל השבחה (Heytel Hashbakha – 'betterment levy')	Town Planning Ordinance/1936; and Planning and Building Law/1965	Local governments	Always
	מס השבחה מטרון (Metro Mas Hashbakha – 'metro betterment tax')	Metro Law/2022	National government	Not yet used
Infrastructure levy	היטלי פיתוח (Heytelei Pituach)	Local Governments Ordinance/1949	Local governments	Always
Land readjustment	איחוד וחלוקה (Ikhud veKhaluka)	Town Planning Ordinance/1936; and Planning and Building Law/1965	Local governments and landowners	Frequent
Strategic land management	N/a	Land Ordinance (Acquisition for Public Purposes)/1943	National government (Israel Lands Authority)	Rare

Enabling framework

Israel is a unitary state with one subnational level of government: 251 local governments (OECD, 2022^[3]). Land-use planning is highly centralised with strong oversight at the national level (OECD, 2017, p. 130^[2]). Local officials have little discretion when issuing planning permits when these conform with local or national detailed plans. The national government level creates the legal framework for land value capture.

Developer obligations (Heytel Hashbakha and Metro Mas Hashbakha)

Developers are subject to the *Heytel Hashbakha* to obtain approval for new development, densification, or exceptions from urban planning regulations. The *Heytel Hashbakha* consists of a monetary payment to capture some of the 'betterment' of plots that have been granted development rights of higher value than before. The *Heytel Hashbakha* dates back to the 1920s, but the legislation was dysfunctional until thoroughly revised in 1981-83. It is implemented by local governments, and its revenues are sometimes a major part of local budgets.

The *Heytel Hashbakha* amounts to 50% of plots' estimated value increase. It is to be paid at the earliest occurrence among the following: the granting of development rights, relaxation of existing regulations or sale of property. A building permit will not be issued until the *Heytel Hashbakha* is paid. To estimate the value increase of plots that are granted development rights, local governments obtain an appraisal by a legally certified real estate valuer. The appraisal is based on the site-specific market value of land, using relevant criteria as determined by the real estate valuer. If developers contest the amount, they may request a second appraisal by a nationally appointed valuer among a list of highly experienced real estate valuers. These must cease private practice and are certified to decide on appraisals contested by private parties and local governments.

Local governments can use the revenues from the *Heytel Hashbakha* for an open-ended list of infrastructure or development anywhere within the jurisdiction. A recent amendment also allows directing

10% of the revenues to school education. Public buildings, social services, small housing units and specific types of urban regeneration projects are fully or partially exempt from the *Heytel Hashbakha*. Local governments are currently arguing against the nationally imposed waiver for urban regeneration projects due to a lack of other funding sources for public services.

In addition, developers must provide up to 40% of a newly developed or redeveloped plot unless 40% of land were already provided in the past. The land provision, to be required, must be included in a statutory plan. It can be used for local public roads, limited public buildings and public space. Such improvements do not necessarily have to benefit adjacent properties directly. For example, a kindergarten may cause nuisance to developers who are required to provide land.

Although only land can be required from developers – not in-kind infrastructure –, land is very valuable in Israel's high urban density and demand context. Even after the land provision and *Heytel Hashbakha*, urban development is highly profitable for developers. On the other hand, local governments rarely cover their full funding needs even with these instruments.

The 2022 *Metro Law* introduced a new type of 'developer obligation', the *Metro Mas Hashbakha*, to finance the first underground metro lines in Israel's highly built-up and congested central district. The *Metro Mas Hashbakha* will apply to landowners or developers located in the lines' proximity, in predesignated zones expected to benefit from higher land values linked to the higher development rights from amended plans and metro infrastructure improvements. The usual *Heytel Hashbakha* in these zones will be 40% and local governments will continue to levy it. Newly designated national government authorities will appraise and levy the balance of approximately 10% and the revenues will go to the metro financing fund.

In the past, some local governments allowed and negotiated the provision of in-kind infrastructure by developers, fully or partly instead of the *Heytel Hashbakha* or in addition to it. This was useful for earlier construction of the infrastructure new development required because the *Heytel Hashbakha* comes late in the building permit process. However, the Supreme Court ruled it illegal in 2011. The 2022 *Metro Law* revives and explicitly allows this practice, but only related to metro-area works.

Infrastructure levy (Heytelei Pituach)

Landowners pay several types of levies for infrastructure built adjacent to their land by local governments, for example public roads, public utilities and green space (only in limited cases, where an area clearly lacks green spaces). The levies are set in local by-laws, which were broadly authorised in 1949 and are frequently amended. Local governments are in charge of implementation and receive the revenues. They always use the levies when they have the right to do so. However, the levies and thus the revenues are low. The burden on landowners is minimal, amounting to a few percents of property value. The precise amounts vary somewhat from place to place.

The levies are estimated using a fixed formula for each type of public work, based on their estimated cost. The formula takes into account the location and size of abutting or directly benefiting properties. The national government sets a range within which local governments have discretion to set the levies and charge landowners. If the levies fall short of the public investment needed by local governments, for instance because the national government sets a ceiling, the national government sometimes provides the missing funds – especially in 'poorer' municipalities.

An earlier version of the instrument was linked to the land value increase public works generate rather than their cost. However, it proved difficult to administer, and was replaced by the current levies, which are unrelated to a proof of added value to land plots.

Land readjustment

Land readjustment is used for new development, redevelopment and to unlock fragmented land ownership where private plots are co-owned by many family members or scattered among national land. It dates back to 1955, and the 1965 *Planning and Building Law* retained the relevant clauses. Local governments implement land readjustment, and use it frequently. Land readjustment areas are not treated as special development areas with a separate institutional structure. Rather, land readjustment is a routine practice set in almost-regular planning processes.

Local governments and private landowners can initiate a land readjustment stage in the plan-preparation process. For a plan with land readjustment to be approved, landowners whose property falls within the readjustment area need to consent. If some or even one landowner does not consent, the plan is approved without the consent of all landowners and they are compelled to participate. In reality, agreement with all landowners is sought and received.

For major new development, landowners must typically provide 50-70% of land readjustment areas for public improvements and services such as public roads and transport, public utilities, parks, schools, etc. Nevertheless, usually the remaining land is still much more valuable than undevelopable plots. In fact, in the Israeli high urban density and demand context, the value of land significantly increases if it is released for development, despite the often large share of land allotted for public services.

Both landowners and local governments often view land readjustment as a win-win. It occurs within regular planning processes and is financed through the same instruments as other public improvements: the *Heytel Hashbakha* for increases in land values, and compulsory land provision and the infrastructure levy for public infrastructure built on readjusted land (see sections above). Moreover, while development without readjustment is restricted to the 40% maximum land provision rule, any amount of land needed for public services in a land readjustment project may be taken as long as readjusted plots are more valuable than original ones. Expropriation is almost never necessary. However, the process usually takes long due to back-and-forth appraisals requested by landowners and interim appeals regarding land provision requirements.

After readjustment, landowners receive a new plot with a value proportional to their original holdings. The law also denotes that the new plots should be located on or as close as possible to landowners' original land. However, this consideration is secondary in practice as it could conflict with good planning. Landowners are most often reallocated to newly created plots within the readjustment area to make space for reconfigured roads and public services required by higher densities. The new plots' proximity to landowners' original land is rarely an issue because most readjustments are conducted through agreements, and landowners focus on receiving plots with appropriate value. Due to high urban densities, landowners also frequently receive apartments instead of their original ground plots.

If there are disparities in the reallocated plots' (proportional) values among landowners, local governments use a mutual-compensation mechanism. Owners of readjusted plots that are less valuable than original plots are to receive the difference in value from owners whose readjusted plots are more valuable. The latter owners pay into a fund the local government mediates. However, this mechanism is complex to handle and delays projects. Israeli valuers have learned to find reallocation solutions that balance plots' values and avoid the mutual payments. Moreover, the compensations trigger the Land Increment Tax, which requires recipients to pay the State 25% of the received funds. For this further reason, landowners tend to cooperate to find a reallocation solution without compensation payments.

Strategic land management

Approximately 90% of land is owned either by the state (about 73%) or by the Jewish National Fund, a quasi-state agency (about 17%). Most state-owned land was inherited from the Ottoman Empire and British Mandate. The Jewish National Fund also bought its land before the State of Israel was established. Until

1965, the state and Jewish National Fund administered their lands separately. The Jewish National Fund then passed managerial tasks to the Israel Lands Authority, a statutory government agency which acts for both owners.

Strategic land management is carried out almost entirely by the Israel Lands Authority. Local governments do not have legal powers or financial resources for land purchase and management.

Since the Israel Lands Authority already manages most land, the national government rarely buys land. Expropriation was used for large land purchases for urban development until the 1970s, when public protests brought it to a stop. Today, expropriation and land purchase are mainly used for national public services such as highways. Local governments only expropriate land for small-scale local public services. They try to avoid it and rely on 'developer obligations' (see section above).

Conversely, nationally-owned or managed (residential) land – occupied by approximately 60% of urban residents – is currently being privatised to the leaseholders. Underdeveloped urban land of more than 1.3 hectares, such as land with garages or low-density old industries, is not being privatised and awaits national tenders for redevelopment.

An important recent government policy promotes urban regeneration projects, often condominium housing on national land, which are carried out as if they were private property. The leaseholders agree as a condominium (with at least 67% majority) to hire a developer. They receive a brand new, often larger apartment with no extra payments, and the developer receives much larger development rights. The developer finances the demolition and reconstruction through the new apartments' sale, and is partially exempt from taxes. Since 2017, in most new tenders for any type of urban land, the winners or homebuyers receive the land's full ownership. In some affordable housing programmes, developers competing in the tender win if they offer the cheapest final apartment product that fulfils specific requirements the Israel Lands Authority sets. Eligible households are offered the apartments' ownership by lottery. Such programmes have delivered thousands of affordable units throughout the country. In a new, 'build to rent' programme, developers are granted corporate tax discounts to build 'affordable' flats to be rented out for 10-15 years. Afterwards, the developer becomes the land and buildings' full owner.

While national urban residential land will soon disappear, some urban commercial and industrial land continue to be leased, though such leases are also expected to gradually disappear. The national legislation for public land lease dates back to pre-State-of-Israel times, with further codification in the 1960s and an important change in 2010 to allow urban land's privatisation.¹

The lease length (until privatisation) mainly depends on the permitted use of leased land. For example, urban residential leases tend to be longer than commercial or industrial leases, which are often for 49 years only. After paying their lease charges, leaseholders can transfer the lease or sublease it to any third party. The annual ground rent share for leaseholds is fixed at 5% of the leased land's value. However, since the 1980s, the Israel Lands Authority has been converting old leases with annual payments to new leases with upfront payments that are close to the full market price. This was motivated by the high costs of collecting annual payments. Some public and not-for-profit entities are eligible for reduced lease payments or full exemptions, such as community centres, schools, religious facilities or state-led affordable housing programmes.

The revenues from public land lease or sale are transferred by the Israel Lands Authority (after discounting costs) to the general state budget. When there is a tender for national land, the Israel Lands Authority estimates the infrastructure levy for a particular project (see section above), and the revenues are passed on to the local government. Leaseholders who add development over what was permitted under the original lease are also subject to the *Heytel Hashbakha*, compulsory land provision and land readjustment like private landowners (see sections above). The transfer of old leases triggers a charge on top of the national real estate capital gains tax. New leases only pay the national capital gains tax. Land held under long-term leaseholds may be expropriated just like private land.

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Note

¹ The regime in rural areas – where national land is dominant – has not changed and privatisation is minor.

Italy

Land value capture in Italy

Italy uses land value capture systematically (Table 2.30). However, given the absence of national guidelines and since regional regulations differ across regions and leave high discretion to local regulations, land value capture's use and impact vary widely across local governments. At the same time, such discretion for regions and local governments has allowed to test new instruments. For example, recently some local governments introduced inclusionary zoning policies for affordable housing provision by private developers. Else, many cities use transferable development rights for environmental protection under regional regulations despite the lack of national-level legislation. Italy experienced several failed reforms but these attempts made important contributions to subsequent regional reforms and the current planning system. The main obstacles for land value capture's broader use are the lack of political will to use some of the instruments due to their unpopularity and local governments' lack of administrative capacity. If land value capture charges are not aligned with local market conditions and are too expensive they may generate resistance. Moreover, some urban areas' cadastres are not up to date, accurate or complete.

Table 2.30. Italy: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	<i>Standard urbanistici, oneri di urbanizzazione and contributo al costo di costruzione</i>	<i>Law 765/1967; Ministerial Decree 1444/1968; and Articles 1 and 3 of Law 10/1977</i>	Local governments	Always
	<i>Contributo straordinario per la plusvalenza</i>	<i>Article 16dter of Presidential Decree 380/2001</i>	Regions	Rare
Charges for development rights (and transferable development rights)	<i>Perequazione and cessioni</i>	No	Local governments	Frequent
Land readjustment	<i>Piano di lottizzazione convenzionata</i>	<i>Article 28 of Law 1150/1942; and Article 8 of Law 765/1967</i>	Local governments, private landowners and private developers	Frequent
Strategic land management	N/a	<i>Civil Code/1942; Law 167/1962; and Law 865/1971</i>	N/a	No
Infrastructure levy	<i>Contributi di miglioria</i>	<i>Article 78 of Law 2359/1865; and Article 236 of Royal Decree 1175/1931</i>	N/a	No

Enabling framework

Italy is a unitary state with four levels of government: the national level, 20 regions, 14 metropolitan cities and 7,904 municipalities (OECD, 2022^[3]). Though Italy is a unitary state, its land-use planning system follows a model generally observed in federal countries, with regional laws outlining the planning process – although national law from 1942 is still in force. Regional laws define the structure and processes local authorities follow to prepare statutory land-use plans. Regional provisions can vary from each other. Despite this high degree of regional autonomy, planning systems are similar across the country. The national government is in charge of infrastructure of national importance as well as of environmental and heritage preservation.

Actual land-use decisions are made by municipalities. Municipalities with fewer than 5,000 inhabitants can form inter-municipal cooperations to conduct their land-use planning. The exact nature of the planning process and municipalities' responsibility differs from region to region (OECD, 2017, p. 134^[2]).

According to Article 42 of the Constitution, the state may limit private property to ensure its social function and make it accessible to all. The national, regional and local government levels create the legal framework for land value capture.

Developer obligations

Developers are subject to obligations to obtain approval for new development or densification. The obligations consist of cash or in-kind payments or a combination of both. They are designed to compensate the cost of stronger public infrastructure and services use resulting from private development. The legal basis dates back to 1967. Local governments implement the obligations and receive the revenues. They always use them as follows:

1. For any building permit, developers must pay monetary charges (*oneri di urbanizzazione* and *contributo al costo di costruzione*) towards the public infrastructure and services their developments require.
2. In addition to those monetary charges, for building permits in local detailed plans for single development areas (*piani di lottizzazione convenzionata*), developers must directly provide the public infrastructure and services their developments require, for example roads and basic infrastructure, as well as land for such infrastructure and for facilities like schools, libraries, parks and affordable housing.

Developments that provide a social benefit that outweighs their impact on existing infrastructure may be exempt from payment. Some local governments grant discounts for developments with a high environmental performance.

The monetary charges are calculated using a fixed formula, based on developments' size, type (residential, commercial or industrial), location and quality. The charges follow regional criteria and local regulations. Since regional criteria differ across regions and leave high discretion to local regulations, the charges vary widely across local governments. In general, they cover a low share of the public costs private development generates. In 2018, the charges recovered EUR 1.8 billion. The average monetary charge per newly built residential unit of 100 m² is EUR 23,000 in Milan, 20,000 in Bologna and Naples, and less than 10,000 in Como, for example.

The in-kind contributions in local detailed plans are based on national and regional requirements for minimum infrastructure and public space that must be guaranteed to every citizen (*standard urbanistici*). Since in local detailed plans developers both pay the monetary charges towards the public infrastructure their developments require and provide land as well as infrastructure directly, the obligations usually cover the total public costs for roads and utilities. However, other public facilities, like schools, libraries, affordable housing and parks, are not sufficiently covered.

If local detailed plans require affordable housing, developers typically have to build it inside their project sites. They may negotiate on a case-by-case basis to build affordable housing outside their project sites or pay in cash instead. Though the location might differ, affordable units are comparable to market-rate units in terms of design standards and amenities. National law sets the 'affordability' period at minimum eight years. Local governments may negotiate with developers that units remain 'affordable' for longer periods. Regional, metropolitan or local agreements between owners and tenants' organisations regulate the rent.

To increase affordable housing construction, some local governments use density bonuses in local development plans (*piani regolatori generali*) or tax incentives for developers. Moreover, recently some

local governments have introduced inclusionary zoning policies in local development plans: a compulsory quota of affordable housing and land in all predominantly residential private development projects. For example, Milan's 2012 local development plan may require up to 30% of private projects' land for affordable housing. Currently, Emilia-Romagna is the only region with a legal basis for inclusionary zoning.

In addition to the above 'regular' obligations, local governments have, due to public budget cuts, progressively adopted regulations to obtain an extra contribution from developers for major development or renewal projects. Green areas as well as affordable housing inside or outside project sites are the main matters of negotiations.

Moreover, since 2014 national law allows local governments to charge 50% or higher of the land value increase development approvals generate (*contributo straordinario per la plusvalenza*). Local governments and developers negotiate this *contributo straordinario*, which is proportional to private profits. Economic feasibility studies should demonstrate the land value increase.

However, being discretionary and with regional regulations mostly missing, the *contributo straordinario* has hardly been used in practice. As the negotiation process can take a long time (sometimes up to 20 years for large developments), the original agreement may not be aligned with market conditions once it is finalised. Occasionally, its amount has caused conflict between local governments and developers. Moreover, local governments lack administrative capacity to estimate the land value increase development approvals generate or to negotiate the *contributo straordinario* with developers.

Charges for development rights (and transferable development rights)

Local development plans set maximum density building rights and may rezone land to a higher use. Landowners who want to develop their plots to meet the new plan – beyond the baseline development rights but within the maximum density or land use – must pay a cash and in-kind charge for such development rights. This charge is on top of the developer obligations to obtain a building permit (see section above) and also applies to owners who transfer the baseline development rights attached to their plots to other plots local development plans designate as better suited to higher density (see *perequazione* below).

Local development plans establish in advance the baseline development rights and maximum density or land use. Landowners may have to pay in cash; provide land, public infrastructure or services; build affordable housing (see developer obligations section above as the procedures are similar); or provide a combination of these. As the charge is set locally, it widely differs across local governments.

The majority of recently approved local development plans (*piani regolatori generali*) also include the instrument *perequazione* ('equalisation'), a form of charges for development rights and transferable development rights. *Perequazione* is a fundamental part of current planning practices and works as follows. Local development plans grant all plots the same baseline development rights regardless of their designated use. However, not all plots can be developed. This is to reserve some areas for public uses, such as environmental protection, affordable housing and public facilities. Owners whose plots cannot be developed can transfer the baseline development rights attached to their plots to other plots local development plans designate as better suited to higher density.

Therefore, *perequazione* allows to:

1. Distribute equally among landowners the advantages and disadvantages plans generate, since all landowners get the same baseline development rights.
2. Obtain areas for public uses and achieve plan objectives without expropriation's costs, since owners of plots that local development plans designate for public uses *de facto* grant their land to local governments. In fact, *perequazione* was introduced as an alternative to expropriation (see strategic land management section below) through which local governments can recover some of

the value the planning system generates. Transferable development rights compensate owners whose plots cannot be developed.

The legal debate about *perequazione* started in 1980. In 1995, the National Institute of Urban Planning (INU) proposed the main reform at the national level, albeit unsuccessfully. Other proposals have arrived in Parliament ineffectively since then. However, the lack of national-level legislation has not prevented *perequazione*'s broad use at the local level under regional regulations. Large cities, like Rome, Milan and Turin; medium-sized cities, like Bologna and Ravenna; as well as many smaller cities mostly in Northern and Central Italy use the instrument successfully. Local governments implement transferable development rights and receive the benefits.

The main obstacles for *perequazione* are the low demand for new private development or densification and local governments' lack of administrative capacity to draw up plans with baseline, maximum and transferable development rights as well as with associated charges for such development rights.

Land readjustment

Land readjustment is used for urban development or renewal, the conversion of rural to urban land and post-disaster reconstruction. The legal basis dates back to 1942 and the current national legislation was introduced in 1967. Local governments, private landowners and private developers implement land readjustment. They frequently use it.

Local governments and private landowners can initiate a readjustment project through a local detailed plan (*piano di lottizzazione convenzionata*). Landowners in the readjustment area as well as local citizens participate in consultations. The consent of landowners whose plots are worth at least 51% of the readjustment areas' value is required. Land is valued based on the cadastral taxable value at the time of presentation of the readjustment plan. Once the required consent level is met, landowners who do not consent can be expropriated at market rate based on plots' original value. This allows recovering the increase in land values readjustment projects generate. However, expropriation is rarely necessary. Landowners are compelled to participate in readjustment projects with a public purpose.

Land readjustment is financed through charges for development rights and transferable development rights (see section above). Landowners must provide a share of their plots for public infrastructure and services, such as public transport, roads, utilities, parks, affordable housing, schools, universities, hospitals, sports facilities, administrative buildings and services, churches, etc. The land provisions must at least meet the *standard urbanistici*: national requirements for minimum public space that must be guaranteed to every citizen. Local development plans (*piani regolatori generali*) may set higher requirements for local detailed plans. In recent plans, landowners often had to provide up to 50% of readjustment areas for public infrastructure and services. There is no limit to the share of readjustment areas the government can demand. Land readjustment provides approximately 500 hectares of land yearly for public infrastructure and services. The investment in infrastructure and services increases the value of land in readjustment areas.

After readjustment, landowners receive plots (*superficie fondiaria*) where they can transfer their building rights attached to the land they granted for public infrastructure and services. They can exchange reallocated plots for cash. Third party investors can buy readjusted plots.

The main obstacle can be the length and bureaucracy to strike an agreement between landowners and the local government, which is needed for land readjustment.

Strategic land management

Strategic land management is not used due to political unpopularity and the lack of resources for land purchases. Developable land's scarcity and brownfields' high cost deter possible purchases. The instrument is not in the political agenda.

Up to 1980 expropriation was the main tool to obtain land for public infrastructure and services. The *Riforma Sullo* in 1962 tried to support expropriation of land at pre-development prices – to recover land value increments from development – for public infrastructure and services provision. It was not approved and was abandoned due to criticism by the political opposition and the public, but it contributed to the creation of the instrument *Piani di Edilizia Economica e Popolare* with the same mechanism specifically for affordable and social housing. Local governments could expropriate unserviced land at pre-development prices, rezone the land, service it and build affordable and social housing. This allowed recovering the increase in land values the zoning change, servicing and housing investment generated. Local governments could also lease their land for affordable and social housing construction by entitled providers, such as cooperative associations and the Institute for Public Housing (IACP). The lease length was minimum 60 years and maximum 99 years. Local governments were in charge of the instrument's implementation. The revenues were earmarked for affordable and social housing. The instrument, which is still legally in force, was largely applied before being progressively abandoned because expropriation costs have been paired with market values.

Since 1990, public infrastructure and services as well as affordable and social housing provision shifted from expropriation-based approaches to contributions by landowners in exchange for development approval or transferable development rights (see developer obligations and charges for development rights sections above).

Infrastructure levy

The infrastructure levy (*contributi di miglioria*) is not in force and has no up-to-date legal basis. The principle of the levy dates back to the first law on urban planning in 1865, a few years after Italy's unification in 1861. The levy was introduced as a formal fiscal instrument in 1931. However, local governments did not use it much due to political unpopularity. It was removed and replaced by several real estate taxes that do not distinguish between increases in value from specific public infrastructure or planning decisions as well as between land or buildings:

- The *Imposta sugli Incrementi di Valore delle Aree Fabbricabili* (tax on the increase in value of developable land) in 1963;
- The *Imposta sull'Incremento di Valore degli Immobili, INVIM* (tax on the increase in property value) in 1972;
- The *Imposta Comunale sugli Immobili, ICI* (municipal property tax) in 1992;
- The *Imposta Municipale Unica, IMU* (single municipal tax) in 2012.

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Japan

Land value capture in Japan

The most prominent land value capture instruments in the country are land readjustment and charges for development rights (Table 2.31). Land readjustment is historically important and in recent years has been expanded to programmes of urban regeneration and social infrastructure. Infrastructure levies are rarely applied, but they have been object of recent discussion and partial testing in Business Improvement Districts. There is no strict legal framework for developer obligations. Strategic land management is uncommon, as the national and local governments holds little public land available to lease and financing for land acquisition is scarce.

Table 2.31. Japan: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Land readjustment	Land readjustment (土地 区画整理)	Land Readjustment Act (1954)	National government, local governments, special purpose bodies, private entities, private landowners and stakeholders with claims towards the affected land	Frequent
Charges for development rights	FAR Bonus (容積ボーナス or 容積率緩和特例)	Article 36-1 of Chapter 4 of Urban Renaissance Special Measures Law (2002)	National and local governments, as well as special purpose bodies	Frequent
Infrastructure levy	Betterment Levy (受益者負担金)	None	Local governments and special purpose bodies	Rare

Enabling framework

Japan is a unitary country with two tiers of subnational governments: 47 prefectures at the regional level and 1 741 municipalities at the local level, plus 23 special wards within Tokyo (OECD/UCLG, 2019, p. 187^[11]). The prefectural level consists of the metropolitan district of Tokyo, the two urban prefectures of Kyoto and Osaka, the district of Hokkaido and remaining rural prefectures. Municipalities are divided into different categories: designated cities, core cities, special cities, cities, towns and villages.

The principle of social function of property establishes that property rights shall be defined and exercised in conformity with the public welfare (Article 29 of the Japanese Constitution). There is no national policy document that guides the use of land value capture tools, but the enabling framework is found in different national laws and plans, being further specified in local ordinances.

The Japanese spatial planning system is complex, with plans at all levels of government (OECD, 2017, p. 140^[21]). At the national level, the *National Spatial Strategy* and the *National Land Use Plan* provide general principles and a master concept for land use. Prefectures have their basic land use plans and master plans for urban areas within prefectures. At the local level, there are strategic master plans and land-use plans.

A range of land value capture instruments has been applied to finance urban development and renewal in the largest metropolitan areas, such as Tokyo, Nagoya, and Osaka. Many of the instruments can also be applied in provincial capitals and second-tier cities, depending on local government capacity, political will and market dynamics. Small towns and rural villages with limited market potentials are often unable to apply incentive-based instruments, being financed by national subsidy programs.

Land readjustment

Land readjustment is by far the most popular approach to land value capture under the market freehold system. In use since the late 19th century, it was formalised in 1954 with the *Land Readjustment Act*, last updated in 2019. Since the 1990s, land readjustment has been revised and expanded, having become associated with other programs, notably related to disaster prevention and urban regeneration.

Land readjustment is defined as a project that changes the shape of land lots and constructs or changes public facilities in order to improve local infrastructure and promote the use of residential sites within urban planning districts. It may be used for the purposes of urban expansion, urban development or renewal and disaster prevention or reconstruction. Yearly, an average of 870 land readjustment projects is conducted.

Many actors may be involved in a land readjustment program: the national government, local governments, special public bodies, private entities such as land developers and railway agencies, private landowners and leaseholders, tenants or informal residents. If local governments decide to pool and readjust plots, first they need approval from their prefecture, as it happens for urban planning decisions in general. The interest in land readjustment programs varies with the dynamism of real estate markets. They are therefore more frequent in neighbourhoods with strong demand for real estate.

For a land readjustment project to take place, two thirds of involved landowners and leaseholders must consent. Their participation is not compulsory. Once the consent level is reached, all landowners must provide their plots. If the project is of public interest, resisting property owners may have their plots expropriated, in which case they receive fair compensation. However, as landowners frequently give their voluntary consent, expropriation rarely occurs,

A share of 30-40% of readjusted plots is reserved for public improvements, such as public utilities, public spaces and transportation projects – from which landowners will benefit. Across all land readjustment projects, 110-150,000 hectares of land are reserved for public improvements per year in the country.

After readjustment, landowners receive a plot with a value proportional to the original holdings, preferably on the same location or as close as possible. Third party investors, e.g., developers, can also receive readjusted plots in return for their investment in the project.

If the original plots are smaller than a specific size or are less valuable than the original ones, landowners can be compensated in cash. The contrary, however, does not hold true: if the readjusted plots are more valuable than the original ones, they are not required to pay any compensation to the public authorities.

Moreover, the newly readjusted area typically includes the creation of publicly owned plots for sale. This is an important feature of the system, since land sales recover at least half of the costs. For instance, in the project around Futako-Tamagawa Station in southern Tokyo (2000-2015), sales of readjusted plots recovered 70% of the costs. In the projects along the Tsukuba Express Line (2000-2023), it is estimated that between 50% and 60% of the costs will be recovered. The revenues collected from land sales serve to compensate stakeholders with various claims, such as leaseholders and informal residents.

The implementation of land readjustment still faces some obstacles. Land expropriation is expensive and controversial. Areas of environmental or cultural significance may obstruct the project, since their fixed spatial configuration constitutes a practical restriction to readjustment. Resisting landowners in some cases appeal against the decision to conduct a project, engendering administrative and judicial disputes. Tenants and other affected groups also resist, fearing that they will not receive adequate compensation.

Charges for development rights

The national government, local governments and special public bodies frequently adopt charges for development rights. They are linked with Urban Regeneration Special Districts, in accordance with the Urban Regeneration Special Measure Law, introduced in 2002. Within such Special Districts, private

developers may present a planning proposal for building at a higher density or height, that is, with a higher Floor Area Ratio (FAR) than the basic one defined in the zoning law.

In exchange for the higher building density, the developer pays a compensation. The compensation is in the form of provision of land, public space or public improvements, to be delivered upon project completion. The aim is to improve local infrastructure and the quality of the built space. No cash payments are allowed. As of 2012, there were 58 designated districts with special FAR permissions, many of which can apply a FAR above 10 floor buildings.

The urban regeneration programs with special FAR permissions are changing Japan's urban landscape. High-grade commercial towers and residential buildings have been constructed with high-amenity built environments around major transportation centers. For instance, in Osaka's Abeno Harukas development, a maximum FAR from 8 to 16 was allowed, in exchange for the provision of public and cultural facilities.

Nonetheless, some implementation obstacles remain. Many municipalities lack the administrative capacity to analyse, approve and enforce such charges. Development norms and land use regulations are regarded as unclear. Being associated with dynamic markets where higher density is profitable, the adoption rate varies with the risks associated with real estate markets. Lastly, many developers do not regard the charges to be feasible, in terms of the profitability rate of projects.

Infrastructure levy

Municipalities and special purpose bodies rarely charge landowners for the costs of a public improvement adjacent to their land. The public improvement may include public spaces, green spaces or public transportation projects. In the case of subway construction, subway agencies can receive fees from owners of the buildings which will be built over stations.

Charging the fee requires negotiation between the local authority and property owners. The local authority estimates the fee in a case-by-case manner. Costs may be equally distributed to all benefitted property owners or allocated according to the expected increase in land values, considering distance to the service, façade length, floor area and land use. The capacity to pay may be also taken into consideration. Large landowners, even if few, tend to pay more than small landowners. Some may be exempt from payment, depending on the negotiation process.

There is no defined procedure for payment and collection. The fees are collected before or upon completion of the improvement, in lump sum or in installments. Nonetheless, a significant percentage of the costs of the public improvement is recovered, for example, 50% for the Hokuso Rail Line in Chiba. For the Yokohama MM21 Line, around 30% of the land value increase was recovered.

Besides this locally-based negotiation, another recent type of infrastructure levy is Business Improvement Districts. Inspired from major US cities, such as New York, Denver and Boston, the instrument finances street-level capital improvement projects, including maintenance costs and social activities. After consultation with business owners, business district associations deliver a specific plan for the amelioration and upkeep of the area. Although limited and still less established, it is part of urban regeneration initiatives in dynamic commercial areas, especially where small business owners and local governments share a similar vision and are proactive.

The application of infrastructure levies is relatively limited and little institutionalized. Local governments or special purpose bodies apply this instrument when major developers own relatively large land parcels near public capital projects. Subway station construction is a common example. The main challenges to implementation are unwillingness or inability to pay. On one hand, there is resistance by landowners, who frequently appeal against the requirement to pay a fee. On the other hand, many landowners cannot afford to pay the fee, such as elderly or low-income households.

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Korea

Land value capture in Korea

The government must recover land value gains from government-induced development in excess of normal increases. This principle supports the consistent and widespread use of land value capture tools in the country (Table 2.32). Developer obligations are a regular component of the planning system and therefore are always collected by local authorities. Charges for development rights are frequently levied when building at higher density, and compensation is defined on a case-by-case basis. Strategic land management and land readjustment are also common. There is no legal framework for infrastructure levy. Even though there has been some public discussion to introduce this tool, there are many practical obstacles, such as identifying the benefited property owners and determining the rate to be levied.

Table 2.32. Korea: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Use	Implementation
Charges for development rights	Additional FAR or FAR Incentive System (용적률 완화 or 추가용적률)	Articles 54 and 66 of Act on the Improvement of Urban Areas and Residential Environments (2002)	Frequent	Local governments
Developer obligations	Development approval (개발행위 허가)	Article 56 of the National Land Planning and Utilization Act (2002)	Always	Local governments
Land readjustment	Replotting (환지방식)	Article 43 of Enforcement Decree of the Urban Development Act (2000) and Urban Development Act (2000)	Frequent	National and local governments, private landowners, landowners' cooperatives, public corporations
Strategic land management	Permission for Use (사용허가) Land Bank (토지은행)	Articles 2 and 30 of State Property Act (2009) and Article 2 of Public Land Reservation Act (2009)	Moderate	National, state and local governments, as well as independent public agencies

Enabling framework

Korea has two levels of government at the subnational level, with a complex and varied structure. At the regional level, there are 8 provinces, 1 special self-governing province, six metropolitan cities, Seoul Metropolitan City and Sejong special self-governing city, both of which enjoy special status (OECD/UCLG, 2019, p. 192^[1]). At the local level, there are 226 entities of varying sizes of area and population, among cities, counties and autonomous districts. These local authorities are further subdivided into 3 500 sub-municipal localities.

The principle of social function of property enshrined in the Constitution stipulates that the exercise of property rights shall conform to public welfare. The Constitution also establishes that restrictions to private property may happen for public necessity, in which case compensation is due. According to the *Restitution of Development Gains Act* (1989), the State may collect charges on increases in land prices in excess of normal increases in land prices only when land development happens.

The national government creates the legal framework of land value capture. The *National Land Planning and Utilisation Act* provides the legal basis of the spatial planning system (OECD, 2017, p. 147^[2]). Local authorities are responsible for strategic planning and zoning regulations. They implement most land value capture instruments, except for strategic land management (land banking).

Charges for development rights

The national government allows local authorities to charge a fee from developers and landowners that make a request to build at higher density than the baseline in the local zoning law or whose building request benefits from previously enacted planning changes. This instrument was introduced in the national legislation in 2009 concerning housing development projects in Seoul Metropolitan City, and in 2011 for the rest of the country, concerning any type of redevelopment. Since then, local authorities frequently adopt it and collect the revenues.

Local governments negotiate the charge with developers on a case-by-case basis, notably for large projects. Depending on project characteristics and according to the estimated land value gains caused by densification, the government will decide on compensation due, to be paid upon project completion. The compensation may be paid in cash or through the provision of infrastructure or affordable housing units.

When the payment is made in cash, the funds collected are earmarked for the specific purpose of improving the local infrastructure within the jurisdiction. Local infrastructure may comprise the provision of public space, public transportation, public utilities and other types of improvements.

The payment through the provision of affordable housing units is recent. Developers have to build a share of affordable units on-site. The units shall remain affordable for around 20 to 30 years and benefit households with an income below 70% of the area's median income level. If the provision is not possible, developers may satisfy this requirement by paying a fee in cash. The funds collected from the fee are earmarked to finance affordable housing by the local government.

In all, local authorities have the administrative capacities to follow a structured procedure to define compensation. The main obstacle to implementation is the opposition manifested by landowners and developers, who frequently file claims against the charge.

Developer obligations

Developer obligations are established by national law and a prerequisite for every development project. In order to compensate the impacts that new development or development at higher density will have on local infrastructure and services, the developer must present a plan to the local authority to provide the necessary infrastructure with the request for building approval. Local authorities have high discretion in issuing development approvals, establishing the compensation and reinvesting the collected funds.

The developer may be exempt of providing infrastructure only if the project is small, since the impact on local infrastructure is considered negligible. The size threshold varies with the type of development.

The charge may be calculated using an established rule or negotiated. If calculated, the method for defining the compensation takes into consideration the impacts on infrastructure and the type of development. In any case, the charge cannot be paid in cash, except in infrastructure-levy areas, where a payment for installation of infrastructure in cash is required.

Since developer obligations are incorporated into the planning system, local authorities always charge them. The instrument is effective, since almost 100% of infrastructure costs are borne by developers. There are no significant obstacles to implementation, and developers do not usually object to the obligations.

Land readjustment

Land readjustment takes place often, as a method to acquire public land in newly urbanized areas, secure land for public improvements and redevelop built-up areas. The enabling framework is set at the national level, but the permissions to carry out the projects are granted at the local level. Both public and private actors may conduct land readjustment, among private landowners, landowners' cooperatives, local governments and public corporations, e.g., the Korea Land and Housing Corporation.

Since 2000, in land readjustment projects, the land is exchanged and subdivided without altering the underlying land rights. The land is developed and then redistributed to landowners, after deducting a share for public improvements and another one for future sales or leases. This reduction in ownership area is compensated by the land value gains generated from project development. In the end, landowners have smaller, but more valuable holdings.

The revenues from the land sales are used to pay for the project development. Notably, 100% of the cost of public improvements related to land readjustment projects is recovered through the sale or lease of those plots. The financial viability of the operations is an important characteristic of land readjustment.

In privately-led land readjustment projects, the consent of landowners representing 1/2 of the total number of owners and 2/3 of the total land area is required. Landowners may be organised in a cooperative, which must be registered as a legal entity.

Public actors may also conduct land readjustment. They are entitled to do so when the application filed by landowners or cooperatives is not successful or when these actors give consent to the public entity. When public facilities are needed, or in case of natural disaster and emergencies, no consent is needed, and the participation of landowners is compulsory. The participation of resisting landowners may be enforced through expropriations. Expropriations, however, are rarely carried out.

Recently, the number of land readjustment projects has increased, while the number of expropriations has been decreasing. Starting from the 1980s, whole land readjustment projects were conducted only through expropriations, especially for the purpose of social housing development. Since the 2000s, expropriations are only used to overcome the resistance of landowners who do not deliver their land even after the necessary consent is reached.

After readjustment, landowners receive a plot with a value proportional to their original holdings, located on or as close as possible to their original land. They may receive a residential or commercial unit. Alternately, they can opt to exchange reallocated plots for cash. Landowners sometimes appeal against the decision to pool and readjust their plots, but resistance by landowners is not a significant obstacle.

The main obstacles to the adoption of land readjustment projects concern expropriations and the protection of affected residents. Expropriations are expensive to carry out, because of the high price of land in urban areas. Affected residents are displaced tenants and informal residents, who receive insufficient financial compensation. Land readjustment projects do not typically foresee resettlement alternatives for them.

Strategic land management

There are two categories of public land in Korea: nationally owned land, which is managed by the *State Property Act*, and land owned by local governments, which falls under the scope of the *Public Property and Commodity Management Act*. For historic reasons, the government holds significant amounts of land, notably in mountainous, rural areas, but not always land that could serve urban development purposes.

The independent public corporation *Korea Land and Housing (LH) Corporation* acquires and retains land. Since the 1960s, *LH Corporation* has played a key role in developing public land and supplying social housing. It acquires land both to reserve areas for housing projects and to hold land as an asset.

Purchases of large blocks of undeveloped land are conducted at market price or through expropriation. The government or an authorized developer, such as the LH Corporation, can freeze land prices before the announcement of a public investment or rezoning and buy land at that price.

Land acquired for strategic land management is either destined to public projects or transferred to other entities, via sales and leases. If destined to public projects of land development or housing construction, the lands are reserved only for a short time. Other than that, land is typically retained for 2 years before being sold. Typically, the acquired land is sold at a predetermined price to the preferred buyer.

If the land is leased to a private actor that is not conducting a project of public purpose, the rent is calculated as 5% of the land value. Lease length depends on the permitted land use. To illustrate, for affordable housing, the length is typically of 30 years. The rent is paid through recurrent lease payments.

In all, strategic land management yields substantial revenues to the government. Between 2010 and 2019, the yearly revenues raised through strategic land management amounted to 209.2 million USD. In addition, the yearly revenues raised through the ground rents of leased public land corresponded to 200 million USD. The revenues collected from land leasing are earmarked for the purpose of land banking.

Some implementation challenges remain. Public land leasing is weakened by the fact that the government does not hold a significant amount of land in urban areas. Coordination among the relevant public entities and an adequate legal framework are sometimes lacking.

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Latvia

Land value capture in Latvia

Several land value capture instruments are used in Latvia, but only occasionally (Table 2.33). Some instruments are used to recover revenues relative to developments' impacts on infrastructure, as well as for urban renewal, redevelopment, and expansion. The main obstacles that limit the broader use of land value capture include a lack of administrative capacity, coordination and resources, as well as landowner resistance or inability to pay, controversy related to expropriation. Moreover revenues raised are low.

Table 2.33. Latvia: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Strategic land management	N/a	Sections 1, 17, <i>Land Management Law/2014</i> #350, <i>Rules for Lease and Building Rights of a Public Person/2018</i>	National, local governments	Occasionally
Land readjustment	N/a	<i>Law on Local Governments/1994</i> ; Sections 1 and 8, <i>Land Use Planning Law/2006</i> ; <i>Spatial Development Planning Law/2011</i> ; <i>General Regulations for the Planning, Use and Building of the Territory/2013</i> Section 1, Chapter 3, <i>Land Management Law/2014</i>	Local governments	Occasionally
Developer obligations	N/a	<i>Law on Local Governments/1994</i> ; <i>Spatial Development Planning Law/2011</i>	Local governments	Rarely
Infrastructure levy	N/a	Sections 14, 15, 21 <i>Law on Local Governments/1994</i> ; <i>Spatial Development Planning Law/2011</i> ; <i>General Regulations for the Planning, Use and Building of the Territory/2013</i>	Local governments	Frequently

Enabling framework

Latvia is a unitary state with one subnational level of government consisting of 42 local governments (OECD, 2022^[3]). Latvia's national government provides the legislative framework that enables land value capture instruments, while municipalities apply them in their local planning. However, there is no legal definition of land value capture in Latvia. Public officials have a high level of discretion when deciding the granting of planning permits.

The principle of a social function of property is included in Latvia's constitution.

Strategic land management

Strategic land management is used in Latvia for urban renewal, redevelopment and land consolidation, with national law providing the legal basis. The government can buy and expropriate land for public purposes. Land acquired for strategic land management consists of both green and brownfield sites. Both national and local government conduct strategic land management in Latvia and can receive related revenues. However, it does not typically generate revenue.

Land is typically acquired through expropriation to provide public infrastructure and access. National and local government cannot freeze land prices before announcing public investment or rezoning to buy the land at that price. Strategic land management may therefore only result in land value capture if the government expropriates the land before public investment or rezoning plans become public knowledge.

However, the government or an authorized public entity can rezone land after its acquisition for strategic management and develop it before it is sold. There is no time limit for retaining land.

Land can be developed for basic physical preparation and servicing, public space, public transport, roads and parking, public utilities, administrative buildings and services, and construction of affordable and social housing. Land acquired for strategic land management is typically either leased or disposed of through public tender involving criteria beyond the sales price. Public-private partnerships (PPPs) between governments and private developers to develop land via strategic land management are rare.

The also government holds a significant amount of public land to lease. Public land is typically leased to generate public revenues, provide land for real estate development, and facilitate development with a public purpose (e.g. affordable or social housing). Developers can develop land under long-term lease.

Obstacles that hinder the practice include a lack of administrative capacity of public entities, a lack of coordination between the relevant public entities, and a lack of financing for the acquisition of land.

Land readjustment

Land readjustment is enabled by legislation and occasionally used for urban expansion, development or renewal, but not for land value capture. Rather, it is integrated into spatial development plans in order to help provide public infrastructure, including to resolve problems relating to subdivision, amalgamation or the reallocation of land plots. Neither spatial development plans nor land readjustment projects within them are used for the expropriation of property.

When developing a plot, municipal practice typically includes the creation of a street, provision of electricity, distribution of land plots, the conducting of transactions with developers and determining the ownership structure of the land, obtaining building permits, and construction. In certain municipalities, it is necessary to install all the necessary utilities and establish a new ownership structure or building permit before land transactions take place. Developers usually cover these costs, and often initiate plans.

Developing and initiating a detailed plan does not guarantee its approval, however. The boundaries of land units and utility corridors specified in a detailed plan may shift ownership via reallocation, or be developed into public infrastructure such as a street.

Land readjustment conducted within larger development plans typically involves local governments, special purpose bodies, private entities, and households, and are approved by local government. Development plans are binding for landowners in the designated area, but they are involved in the consultation process, including agreements forged between landowners or developers and municipalities on implementation including each actor's duties, conditions and responsibilities, deadlines, and financing.

A share of readjusted plots is typically reserved for public infrastructure and service improvements such as public space, roads and parking, and public improvements or services for the neighborhood, utilities or administrative buildings and services. The share is limited to 20 percent. Collectively or publicly owned plots created through land readjustment can be sold or leased.

Obstacles to land readjustment include resistance by landowners, lack of administrative capacity of public entities, cost or controversy related to expropriation, and that revenues raised do not justify the cost of pooling and readjusting plots.

Developer obligations

Developer obligations only typically occur in Riga on a case-by-case basis. Though national law does not provide a legal basis for developer obligations, developers in Riga are frequently charged cash or in-kind contributions to compensate for the impact of their developments on adjacent infrastructure when seeking approval or support for new land development. Charges are calculated using an established rule, based on the cost incurred by the jurisdiction due to the developer's impact on infrastructure, the size and type of

development, or the value of land on which it is built. Development charges are borne by the developer in accordance with local plans.

Developers can be exempt from such charges if the construction plan is for their own residence. Charges may be paid at any point in the development approval process. Payments take the form of cash or the provision of public infrastructure or services, which can include road, parking, or public utilities.

Local governments issue development approvals and receive the revenues from the charges. Developers rarely appeal against charges. The main obstacle to developer obligations is a lack of national framework, or local framework in the case of Riga, which leads to ad hoc developer charges.

In 2013, the Riga City Council adopted binding regulations concerning fees for the maintenance and development of infrastructure in Riga. Municipal institutions, spatial planners, real estate owners and developers, and developer-providers of most utility services are responsible for developer obligations.

Infrastructure levies

There is no legal basis for infrastructure levies provided by national law. However, property owners can be charged a fee to cover the development cost of public infrastructure if they benefit. The government frequently levies such fees.

Public entities typically execute projects to improve public infrastructure or services, and can levy a fee on property owners who benefit when the improvement increases the value of the benefited property owners' land, or when it benefits a specific number of property owners above a minimum threshold (ad hoc).

Fees are always equal to the cost of the improvement. Otherwise, fees amount to a specific percentage of the cost depending on the project and other funds available. Property owners paying the fee are typically involved in the consultations process before the contract is ratified. If the public improvement or service is not provided within a specific period, the money paid is typically returned, depending on stipulations in the contract.

Local governments are typically responsible for levying such fees, including public or private utility companies, and receive the revenues generated. When utilities are provided by municipal companies, local governments have a high level of discretion in levying fees, setting the payment procedure, and using the collected funds. Property owners sometimes appeal against fee requirements.

Obstacles that hinder infrastructure levies include resistance by property owners and property owners' inability to pay.

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Lithuania

Land value capture in Lithuania

Land readjustment is the only frequently used instrument in Lithuania (Table 2.34). Most of the legislation was adopted more than 20 years ago, is general and does not regulate land value capture instruments in detail. Moreover, landowners and developers resist the instruments. However, there would be favourable conditions to use more land value capture:

- A well-functioning digitised land cadastre and mass land valuation and monitoring systems;
- A programme to increase the responsibilities of local governments, including through the transfer of some urban national land to local ownership and drafting of clearer building regulations. This could accelerate the adoption of land value capture at the local level.

Table 2.34. Lithuania: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Land readjustment	Žemės pertvarkymas	Article 40, and Chapters VIII and IX of the <i>L-446 Law on Land/1994</i>	National government, local governments, special purpose bodies, private developers, private landowners, leaseholders and tenants	Frequent
Developer obligations	Vystytojų įsipareigojimai	<i>Law on Municipal Infrastructure Development/2021</i>	National government and local governments	Occasional
Strategic land management	Žemės tvarkymas	Articles 10 and 31, and Chapter VIII of the <i>L-446 Law on Land/1994</i> ; and Article 5 of the <i>IX-1314 Law on the Acquisition of Agricultural Land/2003</i>	National government, local governments and a special purpose body	Occasional

Enabling framework

Lithuania is a unitary state with two levels of government: the national level and 60 municipalities (OECD, 2021^[8]). Municipalities are the planning authorities and decide on land use and management. Local officials have high discretion when issuing planning permits.

According to the Constitutional Court Ruling of 25 September 1996, land has universal value, beyond the value to owners, and should serve the nation's welfare. The national and local government levels create the legal framework for land value capture.

Land readjustment

Land readjustment is used for urban development, brownfield redevelopment and the conversion of rural to urban land.¹ The national government, local governments, special purpose bodies, private developers, private landowners, as well as leaseholders and tenants implement it. They frequently use it. The national government and local governments receive the revenues.

Public entities and private landowners can initiate a land readjustment project. Landowners, leaseholders and tenants participate in consultations. The consent of at least two thirds of the landowners is required. Once this requirement is met, landowners who do not consent can be expropriated at market rate, provided projects are of public interest. Expropriation is frequent in these cases.

Landowners must provide a share of their plots for public infrastructure and services. Additional land may be transferred into public ownership for sale or lease to pay for the costs of such public improvements. The investment in infrastructure and services increases the value of land in the readjustment area. Local governments also increase land taxes and rents to recover the investments in readjustment projects.

After readjustment, landowners receive a plot with an area proportional to their original holdings and located on or as close as possible to their original land. However, landowners may receive newly created plots within the readjustment area or cash instead of land if their original plots are small. They cannot exchange reallocated plots for cash. Owners of readjusted plots that are more than 5% less valuable than original plots receive the difference in cash. However, owners of readjusted plots that are more than 5% more valuable are not required to pay any compensation.

The main challenges for land readjustment come from landowners' resistance and the protection of environmental areas and cultural heritage sites. Landowners frequently challenge readjustment projects in court.

Developer obligations

Developers are subject to obligations to obtain approval for new development. The obligations consist of cash or in-kind payments. They are designed to compensate the cost of stronger public infrastructure and services use resulting from development. The current legislation entered into force in 2021. The national government and local governments implement the obligations and receive the revenues.

The obligations are calculated using a fixed formula, based on the total public costs private development generates. Developers enter into a contract with local governments and must pay in cash; provide land for local public roads, utilities, parks or public space in general; or provide this public infrastructure directly. At developers' request, they may pay cash obligations through instalments.

The main obstacle is the high cost of the obligations for developers.

Strategic land management

Under the Soviet Union, all land was state owned. In 1991, after the Soviet Union's collapse, most land was returned to its former owners or sold. 85% of land was privatised and 15% remained at the central government's disposal.

Strategic land management is used for urban redevelopment, land consolidation and to control urban growth. There is no specific legal basis but the general land management system allows to use strategic land management. The national government, local governments and a special purpose body implement it and receive the revenues.

Land is bought at market price or expropriated. The national government and local governments can buy land within and outside their territory. Occasionally, the national government transfers land to local governments free of charge.

Land is rezoned, which raises land prices. There is no limit to the length of retention of land. It is then sold at market price to the highest bidder or through auctions. The government also leases its land to generate revenues, provide land for real estate development, and encourage planned development as well as development with a public purpose, for example the construction of affordable housing. The government recovers investments in land purchase through the sale or lease of rezoned plots.

Strategic land management is hampered by the lack of a specific legal basis and lack of coordination between levels of government.

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Note

¹ Land readjustment is also used for farmland consolidation. However, it is beyond the scope of the Compendium and the rest of this section focuses on land readjustment in urban areas.

Luxembourg

Land value capture in Luxembourg

Land value capture is used in Luxembourg but not systematically (Table 2.35). Land readjustment may gain momentum following recent reform. The main obstacles to land value capture are landowners' resistance and the lack of political will to charge them.

Table 2.35. Luxembourg: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Strategic land management	N/a	<i>Plan d'aménagement général (PAG); Loi sur l'expropriation pour cause d'utilité publique/1979; and Article 2 of the Loi concernant l'aménagement communal et le développement urbain/2004</i>	National and local governments	Occasional
Land readjustment	<i>Remembrement urbain</i>	<i>Loi sur l'expropriation pour cause d'utilité publique/1979; Chapter 2 of the Loi concernant l'aménagement communal et le développement urbain/2004; and Adapted Building Land Bill Introduced to Fight Soaring Housing Prices/2020</i>	National and local governments	Occasional

Enabling framework

Luxembourg is a unitary state with one subnational level of government: 102 municipalities (OECD/UCLG, 2019^[1]). Municipalities are responsible for local spatial planning and urban development. Local officials have high discretion when issuing planning permits. The national and local government levels create the legal framework for land value capture.

Strategic land management

Strategic land management is used for brownfield redevelopment, to control urban growth and land price inflation as well as capture land value gains. The national and local governments implement strategic land management. They only occasionally use it due to a lack of suitable land. The national government, local governments and a special purpose public-private body receive the revenues. In 2016, the national government owned 1% of the total land, local governments 6%, public funds 2%, and the social housing developer Société Nationale des Habitations à Bon Marché (SNHBM) 2%.

For brownfield redevelopment projects, the national government has to pass a general development plan (*plan d'aménagement général* or *flächennutzungsplan*). Local governments then implement it and can modify it. The national government and local governments can buy or expropriate land at a reduced price in return for granting landowners a stake in development projects. The price is fixed at the level before the announcement of a public investment or zoning change. This allows recovering the increase in land values public investment or zoning changes generate. However, the fixed-price period between the announcement of a public project and the land purchase or expropriation cannot be longer than three years. Usually, the government buys unused brownfield land.

Land is typically retained for ten years although there is no limit to the length of retention, rezoned and developed through public-private partnerships. Development includes basic physical preparation and servicing, public utilities, public transport, roads, parks, administrative buildings and affordable housing.

The national government and local governments then sell the land at market price to the highest bidder or transfer it to another public entity. They also lease their land, for example to encourage construction of affordable and social housing.

Land readjustment

Land readjustment is used more and more in urban areas since it was given a legal basis in 2004.¹ The main obstacle until 2020 for publicly-initiated projects was that all private landowners had to consent, which proved unrealistic due to complex land plots configurations and fragmented land ownership. In 2020, the national government proposed new mechanisms to compel landowners to participate without resorting to expropriation (the *Baulandvertrag*; a simplified procedure for modifying general development plans; and a ministerial consolidation). The main purpose is to provide affordable housing because of increasing housing prices.

Land readjustments should be specified in special development plans (*plans d'aménagement particulier*). The national government can initiate a readjustment project at its own initiative; at the request of at least one fifth of the landowners or at local governments' request. Private landowners can initiate a readjustment project if they represent at least half of the landowners and own at least half of the readjustment area. If not all landowners consent to a privately-initiated project, landowners can propose a new project if they represent at least two thirds of the landowners and own at least two thirds of the readjustment area. Landowners, local governments and other stakeholders participate in consultations, and land readjustments are then submitted to the vote of municipal councils. Landowners who do not consent may be expropriated. The national government and local governments are in charge of implementing land readjustment.

Landowners must provide a share of their plots for public improvements and services. There is no limit to the share of plots the government can demand. After readjustment, landowners should receive a plot with a value proportional to their original holdings and located on or as close as possible to their original land. They can exchange reallocated plots for cash. To harmonise the reallocation of readjusted plots among landowners, compensation mechanisms exist. Owners of readjusted plots that are less valuable than original plots should receive a compensation. Moreover, owners of readjusted plots that are more valuable are taxed on the value added of plots.

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Note

¹ Land readjustment is occasionally used to organise rural property in a more economic way. The *Loi concernant le remembrement des biens ruraux/1964* regulates land readjustment in rural areas. This law was modified in 2004 to include urban areas. Land readjustment in rural areas is beyond the scope of the Compendium and the rest of this section focuses on land readjustment in urban areas.

Mexico

Land value capture in Mexico

Land value capture is used in Mexico but not systematically (Table 2.36). States and local governments use only developer obligations on a regular basis and the revenues are low. There are significant differences in land value capture instruments' use, the legislations and revenues raised across states and local governments. Two main obstacles limit land value capture's use. First, property rights are considered untouchable, which reinforces resistance. The political cost of introducing land value capture instruments is high. Second, weak legal frameworks and fiscal regulations at the state level hamper implementation at the local level. The 2016 *General Law on Human Settlements, Regional Management and Urban Development (LGAHOTDU)* mandates states to update their legislations to include several land value capture instruments.

Table 2.36. Mexico: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	<i>Donaciones y cesiones</i>	Article 57 of the LGAHOTDU/2016	States and local governments	Frequent
Infrastructure levy	The name varies across states. The main names are: <i>contribuciones de mejoras; contribución por obras públicas; contribuciones de obras y servicios por cooperación; obras de cooperación y de captación; or derechos de cooperación para obras públicas</i>	Article 88 of the LGAHOTDU/2016	States and local governments	Rare
Charges for development rights	The name varies across states. The main names are: <i>transferencia de derechos de desarrollo; transferencia de potencialidad de desarrollo urbano; or zonificación incluyente</i>	Article 59 of the LGAHOTDU/2016	Local governments	Rare
Strategic land management	<i>Reservas territoriales</i>	Article 147 of the <i>General Law on National Assets/1968</i> ; and Article 77 of the LGAHOTDU/2016	National government through a decentralised body, and states and local governments through special agencies	Rare
Land readjustment	<i>Reagrupamiento parcelario</i>	Articles 86-87 of the LGAHOTDU/2016	N/a	No

Enabling framework

Mexico is a federal country with three levels of government: the national level, 32 federated states and 2,463 municipalities (OECD, 2022^[3]). Compared to other federal countries, the national government is an important land use actor (OECD, 2017, p. 148^[2]). Mexican states have fewer powers. Municipalities are the main planning authorities and can decide on land use. Most importantly, they develop land-use plans that control land-use changes and decide whether to issue building permits (*ibid*). Local officials have high discretion when issuing building permits. Building permits for large developments are granted by state governments and for example take into account environmental considerations.

According to Article 27 of the Constitution, all land belongs to the nation. As such, the state has the right to limit the use of private property rights in the public interest. But in practice, property rights are very strong. Article 115 allows local governments to charge increases in real estate values. The national government and state levels are responsible for creating the legal framework for land value capture.

Developer obligations

Developers are subject to obligations (*donaciones y cesiones*) to obtain approval for new development. The obligations are designed to compensate the cost of stronger public infrastructure and services use resulting from private development. States and local governments implement them and receive the revenues.

Set rules determine the type and amount of the obligations. In most states, developers must provide a share of their developed land to local governments, states or both. States and local governments use this land to provide the public roads, utilities and green spaces private development requires. On average, developers provide 10% of their developed land. In a few states, for example the capital city Mexico City, the land provision can be replaced by an equivalent cash payment. However, this is usually agreed through untransparent negotiations. Developers can also directly provide public infrastructure, such as public roads, utilities, schools and green space, to meet the obligations.

Occasionally, developers may also be subject to obligations to obtain approval for densification or exceptions from urban planning regulations. These obligations consist of cash or in-kind payments. Many states and local governments use them since their appearance in the 1996 *Urban Law of Mexico City*. However, due to dysfunctional legislation and unclear development regulations, they raise little revenue.

The latter obligations are mostly negotiated between states or local governments and developers. In a few cases they are calculated using a fixed formula. When formula-based, the charge takes into account the cost impact, size and type of development. Small developments, for example adding a floor to an existing house, can be exempt.

The 2016 *General Law on Human Settlements, Regional Management and Urban Development (LGAHOTDU)* mandates that updated state legislations include developer obligations.

Infrastructure levy

Landowners pay a levy for infrastructure built by the government and from which they specifically benefit, for example public roads, utilities, schools and green space. Local governments receive the revenues from the levy, but require the approval from states to implement it. Although the infrastructure levy exists since the 1980s, it is rarely used.

In principle, the levy amounts to 50-100% of the estimated cost of public works. In practice, it raises very low revenues and many local governments do not cover any of the public works' cost.

For the levy to apply, public works must typically benefit a minimum number of landowners. For example, in the state Sinaloa, 51% of benefiting landowners need to consent to public infrastructure projects and the associated levy. At the local level, a fixed impact radius based on the type of public work usually identifies landowners who will benefit and be charged. For example, in Mexico City, landowners within a 500-metre radius of infrastructure works pay the levy. At the state level, the inclination is to identify benefiting landowners by estimating the increase in land values public works generate. However, state legislations have not yet regulated this, except in rare cases like Querétaro and Aguascalientes.

Landowners then pay the levy according to a fixed formula, based on the distance to the new infrastructure, location and size of their properties. The levy is charged upon completion of public works, except in the state Sinaloa where it can be charged in advance. If public infrastructure is not provided as originally planned or within the due date, the money is returned to landowners. Several payment exemptions apply. For example, this is the case in Mexico City when public works benefit lower-income landowners or the whole city instead of specific properties. Landowners usually challenge paying the levy in court or cannot afford paying it.

Charges for development rights

National law allows municipalities to increase density development rights in local plans. Developers who want to build beyond the density established in the local plan should pay for the cost of stronger public infrastructure and services use resulting from densification. Such charges for development rights have been considered since 2010. For instance, they were included in the urban development plans in 2012 in Sinaloa state's three main municipalities, in 2015 in the city Santiago de Querétaro, in 2018 in the city San Juan del Rio, as well as in other cities. However, three obstacles blocked their use:

- The absence of legislation at the state level allowing local governments to charge for development rights;
- Local governments' lack of administrative capacity, for example to set the charges;
- Opposition from developers.

The municipalities Zapopan, Guadalajara, Santiago de Querétaro and a few others have managed to implement charges for higher density development rights without state-level legislation. However, the charges are based on weak municipal legal dispositions and estimation methods. Most municipalities prefer negotiated developer obligations for densification projects (see section above).

Transferable development rights are also used in a limited way. In major cities, transferable development rights exist in the law but are not applied, while some municipalities use them with weak legislation. Mexico City charges for transferable development rights on an *ad hoc* basis during the processing of discretionary development applications. In Mexico City, a formal system of transferable development rights applied from 1988 until 2010. Developers could buy development rights attached to plots with historical buildings that could not be developed because of preservation policies and transfer them to other plots better suited to greater density. The revenues were earmarked for the city centre's restoration. However, the instrument was abandoned due to corruption.

Since the 2016 *General Law on Human Settlements, Regional Management and Urban Development (LGAHOTDU)*, several states have included (Aguascalientes, Sinaloa, Quintana Roo, Jalisco) or are including transferable development rights in their legislations. The state Jalisco has a strong legal basis for the instrument.

Strategic land management

Strategic land management is used to create land reserves (*reservas territoriales*) for urban development and housing, discourage land speculation, reduce illegal occupation of land through the provision of serviced plots for the lowest-income population, and promote tourism and strategic projects such as the construction of highways. All levels of government have powers to apply it and receive the revenues. The Institute of Administration and Appraisals of National Assets, a decentralised body of the Ministry of Finance and Public Credit, manages nationally-owned land. Special agencies administer land within the jurisdiction of state and local governments. Strategic land management dates back to 1968 and is part of the Mexican urban planning paradigm. However, it is rarely used. The most prominent cases were in the cities Aguascalientes and Puebla more than ten years ago.

Land is retained for ten years on average, rezoned and developed by the government, which raises land prices. It is then sold at market price to the highest bidder; at a predetermined price to the preferred buyer; or transferred to another public entity. The government recovers investments in land purchase and development through the sale of rezoned and developed plots.

On the basis of the 2016 *General Law on Human Settlements, Regional Management and Urban Development (LGAHOTDU)*, most states have introduced innovations about strategic land management in their legislations.

Land readjustment

Land readjustment (*reagrupamiento parcelario*) has not yet been used but has a legal basis. Now that most states are updating their legislations in line with the 2016 *General Law on Human Settlements, Regional Management and Urban Development (LGAHOTDU)*, they are including land readjustment (Quintana Roo, Oaxaca, Sinaloa), albeit in an unspecific way. The legislation of Nuevo León state includes land readjustment since 1999 and served as the basis for articles on land readjustment in the 2016 *General Law*.

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Morocco

Land value capture in Morocco

Land value capture instruments are moderately used in the country (Table 2.37). Developer obligations and infrastructure levies have national legal provision but are rarely, if ever, adopted by local authorities. Land readjustment was more systematically used in the 1960s and 1970s, while today it is limited to road construction projects. Strategic land management serves the purposes of generating public revenues and promoting major national public development programs.

Table 2.37. Morocco: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Land readjustment	hydro-agricultural development	Dahir of 1917, 1938 and 1962	Local authorities, private landowners and non-government organizations	Moderate
Strategic land management	National Cadastre	Decree on National Cadastre (1973), Decree 2.16.263 (2016) and Law 47.18 (2019)	Central government and National Agency of Land Conservation, Cadastre and Cartography	Moderate
Developer obligations	Local authority taxation	Law 47-06 promulgated by the Dahir 1-07-195 du 19 kaada 1428 (30 novembre 2007)	Local authorities and independent public agencies	Moderate
Infrastructure levy	Value added compensation	Article 59 of Law 7.81 (2011)	Local authorities, council of the commune, and independent public agencies	Rare

Note: The National Cadastre of Land will be updated into an economical and multipurpose cadastre.

Enabling framework

Morocco is a constitutional monarchy with a three-tier subnational government structure that includes regions at the higher level, prefectures (urban areas) or provinces (rural areas) at the intermediate level and municipalities (communes) at the lower level (OECD/UCLG, 2019, p. 95^[1]). The country also has a network of more than 25 000 villages and rural localities for administrative purposes, with no legal personality.

The government is responsible for creating the legal framework for land value capture, notably through the Permanent Inter-Ministry Commission of Land Policy (Decree 2.16.263 of 2016). The principle of social function of property establishes that the right to property can be limited by the state for exigencies of economic and social development (Article 35 of the 2011 Constitution).

Land readjustment

Land readjustment projects are used for the purposes of urban expansion, urban development, brownfield regeneration and farmland consolidation. Local institutional representatives of the government (LIRG), private landowners and non-government organizations can implement such projects, but they rarely do so. LIRG collect the revenues from them, when there is a project that yields revenues.

Private entities need the consent of landowners whose plots represent more than 50% of the total area in order to carry out a project. Participation is compulsory for projects initiated by public entities or that have

a public purpose. If landowners resist land contributions, their lands are acquired through expropriation, and compensation is paid at market rate based on the original land value.

A share of 25% to 30% of the readjusted plots is reserved for public improvements, such as affordable and social housing, public roads, public utilities, schools, parks and green space – from which landowners will benefit. The share is of 25% in road development projects and 30% in housing projects.

After readjustment, landowners receive a plot based on value and surface area, located on or as close as possible to the original land. But, depending on the case, they may be reallocated to different plots within the readjustment area. They cannot exchange reallocated plots for cash. Yet, compensation may be due if the readjusted plots are less or more valuable than the original ones.

The main obstacles to the adoption of land readjustment are the reduced levels of administrative capacities and the high costs of expropriations. Another challenge is the lack of resettlement alternatives for displaced residents, such as tenants and informal residents.

Strategic land management

Strategic land management is used by the government and local authorities to enable the construction of public utilities and amenities and to promote major public development programs. Besides these actors, independent public agencies may also collect the revenues from operations, although they are not involved in the planning or execution. The national Permanent Inter-Ministry Commission of Land Policy is in charge of defining the strategic orientations and policies of land management.

The government acquires greenfield land zoned for public infrastructure through acquisitions at market price, expropriations or transfers from another public entity. The purchasing entity typically sells the land at a predetermined price or transfers it without costs to a jurisdiction or public company specialised in land development. These actors will then carry out the public amenities or land development projects. The government's role is to intermediate land transfers in order to facilitate public development.

Public land is leased to generate public revenues and facilitate planned urban development. Lease length is usually of 40 years, but it can vary with the purpose of the intended project, if industrial, touristic, agricultural or educational. The ground rent is paid through recurrent lease payments. No exemptions or discounts to payment are admitted.

In all, land management is a strategy to facilitate public development projects, by intermediating land transactions that otherwise would be costly and lengthy. Still, the lack of financing for land acquisition and the low capacity levels of local governments are notable challenges to the implementation of this strategy.

Developer obligations

Developer obligations may be collected by municipalities since 1989, through which developers can be subject to obligations to obtain approval for new developments. The obligations are designed to compensate the impact of development on public infrastructure and services needs and resulting costs.

The government and independent public agencies can implement the obligations and receive their revenues, but they never implement them. They have no discretion in issuing development approvals, establishing the impact rule or reinvesting the collected funds.

The obligations consist of cash payments, calculated using a formula that takes into account the size and type of development, as well as the value of the land on which the development takes place. The charge is paid in two installments: 75% upon approval and 25% after project achievement. Public development projects, military projects and projects with social benefit are exempted from payment.

The main obstacle to implementation is the lack of political will of municipalities, who, authorised to charge the obligations under national law, never actually impose them. Administrative capacities to do so are limited too. The calculation formula itself is not a problem, since it follows standard rules.

Infrastructure levy

Landowners pay a levy for government-built infrastructure from which they specifically benefit, for example public roads, public transport, public utilities and green space. When the announcement or execution of public works confers an increase in value greater than 20% on private property, the beneficiaries of this increase are jointly liable for compensation. Compensation must equal up to 50% of the value, but may be reduced to a minimum of 20% of the value gains (Article 59 of Law 7.81 of 2011).

Local governments and independent public agencies are authorised to implement the levy and receive its revenues. However, there is no public engagement and local governments lack the administrative capacity to conduct implementation. Hence the instrument has been rarely adopted in the country.

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Namibia

Land value capture in Namibia

There is very little land value capture in Namibia (Table 2.38). The lack of a legal definition of land value capture in the country, along with strong decentralisation, has led to ad hoc applications of land value capture that may vastly differ in nature and enforcement among local governments. Public land leasing is practiced with a general goal of redistributing land post-independence in 1990 and generating revenue, although little revenue is generated in practice. Developer obligations are limited to endowment fees related to the subdivision and creation of new properties, and betterment charges related to the increased value of land due to government rezoning.

Table 2.38. Namibia: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Endowment Fees	<i>Town Planning Ordinance 18/1954</i>	Local governments	Frequently
Strategic land management (public land lease)	Resettlement Leases Customary Leases	<i>The Credit Agreements Amendment Act, Act 3/2016</i> <i>Deeds Registries, Act 14/2015</i> <i>The Communal Land Reform Act 5/2002</i> <i>The Agricultural (Commercial) Land Reform Act 6/1995</i> <i>The Local Authorities Act 23/1992</i> <i>Rents Ordinance 13/1977</i>	National, local governments	Occasionally

Enabling framework

Namibia is a unitary decentralised state with a two-tier system of subnational government: 14 regional councils and 57 local councils (OECD/UCLG, 2019^[1]). The decentralisation of the Namibia government began with the 1990 Constitution, with legislation such as The Regional Councils Act and the Local Authorities Act of 1992 serving as guiding documents for the powers, functions and duties of local government. Regional governments are responsible for a variety of land use-related functions, including planning, management of communal lands, land valuation and acquisition, and land surveying and mapping. Municipal governments hold certain urban and land use-planning responsibilities as well. There is no legal definition of land value capture in Namibia.

Developer obligations

While there is no legal basis for developer obligations in Namibia, developers may be charged for the approval or support of new land development. The government can levy obligations on developers when the development for which the approvals are issued has an impact on infrastructure. However, in practice the only development obligation applied in Namibia is an endowment fee that relates to the subdivision and creation of new properties.

Jurisdictions charge developers for development approvals whenever they have the right. Such obligations are calculated based on the cost incurred by the jurisdiction due to a development's impact on infrastructure, or the market value of the development. There are no conditions that exempt developers from development obligations. Any charges are paid in cash before or at the time that development receives approval.

Local government issues development approvals and receives revenues from obligations, without any need for approval from higher levels of government. Indeed, local governments have a high level of discretion when issuing approvals, establishing the amount and nature of charges, and re-investing collected funds. Developers rarely appeal against required charges for approvals.

Endowments are typically used for subdivision of land in Namibia. These endowment fees, which are somewhat similar to development charges, are generally levied at 7.5% based on the market value of the land. The transaction value of the land and the appraisal by a valuator should be within fifteen percent of one another.

While there are no charges for additional development rights in Namibia, developers may be charged for development rights when a property increases in value due to rezoning. Such charges are paid in cash, with the price determined by the increased value resulting from the rezoning. The betterment fee for is 25% of the increased value for residential rezoning, and 50% for industrial or commercial rezoning.

Strategic land management

Public land in Namibia is purportedly leased to generate public revenue, develop land, and execute agricultural land reforms. However, leasehold rights at the national level do not form a significant source of revenue for the government, instead consisting principally of communal and agricultural resettlement leases. Customary land is held in trusts by the government and can be leased to community members for commercial purposes, however this is usually rural land for farming and rarely for urban development. It has been argued by Werner and Bayer (2016^[9]) that customary leasehold rights in resettled areas are a means to control land, rather than promote economic development.

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Netherlands

Land value capture in the Netherlands

Developer obligations and strategic land management are systematically used in the country (Table 2.39). Municipalities always charge developer obligations, since they are part of the regular planning procedure. Strategic land management is a prominent feature of the country's active land policy. Due to disputes over the calculation method, the infrastructure levy is rarely implemented. Urban land readjustment is yet to be implemented. There is no legal provision for charges for development rights.

Table 2.39. Netherlands: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	<i>Exploitatiebijdrage and exploitatieplan</i>	Section 13.6 of the Omgevingswet (2016) (Environmental and Planning Act)	Local governments	Always
Strategic land management	<i>Actief gemeentelijk grondbeleid</i>	Article 186 of the Gemeentewet (1992), Besluit Begroting en Verantwoording Provincies en Gemeenten (2003) and Mededingingswet (2012)	Local governments and special purpose bodies	Frequent
Infrastructure levies	<i>Baatbelasting</i>	Article 222 of the Gemeentewet (1992) (Law for Municipalities)	Local governments	Rare
Land readjustment	<i>kavelruilovereenkomst</i>	Section 12.6, article 12.44 of the Omgevingswet (2016) (Environmental and Planning Act)	Private actors	Not yet started

Enabling framework

The Netherlands is a unitary state with three levels of government: the national level, 12 provinces and 380 municipalities (OECD, 2017, p. 154^[2]). The national government creates the legal framework of spatial planning and land value capture. According to the principle of “cost recovery”, property owners must compensate public investments that benefit them. Municipalities are responsible for land use policy and for designing and implementing land value capture instruments.

The *Environment and Planning Act* enacted in 2016 brought substantial changes to developer obligations and land readjustment. Implementation, however, is expected for the second half of 2022. Other important national laws are the *Law for Municipalities* (1992) and the *Decree on the budget and accountability of the provinces and municipalities* (2003).

Developer obligations

Developer obligations, which are part of regular planning practice in the country, seek to compensate impacts new development or development at higher density have on local infrastructure. Around 95% of developer obligations are based on voluntary agreements whereby developers provide land, public spaces, roads and parking space (*exploitatiebijdrage*). Municipalities have substantial discretion to define the amount and form of contribution. If no agreement is made, municipalities can impose a fee to be paid in cash (*exploitatieplan*). Municipalities always implement developer obligations and collect the revenues.

The fee is calculated based on the costs of the public infrastructure, the land value and the market value of investment. The contribution must cover all on-site infrastructure costs and proportionally all directly-connected off-site infrastructure costs. Non-directly-connected off-site infrastructure costs such as ring roads or recreational areas may be included too. Municipalities can set their own criteria to calculate the fee (Environment and Planning Act of 2016). In any case, the charge must be paid before or at the time the development receives approval. Smaller developments may be exempt from payment.

If the obligation consists of the provision of social housing units, the units must be built on-site. Developers provide the land, and a housing association builds the units. In fact, all affordable housing in the country is built and owned by housing associations. Beneficiaries are households with income below a level defined and adjusted yearly by the national government. Housing associations typically keep the majority of their housing stock affordable for a long time. However, a small part of the affordable units are sold annually to the users of these units. Alternatively, developers may satisfy the requirement by in cash compensation, if the municipality agrees.

The recent *Environment and Planning Act* (2016) instituted a differentiation between “integrated projects” and “organic projects”. Integrated projects require a voluntary agreement to be reached in relation to developer obligations before a planning permission is granted. Organic projects are a vision for future development published by municipalities and are not legally binding. In organic projects, developer obligations can be established at a later stage of project development, which is an innovation.

The main challenge to implementation is the cost-benefit relation. The revenues collected and the public improvements provided do not always justify the costs of charging for development approvals. Developers consider the charges to be financially unviable and have resisted attempts to increase them.

Strategic land management

Strategic land management plays a crucial role in spatial planning, housing policy and land value capture. As part of a forward-looking land policy, local governments acquire and retain land in advance of needs for the purposes of urban development and renewal, land consolidation, control of urban growth patterns and spatial planning and capture of capital gains. The government does not hold a significant amount of land but manages this asset strategically.

Local governments typically acquire vacant, abandoned or unproductive land. They purchase land at either market price or reduced price. In the case of a purchase of land owned by a private developer the government grants the ‘developing landowners’ a development right in subsequent development. Either way, land acquisition is financed via debt financing, such as bonds.

Local governments rezone and develop the acquired land. They carry out basic physical preparation and servicing and build public spaces, roads and parking, and sometimes public utilities. Since the 1990s, there has been a trend of forming joint ventures, which are a form of private-public partnership, to conduct these projects. Before then, local governments usually conducted the projects alone.

Local governments recover investments through the sale or lease of the developed plots. They are forbidden by law to sell land below market value. Land is sold at a predetermined price to preferred buyers or in public tenders. Tender criteria may include qualitative aspects of the development plan, with the aim of orienting preferred land uses, such as residential or commercial, depending on the area.

Local governments make moderate use of public land leasing. They do so to generate public revenues, provide land for real estate development and facilitate development with a public purpose.

The ground rent is calculated as a percentage of the land value and paid in installments or in a lump-sum, in which case discounts are granted. Leaseholders can transfer the lease or sublease the land to a third party.

In practice, only the four largest cities – Amsterdam, Rotterdam, The Hague and Utrecht – make use of public land lease. Recently, these cities modified lease contracts, by turning them into “perpetual leases” of 50 or 100 years. Leaseholders considered the readjustment fees to be expensive, which generated public discussion.

The main challenges to implementation are the little amount of land available to lease and the high costs of strategic land management operations, in comparison to the economic benefits accrued.

Infrastructure levy

Local governments can charge property owners part of the costs of public infrastructure works, as long as the public infrastructure directly services the property and increases its value. Although the instrument has been in place for most of the 20th century, local governments rarely implement it.

The levy is calculated according to the costs of infrastructure provision. It does not relate to the capacity to pay of property owners. No discounts or exemptions to payment are admitted.

Local governments can only charge the levy for the costs of new infrastructure provision. In practice, they have difficulty distinguishing between costs of infrastructure provision and costs of maintenance.

The main implementation challenge is the risk of the levy being overruled by courts. Landowners often challenge the calculation method in the courts, which have ruled that the charge was unfair on several occasions. In this case, municipalities have to bear all infrastructure costs. As a consequence, they have become averse to the risks of adopting the instrument.

Land readjustment

Private landowners can promote urban land readjustment for the purposes of urban expansion, urban development and renewal, brownfield regeneration and post-disaster reconstruction. Agricultural land readjustment has existed in the country for more than 100 years, but urban land readjustment is new, having been introduced in 2016 (Environment and Planning Act). Implementation can start after ordinances detailing the procedures and operations are enacted.

Land readjustment is defined as an "*agreement of three or more owners to merge certain properties owned by them, to readjust these properties in a certain way, and to divide it among each other based on a notarial deed.*" (Environment and Planning Act, 2016).

Participating landowners must agree on plot reallocation. If the reallocated plots are not equally distributed, one landowner will have to pay cash compensation to another. Public entities will not receive the revenues from cash compensation for readjusted lots.

All costs of public improvement must be recovered from the project. A share of land will be reserved for public improvements, such as public space, roads, parking, public utilities and facilities and social housing.

There are no challenges as of yet, but some resistance by landowners is expected, not only for being a new type of arrangement but also because profit margins are unknown. Moreover, if the government needs to be involved to carry out expropriations, the process may become costly and lengthy.

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New Zealand

Land value capture in New Zealand

Land value capture instruments are occasionally used in the country (Table 2.40). The most frequently adopted instrument is developer obligations, by which developers contribute to offset the impacts of project development on local infrastructure. Charges for development rights are seldom used, and only in specific cities. Strategic land management is a recent concern for the national government. The infrastructure levy has not been implemented. However, since 2020 the government agency *Kāinga Ora - Homes and Communities* has powers to levy “betterment payments”, but operational regulations are still pending. Whilst land readjustment has had some use in rural areas, in cities it has been limited to urban renewal programmes and recent government initiatives.

Table 2.40. New Zealand: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	<i>Development contributions</i>	Sections 106 and 197 of Local Government Act (2002)	Local governments	Frequent
Charges for development rights	<i>Inclusionary Zoning, FAR Bonus, Transferable Development Rights</i>	Local Government Act (2002) and the Affordable Housing Enabling Territorial Authorities Act (2008) now repealed	Local governments	Rare to occasional
Strategic land management	<i>None specific</i>	Land Act (1948) and Urban Development Act (2020)	National and local governments	Rare

Enabling framework

New Zealand is a unitary country with two tiers of subnational government, composed of 11 regional councils at the regional level and 67 territorial authorities at the local level (OECD/UCLG, 2019, p. 208^[1]). There are two types of territorial authorities: city councils (12), with a predominantly urban population of more than 50 000 inhabitants, and district councils (55), which are smaller and more sparsely populated. The metropolitan area of Auckland, where one third of the country’s population live, has a distinct territorial organization, formed by an amalgamation of the previous regional council and seven territorial authorities.

Regional councils are responsible for *Regional Plans and Policy Statements*, and territorial authorities are in charge of zoning and land use matters, through *District Plans* (OECD, 2017, p. 158^[2]). Auckland Council is responsible for the *Auckland Unitary Plan*.

The national level creates the framework for land value capture. The *Land Act* (1948), the *Local Government Act* (2002) and the *Resource Management Act* (1991) provide this framework. The recently approved *Urban Development Act* (2020) establishes the powers for a government agency *Kāinga Ora - Homes and Communities* to implement some land value capture instruments.

Much of the country’s land area is devoted to pastoral farming, agriculture and mountain ranges. The use of land value capture instruments is predominantly in urban areas, including the largest cities – Auckland and Christchurch. The provincial centre of Queenstown Lakes has implemented land value capture tools, notably a form of charges for development rights called Inclusionary Zoning.

The Indigenous People Māori make up over 17% of the country’s population. Māori tribal organisations hold and develop both rural and urban land. Differing understandings of Māori land value, including legal, financial and cultural complexities, are not addressed here.

Developer obligations

Local councils charge private developers when they apply for new development or development at higher density, due to the impacts of the development upon local infrastructure. Under the *Local Government Act* (2002), developer obligations are part of the current land use planning process, and therefore are factored into all private sector development applications. Under the *Resource Management Act* (1991), a financial contribution may be required to address negative environmental effects of the development. By charging developer obligations, local councils can recover part of the costs of infrastructure investments.

The charge is paid in cash or through land transfers to the government, in this case for the purposes of building public parks and other public spaces. Projects with social purpose, such as hospitals, schools and elderly care facilities, may be exempted from paying the charge.

The charge may be calculated using an established rule or be negotiated following a structured procedure. The rule takes into consideration the public improvement's costs and the characteristics of the private development, such as zone, market value, type and size.

When negotiated, the process is occasionally contested. Developers argue that payments should be made after the project is completed, whereas local governments ask for contributions up front. Developers often complain that large contributions may undermine the viability of proposals.

Although the majority of the contributions are not contested, the minority that are contested are on the basis of financial unviability, which constitutes an obstacle to wider implementation.

Charges for development rights

Local governments can require developers to provide public amenities or affordable housing units in exchange for the authorisation to build at higher density. There are three types of charges for development rights: Inclusionary Zoning, density bonuses and Transferable Development Rights. Local governments rarely implement charges for development rights.

The charge is negotiated with developers, following a case-by-case procedure. Developers are required to build affordable housing units, but alternatively they can pay a fee or provide the land. If they provide affordable housing units, the units are built on-site, within the boundaries of the project. The units must fall under a particular set price point and must be retained in perpetuity as affordable.

The city of Auckland has used density bonus schemes primarily for large scale office buildings. In return for additional density, developers have provided public amenities – such as public toilets, public spaces, walkways, early childcare centres and nurseries. The density bonus scheme is not part of the current land use plan, and is not used to deliver affordable housing.

There is only one operational Inclusionary Zoning scheme in New Zealand, in the Queenstown Lakes District, whereby developers contribute to affordable housing provision via land, money or dwellings, in exchange for additional density.

Transferable Development Rights are operational when subdividing rural land for residential development. The instrument of density bonuses has not been used to deliver affordable housing units.

The lack of adequate legal frameworks constitutes the main challenge to implementation.

Strategic land management

Strategic land management could be used to facilitate land consolidation, control urban growth, capture capital gains, create land reserves for social housing and for future developments. National and local governments rarely implement strategic land management and receive the revenues, but, with the 2020 Urban Development Act, change is expected to be under way.

The legislation dates back to the *Land Act* (1948), which provides the basis for leasing Crown land in rural areas, primarily for pastoral farming. In rural areas, public land is typically leased to generate public revenues, for farming purposes and for the protection of significant landscapes.

For urban lands, significant urban redevelopment projects in a small number of cities adopted a strategic approach. Existing low-density social housing areas have been reconfigured and redeveloped at three-times the density, for social housing, and both affordable housing and market-priced housing for purchase. This approach has been extended with the *Urban Development Act* (2020).

The government acquires land via purchases at market price or through transfers from another public entity. Through acquisition, different parcels of land are brought together, which enables development. After development, the land is destined for public purposes, including affordable housing, or is sold or leased in the private market, at higher prices. The government recovers investments in land acquisition and development through the sale of rezoned and developed plots.

Since 2020, the government agency *Kāinga Ora – Homes and Communities* can acquire land with the goal of developing housing. Any type of land may be acquired, as long as it is appropriate for residential development. The agency will conduct basic physical preparation and build the housing units.

Given that the legislation dates from 2020, the challenges to implementation are yet to be seen.

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Nigeria

Land value capture in Nigeria

Several land value capture instruments are used in Nigeria (Table 2.41) although national laws do not explicitly enable their use and no legal definition of land value capture exists. Certain instruments are used to recover costs from the impact of developments on infrastructure use, to control urban growth, and to influence spatial planning.

The main obstacles that limit broader use include the lack of a legal framework, of administrative capacity and of funds for the acquisition of land. Revenues raised from land value capture do not justify the cost of enforcement. The prevalence of informal settlements, resistance from landowners and an inadequate land registry also hamper land value capture.

Table 2.41. Nigeria: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Conditions of Development Permit	<i>n/a</i>	Local governments	Frequently
Strategic land management	Land use planning and development control	<i>n/a</i>	Local governments	Occasionally
Infrastructure levy	Betterment Levy/Premium	<i>Lagos state Neighbourhood Improvement Levy (via Lagos state Neighbourhood Improvement Charge Law)/2019</i>	Local governments	Rarely

Enabling framework

Nigeria is a federal republic with two subnational levels of government: 36 states, 1 federal capital territory not considered a state, and 774 municipalities (6 of which are council areas) (OECD/UCLG, 2019^[1]). The Constitution of 1999 granted far-reaching responsibilities to local government, including increased local authority over economic planning and development (ibid). Subsequently, state and local levels of government are chiefly responsible for local and regional urban and land use planning. However, there is no enabling framework for, nor legal definition of, land value capture. Public officials have a high level of discretion when deciding the granting of planning permits.

Major gaps exist in Nigeria regarding the updated status, accuracy, or completeness of land registry records in urban areas. Land is valued using a non-market approach based on proxies, and valuation is the responsibility of the state level governments, although recently some states such as Lagos and Kaduna have engaged specialists to determine property values using a hedonic valuation approach towards property tax collection. Unclear and unsecure property rights as well as the dominance of some landowners or developers hamper land markets.

Developer obligations

While the legal basis for developer obligations is not explicitly provided by national law, developers in Nigeria may be charged cash contributions to compensate for the impact of their developments on adjacent infrastructure when seeking approval or support for projects. This includes both new land development and those proposed at a higher density and/or height on already developed land.

Governments can charge developers for approvals by requiring the resubmission of Building Plan Approval requests, usually triggered by proposals that include additional development densities, e.g. adding floors

on existing buildings. In the states of Sokoto, Lagos and the Federal Capital Territory, the re-submission of an application for building plan approval requires a 50% additional charge of the initial development permit fees. Charges for additional development are not typically charged in Nigeria. However, maximum building heights and densities are set in the Federal Capital City of Abuja and other cities, and a premium is charged there at the point of land allocation. In Sokoto state, such charges are not enough to offset the impacts of development. If a property owner applies for and receives a permit to build additional floors (within a set limit), 50% of the initial development charge is applied. Charges for additional development are obtained only on an ad hoc basis, for minor amounts, and are typically determined by the volume or size of structure to be built.

Developers are charged whenever there is the potential to do so in exchange for approval, and rarely appeal charges. Charges are calculated using an established rule, according to the type of development, e.g. residential, commercial, etc. However, developers can be exempted if they provide a social benefit that outweighs their impact on infrastructure, e.g. affordable housing, green space. The charge is usually paid before or at the time the development receives approval.

State Urban Planning Boards are responsible for approving development permits in all urban areas within the state, thus do not need approvals from the national government to do so. However, subnational governments below the state level have no discretion in issuing approvals, establishing rules or negotiating with developers on charges, or re-investing collected funds. In general, the division of responsibilities between the boards, local authorities and ministries of urban planning and development is not very clear.

Obstacles hindering charges for development approvals in Nigeria include the low quality of the cadastre, unclear development norms and land use regulations, the lack of a legal framework and of administrative capacity, and unclear rules to calculate charges.

Strategic land management

Strategic land management is used in Nigeria to control urban growth and spatial planning. However, national law does not provide any such legal basis. Land acquired for strategic land management is typically located within the jurisdiction acquiring it and consists of greenfield sites.

It is not possible for the government to freeze land prices before announcing public investment or rezoning, and then buy the land at that price. The government and authorised public entities do not rezone or develop land acquired for strategic land management before sale. There is no limit to how long land acquired for strategic land management can be retained.

Land is typically acquired, retained, and disposed of by the 2 levels of the Nigerian government and both receive revenues from sale. Subnational governments do not need approval from central government.

The government also leases its land to generate revenues, provide land for real estate development, encourage planned development as well as development with a public purpose (e.g. construction of affordable housing), and to incentivise foreign direct investment.

Obstacles hindering the use of strategic land management in Nigeria include the lack of a legal framework and administrative capacity, the lack of financing for the acquisition of land. Revenues raised do not justify the cost and informal settlements are widespread.

Land swap in Abuja was an initiative by the Federal Capital Territory Administration (FCTA) intended to provide serviced land for development, although the project failed largely because of insufficient planning and implementation. Developers were required to pay the government to cover the cost of technical reports and plans required for development permit approvals, to pay compensation where necessary to displaced populations, and to provide basic infrastructure such as roads and streets. In return, the developers were to receive 60% of the land under a leasehold recognized by national law. Most of the developers did not have the capacity to execute the project but were eager to gain access to the land. Controversies then followed with resistance from the local population, which halted the swap process. Land had been provided

for development under this arrangement in some districts of Abuja such as Ketti and Sheretti before the project was halted.

In Abuja, land swaps have been used as infrastructure financing options, however there is no deliberate policy recognising it as a statutory land delivery mechanism. State governments such as Bauchi or Sokoto can adopt a similar arrangement to finance infrastructure provision, such as the Spark light Neighbourhood in Bauchi, and one of the financing options proposed for the Sokoto new city district.

Infrastructure levy

Infrastructure levies in Nigeria are only applied in Lagos (Neighbourhood Improvement Levy, Table 2.17), and only rarely. Landowners pay a levy for infrastructure that the government builds and from which landowners benefit, if it is adjacent to or within a defined distance from their land. Improvements of public infrastructure or services that may trigger levies include public space, roads or parking, neighbourhood services (e.g. schools, elderly care), public utilities, safety (e.g. police patrols), or other public facilities.

Projects that result in infrastructure levies on landowners are typically initiated by public entities. Levies are only charged to landowners when such a public improvement or service increases the landowner's property value.

Landowners benefiting from a given public infrastructure or service improvement are identified according to an estimate of the actual distance up to which it affects land prices, or by a fixed impact radius based on the type of improvement. The cost is assigned to each benefiting landowner according to the actual expected increase in value. Certain landowners can be exempt from sharing the cost at the governor's discretion. Property owners paying the fee are typically involved in the consultation process concerning the project.

The levy is charged upon completion of works. The state level of the Nigerian government is responsible for levying infrastructure levies and receive the revenues. Subnational governments do not need approval from higher levels. If the national government largely funds a public improvement or service, it encourages regional/local governments to recover the land value increases. However, local governments have no discretion in levying fees, estimating fee amounts, setting the payment procedure, or reinvesting the collected funds.

Landowners sometimes appeal against the fee. The main obstacles to infrastructure levies are by landowner resistance, their inability to pay and the lack of a legal framework or administrative capacity.

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Norway

Land value capture in Norway

Land value capture instruments are used in the country (Table 2.42). Municipalities frequently negotiate developer obligations to compensate the added impacts of a new project on existing or new local infrastructure. Private landowners can execute land readjustment projects for urban densification and redevelopment projects, but rarely do. The three levels of government make moderate use of strategic land management operations, as long as they already own land or have the necessary funds for acquisition. There is no legal framework of charges for development rights.

Table 2.42. Norway: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Utbyggingsavtaler (development agreements)	Section §17 of the Planning and Building Act (2008)	Local governments	Frequent
Strategic land management.	Kommuneplanens arealdel (KPA) Municipal masterplan – land use part. Områdeplan/Local zoning plan.	The Planning and Building Act	National, regional and local governments	Rare
Land readjustment	<i>Jordskifte/Land readjustment</i>	§ 12-7, section 13 and 14 of the Planning and Building Act (2008) and § 3-30 of the Land Readjustment Act (1995)	Jordskifteretten/ Land readjustment court, municipalities and private landowners (expropriation)	Rare

Enabling framework

Norway has a two-tier subnational government system, composed of 11 counties and 356 municipalities, as per the 2020 administrative reform. The city of Oslo is both a county and a municipality (OECD/UCLG, 2019, p. 388^[1]). The county governor acts as the representative of central government in each county and supervises local government activities (Article 59 of the Local Government Act). Municipalities, as the main planning authorities, are in charge of local strategies, master plans, and local zoning plans (OECD, 2017, p. 161^[2]).

The national government creates the legal framework of land value capture, which is the Planning and Building Act (2008) including supplementing regulations. The country does not have a long tradition of land value capture tools. The Planning and Building Act is used to ensure that developers contribute to actual infrastructure improvements and the cost of common utilities in a specific development, which must be justified in legally binding land use plans.

Developer obligations

Developers have to compensate the impacts that the new project generates on infrastructure located within or adjacent to the project. Local governments frequently use developer obligations and collect the contributions.

Developers negotiate with municipalities to define what amenities are necessary for a high quality development and how the new development project impacts existing infrastructure. Negotiation follows

processes outlined in the Planning and Building Act. Local governments have high level of discretion in issuing development approvals and negotiating with developers. The basis of any negotiation is the land use part of the municipal master plans or local zoning plans (§ 11-12). The procedure is specified in part three of the Planning and Building Act, §17).

The charge is paid in cash or through the in-kind provision of land, public space, or public infrastructure, such as roads, parking, public transport, and other public utilities. Both forms of payment may be admitted. The in-kind contributions may correspond to new infrastructure and common utilities that are afterwards transferred free of cost to the municipality. Developers pay the charge upon obtaining the building permit.

The level of implementation varies across municipalities, depending on local real estate dynamics and local capacities. Municipalities with a dynamic real estate market find the instrument to be more relevant, while smaller municipalities where fewer developments take place use developer obligations less often.

Developers operating in small markets often perceive the charge to be excessively onerous and the municipalities tend to refrain from asking for developers' contribution in such areas.

Strategic land management

Local governments acquire and retain lands in advance of needs for the purposes of urban renewal and capture of capital gains. The national, regional and local governments lease public land to generate public revenues. Strategic land management is rarely used in the country.

When municipalities acquire land, they do so in reason of a specific opportunity or in anticipation of future needs for social services. Land is acquired in a scattered manner, through debt financing at market price or at a reduced price, in return for granting landowners a stake in subsequent development projects.

Municipalities may carry out land development in accordance with spatial and land use plans, which includes basic physical preparation, provision of public utilities and construction of green spaces and parks. However, in most cases, developers conduct these tasks and afterwards transfer the public equipment free of cost to the municipality (see section above on developer obligations).

Municipalities sometimes own land and conduct planning and basic physical preparation. Depending on the purpose of these operations, they may sell the developed lands to private actors, via auctions under the highest bidder criteria. Some municipalities sell land as part of their housing policy, in which case the public tender involves other criteria beyond sales prices, such as unit layout and maximum sale price per unit. Municipalities may transfer any land that they own to an agency designated to manage municipal property. In all, they recover investments through the sale or lease of the developed plots.

Leasing is not very common because governments hold little land available for lease. Land lease contracts range from 20 to 50 years, with possibility of renewal. The national government regulate the process of setting the rate, giving the municipalities power of attorney to set the exact ground rents. Payment can be done through recurrent installments, and no exemptions are granted. Leaseholders may transfer the lease in the market or sublease it to a third party.

Due to lack of financing, public land acquisition is scarce, and hence public land lease plays a minor role for municipal revenue.

Land readjustment

Land readjustment has been used in a few occasions in urban planning or urban development. The law enables private landowners to conduct farmland consolidation and post-disaster reconstruction, and this is frequently used. Land readjustment projects for the purposes of urban development or renewal is less common, in particular when the readjustment includes redistribution of urban land values.

The local zoning plan (*reguleringsplan*) may contain norms about land readjustment if it is necessary for urban redevelopment projects. Two thirds of property owners must agree with the project for it to be executed. In most cases the landowners cooperate without using the readjustment law, or one developer acquires all land that is necessary to start a development project. In other occasions the developers merge their properties and establish a single purpose joint venture to accomplish the project.

Both municipalities and private landowners can enforce the participation of resisting landowners through expropriations. The compensation is subject to discretion, as per the Law on public land take and expropriation (*Lov om overtagning av fast eiendom*). Expropriations are rarely carried out, as it is politically controversial.

In the rare cases of urban land readjustment, the plot reallocation is based on both value and surface area. The characteristics of readjusted plots vary on a case-by-case basis. Landowners can exchange reallocated plots for cash. Third party investors, such as developers, can receive readjusted plots in return for their investment.

The challenges to implementation include low levels of technical administrative capacity and resistance by landowners, who frequently appeal against the arrangement.

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Pakistan

Land value capture in Pakistan

Several land value capture instruments are used (Table 2.43). Local governments and independent public agencies frequently levy charges in the events of rezoning and repurposing of urban land. Strategic land management is not common, given that the government does not hold significant amounts of public land to lease and that financing for land acquisition is scarce. There is no legal framework for infrastructure levy or developer obligations.

Table 2.43. Pakistan: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Charges for development rights	Conversion Fee	None	Local governments and independent public agencies	Frequent
Land readjustment	None specific.	None	Provinces, independent public agencies and private developers	Moderate
Strategic land management	None specific.	Section 4 of Land Acquisition Act (1894)	National government, provinces, districts and independent public agencies	Moderate

Enabling framework

Pakistan is a federal republic with two tiers of subnational government: provinces and local governments. Each province establishes their local government system, with devolution of political, administrative and financial responsibilities. Local governments, on their turn, are structured into two or three tiers, among district councils, urban councils and rural councils.

The principle of social function of property establishes that private property may be subject to reasonable restrictions imposed by law in the public interest (Article 23 of the Constitution). There are no national or provincial urban policies. The main national law of land value capture is the *Land Acquisition Act* (1960), which regards strategic land management. Provincial legislations regulate charges for development rights.

Provinces are responsible for creating the framework of land value capture. Since the 1960s, they have urban development authority legislations. Land value capture is more relevant in the provinces of Punjab and Sindh. In the other two provinces, Balochistan and Khyber Pakhtunkhwa, the instruments are yet to develop to the same extent. Nonetheless, land acquisition practices are similar across all four provinces.

Charges for development rights

Charges for development rights are frequently levied in the event of rezoning and repurposing of urban land. There is some level of variation across provinces. Local governments and independent public agencies levy this charge after they receive approval from the provincial government to do so. They collect the revenues, which become part of their general budget. The charge, to be paid in cash, is calculated as a share of the commercial value of land.

In the city of Lahore, the second largest in the country, the fee is charged when a developer requests approval for new development on land whose use has changed (Article 23 of LDA Land Use Regulations 2020). Those who wish to use the land in accordance with the reclassification must pay a conversion fee. The fee must be paid in cash, as a share of the intended land use value. For instance, if agricultural, peri-

urban or residential land is reclassified as commercial or industrial, the developer must pay a fee worth 20% of the value of the commercial or industrial land.

The fee must be paid before or at the time the development receives approval. The payment may be one-time, with a discount, or in installments. Philanthropic, charitable and non-profit organisations can be exempt from payment if they intend to use land for educational, healthcare or institutional purposes.

Some provinces lack the adequate legal framework to enable local governments to levy charges for development rights. Large cities apply the instrument more frequently, as the demand for building at higher density or for more productive uses is larger. Even then, fluctuations in land and real estate markets may negatively affect demand. While these cities typically have adequate and up-to-date land use regulations, this is not the case for all cities in the country.

Land readjustment

Provinces, public corporations and developers often carry out land readjustment projects for the purposes of farmland consolidation and urban expansion for which they convert rural to urban land. The legal provisions for farmland consolidation date back to the late 19th century. For urban areas, land readjustment has been practiced in the current form since the 1960s. Development authorities, which are public corporations in charge of spatial planning at the local level, create the legal provisions.

Public authorities or private developers can initiate land readjustment projects in urban areas. The projects starts when the local planning authority declares which land is suitable for land readjustment. The declaration may be issued upon request of private developers or without any prior request. Afterwards, landowners will voluntarily adhere to the project, offering undeveloped land to be readjusted.

If the project is of public interest, the participation of resisting landowners may be enforced through land expropriations. Expropriations may be carried out both by public and private entities, and landowners are entitled to a compensation based on the market rate of the original use of plots. Land is always expropriated when necessary. Still, landowners often dispute the compensation price in judicial claims that last decades.

A share of around 20% of the readjusted plots is reserved for public improvements, such as public roads, utilities, schools, parks and green space – from which landowners will benefit. Moreover, some of the newly created plots are reserved for future sales, to generate revenues for the government. There is no formula to calculate how many plots should be reserved, and the revenues vary. In housing projects in the city of Lahore, for instance, 6% of project costs have been recovered through the sale of plots.

After readjustment, landowners receive a plot with a value proportional to their original holdings. They typically retain 10 to 20% of the original land area for commercial plots and 25% of the area for residential plots. The land returned after public development is much more valuable than the original land. Depending on the project, landowners may be reallocated to different plots within the readjustment area or receive a residential or commercial unit instead of their original plot. If they prefer, they may exchange the plots for cash compensation.

The implementation of land readjustment projects faces obstacles. Public entities often lack administrative capacities to conduct, manage and oversee land readjustment projects. Landowners sometimes appeal against the decision to readjust their plots, engendering administrative and judicial disputes that make the process lengthier and more costly. Tenants and informal residents are another affected group that resists land readjustment projects, fearing the absence of resettlement alternatives.

Strategic land management

The national government, provinces and districts, as well as urban development public corporations, resort to strategic land management operations in order to control urban growth and promote planned

development. The country makes moderate use of strategic land management operations and land leasing.

Land is acquired in a concentrated manner through expropriation, with due market-value compensation, or through purchases at discounted prices, in return for granting private landowners a stake in subsequent development. In many cases, public urban development authorities acquire small tracts of land and follow up with housing development within a few years up to a decade.

The government may freeze land prices at a certain level before the announcement of a public investment or rezoning and buy the land at that price. The government may also retain land for some time before selling it, in expectation of a future increase in land prices.

After land acquisition, the government typically rezones and redevelops it, alone or in partnership with private developers. Development includes basic preparation and servicing and the provision of public utilities, administrative facilities and affordable and social housing units, which leads to land value gains.

To retain the land valorisation, the government can transfer land to another public entity or sell it at the private market. If sold to the highest bidder, the main purpose is to generate revenues. If sold using other criteria, a specific purpose is sought, such as to address infrastructure needs.

Public land may be leased to generate public revenues and to provide land for real estate development. Each province enacts a Land Lease Policy, which establishes types and characteristics of leases. Within the limit of 40 years, lease length is determined on a case-by-case basis, in accordance with the intended uses. Large development projects have longer leasehold contracts than small projects. Similarly, charitable projects contracts tend to be longer than those of commercial projects or farming.

Some provinces do not have the adequate legal framework for public land leasing. The other challenges to strategic land management are the lack of financing for land acquisition, the lack of administrative capacities and the lack of coordination between the relevant public entities.

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Peru

Land value capture in Peru

Several land value capture instruments exist in the country (Table 2.44). Local governments always charge developer obligations for new urban developments that request formal approval. Yet, new formal developments represent only 6% of converted urban land. Local governments rarely adopt charges for development rights, infrastructure levy and land readjustment. The main cities, notably Lima, Arequipa, Trujillo and Cusco, apply them in an exceptional basis. There is no legal framework for strategic land management. The inaccuracy of land registries, low level of technical capacities, reduced political will and insufficient local budget constitute obstacles to the implementation of these instruments.

Table 2.44. Peru: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Aportes reglamentarios	Norma GH.020 of Supreme Decree 11-2006-VIVIENDA	Local governments	Always
Charges for development rights	Bonificaciones por Finalidades de Interés Público	Art. 64 of National Law 31313/2021	Local governments	Rare
	Bonificación de altura por construcción sostenible	Art. 133 of Supreme Decree 022-2016-VIVIENDA		
	Bono de zonificación inclusiva	Art. 135 of Supreme Decree 022-2016-VIVIENDA and Supreme Decree 10-2018-VIVIENDA		
Infrastructure levies	Contribución especial de obras públicas	Arts 62 to 65 of Legislative Decree 776/1993	Local governments	Rare
Land readjustment	Reajuste de Suelo	Art. 45 of National Law 31313/2021	Local governments and private actors	Rare

Note: *Bono de zonificación inclusiva* refers to social housing provision as a form of compensation.

Enabling framework

Peru is a unitary republic with a two-tier subnational system of government, composed of 24 departments and the Constitutional Province of Callao at the regional level, and 195 provincial municipalities at the upper local level and 1 671 districts municipalities at the lower local level (OECD/UCLG, 2019, p. 507^[11]). These two municipal levels are independent, but provincial municipalities have a co-ordination role across district municipalities within the province.

The national and local governments create the legal framework of land value capture. The national government is responsible for land valuation, using a non-market approach. Local public officials have no discretion in the decision of granting planning permits. This means that they cannot negotiate the terms of permits, they can only grant them with basis on zoning parameters.

In 2021, the national government enacted the *Sustainable Urban Development Law* (Law 31313). This law informs substantial modifications to charges for development rights, developer obligations and land readjustment. However, implementation of the law has not yet started, as the Ministry of Housing must first create its regulation. Only after that, these changes will enter into force.

Developer obligations

Developers are subject to in-kind obligations to obtain approval for new development. The obligations are designed to compensate the impact of new development on public infrastructure and services located within the boundaries of development. Local governments always implement developer obligations and collect the revenues, when there are any to be collected.

The obligation is paid through the in-kind provision of public spaces and public services. After conducting the necessary works, the developer transfers the developed areas to the local authority (Ministerial Resolution 29/2021 of the Housing Ministry). If the development is financed by public sources, developers are exempted to meet this obligation.

If the development is smaller than a specific minimum size, developers can pay the obligation in cash, upon project completion. In this case, the calculation charge follows an established rule, according to the size, type and land value of development (art. 9 of Technical Rule H10 of the Supreme Decree 011/2019).

Since 2021, the concept of developer obligations included the provision of social housing units as a form of compensation (Law 31313/2021). Every development project located within zones of medium or high densification must provide social housing units for at least 10% of the total built area. Local governments can define higher thresholds in their local *Urban Development Plans*. Once their local plans are updated, local governments will be able to implement this new form of compensation.

The main challenges to implementation are the lack of local administrative capacities and the lack of updated local regulations. The low levels of land formality, with 94% of converted urban land being informal, constitute another obstacle, since the instrument is only used for formal developments.

Charges for development rights

There are three types of charges for development rights in the country: the *Floor Bonification for Sustainable Buildings*; the *Floor Bonification for Inclusionary Zoning*; and the *Floor Bonification for Public Interest*. Local governments rarely adopt charges for development rights and collect the revenues. To do so, they need approval of the provincial government on the land use zoning, which defines the areas where the charges can be applied.

Local ordinances must establish in advance the density baseline for development and the types of compensations admitted. Compensation can be paid in cash or through the in-kind provision of public utilities, social housing or other improvements of public interest. If in cash, the charge is paid upon project completion; if in kind, the improvements must be executed during project development.

Through the *Floor Bonification for Sustainable Buildings*, developers can obtain the right to build at higher density if they prove that the building meets international standards for energy and water efficiency and has green roofs or green walls. A local ordinance must detail the characteristics of sustainable projects and specify the density increase to be awarded.

Through the *Floor Bonification for Inclusionary Zoning*, developers who allocate a percentage of social housing units within the project can build at higher density. Currently, the national regulation does not specify the minimum size and cost of units, the percentage of units in relation to the total or the eligibility criteria (Supreme Decree 10/2018). Therefore, provincial municipalities need to regulate these aspects. The authorization granted by provincial governments must contain an expiration date, after which the project cannot be built with the same beneficial parameters (art. 136 of Supreme Decree 22/2016).

The scope of the *Floor Bonification for Public Interest* is broader than that of the other charges for development rights. Projects that create additional public spaces, infrastructure for sustainable mobility, care facilities or that promote other social interests, as established in local metropolitan or urban

development plans, can obtain permission to build at higher density. Since the Law 31313 dates from July of 2021, local governments still have to create local ordinances to render the tool operational.

The main challenge to implementation is the absence of local regulations, which is not helped by the fact that there are no national guidelines to support municipalities in this task. Additional challenges are the low quality of land registries, the risks associated with land markets and the lack of administrative capacities.

Infrastructure levy

Local governments may charge a contribution from owners whose land is adjacent or near public improvements such as roads, parking space, public spaces and other public utilities. The contribution levies the land value increment generated by the new project. Municipalities cannot recover the land value increases when the national government funds a public improvement, in which case the levy is not collected (Article 64 of Presidential Decree 776/1993). Even though the current legislation dates back from 1981, municipalities rarely implement this instrument and collect the revenues.

Municipalities have the autonomy to create, change and extinct contributions (art. 60 of Presidential Decree 776/1993). They must enact local norms to collect and administer the levy. Moreover, prior to the start of every public work, they must communicate to landowners what is the estimated amount of charge.

Benefitted landowners are identified according to distance to improvement. However, the selection criteria may vary depending on the type of project. Some property owners may be exempt from payment, typically due to their low-income status.

The charge is calculated according to distance to improvement, size and position of the land, estimated land value gains and capacity to pay of landowners. Municipalities typically carry out a socioeconomic study to define owners' capacity to pay. In the end, each landowner will have to pay a different amount.

The collected funds are earmarked for the purpose of financing the specific public work. The total amount collected can never surpass the total project cost, otherwise it would constitute a confiscatory collection.

The main obstacle to implementation is the lack of political will to implement the levy, due to resistance by property owners. They frequently appeal against the charge, which renders the process lengthier and more difficult. Most local governments lack sufficient administrative capacity to design and implement the tool. Land registries are inaccurate, which renders the calculation of the land value increment difficult.

Land readjustment

Land readjustment is an instrument designed for the purpose of urban expansion. Private landowners can file an application to conduct a land readjustment project in rustic land plots, that is, non-urbanized land located in newly converted urban land (art. 60 of the Supreme Decree 029/2019). The current legislation was enacted in 2011 and has been little used since then. Public entities do not get involved.

Rustic plots, due to their original shapes and dimensions, would otherwise hamper the allocation of public spaces and public equipment. By readjusting and servicing these plots, urban expansion is carried out in a more integrated and effective way, in the benefit of private landowners and of the wider municipality.

All property owners willing to conduct land readjustment must agree to join their undeveloped lands. If they agree, a new legal entity is formed to manage the project. This private entity is responsible for filing the application and executing the project, which includes readjustment of plots and distribution of charges and benefits. Landowners often opt not to participate, and the necessary consensus is almost never reached.

A share between 13% and 24% of the area is reserved for public improvements, such as public roads, public utilities, schools, parks and green space – from which landowners will benefit. After readjustment, landowners receive a plot with a value proportional to their original holdings. No cash substitutions are allowed.

In 2021, the national government enacted a new framework of land readjustment, which is yet to be implemented (Law 31313/2021). Besides urban expansion, land readjustment will be used for urban development and renewal. Instead of 100% of consent, owners whose properties represent 60% of the total area will have to agree with the project for it to happen. Public authorities will be able to initiate land readjustment projects, too, which means that expropriations could be carried out if needed. The goal is to broaden the scope and frequency of land readjustment.

The main obstacles to implementation are resistance from landowners and the low quality of land registry systems.

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Poland

Land value capture in Poland

Several land value capture instruments are used in the country (Table 2.45). Land management for strategic purposes is limited, despite the legacy of public ownership of land. The most common developer obligation is the one charged to landowners upon land subdivision. Through another type of developer obligation, developers compensate the impacts of a new development by building adjacent roads. Municipalities make moderate use of infrastructure levy and very rarely carry out land readjustment projects. Municipalities can charge landowners for land use changes that increase property values in excess, but they rarely do so.

Table 2.45. Poland: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Strategic land management	None specific	Articles 20, 23.1, 25 and 24.2 of the Real Estate Management Act (1997)	All levels of government	Frequent
Infrastructure levy	Oplata adiacencka (adjacent levy)	Article 4.11 of the Real Estate Management Act (1997)	Local governments	Moderate
Developer obligations	Land subdivision levy	Art. 98 of the Land Management Act	Local governments	Frequent
	Budowa lub przebudowa dróg publicznych (construction or reconstruction of public roads)	Art. 16.1 of the Public Roads Act (1985)	District and local governments	Moderate
	Inwestycja towarzysząca (accompanying development)	Art. 22 of the "special residential development act" (2018)		Rare
	Inwestycje uzupełniające (complementary developments)	Art. 37 of the Spatial Planning and Development Act (2003)	Never	
Land readjustment	Scalenie i podział nieruchomości (merge and division of real estate)	Chapter 2 of the Real Estate Management Act (1997)	Local governments	Rare
Charges for development rights	Planning levy (Oplata planistyczna)	Art. 36.4 of the Spatial Planning and Development Act (2003)	Local governments	Moderate

Enabling framework

Poland is a unitary republic with a three-tier system of subnational government: 16 regions (*Voivodeship*), 380 counties at the intermediate level (*Powiat*) and 2 478 municipalities (OECD/UCLG, 2019, p. 392^[1]).

The national government creates the legal framework of land value capture. Municipalities are the main actors responsible for spatial planning (OECD, 2017, p. 169^[2]). They may adopt local development plans that are a default basis to get the building permit. Yet, local public officials have almost no discretion in granting planning permits that are theoretically an auxiliary, but in practice the most common way to obtain the building permit. Municipalities must enact specific regulations to implement land value capture instruments such as planning, infrastructure and subdivision-based levies. For other instruments, however, the national framework is sufficient, and the challenges relate to practical aspects of implementation.

Strategic land management

For historic reasons, the government owns a large amount of land. They manage the land stock to support investment and development of vacant, abandoned or unused land. Municipalities may keep land stocks for development purposes, such as residential and infrastructure facilities (Real Estate Management Act of 1997). While land banking as such does not exist, public land sales are frequent.

Municipalities have a large stock of vacant land that they manage. The government sells the land at market price to the highest bidder or leases it to generate revenues. If they need to purchase land for a specific public project, they do so in the form of concentrated plots, at market price or through transfers from another public entity.

Public land leasing is quite common, since the government holds a substantial amount of land. Land is leased for the purpose of generating public revenues or to secure the desired use of the plot. All levels of government frequently lease land in form of perpetual usufruct.

The ground rent is calculated as a percentage of the land value. There is no typical lease length. Leaseholders can transfer the lease or sublease the land to a third party.

The perpetual usufruct (*użytkowanie wieczyste*) is the prevalent form of public land leasing. It consists of a lease of 99 years paid annually. The rate ranges from 0,3% to 3% of the land value, depending on the planned use: for religious, charity, education, research, culture and health care purposes the rate is 0,3%; for agriculture, housing and sport it is 1%; for tourism it is 2% and for other uses it is 3%. Nonetheless, as the instrument is considered to be outdated, public authorities do not use the perpetual usufruct as a tool to enable land value capture.

The challenges to implementation are the lack of an adequate framework to contemporary land management needs, lack of financing for land acquisition, lack of coordination between public entities and insufficient administrative capacities. Public land leasing is less popular than it once was, because it is regarded as an unwelcome legacy of communism. Public entities prefer to sell their land stock to generate immediate revenues, instead of managing it strategically.

Infrastructure levy

Local governments may charge a levy to landowners to compensate the costs of public improvements that benefit them, such as roads, water and sewage infrastructure. Local governments make moderate use of the instrument and collect the revenues.

The levy can be charged when the public development increases the value of the benefited owners' land. Benefitted owners are those with plots adjacent or serviced by the constructed infrastructure. The levy amounts to a maximum of 50% of land value gains. In each municipality, a resolution of the municipal council will establish the exact percentage.

The fees are collected upon completion of the public improvement, either through a lump sum payment or in installments. No specific group of landowners is exempt from payment by law. Nonetheless, landowners can apply for an exemption through the municipality, showing their reasons for the request. If the municipality decides to grant the request, they must publish an official list of exempted landowners.

An obstacle to a more widespread adoption of the instrument is that affected landowners frequently appeal against the requirement to pay the charge, questioning benefits from public improvements. The resistance from property owners makes the tool unpopular.

Developer obligations

The most recurrent type of developer obligation is the one charged to landowners for land subdivisions in areas covered by a legally binding land use plan. Landowners may wish to subdivide their plots to conduct different types of development, build housing or service the area with roads. Land subdivision generates land value gains. Called *land subdivision levy*, it is paid in cash and set at the maximum of 30% of the land value increment. Local governments frequently adopt this instrument and collect the revenues.

In-kind developer obligations can be imposed on developers to compensate the impacts that new developments have on local infrastructure. There are three national frameworks to determine compensations, according to the type of project or impact. The compensations may include land, public space, infrastructure improvements, public roads construction or reconstruction and social housing. The most important and oldest framework is the one related to road construction or reconstruction, while the other two frameworks are special and have minor application. In all, the overall extent of developer obligations is small, and different than the one of land subdivision levy.

Developers are responsible for the construction or reconstruction of public roads caused by their non-road investment, in order to compensate the impacts on transit network (Public Roads Act of 1985). Formally, public road authorities can impose the obligations, since their adoption is mandatory. However, in practice, obligations are negotiated with developers. Some large cities have a structured procedure for negotiation. In small developments, in which the project knowingly has minor impacts on roads, developers are typically exempted of the obligation.

Municipalities may create rules regarding cash payments in lieu of road construction or reconstruction. In this case, the charge is calculated using a rule that considers development size and type, as well as the costs incurred by the jurisdiction due to the impacts on infrastructure. Cash payments are seldom used.

For residential development, developers may agree with a public entity to build additional infrastructure (s.c. “special residential development act” of 2018). The act requires a formal “agreement” between the municipality and the developer, if local standards of equipment with public infrastructure are not met.

In projects of urban renewal, developers may be asked to provide technical or social infrastructure or social housing (Spatial Planning and Development Act of 2003). Officially the obligations are not negotiable, as the requirements should be inscribed beforehand in legally binding land use plans. There is no example of adoption in the country up to the present date, so in practice there might be changes in the procedure.

Implementation is challenging because municipalities lack an adequate legal framework. In the obligation to build public roads, in most cases there are no official formulas to calculate the charges. The land subdivision levy can only be imposed when there is a valid legally binding land use plan for the area.

Land readjustment

Urban land readjustment can be used for urban expansion and renewal. Municipalities carry out land readjustment projects on their own in areas marked as mandatory in local development plans or upon request from landowners whose land amounts to at least 50% of the affected area. Municipalities very rarely implement the instrument and collect the revenues.

In the case of undeveloped plots, the participation of resisting landowners is compulsory. Land readjustment is legally binding and changes the status of land ownership. There is no need to resort to forcible mechanisms such as expropriations.

A share of readjusted plots is reserved for road construction – from which landowners will benefit. Landowners receive cash compensation for the market value of land handed over for public roads. Municipalities are responsible for building this basic infrastructure, in exchange for a cash payment from

landowners (*opłata adiacencka*) that is calculated as a share of land value increase due to the land readjustment carried out. This share is 50% maximum, upon municipalities' discretion.

After readjustment, landowners receive a plot with a surface area proportional to their original holdings, plus cash compensation for the land taken. However, if the land values more, landowners have to pay the municipality back a share of the land value increase. They cannot exchange readjusted plots for cash.

One obstacle to implementation is the resistance by landowners, who often appeal in courts against the decision to readjust plots. The other obstacle is that the revenues collected do not compensate the costs of carrying out land readjustment projects, mainly the costs of acquiring the land and constructing public infrastructure. Lastly, the fact municipalities frequently charge the land subdivision levy reduces the need to resort to land readjustment projects, which are more complex and involve multiple landowners.

Charges for development rights

Local governments can charge landowners for the increase in property values that results from changes in land uses stipulated in legally binding land use plans. The charge is paid in cash in a lump-sum, when and if the property is transferred. The charge cannot exceed 30% of the increase in property values. In theory, the implementation of the instrument is obligatory, but due to various possibilities to avoid executing it, in practice, local governments rarely implement it and collect the revenues.

The main obstacles to implementation are the narrow scope of incidence and the consequent small revenues collected. For one, the charge is only collected in the event a land transaction has taken place. Secondly, in accordance with the law municipalities can collect as little as 0,1% of the land value gains, in which case the charge would be smaller than the cost of incurring it.

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Portugal

Land value capture in Portugal

Developer obligations, land readjustment, and strategic land management are used in varying degrees, while infrastructure levies and charges for development rights are rarely used (Table 2.46). Developer obligations aim to compensate the impacts that a land development project has on local infrastructure. Land readjustment is common in land subdivision processes. The infrastructure levy is specific to large public works and adopted on a case-by-case basis. Municipalities rarely adopt charges for development rights, primarily because local laws do not yet enable implementation. The three levels of government make moderate use of strategic land management.

Table 2.46. Portugal: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Parâmetros de dimensionamento, cedências e compensações	Article 44 of Decree-Law 555/1999	Local governments	Frequent
	<i>Taxa pela realização de infraestruturas urbanísticas</i>	Articles 116 and 117 of Decree-Law 555/1999	Local governments	Rare to moderate
Land readjustment	<i>Reparcelamento do solo urbano</i>	Articles 164-170 of Decree-Law 80/2015 and Decree-Law 555/1999	National and local governments and private entities	Moderate
Infrastructure levy	<i>Encargo de mais-valia ou contribuição especial de valorização</i>	Specific legislation per project / area	National and local governments	Rare
Charges for development rights	<i>Transferências de edificabilidade</i>	Article 21 of Law 31/2014 and Article 179 of Decree-Law 80/2015	Local governments	Rare
Strategic land management	<i>Several</i>	Articles 26 to 36, 62(4) and 68 of Law 31/2014 and Decree-Law 280/2017	National, district and local governments and special purpose bodies	Rare to moderate

Enabling framework

Portugal is a unitary state with a two-tier subnational government structure: 2 autonomous regions and 308 municipalities. The mainland does not have a regional level government, and the two autonomous regions that exist are the overseas islands of the Azores and the Madeira (OECD/UCLG, 2019, p. 396^[1]).

The national government and municipalities create the legal framework of land value capture. The national government regulates spatial planning at the local level, notably through the National Programme of Spatial Planning Policy and with basis on the Law 31/2014 (*Law of Public Policy on Soil, Land-use Planning and Urban Planning*). Municipalities enact Municipal Director Plans, Urban Development Plans and Local Detailed Plans (OECD, 2017, p. 173^[2]).

The Law 31/2014 introduced changes to some land value capture instruments and determined the creation of Municipal Funds for Urban and Environmental Sustainability. These changes become operational when municipalities incorporate them into their urban plans and create such a fund. Some municipalities, however, have not yet revised their Master Plans or regulated the new obligations.

Developer obligations

The two types of developer obligations in the country are the compensation fee and the urbanisation tax. They are both rule-based mechanisms to charge developers for the impact that a new development or a development at higher density have on local infrastructure. They differ depending on the type of impact, if internal or external to the project. Municipalities commonly implement them and collect the revenues.

The compensation fee, which aims to offset the impact on infrastructure within the project, must be paid through the in-kind provision of land and public utilities (Article 44 of Decree-Law 555/1999). This obligation only applies to land divisions (“loteamentos”) and to edifications with significant urban impact (Articles 44, § 5 and 57, § 5 of Decree-Law 555/1999). Developers must assign areas within the project for green spaces, public utilities and infrastructure and, after that, transfer them gratuitously to the municipality (Article 43 of Decree-Law 555/1999). Alternatively, if the assigned areas are not transferred, the developer will be charged a fee, to be paid in cash or in-kind (Article 44, § 4 of Decree-Law 555/1999). In this case, municipal regulations shall establish the criteria and procedures to define the alternative compensation.

The urbanisation tax is charged to offset the impact on infrastructure external to the project (Article 116 of Decree-Law 555/1999). The fee is paid in cash and is intended to cover part of the costs of public improvements. The basis to calculate the charge is usually the size and type of development, but additional criteria may apply, depending on local ordinance. The urbanisation tax is used in parallel with the compensation fee.

The main obstacles to more widespread use of this tool are the low quality of land registries, the lack of administrative capacities and unclear or complicated calculation formulas. Developers sometimes consider the charges to be economically unfeasible and appeal against their adoption.

Land readjustment

Land readjustment is used for the purposes of urban expansion, urban renewal or brownfield regeneration. It was first introduced in 1965, and presently regulated by Decree-Law 555/1999 and Decree-Law 80/2015. Land readjustment projects are initiated by landowners alone or in cooperation with the city council. The national government and municipalities commonly implement or authorise land readjustment projects. Municipalities collect the revenues.

Land readjustment projects subdivide land plots and provide the basic infrastructure for development. Proved ownership of the original area in the official land registry is a pre-requisite. Another important condition is the consent of all involved landowners. If they do not consent, municipalities may carry expropriations of land at market value. Since the required consent level is often obtained, expropriations are not always necessary.

A share of around 30% the readjusted plots is reserved for public improvements, such as green spaces and parks, roads, public utilities and improvements – from which landowners will benefit.

Landowners receive plots located on or as close as possible to their original land, with a value proportional to their original land. Yet, if that is not feasible, they may agree to receive different plots or a residential or commercial unit instead of their original land. The owners will have to agree to a new division, depending on the project. Landowners may exchange reallocated plots for cash. Third party investors, such as developers, can receive readjusted plots in return for their investment.

The challenges to implementation are low levels of technical administrative capacities, low quality of land registries and high costs of expropriations. There are no adequate resettlement alternatives for affected landowners and other affected parties, such as tenants and informal residents. The revenues raised do not justify the costs to pool and readjust land.

Infrastructure levy

The national government and municipalities may create an infrastructure levy to recover the costs of road construction and public utility works. The levy is charged to landowners whose property is adjacent to the public work. The national government and municipalities rarely implement the instrument and collect the revenues.

The levy is to be paid in cash. The fee is typically calculated according to the expected land value gains and a score assigned for each land plot; which takes size, use and price of land, as well as distance to the public improvement into consideration. For instance, the fee for building a bridge between Lisbon and Almada was defined as 60% of the land value gains, calculated as the difference of the market value of land after and before the public work (Decree-Law 46950/1966). The calculation criteria can vary for every public project.

The instrument is used on a single-case basis. Previous legislative authorisation must be given prior to charging each specific contribution. For instance, the Decree-Law 51/1995 created a special contribution for landowners whose land was adjacent to a new bridge constructed over the Tejo River. The special contribution was created only for that major public work and lasted 20 years.

The lack of legal authorisation is a major obstacle to the adoption of the tool. Political will and administrative preparedness must be in place to create a special contribution for every public work deemed to cause land valorisation in adjacent areas. The political and administrative costs of collecting the fee are often higher than the revenues collected.

Charges for development rights

Developers that comply with land use purposes for public interest are allowed to transfer the density potential of that land parcel to a non-contiguous parcel that is better suited for greater densities. Municipalities rarely use this instrument and collect the revenues. The instrument was introduced in the legal system in 2014, and is yet to be incorporated into local master plans.

Developers may resort to this instrument if their project contributes to any of the following land use purposes: conservation of nature and biodiversity; safeguarding the natural, cultural or landscape heritage; prevention or minimization of environmental risks; rehabilitation or regeneration; adequate endowment of public infrastructures or green spaces; housing for social purposes; and energy efficiency (art. 21, § 1º of Law 31/2014).

As an incentive for complying with land use purposes, the instrument gives a benefit derived from building less than what is allowed. If developers submit a project with a building quota below the basic building quota of the zone, they will receive a certificate of building rights. Using the certificate, they can transfer the unused building rights to other projects, which will then benefit from a higher building quota. The result is that a different project will enjoy extra development rights.

Certificates may be exchanged among developers for a monetary value. However, the instrument itself is not paid for in cash. The certificates can only be used during the planning approval process of a development project.

The main challenges to implementation are unclear land use regulations and the lack of administrative capacities to design and implement the instrument.

Strategic land management

The national, regional and local governments acquire and retain lands in advance of needs for urban renewal, land consolidation and control of urban growth patterns. Strategic land management is only moderately used in the country.

The government acquires brownfield land that is abandoned or located on zones of historic preservation. Land is purchased at market price, obtained via transfers from another government entity, expropriated or through the exercise of a preferential right of acquisition.

The acquired land is not usually rezoned or redeveloped before being sold or leased. Although the government holds little land available to lease, they can lease land with the aim of fostering real estate development or development with a public purpose.

Lease length varies according to intended use: for instance, rural lease contracts are signed for at least 7 years, while residential leases under a superficies right used to be signed for at least 50 years, according to article 19 of Decree-Law 794/76, which was revoked in 2014, and are now defined on a case-by-case basis. The selection of the superficies tenants must be a public, open call. However, in many cases, it is done directly (*ajuste direto*), due to the public interest of the activity to be provided.

The ground rent is calculated according to the market value of land. Exemptions to payment may be granted to public or non-profit entities or if the land is destined for public purposes, such as social housing. In practice, many development projects on leased land are considered to be of public interest and therefore are exempt. If the government authorises it, the tenant may transfer or sell the lease in a secondary market.

The obstacles to strategic land management are twofold. First, when acquiring private land, the government often resorts to forcible instruments such as servitudes, expropriation and right of preference, in detriment of less intrusive mechanisms, which tend to be based on strategic planning and incentives. Secondly, there are obstacles of practical order, which include the lack of financing for land acquisition, lack of administrative capacities and lack of co-ordination between public entities.

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Singapore

Land value capture in Singapore

Several land value capture instruments are systematically used in the country, notably land readjustment and charges for development rights (Table 2.47). Strategic land management has a key importance, since land is a critical resource. The government is the largest landowner, and public land is often leased to private actors. Infrastructure levies are frequently used to fund and pay for the upgrading of high-rise housing estates and adjacent public infrastructure. There are no significant implementation challenges. There is no legal framework of developer obligations.

Table 2.47. Singapore: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Charges for development rights	Development Charge or Differential Premium	Section 40 of the Planning Act (1998)	National government	Always
Infrastructure levy	HDB upgrading programs	Part IVA of the Housing Development Act (1992)	National government	Always
Land readjustment	HDB Selective En bloc Redevelopment Scheme, En bloc collective sale	Land Acquisition Act (1966), State Lands Act (1996), Part VA of the Land Titles (Strata) Act (2009)	National government, special purpose bodies, land developers and private property owners	Frequent
Strategic land management	Government land acquisition, Government Land Sales Program	Land Acquisition Act (1966), Urban Redevelopment Authority Act (1990), Planning Act (1998), Singapore Land Authority Act (2002)	National government	Frequent

Enabling framework

Singapore is a unitary state with no second-order administrative divisions. As a small and densely populated city-state, strategic land use planning and management receive strong emphasis. Compulsory land acquisition and resettlement have been central to planned national development over the decades. The Urban Redevelopment Authority (URA) is the land use planning agency.

The *Concept Plan* is the planning instrument for long-term strategic land use and transportation. It was firstly enacted in 1971 and latest reviewed in 2011-2013. The *Master Plan* is the statutory land use plan which guides development in the medium term. It translates the broad, long-term strategies of the *Concept Plan* into detailed plans. It contains land use and density guidelines and must be reviewed every 5 years.

Charges for development rights

The national government charges a levy when developers or landowners request to increase the building density or to benefit from a previous change in zoning or plot ratio. An adjustment to zoning or plot ratio in the Master Plan only generates the obligation to pay the charge when landowners apply for development permission. To lift planning restrictions on leased public land, developers can file an application to the Singapore Land Authority. They will have to pay a Differential Premium, which is calculated using the same framework.

The charge amounts to a specific rate based on 70% of the increase in land value arising from rezoning or higher density. The charges are differentiated for nine land use groups across 118 geographical sectors and are reviewed every 6 months. The government publishes them on a website, which provides for greater transparency and certainty.

The charge must be paid in cash at the time the development rights are issued. Exemptions to payment may be granted for developments providing a social benefit or smaller than a specific minimum size.

There are no obstacles to implementation, as the charge, when not exempted, is always collected by the government. Property owners never appeal against the charge.

Infrastructure levy

Infrastructure levies are always collected from property owners, in the event of housing upgrading works and adjacent neighborhood improvements carried out by the government. It is important because 94% of high-rise government-built flats are sold by the government on a 99-year leasehold basis, and 80% of the resident population lives in these.

The instrument lies at the heart of a long-term renewal program which formally began in 1992, with the goal of bringing the standards of older flats closer to newer ones. The upgrading works encompass the interiors of flats and lifts, as well as common areas, public spaces and neighborhood improvements.

When the government proposes a renovation, at least 75% of residents must consent. All benefitted residents must contribute with a fee, without exemptions. The fees are calculated based on physical location, floor area and land use, but also considering the socioeconomic characteristics of residents. They are collected upon completion of the works, and the payment scheme varies with the capacity to pay of residents. The fees are destined to fund between 5% and 12,5% of the renovation works. The program is heavily subsidized by the government.

Overall, the program runs smoothly. Because residents are consulted before implementation, they rarely appeal against the requirement to pay the fee. Since the program is ongoing since the first pilot in 1989 and has a long-term perspective, it has become integrated into the routine of the public administration, and there are no present challenges in terms of administrative capacity and inter-agency coordination.

Land readjustment

Land readjustment is frequently used for the purposes of urban expansion, urban development or renewal. The national government, special purpose bodies, land developers and private property owners may all be involved in the execution of a land readjustment project. The national government collects the revenues.

For privately-led projects, at least 90% of property owners must agree to the collective sale (*en bloc*) of the land parcel for the redevelopment to take place. For developments older than 10 years, at least 80% of property owners must agree to the sale. If the project is publicly-led or has a public interest, participation of property owners is compulsory and may be enforced through expropriations. Land expropriations are always carried out when necessary, and compensation is paid based on the property values practiced at the market. Property owners rarely appeal against the decision of readjustment or the compensation.

If the project involves the reacquisition and construction of affordable housing units, after readjustment, property owners may choose to receive a new property or cash compensation. For existing affordable housing, the government acquires blocks of flats in order to redevelop and revitalise the area (*Selective En bloc Redevelopment Scheme*). Residents can then select a new subsidised home at a designated replacement site, together with their current neighbours. The scheme is limited to precincts with high redevelopment potential, i.e., precincts where the land can have a higher and better use.

Newly readjusted areas typically include publicly owned plots that can be sold or leased in the future. 100% of the costs of public improvements are typically recovered through the sale or lease of readjusted plots.

In all, the system functions well and there are no significant obstacles to implementation.

Strategic land management

The government actively acquires land for housing, industrial, commercial and public purposes, including redevelopment of housing estates. Land acquisition and subsequent readjustment, as described above, have greatly facilitated the construction of new towns, industrial and business parks, urban redevelopment of the central business district and infrastructure development in general.

Using direct government financing, property is typically acquired through purchase at market price or, if a payment in-kind is granted to property owners from subsequent development, at reduced prices. Acquisition may also occur through expropriation or transfers from another governmental agency. Since 2007, the country has moved to a market-based approach to determine compensation for land acquired using compulsory methods.

The acquired land is then rezoned and redeveloped. Development includes basic physical preparation, new roads, public utilities, administrative buildings and social housing. Development may be carried out by the government, alone or in partnership with private developers. Developers may conduct the works by themselves, too, as long as they follow previously approved spatial and land use plans.

The land may be sold or leased to private actors or transferred to a government agency. Through its vacant land sales program, the government works with the private sector to implement local land use plans. When transferred to public entities, the land is typically used for public purposes as well as for affordable housing, industrial and business parks.

Sales usually occur at market price to the highest bidder, through the Government Land Sales program. In strategic locations, the public tender may include criteria such as urban design and business, in order to select the best development project. In rare instances, such as for the two Integrated Resort sites at Marina Bay and Sentosa in 2005, land prices were announced before developers were invited to submit concept proposals, with the aim of selecting the most outstanding design and concept for the projects.

Public land leasing is a very common practice, being adopted in the publicly built high-rise housing estates and also for private development. Exemptions or discounts to payment may be given to not-for-profit entities and for projects with a public purpose. Lease length is determined by the permitted use of land: typically, 99 years for residential and commercial uses and 30 years for industrial and other uses. Leaseholders are allowed to transfer the lease in a secondary market or sublease it.

The revenues collected belong to the government and form part of the country's reserves. The reserves are invested professionally and on a commercial basis by the central bank and two government-owned funds and investment holding companies. Annual investment income from the reserves is an important source of revenue for the government.

There are no obstacles to implementation. The government owns 90% of the country's total land area. Through the *Government Land Sales Program*, the purpose and locations of sites are strategically chosen to achieve economic and land use objectives.

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Slovak Republic

Land value capture in the Slovak Republic

Several land value capture instruments are used in the Slovak Republic (Table 2.48), including developer obligations, strategic land management and land readjustment, principally for urban development, renewal, and expansion, and to recover revenues relative to developments' impacts on infrastructure. The national government provides a legal definition of land value capture and enables its use through national laws relating to land use and planning, though instruments are mostly deployed by subnational governments. Several obstacles limit the broader use of land value capture, including unclear development norms and land use regulations, inadequate administrative capacity and financing, the long-term absence of strategic planning, and an insufficient legal framework.

Table 2.48. Slovak Republic: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Poplatok za rozvoj	Act 447/2015 Collections of Laws (amendment made 2019)/2016	National, local governments	Frequently
Land readjustment	Pozemkové úpravy	Act No. 330/1991 Collections of Laws (with latest amendment in 2020)/1991	District, department, local governments	Frequently
Strategic land management	Strategický pôdny manažment	Act no. 116/1990 Collections of Laws /1990 Act no. 330/1991 Collections of Laws /1991 Act no. 504/2003 Collections of Laws /2003	National government	Rarely

Enabling framework

The Slovak Republic is a unitary state with two subnational levels of government: 8 regional and 2 927 local governments (OECD, 2022^[3]). The Slovak Republic has a hierarchical planning system with four levels of plans (OECD, 2017, p. 179^[2]). The Slovak Republic's national, regional, and municipal governments are responsible for the framework legislation that enables land value capture. The Slovak government values land using a market-based approach. However, there is no legal definition of land value capture in Slovakia. Public officials have little discretion in granting planning permits.

The principle of a social function of property is included in the Slovak Republic's constitution.

Developer obligations

The legal basis for developer obligations is provided by national law, and frequently used. Local governments typically charge developers for the approval or support of new land development, or in exchange for the right to develop land at a higher density or height. The purpose of development fees is to provide cities with additional resources for building new infrastructure so that new construction brings immediate benefits for long-time residents. The legal basis for developer charges is provided by national law, and developers rarely appeal against requirements.

Developers are frequently charged cash or required to provide in-kind contributions to compensate for the impact of their developments on infrastructure. Charges are calculated using an established rule, based on the size and type of development, or the area or neighbourhood on which the development takes place. Charges must be paid before or at the time that the development receives approval. Developers can be exempted from such charges under certain conditions, including maintenance to an existing building that does not alter the total floor area, construction or extension of a floor area up to 25 square metres, or the provision of a public good or service. In the past, developers have made efforts to obtain one exemption in particular, worded as “significant investment according to a special regulation”. This has typically been done in order to have construction projects exempted from development fees, and because under this status developers could apply expropriation in the public interest--and for appropriate compensation.

Developer obligations raise an estimated 30 million EUR per year. In 2019, the city districts of Bratislava levied a development fee of over 9.3 million EUR; however, it is estimated that only 28% of money collected from development fees were used to build new infrastructure. The average amount that developers are charged to obtain development approvals is 30 EUR per square meter, factoring in a wide range: a maximum limit of 35 EUR per square meter is levied in all major cities, while smaller municipalities range from 5 to 35 EUR.

Public improvements or services provided by developers typically include public space, public transport, roads, parking, schools or elderly care, and public utilities. Developers who provide public improvements can receive discounts on charges. When developers provide in-kind contributions to obtain development approvals, an average of 70% of the public costs created by their developments is recovered through such provision. However, this is determined on an ad hoc basis.

Subnational governments can charge developers, issue development approvals, and spend resulting revenues without the need for approval from higher levels of government. Development charges are decided on and administered by municipalities, with revenues from development charges feeding the municipal budget. The redistribution of revenue from development charges between the city and the city districts is determined by the city's statute. In Bratislava and Košice, the two largest cities, city districts have considerably more discretion and capacity to charge developers, collect revenue, and decide on how revenue is spent, similar to most municipalities.

As the national capital and a self-governing region since 2002, Bratislava has particular administrative system where city districts are the collectors and administrators of fees. The revenue from the fee is divided between the city districts and the city at roughly a 2:1 ratio in favour of the former. According to the law, the city and city districts can only spend development fee revenues on capital investments for purposes specified by law. However, local governments have so far used only 3.6 million EUR, intended for the construction of transport, social and cultural infrastructure, and an increase in the share of greenery. This represents less than 28% of the total revenues collected through development charges.

Although developers pay developer charges to municipalities, which in most cases is set at the upper limit of the rate decided on ad hoc between cities and developers, especially in larger cities, they often also face charges for building public infrastructure. Although the city uses development charges to reimburse capital expenditures related to construction costs of public infrastructure, this can create a double financial burden for developers. As a consequence, these costs are often passed down to end-users, e.g. tenants, and is one cause of large increases in real estate prices in and around Bratislava. Meanwhile in small municipalities located in poorer regions with few job opportunities, local government development fees are almost never applied. They do not want to introduce additional barriers in locations that are not experiencing growth.

The main obstacles to developer obligations include unclear development norms and land use regulations, an inadequate legal framework, and that the benefits and provisions provided do not justify the cost of the charges.

Land readjustment

Land readjustment in Slovakia is used for urban expansion, development, and renewal, with the legal basis provided by national law. Land readjustment projects are typically executed by public entities. There are 120 land readjustment projects carried out yearly in Slovakia. The required consent level among landowners is frequently reached, and projects frequently executed.

Readjustment projects can take place when all original plots in the readjustment area are registered in the land registry, and private landowners hold at least two thirds of the area. To execute land readjustment, consent must be achieved among at least two-thirds of the land that forms the perimeter of the project. If consent is reached but some landowners resist providing their plots, compulsory participation is employed. After the pooling and readjustment of plots, landowners receive a plot proportional to their original holdings based on either value, surface area, or both. Landowners can exchange reallocated plots for cash. Landowners can be reallocated plots on or close to their original land, different plots within the area, or receive jointly owned plots. If the readjusted plots are less valuable than the original ones, the affected landowners are not entitled to receive compensation; however, if the readjusted plots are more valuable, landowners are not required to pay a cash compensation. Land readjustments typically involve leaseholders and tenants, and landowners are typically involved in the consultation process. Landowners sometimes resist decisions to pool and readjust their plots.

A share of readjusted plots is typically reserved for public infrastructure or services, with no limit to the amount. However, limits have been placed on certain subnational land readjustment projects involving greenfield development. The cadastral area of Brezovica reserves 13% of the potential readjusted plot, while a project in the Lamač region has reserved 15%.

For brownfield development, land designated for public infrastructure owned by the state is used first, then the land of the municipality. If there is not enough land for public infrastructure from the state and the municipality, then the need for sufficient land is borne by all participants according to the proportion of their claims for compensation.

Across all land readjustment projects, 3 000 hectares are reserved for public infrastructure per year, and typically includes public space, roads, parking, public utilities, sports facilities, environmental protection measures, and water management measures. Collectively or publicly owned plots created through land readjustment can be sold or leased.

Subnational governments that pool and readjust plots need approval from national level government. The list of cadastral areas is prepared on the basis of proven urgency, according to the Ministry of Agriculture and Rural Development of the Slovak Republic.

Obstacles to land readjustment include a lack of funding for faster submission of land readjustment projects by the state, which are currently in demand by both municipalities and landowners.

Strategic land management

Strategic land management is used for urban renewal, redevelopment and land consolidation, but there is no legal basis provided by national law. However, major legislative reforms are being prepared. The forthcoming Development Act would establish a new norm regulating the issue of strategic management of the development of territorial entities. The country has chosen the structure of inter-municipal cooperation. Under the current legislative environment, municipalities can ensure the strategic management of development in their administrative territories, use joint spatial plans among municipalities and pool the financial resources needed. However, strategic land management is mostly implemented informally within broader spatial planning, and is not widely conceptualised or defined as an instrument specifically for land value capture, which undermines its effectiveness.

Acquisitions for strategic land management are not limited to specific types of land. They can be both greenfield and brownfield sites. Land acquired for such purposes is typically located within the administrative jurisdiction of the acquiring government, and is acquired either via purchase at market price or via transfer from the government. It is not possible for the government to freeze land prices before purchasing, and there is no limit to the length of retention of land acquired for strategic land management.

Land acquired for strategic land management is typically rezoned by the government or an authorised public entity, and is developed before it is sold. Developments include roads or parking, and is carried out entirely by the government. Land acquired for strategic land management can be leased, e.g. fixed-length operational and maintenance concessions of a motorway network via public-private partnership. Though the government does not hold a significant amount of public land to lease, public land can be leased to generate public revenue, facilitate development with a public purpose, or facilitate planned urban growth and development. Land can also be transferred to other public entities, e.g. from the Slovak Land Fund to a municipality.

The Slovak Republic's national, regional, and municipal governments, as well as the Slovak Land Fund, can each strategically acquire and retain land, dispose of the acquired land, and receive the revenues generated. Subnational governments can do so without approval from a higher level of government.

Obstacles that hinder the practice include a lack of an adequate legal framework, a lack of administrative capacity of public entities, a lack of coordination between the relevant public entities, and a lack of financing for the acquisition of land. Other obstacles include the existence of uncoordinated approaches across sectors, lengthy administrative processes, the long-term absence of strategic planning, the lack of capacity in most municipalities and self-governing regions to create or manage the process of creating strategic documents.

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Slovenia

Land value capture in Slovenia

Several land value capture instruments are used in Slovenia (Table 2.49). The use of land value capture instruments is enabled by both national and local laws relating to land use and planning, but there is no legal definition nor guiding policy for land value capture. Nonetheless, instruments are principally used for urban expansion and development. Main obstacles include resistance by landowners and developers, a lack of administrative capacity or coordination among public entities, an inadequate legal framework, and a lack of financing for the acquisition of land.

Table 2.49. Slovenia: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Public utility fee (komunalni prispevek) Compensation for using building land (nadomestilo za uporabo stavbnega zemljišča)	<i>Spatial Management Act, Official Gazette of the Republic of Slovenia No. 61/2017, 199/2021 – ZureP-3</i> <i>Rules on the criteria for the assessment of building land development fee/2007 (amended 2019)</i> <i>Decree on the programme for servicing building land and on the ordinance determining the base for assessing the public utility charge for the existing public infrastructure and on the calculation and assessment of the public utility charge, 20/2019</i>	Local governments	Always
Land readjustment	Komasacija	<i>Spatial Management Act, Official Gazette of the Republic of Slovenia No. 61/2017, 199/2021 – ZureP-3</i> [periodically updated since 2002] <i>Real Estate Cadastre Act, Official Gazette of the Republic of Slovenia No 54/2021</i> [Replaced the Real Estate Recording Act from 2006]	Local governments, private landowners	Sometimes
Strategic land management	strateški prostorski akti	<i>Spatial Management Act, Official Gazette of the Republic of Slovenia No. 61/2017, 199/2021 – ZureP-3</i>	Local governments, public-private partnerships	Rarely

Enabling framework

Slovenia is a unitary state with one subnational level of government: 212 local governments (OECD, 2022^[3]). The national and local levels of government both create the legislative framework that structures the spatial planning system. However, there is no legal definition of land value capture and no national policy document guiding its use. Public officials at national and local levels have little discretion when deciding the granting of planning permits.

The principle of a social function of land is included in Slovenia's constitution (Articles 67 and 71).

Land readjustment

Land readjustment is used for urban expansion and development, with the legal basis provided by national law. Projects can be carried out by local governments and private landowners, and executed only in the planning zones. Local governments do not need approval from higher levels of government to pool and readjust land plots, however the majority of projects are initiated and funded by landowners. Local

communities are involved as landowners or as co-financiers of the parts of a project related to public infrastructure and services. Overall, about five land readjustment projects are carried out per year.

Most of the land readjustment projects are contract based where all land owners actively participate and agree with the land parcel restructuring and sign a contract. A special confirmation document is required from the spatial development authority, that the new land parcel structure is inline with the spatial planning acts.

In the case of majority-based land readjustment, which is rarely used, landowners are also actively involved in all the phases of the process. For the majority of land readjustment projects, in order to pool and readjust land plots, consent must be provided either by 67% of landowners, or by landowners who own 67% of the land, depending on the specifics of the project. The process is legally defined, and includes public hearings and consultations. The final decisions of each phase are then publicly announced, and landowners can appeal. However, in instances where a decision that is appealed does not conflict with the law, the new land plot structure is enforced, leaving the landowner to seek any additional desired compensation at the second decision level (ministry). However, land cannot be expropriated.

After the pooling and readjustment of plots, landowners can be compensated in several ways. If feasible, they receive a readjusted plot proportional to their original holdings based on either value or surface area. If the original plots are smaller than a specific size, or if the readjusted plots are less valuable than the original ones, landowners can be compensated in cash. Conversely, if the readjusted plots are more valuable, landowners are required to pay a cash compensation. Landowners can also exchange reallocated plots for cash, receive different plots within the readjustment area or receive jointly owned plots. A share of readjusted plots are reserved for public improvements, typically roads or parking, with no limit to the amount. Other stakeholders, e.g. tenants and the local community, can participate unofficially.

Landowners sometimes appeal against the decision to pool and readjust their plots. Obstacles that hinder land readjustment include resistance by landowners, and a lack of administrative capacity among public entities.

Developer obligations

The legal basis for developer obligations is provided by national law, empowering local governments to define the charges used to fund public infrastructure, services, and utilities. Developer obligations and infrastructure levies usually take the form of land development fees (e.g. public utility fees), which must be paid before a building permit is issued or before the new/improved public service is put into operation, and taxing for the use of building land, which is an annual payment and can be treated as property tax.

Thus, local governments are responsible for issuing development approvals and fees on developers who benefit from public infrastructure or services. They also receive revenues generated by developer obligations, and do not need approval from higher levels of government. The national government does not interfere in the recovery of developer charges or land value increases. Local governments have a high level of discretion when charging developers, estimating the total fee, identifying relevant developers, and reinvesting the collected funds.

Local governments can charge developers for development approvals when charges are applied following a specific plan (e.g. local master plan), or for issuing building permits in the area of existing public infrastructure. They can also charge developers who benefit from a public improvement or service.

Charges can be based either on established rules or negotiated on a case-by-case basis. When based on established rules, charges typically take into account the size, location, and/or physical characteristics of a development, as well as the floor area ratio to land plot area. When decided directly between the jurisdiction and developer, negotiations concerning charges are unstructured and follow an ad hoc procedure for each development approval. Charges levied on developers benefiting from a public

improvement or service are determined according to a score for each plot of land and property, calculated based on floor area, size, and/or ratio compared to the land plot area, or the use of the land (e.g. industrial, residential).

Developers can be exempt from charges for development approvals if their developments meet certain criteria, e.g. facilitate the delivery of public infrastructure or services, or provide a social benefit that outweighs their impact on infrastructure. As part of joint venture projects between municipalities and developers, the latter can provide cash, in-kind contributions such as land, public space, public improvements or services, or a combination to obtain development approvals, either before or at the time that approval is granted.

The timing of payment by developers benefiting from public infrastructure or services depends on local decree as well, however they are usually paid in lump sum payments when issuing building permits. In the case of new facilities, the payment is done once the infrastructure is complete and once the landowner can benefit from the service being provided. If the landowner co-financed the infrastructure project in question, the lump sum of the charge can be reduced in proportion to the estimated contribution.

Public infrastructure or services provided by developers typically include public space, roads, parking, schools or elderly care, and public utilities. In 2019, local communities collected an approximate 70 million EUR through public utility fees in exchange for issuing building permits.

Develop/land owners sometimes appeal against the requirement to pay a development charge. The main obstacles that hinder the use of developer obligations are insufficient administrative capacity of public entities, and occasional resistance from developers.

Strategic land management

Strategic land management is conducted by state and local governments or through partnerships between government and private developers (e.g. public-private partnerships), and is financed via direct government financing. Land can be strategically acquired and retained by local government for infrastructure and other projects related to public services, but there is no legal basis for strategic land management provided by national law. When applied, its aim is to redevelop vacant or unused land, which is usually scattered throughout a jurisdiction.

Land acquired can be either greenfield or brownfield sites, and is acquired either through purchase at market price, via transfer from the government, or expropriation. The government cannot freeze land prices before announcing a public investment or rezoning, and then buy the land at that price. Nor is there a time limit for how long land acquired can be retained.

Land can be rezoned by the government or another authorised public entity, and developed before sale. Developments carried out include conducting drainage and decontamination of soil in preparation for use, public space, public transport, roads and parking, and public utilities.

Public-private partnerships (PPPs) are set up as joint ventures or as a contract between public and private entities, where private entities have certain responsibilities for developing the acquired land and financing its development. Both national and local governments partake in PPPs.

Public land acquired via strategic land management can also be leased. This option is typically used for agricultural and forest land, but municipalities also practise the leasing of building land. Land is also disposed of for roads and land readjustment/consolidation.

Local governments and independent public entities strategically acquire, retain, and dispose of acquired land. They do so without approval from a higher level of government. Both national and local governments receive the revenues when acquired land is sold.

In principle, there is no legal provision for strategic land management in urban areas. For public infrastructure and services at the national level, public entities are usually responsible for acquiring and managing land. Despite the lack of holistic legislation on strategic land management for these purposes, the government is active in the land market to acquire land needed for public purposes and strategic projects. At the local level, governments possess land that is managed and offered in the market. The active land policy of a local community is crucial for public services and national or local government cannot acquire the land on the market, expropriation may occur, but this is a last resort for land acquisition for public purposes, and it is not conducted very often.

Obstacles that hinder strategic land management include an inadequate legal framework, a lack of administrative capacity of public entities, a lack of coordination between the relevant public entities, and a lack of financing for the acquisition of land.

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South Africa

Land value capture in South Africa

Several land value capture instruments are used in South Africa (Table 2.50). Instruments are used for urban renewal, redevelopment, and brownfield regeneration, to guide spatial planning, and to provide affordable housing and local service delivery. The main obstacles that limit the broader use of land value capture include a lack of legal framework or administrative capacity, landowner resistance, inadequate resettlement sites, and the need to protect vulnerable populations.

Table 2.50. South Africa: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Development charges	Spatial Planning and Land Use Management Act/2013	Local governments	Frequently
Strategic land management	Catalytic Projects	The Public Finance Management Act/1999; The Municipal Finance Management Act/2003; The Government Immovable Asset Management Act /2007	National, local governments	Occasionally
Land readjustment	N/a	n/a	Landowners	Occasionally
Infrastructure levy	City Improvement District levies	n/a - Community Improvement Districts or Voluntary Management Initiatives	Land owners	Occasionally

Enabling framework

South Africa is a quasi-federal state with two subnational levels of government: 9 provinces and 257 municipalities (including metropolitan, local, and district) (OECD/UCLG, 2019^[1]). The authorisation of local government is enshrined in the 1996 Constitution, prior to which local government had no legal constitutional backing. The social function of property is included in South Africa's Constitution.

All three levels of government provide the legislative framework that enables land value capture instruments. The provincial level is responsible for regional planning, and the local level is responsible for urban and land use planning. However, there is no legal definition of land value capture.

Developer obligations

Development charges have existed in some form in South Africa for over a century. During the 20th Century they were legislated through provincial laws. However, with the country's new constitutional dispensation achieved in 1994, municipal bylaws became the primary instrument, causing vast disparities in the ways that different municipalities make and implement such bylaws. There is also a strong legal principle that additional development rights should only be allocated for planning reasons, not as a quid pro quo between a municipality and a developer. These charges must go toward a specified municipal purpose related to infrastructure investment, but like any other payment to a public authority may fuel corruption within the municipal system.

Developers in South Africa are frequently charged to compensate for their impact on adjacent infrastructure when seeking approval for new developments, when building denser or higher, or when seeking exemptions from planning regulations that will impose additional loads on existing infrastructure networks. Developers are charged regardless of whether their development impacts the immediate surrounding neighbourhood, as the impacts of every development are felt at a city-wide scale.

There is no explicit legal basis for developer obligations at the national level although there is implicit authority in the Spatial Planning and Land Use Management Act, thus charges are levied through municipal bylaws. Some municipalities don't charge them at all, preferring to cover infrastructure costs through property taxes and tariffs on water and electricity. Weaker municipalities don't charge them because they lack the capacity and see very little development.

Charges are calculated using established rules set by each municipality, based on the cost incurred by the jurisdiction due to the developer's impact on infrastructure, as well as the size and type of development.

Developers can be exempt from such charges if the development provides social benefits that outweigh its impact on infrastructure. Charges are typically paid before or at the moment a development receives approval. Payments can take the form of cash or the provision of public improvements and services to the municipal infrastructure networks, such as roads, sewers, water, and electricity.

Local governments issue development approvals, receive the revenues from charges, and do not need approval from higher levels of government. They have a high level of discretion when issuing approvals, setting charge rates, negotiating with developers, and re-investing collected funds.

Developers sometimes appeal against charges. The main obstacles to developer obligations include unclear development norms and land use regulations, the lack of administrative capacity among public entities, and that revenues raised through charges do not justify the administrative cost.

As of 2021, the national government intended to rectify via new legislation the wide discrepancies in developer obligations charged by different municipalities through the introduction of uniform national principles and rules which have been completed after many years of consultation. Final legislative approval has not yet been given though.

Strategic land management

Strategic land management is used to transform moribund property into productive use, control urban growth patterns, and guide spatial planning. The legal framework governing the disposal of public land however is very restrictive and onerous, mainly as a result of provisions designed to curb corruption.. Due to historical patterns of distribution and ownership according to race, land is a contentious political issue in South Africa. Innovative public-private arrangements to develop land are difficult to implement, especially for municipal government. Implicit in the legislation is a particular mistrust of local councillors' capacity to execute strategic land transactions in the public interest.

A potential legislative reform concerning strategic land management, The Expropriation Act, is under review and will be amended to identify criteria for when compensation can be below market value or, in specific cases, nothing. The intention is to enable the state to acquire more land in order to achieve national strategic objectives (primarily urban and rural land reform).

Land acquired for strategic management is predominantly vacant, abandoned, or unused, because the state cannot afford land situated in a more valuable location or zoned for development. Such land is either acquired at market price or transferred from a governmental agency.

The government cannot freeze land prices before announcing public investment or rezoning to buy the land at that price. Strategic land management may therefore only result in land value capture if the government expropriates the land well in advance of public investment or rezoning plans becoming public knowledge. However, the government or an authorized public entity does rezone land after its acquisition for strategic land management, and develop it before it is sold. There is no time limit for retaining land.

Development of land acquired through strategic land management is typically financed directly by the government. Developed land is then either sold through public tender to fulfil social needs such as affordable housing or transferred to a municipality that solicits proposals for developments that include subsidised housing. The country's flagship housing programme, begun in the mid-1990s was effectively a

strategic land management scheme that provided up to 4 million “housing opportunities”, either on a small parcel of urban and peri-urban land or via informal settlement regularisation, on land which was acquired and handed over to households earning below a prescribed monthly income.

All levels of government acquire, retain and dispose of land, and receive subsequent revenues. Subnational governments do not need permission from a higher level of government to acquire or dispose of land, but they must adhere to the relevant legislation.

The government also has the ability to lease its land to generate public revenue and facilitate development that benefits the public, e.g. affordable or social housing. However, land owned by the government is seldom leased in practice. This is in large part because publicly owned land is very difficult to dispose of. In urban areas, different government agencies often hold public land hopes in order to meet a future need for the expansion of public facilities.

Obstacles that hinder the practice include a lack of legal framework, administrative capacity, or coordination among public entities, a lack of financing for the acquisition of land, and that revenues raised through strategic land management do not justify the costs.

Land readjustment

Land readjustment in South Africa is used for urban development, urban renewal, and brownfield regeneration, though the legal basis is not provided by national law. However, it is usually executed by private landowners on an ad hoc basis in order to increase the value of their land. In the absence of any enabling legal framework or active encouragement from city officials, land readjustment as commonly understood internationally does not happen often in South Africa. Rather, it occurs if private landowners decide that their mutual interests are best served by a readjustment exercise.

In order to secure the necessary planning and subdivision approvals, private landowners ensure that certain land parcels are identified for public improvements (parks, public transport facilities, roads, etc.). With the recent commitments to inclusionary housing in some major cities, it is likely that this land may also be identified for affordable housing. However, this outcome is generally considered incidental to landowners seeking the best outcome for themselves.

After the pooling and readjustment of plots, landowners receive a plot with a value proportional to their original holdings and can exchange their reallocated plots for cash. Third party investors can also receive adjusted plots in exchange for investing in a project.

Landowners may receive readjusted plots on or close to their original land, or in a different place within the readjustment area. They may also receive jointly owned plots, or may receive a residential or commercial unit in lieu of their original plot of land. If readjusted plots are more valuable than their original ones, landowners are not required to pay compensation.

Obstacles to land readjustment include the lack of any adequate framework or administrative capacity among public entities, the cost or controversy related to expropriation, the lack of resettlement alternatives for affected parties, and the need to protect marginalised populations impacted.

Infrastructure levy

There is no legal basis for infrastructure levies provided by national law, and jurisdictions rarely issue them. However, property owners in certain areas, after a consultative process among landowners there, can be charged a fee if they benefit from public safety enforcement, waste management, and urban beautification. Provincial legislation covers these processes, as well as municipal bylaws. These levies and services are often conducted by Business Improvement Districts, known in South Africa as Community Improvement Districts (CIDs) or Voluntary Management Initiatives (VMIs). Though not executed by the public sector, CIDs have a land value capture component by levying fees in exchange for the provision of such services

that increase property value. In this context, local landowners organise themselves to invest in the improvement of the area at their own expense, within a quasi-legal structure.

Public improvements and services are typically executed by private property owners in the area, who also share the cost. Costs are assigned using a calculated score based on floor area, type of land use, and the socioeconomic status of the property owners. Poor households can be exempt from the cost of public improvements or services. Fees levied on property owners are paid on an ongoing basis, collected through instalments.

Local governments are typically responsible for levying such fees, but private entities receive the revenues generated. Property owners paying the fee partake in the consultation process, but if the expected improvement or service is not provided, money is not returned. The national government does not interfere in the recovery of land value increases.

Property owners sometimes appeal against fee requirements. Obstacles that hinder infrastructure levies include resistance by property owners, property owners' inability to pay, and the lack of an adequate legal framework.

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Spain

Land value capture in Spain

Several land value capture instruments are used systematically in Spain (Table 2.51). Non-negotiable developer obligations within land readjustment are mostly used, with differences across regional urban planning legislations and local government capacity levels. The instrument with the longest tradition, the infrastructure levy, is progressively less used due to resistance from landowners and difficulties in managing revenue collection. Strategic land management has gained prominence in recent years, with the creation of land banks and special-purpose bodies. Charges for development rights are almost never used.

Table 2.51. Spain: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	<i>Convenios urbanísticos</i>	Article 9.8 of the Land Act (TR 7/2015)	National and local governments	Moderate
Land readjustment	<i>Reparcelación urbanística</i>	Articles 13.2.c and 14.c of the Land Act (7/2015) Precise legal provisions are contained in regional planning laws	Local governments, special-purpose bodies, private developers and landowners	Frequent
Strategic land management		Art. 51 & 52 of the Land Act (7/2015)	Regional and local governments and special-purpose bodies	Moderate
Infrastructure levy	<i>Contribución especial</i>	Article 2.b. of the Tax Act 58/2003	Local governments	Rare

Enabling framework

Spain is a state with three levels of government: one central government, 17 autonomous communities at the regional level, and 50 provinces, 8 124 municipalities and 2 Autonomous Cities at the local level (OECD/UCLG, 2019, p. 417^[1]). Municipalities, as the main actors in land-use planning, prepare and enact local plans, which, in most cases, receive final approval from regional authorities (OECD, 2017, p. 191^[2]). Local officials have no discretion when issuing planning permits.

Property has a social function, which implies obligations (Article 33 of the Constitution). The constitution states that society will participate in the land value gains public entities' urban actions generate (Article 47). The national and regional governments create the legal framework for land value capture. Most land value capture instruments fall within the jurisdiction of regions and local authorities, which translates into varying degrees of practical application.

Developer obligations

Developers or landowners are subject to obligations to obtain approval for new development or redevelopment. The obligations consist of in-kind payments, that in selected cases can be paid in cash. They are designed to cover the cost of local infrastructure resulting from development. Furthermore, they are obliged to cede part of the buildable plots to local land management authorities. National and regional legislation establishes the general guidelines and local plans specify the obligations. The national and local governments implement the obligations, but only local governments can receive the revenues.

There are two types of developer obligations: non-negotiable obligations legally established for every new development or redevelopment in the framework of land readjustment, and, in few cases, Planning Agreements. Planning Agreements consist of non-binding obligations negotiated on a case-by-case basis, under the premise of “concerted urbanism”.

In the framework of land readjustment, developer or landowners pay obligations after obtaining urban planning approval.

In-kind obligations may include local roads, land for public facilities, public space in general, and land for affordable housing, as well as the provision of public infrastructure. In the framework of Planning Agreements, privates may also pay for off-site infrastructure. No exemptions to payment are admitted.

If the obligation consists of providing land for affordable housing units, it must be provided within the area of the plan, which can be spatially discontinuous. The units built in such land must remain “affordable” during the time set by regional legislation. Affordable housing units built under this framework are marginal in the national production of housing.

The non-negotiable developer obligations tend to be followed without major obstacles. However, the lack of enforcement capacity reduces the impact of the Planning Agreements. The lack of a national framework to regulate them in detail and provide equal treatment across regions constitutes another challenge to implementation.

Land readjustment

Land readjustment is used for incorporating rural land in urban development as well as in urban regeneration schemes. Local governments, special purpose bodies, landowners and private real estate trusts implement such projects. The country-wide legislation dates back to 1956, but since the 1975 constitutional reform regions can enact planning laws and have passed their own legislation. Therefore, land readjustment varies among each of the 17 autonomous communities.

Local governments and private landowners can initiate a land readjustment project. Before readjustment, a consultation process is usually set in motion, involving landowners, leaseholders, tenants and informal residents (2015 Land Act). The consent of landowners is required. The consent level varies with the type of project. Landowners are not obliged to participate in the land readjustment and consequently assume infrastructure costs, but they have the option to do so. The government can expropriate the land of those who are unwilling to participate. Alternatively, unwilling landowners may receive compensation in the form of buildable plots, whose value equals the expropriation set rate. In all, expropriations are rarely carried out.

Landowners must provide a share of their plots for public improvements and services, such as affordable and social housing, utilities, schools, parks and green space (see the section on developer obligations). Also, they have to cede to land management agencies (e.g. municipalities) part of the buildable plots. The minimum share is set in regional planning acts. As a constitutional premise, the burden imposed on landowners cannot be larger than the benefits of the project. In some cases, the entity responsible for the project reserves buildable plots to be sold in the market, in order to recover part of the investments made.

After readjustment, landowners receive a plot with a value proportional to their original holdings and located on or as close as possible to their original land. However, landowners may receive a residential or commercial unit instead of their original ground plots, or, in very rare cases, jointly owned plots. In some cases, they can exchange reallocated plots for cash. Third-party investors can buy readjusted plots.

Some obstacles that limit land readjustment are landowners’ resistance, lack of administrative capacity in small municipalities and the high costs of expropriations, cash compensations and reallocations.

Strategic land management

Strategic land management is used for urban renewal, control of urban growth and of land prices as well as to provide social housing. The national, regional and local governments all implement strategic land management and receive the revenues, directly or through special-purpose bodies. Some municipalities have created land banks for that purpose.

The government buys land, especially vacant or unproductive land, to serve the intended purposes. It acquires land in a scattered fashion in the private market. Land may also be transferred between levels of government, expropriated or even obtained in the framework of land readjustment, due to the aforementioned non-negotiable obligation.

The government typically develops the acquired land, alone or in partnership with private developers. The national government or municipalities can sign contracts of public-private partnerships, which put private developers or non-profit organisations in charge of development. Development can include basic physical preparation, provision of green spaces and construction of roads, public utilities, administrative buildings, and affordable social housing. It may also include investment in the protection of built heritage and metropolitan-wide facilities may also be made.

The government recovers investment costs through the sale of developed plots. Sales occur in public tenders involving criteria of project quality, social impact, and length of execution. The collected revenues are typically earmarked for specific purposes, e.g. enlarging the land banks.

Although there is little public land available to lease, leasing also takes place to facilitate development with public purpose and planned urban growth. There is no typical length, payment scheme or pre-determined periodic readjustments. Leasehold contracts may foresee preferential rights of acquisition in favor of renters. Public entities, non-profit entities, and projects with public purposes can be exempt from payment.

The lack of resources for land purchases and local governments' lack of administrative capacity hamper strategic land management.

Infrastructure levy

Landowners pay a levy for infrastructure improvements built close to their land and from which they specifically benefit, for example, public roads, public transport, public utilities and green space. Local governments implement the levy and receive the revenues. The infrastructure levy dates back to 1924 and regulation was last reformed country-wide in 2003 (Act 58/2003).

To identify landowners who will benefit and be charged local governments assign a score to each property. The score is calculated using distance, physical location, measures of property façades or perimeters, buildable area, volume and cadastral value. Such criteria are not specified in country-wide legislation. Taxpayers who receive fiscal benefits under international treaties may be exempt from payment (Art. 32.2 of Act 2/2004).

The levy amounts to 90% of the estimated cost of the infrastructure improvement. If the estimated cost diverges from the actual cost, the amount of the levy can be adjusted (Art. 33.4 of Act 2/2004). If the infrastructure is not provided as originally planned or within the due date, the money is returned to landowners. Usually, landowners are involved in consultations regarding public infrastructure works.

The local government may execute the infrastructure improvement alone or with other public entities. The fees may be collected independently by the other entities, up to the integrated fee of 90% of the cost (Art. 31.4 of 2/2004 Act). Companies with a long-term contract to execute public services may conduct the improvements and charge the levy. In any case, the collected funds are earmarked for the exclusive purpose of funding the infrastructure improvement or public service.

The payment is due when the improvement occurs. In large development projects with several execution phases, payment can be split. The unpaid fees may be collected by administrative enforcement (called *via de apremio*).

The main challenge to implementation is the administrative cost of collecting the levy, which often exceeds the revenues raised. Property owners show some resistance and occasionally appeal, complaining about the absence of specific benefits or the distribution of the fee among landowners.

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Sweden

Land value capture in Sweden

Several land value capture instruments are used in Sweden (Table 2.52). However, their use and the revenues raised differ strongly across local governments. Some manage to recover an important share of the public infrastructure cost while others recover none. The main obstacles are smaller local governments' lack of administrative capacity and legal restrictions on the type of public costs local governments can recover.

Table 2.52. Sweden: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Developer obligations	<i>Exploateringsavtal</i>	Chapter 6, Sections 39-41 of the <i>Planning and Building Act/2010</i>	Local governments	Frequent
Infrastructure levy	<i>Gatukostnadsavgift</i>	Chapter 6, Sections 24-27 of the <i>Planning and Building Act/2010</i>	Local governments	Occasional
Strategic land management	<i>Kommunal markpolitik</i>	Chapter 2, Section 1 of the <i>Expropriation Act/1972</i>	Local governments	Rare
Land readjustment	<i>Exploateringssamverkan</i>	No	n/a	No

Enabling framework

Sweden is a unitary state with two subnational levels of government: 21 counties and 290 municipalities (OECD, 2022^[31]). The national government is responsible for the framework legislation that defines the land-use planning system and provides the guidelines that municipalities have to follow in their plan-making process. It also defines the building code (OECD, 2017, p. 197^[21]). Municipalities are responsible for local planning. They prepare spatial and land-use plans. They also issue building permits based on those plans and other relevant regulations (*ibid*). Local officials have high discretion when issuing planning permits. Municipalities have the possibility to form inter-municipal associations to jointly take care of these responsibilities (*ibid*). The national government level creates the legal framework for land value capture.

Developer obligations

Developers are subject to obligations (*exploateringsavtal*) to obtain approval for new development or densification. The obligations consist of in-kind payments. They are designed to compensate the cost of stronger use of public infrastructure and services resulting from development. The current legislation was introduced with the 2010 *Planning and Building Act*, but developer obligations have been applied in a similar way for more than 50 years. The principle of developer obligations dates back to the early 1900s. Local governments implement and receive the revenues from the obligations. They frequently use them.

Local governments and developers decide the obligations through negotiated agreements. The obligations must not exceed the increase in land values development approvals generate. Developers must provide land for public roads, parks, water and sewerage facilities or other public space, or provide this public infrastructure directly. No developer is exempt.

The land and infrastructure developers must usually cover the total public costs their developments generate for local public roads, utilities and public space, as a minimum within the development areas. Developers are not required to pay for larger construction works for health care, education or nursing care, which local governments provide.

There are no obstacles to developer obligations apart from these restrictions on the type of public costs local governments can recover.

In 2017, the *Planning and Building Act* allowed local governments to negotiate a monetary compensation from developers when local governments co-finance national infrastructure such as roads and railways that make new development possible. However, this has not been used so far.

Infrastructure levy

Landowners pay a levy (*gatukostnadsavgift*) for infrastructure built adjacent to their land by the government and from which they specifically benefit, for example public roads and public space. The infrastructure levy has existed for at least 50 years, but is only used occasionally. Local governments implement it and receive its revenues. Even if the national government funds public works, it is local governments that recover the land value increase.

A detailed development plan identifies landowners who will benefit from public works and be charged. Landowners are involved in consultations for the public works' planning. The levy can amount up to the estimated total cost of public works, but local governments often subsidise part of it. The extent to which the levy covers the cost of public infrastructure varies strongly across local governments: some charge the total cost while others do not charge landowners. If the actual cost of public works differs from their estimated cost, the amount of the levy can be adjusted.

Landowners then pay the levy according to a fixed formula, based on the size, quality and use of their properties. In addition, landowners are usually charged a uniform basic fee. No landowner is exempt.

The levy is charged upon completion of public works. The payment modalities, for example whether the levy is paid through a lump sum or instalments, depend on the payment capacity of landowners. If infrastructure is not provided as originally planned or within the due date, the money is returned to landowners.

The main obstacles are landowners' resistance and local governments' lack of administrative capacity, for example to estimate the cost of public infrastructure.

Strategic land management

Strategic land management (*kommunal markpolitik*) is used to redevelop urban areas and control urban growth patterns. However, it is rarely used. Local governments implement it and receive the revenues.

Usually, local governments buy land available on the market and suitable for urban development. They may expropriate land in their territory. If they do, the compensation is the market value plus 25%.

Land is typically retained for ten years although there is no limit to the length of retention, and rezoned, which raises land prices. Local governments then sell the land at market price to the highest bidder; through auctions where developers make monetary bids to buy it together with development rights; or through public tenders that involve criteria beyond the sales price, such as environmental criteria and tenure forms. Local governments can also lease their land, but only rarely do so. They recover investments in land purchase through the sale or lease of rezoned plots.

The amount of land accumulated and revenues raised through land sales vary strongly across municipalities. The main challenges are the lack of resources for land purchases and local governments' lack of administrative capacity.

Land readjustment

The *Act on Development Collaboration* introduced legislation on land readjustment (*exploateringssamverkan*) in 1987 but was repealed in 2011. Landowners had to provide a share of their plots for public improvements and services, such as streets, parks and water and sewerage facilities. They received readjusted plots with building rights according to the value of their original land. Land readjustment was infrequent due to complicated legal and land valuation procedures.

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Switzerland

Land value capture in Switzerland

Few land value capture instruments are used in the country (Table 2.53). The law stipulates the government must compensate landowners for major disadvantages resulting from regional and local planning decisions, whereas landowners must compensate the government in the event of major advantages. In cases of rezoning or determination of special zones, municipalities apply charges for development rights. Strategic land management is conducted by some municipalities, most famous being Basle and Biel/Bienne. Land value capture instruments such as developer obligations, infrastructure levy and land readjustment are not currently used in a systematic manner for the purpose of capturing land gains.

Table 2.53. Switzerland: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name (DE / FR / IT)	National legal provision	Use	Implementation
Charges for development rights	Mehrwertausgleich / compensation de la plus-value / compensazione il plusvalore	Article 5 of the Federal Spatial Planning Act (1979)	Frequent	Local governments
Strategic land management	Aktive Bodenpolitik / politique foncière active / politica fondiaria attiva	Articles 675 and 779-779 of Swiss Civil Code (1907)	Moderate	National, regional and local governments and special purpose bodies

Enabling framework

Switzerland is a federal state with 26 cantons (regional level governments) and 2 212 municipalities (OECD/UCLG, 2019, p. 427^[1]). The federal government defines guiding principles for land use planning and co-ordinates land use policies (OECD, 2017, p. 203^[2]). Cantons are responsible for spatial planning.

Municipalities prepare *Land Use Zoning Plans* for the city and issue building permits. For special areas or larger projects that need additional regulation, they prepare *Special Land Use Plans*, which override the city-wide zoning plans. Special Land Use Plans have been primarily used for urban development in unbuilt industrial zones and for large infrastructure projects.

Planning decisions under the Spatial Planning Act that result in major advantages for private landowners must be compensated to the government according to the principle of compensation, in place since 1980. In 2014, national framework regulations determined that the land value gains from permanently assigning land to a building zone must be compensated at a rate of at least 20 per cent (art 5 §1bis SPA). Cantonal legislators have the discretion to define a higher rate, usually up to 50 per cent, or to set more cases to be compensated, e.g. upzoning.

Both national and local governments create the legal framework for land value capture.

Charges for development rights

There are two types of mandatory charges for development rights in the country, according to the Spatial Planning Act. The first type is a charge to be paid in cash upon rezoning decisions that allow for higher density. The second type, which is less common, consists of the in-kind provision of public improvements.

In all, municipalities frequently apply these charges and collect the revenues. The use of each type of charge depends on the local context.

If paid in cash, the charge must equal to at least 20% of the land value gains. In practice, municipalities set the fee between 20 and 30%, and the maximum that has been practiced is 50%. Developers rarely appeal the charge.

If paid in-kind, the charge is negotiated between the municipality and developers of large-scale projects within special zones. The contribution may constitute of public infrastructure, transportation lines, neighbourhood facilities and affordable housing units. Affordable housing units must be built on-site and be comparable to market-rate units in terms of size, design standards and amenities. The share of units to be rented or sold at affordable prices varies by planning zone. The units have to remain affordable as long as the project exists. Beneficiaries are households that spend more than 30% of their income on living and are eligible for social welfare programmes provided by municipalities.

In both charge types, the development right is charged in a delimited zone and cannot be transferred to another municipality. The charge is due upon project completion, but payment could be deferred until the sale of land. If the developer is a public authority or if the added value is minor, municipalities may make payment exemptions.

Funds collected are earmarked for "planning-related measures", which may include the provision of public space, roads and parking, affordable housing, public utilities and other measures (art. 5 § 1ter SPA). The funds are legally bound to the entity that collects the revenues. There are a few exceptions to this rule, for instance, in the case of Basle where funds have been invested in intercantonal and even cross-border projects in the tri-national region with France and Germany.

The main challenge to implementation is the low demand for building at higher densities in most cities. Owing to their small size, municipalities often lack the administrative capacity to create and impose the charges. Some cantonal regulations are unclear and inadequate.

Strategic land management

The national, regional and local governments can acquire and retain zoned land in advance of needs, for the purposes of urban renewal, control of urban growth patterns, control of land price inflation and capture of capital gains. They adopt strategic land management only moderately.

The government purchases vacant or underused land or land zoned as industrial at market price. They may also receive land from another level of government or governmental agency.

After being rezoned, the acquired land is sold at market price to the highest bidder, leased or transferred to another public entity. The government recovers investments through the sale or leasing of plots.

Public land is leased to facilitate urban growth and to provide land for development with public purposes. The public entity who decides which public land to lease and set the ground rents is the same that owns the land. The ground rent typically amounts to 3% of the land value.

The typical lease length is 50 or 100 years. The contracts are usually renewed and readjusted 10 years before expiry. Exemptions or discounts to payment may be granted to non-profit entities or to projects with public purposes, such as affordable and social housing, neighbourhood revitalization or construction of public facilities.

Strategic land management is rarely used, given the overall perception that the government should not interfere in private land markets. Moreover, owing to their small size, municipalities lack the administrative capacity to manage land in a strategic manner. Governments hold little urban land, and leaseholders consider the ground rents to be expensive.

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Tunisia

Land value capture in Tunisia

Two land value capture instruments are used in Tunisia (Table 2.54). The national and subnational levels of government use them, the latter with significant autonomy. Although no legal definition of land value capture exists, these instruments are used to expand urban areas, improve public infrastructure and services, control urban growth and for spatial planning. The instruments are used systematically in every redevelopment project but redevelopment projects are infrequent.

The main obstacles to land value capture include the lack of administrative capacity and coordination among public entities, the lack of financing for the acquisition of land, insufficient data, the need for an inventory of public land, resistance by landowners, costs or controversy related to expropriation, lack of resettlement alternatives and the need to protect marginalised populations.

Table 2.54. Tunisia: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Strategic land management	Land use planning and urban planning	<i>Spatial Planning and Urban Planning Code (law n° 94-122)/1994</i>	National, local governments	Occasionally
Land readjustment	Development of tourist, industrial and residential areas	<i>Law n° 73-21/1973</i>	National, local governments	Rarely

Enabling framework

Tunisia is a unitary decentralised semi-presidential republic, with a two-tier system of subnational government: 24 regional-level governorates and 350 municipalities (OECD/UCLG, 2019^[1]). The 2014 Constitution increases subnational governments' competencies in planning, implementing, and delivering public infrastructure and services. Regional and local governments have responsibility over territorial and urban planning, respectively.

There is no legal definition of land value capture nor a national policy document guiding its use. The national government is in principle responsible for creating framework legislation. Public officials have a high level of discretion when granting planning permits.

Strategic land management

Strategic land management is used for land consolidation, urban growth control, spatial planning and to capture value gains. The Code of Spatial Planning and Urban Planning Code of 1994 requires urban development plans to reserve space for public purposes. A new code of land use planning and urbanism is under discussion in parliament. The national and local levels as well as independent public entities conduct strategic land management and receive the revenues from sales. However, subnational governments need approval from a higher level of government.

The government often rezones the acquired land, and often develops it before sale. Land acquired for strategic land management is typically zoned for specific uses, including for infrastructure, community and public utility facilities, green spaces, greenfield sites, and public squares, and is usually located within the jurisdiction acquiring it. The government can acquire land by expropriation, or by purchasing it below market rate from landowners, who can receive compensation in cash or a share of the serviced land in

exchange. The government can retain land it acquires in this way only for up to 6 years. Land is usually acquired and disposed of through public bids or transferred to other public entities such as local governments or public companies.

Obstacles hindering the use of strategic land management include the lack of administrative capacity and coordination among public entities, the lack of financing for the acquisition of land, the lack of high-quality data to identify land ownership and conduct economic impact assessments of public investment, as well as the lack of an inventory of public land assets.

Land Readjustment

The government uses land readjustment for urban expansion and to obtain public land for lease or sale, with national law providing the legal basis. Some portion of readjusted land is usually reserved for public benefit. Public entities typically execute land readjustment projects, but private landowners may also do so under certain conditions. They typically involve local government and special purpose bodies. Local governments must receive approval from the national government, which receives revenues derived from land readjustment.

Jurisdictions can conduct land readjustment when it increases the value of land, when it takes place on land zoned for specific uses or when all plots within the area are in the land registry. Private landowners may do so when they possess a certain share of the area earmarked for land readjustment, with some plots typically reserved for public services to enhance the value of the land.

When executing projects pertaining to housing or economic development, the government seeks broad consent from landowners and often reaches the needed consent levels. However, consent is not sought for public infrastructure projects, and expropriation in exchange for compensation below market rate is an option if landowners resist providing their plots, though this option is never used.

After readjustment, landowners can receive a plot valued in proportion to their original holdings or, if the original plots are smaller than a specific size, cash compensation. However, if the readjusted plots are less valuable than the original ones, landowners are not entitled to compensation, nor are they required to provide compensation if reallocated plots are more valuable. Third party investors can receive readjusted plots in return for their investment in a project, and landowners can exchange reallocated plots for cash.

It is mandatory by law, though not always applied, that 20% of readjusted plots be reserved for public infrastructure and service improvements, including public space, public transport, roads, public utilities, administrative buildings, or services for the neighbourhood (e.g. schools, elderly care). Land in the readjusted and newly planned area typically includes the creation of collectively or publicly owned plots that can be sold or leased. These revenues cover about 5 per cent of the cost of public improvements related to land readjustment projects.

Obstacles to land readjustment include landowner resistance, the lack of a legal framework, an inaccurate land registry, the cost or controversy related to expropriation, lack of resettlement alternatives, the protection of marginalised populations impacted by land readjustment projects, and that revenues raised do not justify the cost of such projects.

Following an institutional change of 2018, municipalities are now responsible for regional planning instead of the national Ministry of Infrastructure. This has led to transaction costs related to changes in roles, causing the process of land readjustment in Tunisia to take several years. In addition, the unclear legal status of some land has made the process more difficult, which is particularly true of co-owned or community land.

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Turkey

Land value capture in Turkey

Several land value capture instruments are used in the country (Table 2.55). Developer obligations are in-kind obligations negotiated in Plan Notes or planning agreements. Land readjustment is frequently used to restructure property patterns in public and private projects. Local governments adopt infrastructure levy to recoup part of the costs of new public infrastructure, notably roads and sewage and water utilities. The national government makes moderate use of strategic land management, resorting to partnerships with private developers. Charges for development rights have been created in 2020 and are still to be adopted on a regular basis.

Table 2.55. Turkey: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Plan Notes (Plan Notlari)	Reconstruction Law 3194 (1985); Regulation for the Preparation of Spatial Plans (2014)	Local governments	Frequent
Infrastructure levy	Contribution to expenditures	Articles 86 to 94 of Municipal Revenues Act 2464 (1981)	Local governments	Frequent
Land readjustment	Land or land/ lot arrangement	Article 18 of Land Development Law 3194 (1985), Article 10-c of Amnesty Law 2981/3290 and Law 5793	National government, local governments and private landowners	Frequent
Strategic land management		State Procurement Law 2886 (1986), Mass Housing Law 2985 (1984) and Regulation on Management of Treasury Immovables (2007)	National government	Moderate
Charges for development rights		Additional Article 8 Land Development Law 3194 (1985, amended in 2020)	National, metropolitan and local governments	Moderate

Enabling framework

Turkey is a unitary state with three levels of government: the national level, 81 provinces and 1 391 municipal-level entities (OECD/UCLG, 2019, p. 523^[1]). Municipalities are arranged in three categories: Metropolitan Municipalities, City Municipalities and Town Municipalities. The 18 292 villages (köy), despite of their small size, are constitutionally recognized as self-governments.

The planning system is centralised, as the central administration has tutelage over local governments. The Ministry of Environment, Urbanisation and Climate Change prepares and approves Territorial Plans at the regional and provincial level. However, municipalities are responsible for Land Development Plans, which consist of Master Development Plans and Implementation Plans, which are then approved by municipal councils. Municipalities above 10 000 inhabitants must prepare their own Local Development Plans. Master Development Plans provide detailed guidelines, while Implementation Plans set the conditions for permitted developments at plot scale.

The national and local governments create the legal framework of land value capture.

Developer obligations

Developers are subject to obligations to obtain approval for new development or densification. The obligations consist of in-kind payments or, more rarely, in cash. They are designed to compensate the cost

of stronger use of public infrastructure and services resulting from development. Local governments frequently implement the obligations and receive the revenues.

The obligations are consolidated in a planning document called Plan Notes. Local governments determine whether it is feasible to extend public service networks, road infrastructure and public space. As such, Plan Notes contain provisions regarding the payment of road and infrastructure costs and the acquisition of social and technical infrastructure areas in specific areas, for example in urban renewal areas.

The obligations are determined according to Plan Notes or planning agreements, which are private law instruments. According to the conditions set in the agreements, developers provide on-site public space and infrastructure. These agreements are more common for large development projects.

Infrastructure levy

Landowners can be charged a fee if they are adjacent public infrastructure works, namely road construction or expansion, sewer and water facilities, from which they benefit. The infrastructure includes roads, sewage and drinking water facilities. The instrument exists in its current form since 1981. Municipalities make frequent use of this instrument and collect the revenues.

Landowners whose land is located adjacent to the roads where the infrastructure passes through are charged as well. The charge must be paid in cash and cannot exceed 2% of the tax value of a land or building. The charge seeks to recoup part of the costs of the public infrastructure, even if it falls below its potential of value capture.

The procedures and principles for the implementation of the contributions are set in a regulation prepared by the Ministry of Interior (Article 94 of Law 2464/1981). The latest version of the regulation dates from April 14, 2021 (“Expenditures of The Law No 2464 on Municipal Revenues Implementation of the Provisions Regarding Contribution Shares Related Regulation”).

Land readjustment

Land readjustment is an important tool to restructure land property in the country, commonly used for urban expansion or renewal, brownfield regeneration and farmland consolidation. It was first introduced in the 19th century, and the current legislation dates from 1985. The instrument is frequently used in the framework of implementation plans.

The national government, local governments or private landowners can initiate land readjustment projects. The Housing Development Administration of Turkey (TOKI) can adopt land readjustment in areas of illegal housing and urban renewal.

In private-led land readjustment projects, 100% of the area’s landowners must give their consent. Landowners bear all the costs. Municipalities are in charge of the land transactions, and, if necessary, they conduct expropriations, in the form of Title 18 of Land Development Law 3194 and its regulation.

Participation is compulsory for projects with a public purpose or led by a public entity. No compensation is due to landowners if the public entity acquires less than 45% of the land plot. Beyond 45% of the area, the public entity must pay a financial compensation to landowners, based on the actual value of land. Public entities refrain from having to request more than 45% of surface area from a given landowner, to avoid the costs of paying compensation.

A share of 45% of the readjustment area is reserved for public improvement such as: green spaces, parks, roads and parking space, administrative buildings and services facilities – from which landowners will benefit.

After readjustment, landowners receive plots located on or as close as possible to their original land. Plot reallocation is proportional to the surface area of the original holdings. They may receive jointly owned

plots, according to their shares to a same parcel, which engenders complex property rights disputes. For this reason, land readjustment is more successful in newly developed or relatively homogenous areas, but more difficult in built-up areas.

Landowners cannot exchange reallocated plots for cash. Third party investors cannot receive readjusted plots in return for eventual investments made in the project.

Implementation is challenging due to inadequate legal frameworks, low levels of technical administrative capacities, low quality of land registries and resistance by landowners. It is common that the urban plots produced through land readjustment are not serviced. The lack of infrastructure provision and the allocation of jointly owned plots have fostered a negative perception of land readjustment.

Strategic land management

The priorities of strategic land management are to provide land for real estate development, facilitate controlled urban growth or renewal and capture capital gains. The national government makes strategic acquisitions and collects the revenues from leasing and sales. The instrument is frequently used.

The government acquires greenfield land zoned for large residential projects, called Mass Housing Area, or located in areas in need for development. Acquisition occurs through transfers from another public entity or expropriations. The acquired land is typically rezoned before being sold or leased. Sales occur through public tenders involving other criteria beyond the sales price.

Acquired land is developed in partnership with private developers, through the Revenue Share Model. The Housing Development Administration of Turkey (TOKI) opens public procedures to select developers to build high-end housing units on well-located public land. Developers finance the projects and bear the risks of transactions costs, development costs, construction permits and property rights issues. Developers sell the units in the market and transfer a share of revenues to the government. The developer that offers the highest share from the sales of housing units is the winner. This share is typically around 35-50%. By receiving a share of the housing sales, the government recovers the land value gains.

The Revenue Share Model is profitable to both the public and private sectors. A critique made is that private profits are higher than the public gains accrued and that the land valorisation generated in the neighbourhood is not captured. The housing projects are considered disconnected from spatial planning decisions.

The government holds significant amounts of land to lease. The ground rent is 4% of the land value, being readjusted periodically. No exemptions or discounts to payment are admitted. Leases are typically 10 years but can be longer if the land is used for energy production, transmission or distribution, or for touristic facilities.

The obstacles to adoption of strategic land management are inadequate or nonexistent legal frameworks, the lack of administrative capacities and the lack of financing for land acquisition. Leaseholders consider the grounds rents unfeasible. Lastly, sometimes lease contracts are signed for purposes that are incompatible with the ones delineated in local land use plans.

Charges for development rights

Developers that benefit from a planning decision that alters land use or increases building density can be charged a fee. The instrument entered the legal system in 2020. Therefore, the national, metropolitan and local governments rarely use the instrument and collect the revenues.

The charge is paid in cash. The charge is calculated according to the criteria of surface area, location and property value. Property value is estimated using official appraisals, tax declarations and historic sale prices (Article 11 of Law 2942). Landowners or developers will pay the charge at the first sale of the

property or at the building permit stage at the latest. If the real estate is not sold, the increase in value will not be taxed.

Implementation is challenging because the legal framework is absent or inadequate and public entities lack sufficient administrative capacity.

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Uganda

Land value capture in Uganda

There is virtually no land value capture in Uganda (Table 2.56). The national and local governments can use public land lease, but own little land that they can lease and the revenues raised are low. The space for land value capture has actually closed over time after the 1995 Constitution and subsequent laws and policies emphasised that all land belongs to the citizens rather than the government. The 2013 *National Land Policy* also prevents any form of taxes on land in the near term, until Uganda is a middle-income country (Chapter 3, Section 3.5, Paragraph 16). There is strong political opposition to charge landowners and developers. Moreover, there is virtually no legislation for land value capture instruments; land markets function with severe imperfections; and cadastre data is weak for most urban areas.

Table 2.56. Uganda: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Strategic land management (public land lease)	N/a	<i>Land Act/1998</i>	National government and local governments	Rare
Land readjustment	N/a	Article 5 in the Fifth Schedule of the Physical Planning Act/2010	Local governments	Rare
Infrastructure levy	N/a	No	n/a	No
Charges for development rights	N/a	No	n/a	No

Enabling framework

Uganda is a unitary state divided into four regions and 135 districts as well as the capital city Kampala at the local level. Local governments are the planning authorities and decide on land use management (OECD/UCLG, 2019^[1]).

According to Preamble XI (iii) of the Constitution, the state may regulate the purchase, ownership, use and disposition of land and other property to further social justice, albeit in line with the Constitution. The national government level is responsible for creating the legal framework for land use and therefore land value capture.

Strategic land management (public land lease)

The aim of public leaseholds in Uganda is to provide land for investment. Currently, how public land should be leased has a weak legal basis but the Ministry of Land, Housing and Urban Development is developing guidelines by which public land can and should be leased. Since public land should be leased mainly for investment purposes this could result in land value increases. The Ministry seeks to introduce stronger monitoring and enforcement mechanisms to ensure that the leased land is actually developed. It is also considering eliminating provisions for the transfer of leases and sub-leasing.

The Uganda Land Commission, a body of the national government, holds and manages any land the national government owns. District Land Commissions hold and manage the land of local governments. Public land lease revenues are part of the general budget.

The national government and local governments own relatively little developable land that they can lease and have limited funds to acquire more as compensations for land acquisitions can be very high. These compensations are enshrined in the Constitution. This limits the national and local governments' ability to

buy more land for leaseholds and manage it strategically. Other obstacles include the lack of administrative capacity for example to set the ground rents, complicated tenure system and unclear ownership of land.

Land readjustment

Land readjustment is rarely used but has some legal basis. However, Article 26 of the Constitution stipulates that landowners must be compensated for giving up a share of their plots. This makes land contributions by landowners expensive and has prevented any larger efforts to carry out readjustment projects.

Other obstacles to use land readjustment are landowners' resistance, cadastres' low quality, local governments' lack of administrative capacity and the lack of temporary resettlement options for affected landowners during readjustment projects.

Nevertheless, land readjustment schemes without compensation to landowners are being piloted and, especially if they are community-based, have the potential to work.

Infrastructure levy

The infrastructure levy is not used. According to Article 26 of the Constitution, landowners should actually be compensated if public works are carried out on their land. A legal provision for the infrastructure levy was included in the *Town and Country Planning Act*. However, the levy was never collected in practice and deliberately left out of the 2010 *Physical Planning Act* (which replaced the *Town and Country Planning Act*) due to strong political resistance.

Charges for development rights

Charges for development rights are not used and do not have a legal basis. The capital city Kampala drafted a *Physical Development Plan* in 2012, but it has not yet been implemented at the time of writing. Moreover, though it stipulates zones and basic and maximum density levels – which are necessary to implement charges for development rights – these are currently not legally enforced. Similarly, attempts to create district or neighbourhood plans in Kampala have not gone far due to capacity constraints. Physical plans for infrastructure development in Kampala do not take into account zoning or density. Developers only pay an administrative fee to cover the costs of processing building permits.

Other obstacles to introduce charges for development rights are cadastres' low quality and the associated risk with real estate markets.

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Ukraine

Land value capture in Ukraine

Land value capture instruments are used sparingly in Ukraine (Table 2.57). Though allowed by the Constitution, there is no legal definition nor guiding policy for land value capture. Nonetheless, land readjustment is occasionally used for urban expansion and development but limited to public sector purposes. The main obstacles that limit broader use of land value capture also include landowner resistance, the financial and political cost of expropriation, as well as the protection of designated areas, e.g. environmental reserves or cultural heritage sites. Recent amendments to the land legislation concerning spatial planning may lead to the development of land value capture instruments.

Table 2.57. Ukraine: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Land readjustment	землеустрій	<i>Law of Ukraine "On Land Management" /2003</i>	Local governments	Occasionally
Strategic land management	просторове планування	<i>Law of Ukraine "About regulation of town-planning activity" /2011</i>	Local governments	Rarely

Enabling framework

Ukraine is a unitary republic with a complex three-tier system of subnational governments: 27 regions, including two cities (Kyiv and Sebastopol) and the Autonomous Republic of Crimea; 140 total districts, 1,469 territorial communities, including 460 cities, and 28,369 villages/settlements. The national government creates the legislative framework for Ukraine's spatial planning system, but there is no national policy document that guides the use of land value capture. Land valuation methodology is typically the responsibility of the national government, while local planning is that of subnational governments.

The principle of a social function of property is included in Article 13 of Ukraine's constitution, which also provides the legal definition of land value capture. The government values land based on the capitalisation of net income from land use; comparing sale prices of similar land plots; and factoring in the cost of land improvements.

Land readjustment

Land readjustment in Ukraine is sometimes used for urban expansion and development. However, national law does not provide any legal basis, and readjustment of private land plots is only possible on the grounds of public necessity. No more than 200 compulsory land purchases are made annually in Ukraine, including for the construction of transport and energy infrastructure, as well as national security and mining.

Landowners, leaseholders and tenants who provide their plots of land are typically involved in the consultation process. In principle, land readjustment projects must receive consent from all affected landowners. However, landowner participation is compulsory when a project serves a public purpose, and land can be expropriated for public needs via court decision in some cases. Such expropriations of land or forced changes in land use are used exceptionally for specific public needs such as construction of infrastructure facilities, mining, and national defence. Therefore, consent rules do not matter for land readjustment projects in practice. Landowners do sometimes appeal against the decision to pool and

readjust their plots, but land owned by those resisting readjustment is often expropriated at market rate based on the original use of plots.

Affected landowners are typically reallocated to different plots within the readjustment area and cannot exchange reallocated plots for cash. If the readjusted plots are less valuable than the original ones, affected landowners are entitled to receive compensation. But if the readjusted plots are more valuable, landowners are not required to pay the difference. While land readjustment projects are conducted to meet public purposes, shares of readjusted plots are not typically reserved for improvements to public infrastructure. All levels of government conduct land readjustment, from the national to municipal level. Local governments do not need approval from higher government levels.

The decision to build infrastructure facilities can be made either by the state administration or the local community, in order to serve either party's specific needs. Landowners whose plots are needed for construction are subsequently notified. An appraiser assesses the market value of the land and of the improvements to be made, after which the owner is offered to buy the land and improvements at that price. If the landowner does not agree to the price, it is reviewed by the administrative court. The court's decision serves as the basis for the forced sale of land.

Obstacles that hinder land readjustment include resistance by landowners, the steep financial or political cost of expropriation, and the protection of areas with environmental, cultural, or other types of significance.

Major amendments to legislation on land use planning, effective from July 2021, are intended to establish a comprehensive plan for spatial development to ensure sustainable development that balances state, public and private interests, and support the registration of new land plots. Further legislation is expected to be adopted in the near future to introduce instruments of forced readjustment of privately owned land to encourage the restructuring and improving of the spatial conditions of agriculture, achieving more efficient multifunctional use of rural areas, environmental protection and infrastructure development.

Strategic land management

Despite transferring almost 32 million hectares of state land to private ownership since independence in 1991, there is still about 28 million hectares of public property. The 1998 Law of Ukraine "On Land Lease" legally defines the leasing of land as a fixed-term paid possession and use based on a contract, required in order for the lessee to conduct business and other activity. In accord with the law, some land is leased to private businesses to generate public revenues or facilitate real estate development. However, there does not seem to be a policy to purchase land to develop or rezone it and thereby capture the value gains of land for the government. Owners of public land plots include villages, settlements, and city councils as defined by law. The main obstacles to conducting strategic land management include an inadequate legal framework, the lack of administrative capacity among public entities, and the lack of financing for the acquisition of land.

Developer obligations

Prior to 2021, developers were obligated to contribute to the development of urban infrastructure via the local community budget. Charges could reach 4% for housing construction and 10% for non-residential development. These charges were an important source of revenue for local governments' development spending, making local communities more attractive for investment following infrastructure development. However, in 2019 the Ukrainian parliament passed a law abolishing these charges except in ongoing projects. Developers' concerns about misspending and inefficiency were behind the repeal. For residential buildings, the cost of share contributions actually increased the price of real estate or rental payments.

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United Kingdom

Land value capture in the United Kingdom

The land value capture instruments in the United Kingdom are developer obligations and strategic land management (Table 2.58). Developer obligations seek to compensate the impacts that new developments have on local infrastructure. Regarding land banking, the government sometimes sells redeveloped land to private actors, whereas leasing is less common. Landowners and occupants pay additional local taxes for public improvements that take place in Business Improvement Districts. There is no legal framework for charges for development rights or land readjustment.

Table 2.58. United Kingdom: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Developer obligations	Planning obligations	Section 106 of Town and Country Planning Act 1990 (England and Wales) and Section 75 of the Town & Country Planning Act 1997 (Scotland)	Local governments	Frequent
	Community Infrastructure Levy	Part 11 of Planning Act 2008 (England and Wales)	Local governments	
Infrastructure levy	Business Improvement Districts	Part 4 of Local Government Act 2003 (England and Wales) Part 6 9 of the Planning Act 2006 (Scotland)	Local governments	Rare
Strategic land management	Compulsory acquisition of land	Compulsory Purchase Act 1965 (England and Wales) and Acquisition of Land Act 1947 (Authorisation Procedure) (Scotland)	National and local governments, as well as special purpose bodies	Rare

Enabling framework

The United Kingdom is a unitary state with an asymmetrical decentralization system, composed of four constituent nations: England, Northern Ireland, Wales and Scotland. The UK governs the local governments in England, and the devolved nations govern their own local governments. Because Wales was merged into England's legal system, there are three legal systems in place: the laws of England and Wales, Northern Irish laws and Scottish laws (OECD/UCLG, 2019, p. 432^[1]).

The local territorial organisation differs greatly in each of the four constituent countries. England has a mixture of unitary and two-tier subnational local government system. Where there are unitary authorities the local government is responsible for all local government services, including planning. Where there are two-tier arrangements, the county council provides most local government services including education and social services, and the district councils provide other local services, including planning. Scotland, Wales and Northern Ireland have only one tier of local authorities.

The *National Planning Policy Framework* is the national policy of land value capture in England. It covers the policy on developer obligations and similar policies which can oblige developers to contribute to the costs of infrastructure and community needs. The Welsh and Scottish governments enact national spatial planning frameworks that structure the planning system in their territories (OECD, 2017, p. 214^[2]).

Local authorities have considerable discretion in implementing developer obligations and infrastructure levies. As a result, there are wide variations in local policy and practice, subject to these complying with national policy and guidance.

Developer obligations

Developers who seek planning permission can enter into legal agreements to contribute to offset the impacts of the project on local infrastructure. There are different types of developer obligations in each of the UK nations. England and Wales adopt Community Infrastructure Levies and Planning Obligations. Scotland only applies Planning Obligations.

Local planning authorities have discretion in implementing the national legal framework and can establish additional local rules. As a result, there is much variation in policy practice and outcomes, even when the real estate market circumstances are similar. Diverse policy approaches can lead to varying levels of revenue collection.

Community Infrastructure Levy (CIL) in England is a charge paid in cash for new developments that create additional floor space of at least 100 square metres or that create a new dwelling. Residential annexes, self-build housing, charitable development and social housing may be exempt from payment. There is an established rule to calculate the fee, but differential rates may apply, according to the geographical zone, type or scale of development. Local authorities have discretion about whether or not to exact a CIL. Its purpose is to secure funds for sub-regional or regional infrastructure.

Planning Obligations consist of in-kind obligations or direct financial payments sought to mitigate the impacts of developments and to contribute to community needs including affordable housing. If a Community Infrastructure Levy is already in place, a viability assessment study must ensure that the combination of levy and Planning Obligations does not undermine the deliverability of the project.

The obligations negotiated with the developer may refer to the provision of land, public space, local infrastructure or affordable housing. Affordable housing units are generally built on-site, within the boundaries of the market-rate project but on occasion developers may pay sums to enable building of affordable units elsewhere. On small sites, developers may pay in cash, and the local authority builds the units elsewhere but in many cases small sites are exempted altogether.

Whilst negotiations have the benefit of relating to site-specific circumstances, they can be long and complex. If local policy is unclear and inconsistent in application, negotiations may adversely affect developers, especially small ones.

Developer obligations effectively capture about 30% of development value on greenfield sites, notably for large builders. In general terms, developers show increased acceptance of the charge, since they can shift the costs to landowners.

The main challenges to implementation are the lack of administrative capacities and the high complexity of operation rules and calculation formulas. Developers sometimes find the charge economically unfeasible and seek to renegotiate it. Revenue collection may be low in places where the real estate market is less dynamic.

Infrastructure levy

Local governments can charge a fee to business owners within a Business Improvement District, with the aim of offsetting part of the costs of public improvements. It is supplementary to regular business taxes. Local governments rarely adopt this levy.

Local governments or private businesses may draft a proposal to create a Business Improvement District. The proposal must specify the size, scope and services to be provided, as well as the calculation formula of the levy and the contributors. Upon receiving or drafting a proposal, local governments conduct a ballot with local businesses, which, if approved, leads to the creation of the Business Improvement District.

Businesses within the area will have to make a periodic cash payment, on top of regular business rates. In exchange, the local government will execute the projects and services set in the proposal. The services

should be complementary to regular public services, for instance, extra security, cleansing and environmental measures. The government can charge a Business Improvement District levy for up to 5 years. Once the term is completed, it will automatically cease, unless a new ballot votes for its renewal.

Strategic land management

The priority of strategic land management is to anticipate future projects of land consolidation and urban renewal and to control urban growth patterns. The national and local governments, as well as special purpose bodies, rarely acquire land strategically. They have powers to acquire vacant land or rural land destined to become urban, through market acquisition or transfer from another government entity but these are now rarely used.

In the past, acquisition powers greatly facilitated the construction of new towns, major urban expansion and redevelopment. Today, local authorities and some public bodies conduct minor acquisitions to facilitate development, e.g., to enable a roundabout to be built or to construct new roads. Acquisitions are made at market price, which in part narrows the initial potential for land value capture.

The local authority or other body develops the acquired land, alone or in partnership with private actors. Development includes basic physical preparation, public utilities, public space, roads, parking, affordable and social housing and residential or commercial property intended for sale at market prices. The local authority or public body recovers investments through the sale or leasing of the developed plots.

Leasing is less common, even though the government holds a substantial amount of land. Leasing serves to generate public revenues, facilitate public development and provide land for real estate development. Leases are typically 99 years long, and the payment scheme varies. Public or nonprofit entities and public interest projects can receive discount or exemption from payment.

The main challenges to strategic land management are the lack of administrative capacities and lack of coordination between public entities, as well as difficulties in financing land acquisition.

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United States

Land value capture in the United States

Several land value capture instruments are systematically used in the country (Table 2.59). States create the enabling framework for land value capture, hence the high variability of instruments across the country. Charges for development rights are levied to enable the construction of affordable housing units. Infrastructure levies constitute an alternative method for financing public capital facilities and services. States may authorize counties and municipalities to create land banks to acquire, hold, lease and dispose of property. There is no legal framework for land readjustment.

Table 2.59. United States: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provision	Implementation	Use
Charges for development rights	Incentive Zoning; Density Bonusing; Inclusionary Housing Ordinances; Project-by-project negotiations	None	Local governments	Frequent
Infrastructure levy	Special Assessments; Downtown/Business Improvement Districts; Facilities Districts; Transit Districts	None	State and local governments, as well as special purpose bodies	Frequent
Developer obligations	Exactions; Impact fees; Linkages	None	Local governments	Frequent
Strategic land management	N/A	None	Local governments and special purpose bodies	Moderate

Note: Negotiating density and intensity of uses on a project-by-project basis happens through zoning instruments such as Planned Unit Developments and Development Agreements. Local governments seek a host of public benefit and amenities, such as open space and below market-rate housing, during such negotiations.

Enabling framework

The United States is a federal republic composed of 50 federated states, 3 031 counties at the intermediary level and 35 879 municipalities (OECD/UCLG, 2019, p. 534^[1]). States discipline their own system of government and territorial organization. Local governments belong to the states and, consequently, their organization varies according to state law. They do not constitute an autonomous order of government under the Constitution.

Even though there is no legal definition of land value capture, the starting point for policy-makers in this matter is the Takings Clause of the Fifth Amendment of the U.S. Constitution. Case law has further specified the principles of nexus and rough proportionality in order for exactions – a land value capture approach – to be applied.

States create the legal framework for land value capture. They are in charge of general building codes and land use planning legislation that defines, among other aspects, which land value capture instruments may be used (OECD, 2017, p. 220^[2]).

States typically delegate the authority to control land use to local governments. Under this scheme, local governments can enact local zoning laws and create land value capture tools. In practice, local governments have significant autonomy to control land use within their jurisdiction.

In all, the absence of a national definition and the significant autonomy of states and municipalities result in a high level of variation and diversity when it comes to land value capture instruments.

Charges for development rights

Developers pay charges or offer public amenities to build at higher density. They may opt to pay a charge in order to benefit from recent changes in density parameters made by local governments. Local governments frequently offer density and height bonuses and other regulatory reliefs in return for monetary contributions or in-kind provision of land, public utilities or social housing units. This practice in the US is most often known as Incentive Zoning, Inclusionary Housing Ordinances, and Density Bonusing.

States can have specific legislations allowing local governments to adopt the charges. Many states do so by having a specific state statute that delineates the permissible boundaries of incentive zoning programs focused on the provision of affordable housing. In other states, the instrument is sanctioned indirectly through case law, special acts, or implicitly permitted under Home Rule power.

Under a typical Inclusionary Housing Ordinance, developers dedicate a share of units to affordable housing, in exchange for building at higher density. The share varies according to the zone or area. The affordable units must be comparable to market-rate units in terms of size, design standards and amenities. Beneficiaries are households with an income below a specific percentage of the area's median income level, as defined in local ordinances. Alternatively, developers may satisfy the requirement by paying a fee, whose funds are earmarked to finance government-built affordable housing.

These programs may combine with different building incentives, for instance, with bonuses for heritage protection or environmental preservation. Therefore, the government approves the development project as a package, which makes it difficult to distinguish which benefits determine which compensations.

If the charge is set in cash, the price varies according to the value of development rights to be obtained. The collected funds are earmarked for specific purposes. In some cases, the revenues must be spent within the neighborhood or district where the charge was levied. Local governments reinvest the funds in local infrastructure projects, such as of public utilities, public transportation and affordable housing units.

Developers and landowners frequently appeal against the requirement to pay the charge, showing resistance to implementation. In many municipalities, the demand for building at higher density is minor. In municipalities where the instrument is applied, there are no substantial challenges in terms of administrative capacities or policy coordination.

Infrastructure levy

Infrastructure levies have a long history of implementation in the country. In 1691, the state of New York deployed this tool to finance street and drain construction. In California, during the late 19th century and early 20th century, this instrument financed much of the basic infrastructure for suburban development.

Landowners whose property is benefitted by a certain public improvement should contribute financially to offset its costs. Traditionally, the instrument is well accepted when used to fund sewer lines and sidewalks. Since the 1980s, infrastructure levies have been deployed to fund a more diverse range of public purposes, such as public improvements within business districts, public parks and public transportation projects.

All the 50 states have their own enabling legislations of infrastructure levy. Within the parameters set by state legislation, each local government designs unique configurations. A well-known example is the *Mello-Roos Community Facilities Act* (1982) of the State of California, which authorizes local governments to create Community Facilities Districts to charge special fees to pay for public improvements and services. The national government does not interfere in the recovery of the land value increases.

Infrastructure levies in the US can be divided into two different models. Under the first model, a special assessment district collects fees from property owners and use this future revenue stream to borrow money upfront for large-scale infrastructure constructions. The future fees are used to service the debt. Under the second model, the district collects fees and then once a large lumpsum has been collected, it uses the fund for infrastructure construction, maintenance, and improvement. Ideally, the total of fees levied should equal the costs of public improvement.

Before a levy is imposed, local governments often carry out a consultation process with landowners. A specific number of landowners must manifest in favor of the public improvement. To illustrate, in the case of California's Communities Facilities District, two-thirds of the residents within the proposed district must vote in favor of its creation and of the associated public improvements, with their corresponding levy. In all, this consultation process can ensure that the levy is viable and will be met.

The main obstacles to implementation involve landowners, who frequently appeal against the fee in courts. Local governments have to demonstrate that a special benefit impacts specific landowners, which requires extensive technical calculation. In other occasions, landowners lack the financial resources to pay the fee, especially in areas where public improvements are most needed. Lastly, many municipalities lack the capacities to carry out the complex and highly technical procedure of assessing and levying the benefit.

Developer obligations

Local governments seek concessions and contributions from developers when they request approval for new development, development at higher density or exceptional zoning regulations. The developer contribution is intended to compensate part of the impacts that private developments force upon public local infrastructure. Local governments make frequent use of this instrument, which can help fund the construction or expansion of offsite capital improvements.

The developer contributions may be calculated using an established rule or be negotiated. The calculation rule takes into consideration costs of public improvements and the size, type and area of the proposed development. Depending on the type of development, the contributions may be paid in cash, through land dedication, direct improvements to the area, or a combination of all methods.

The charge is paid before or at the time the development receives approval. Exemptions to payment are often granted to developments that provide social benefits, e.g., social housing and green spaces, developments that are under a certain threshold, or those that occur in areas where higher building densities are encouraged.

Developer obligations vary considerably across local governments. To illustrate, there are 37 different types of developer obligations only in the city of San Francisco, California, depending on the location, type, and scale of development projects. For example, the "Transit Impact Development Fee" is a city-wide fee that developers have to be pay in cash, for the purpose of funding transit infrastructure, and whose values vary according to the type and size of development. The "Downtown Park Fund Child Care Impact Fee" applies only to projects located in the downtown area.

The main obstacle to implementation is the fact that developers consider the charge to be economically unfeasible and therefore resist payment, which generates administrative and judicial disputes.

Strategic land management

The priority of strategic land management is to facilitate land consolidation and to reserve land for future urban renewal projects. Local governments, as well as special purpose bodies and corporations created by the government for strategic land management, often acquire land in advance of their needs and collect the revenues.

Land acquisition takes place via purchases at market price or through transfers from another government entity. After acquiring land, the government typically redevelops it, alone or in partnership with private actors. Local governments carry out basic physical preparation, provide public utilities and build administrative facilities and affordable and social housing units.

Acquired land may be destined to another public entity, that will execute a project of public interest, for instance, of social housing. Governments also enter into partnerships with private developers for execution. If the land is not to be used for a public purpose, the government recovers investments through the sale or leasing of plots. If sold to the highest bidder, the main purpose is to generate revenues. If sold using criteria besides the financial aspect, there is a specific purpose, such as to address certain infrastructure needs.

Even though the government holds a substantial amount of land to lease, land leasing is less used than sales. Leases serve to generate public revenues, facilitate development with a public purposes and provide land for real estate development. Lease length depends on the intended uses. Exemptions and discounts to payments may be granted to public or nonprofit entities or if the land will be used for public purposes, notably for social housing.

In all, the main challenges to strategic land management are the lack of financing for land acquisition and the lack of coordination between public entities. The administrative costs to manage and develop land sometimes surpass the revenues raised from land sales, meaning that, from the viewpoint of spending, strategic land management is not always profitable to the government.

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Vietnam

Land value capture in Vietnam

There is virtually no land value capture in Vietnam (Table 2.60). The government uses public land lease only, but corruption hampers it. Many challenges block land value capture:

- Public actions' low transparency and high land values incentivise government officials to use land value capture for private rather than public benefit.
- There is no legislation for land value capture. Development norms and regulations are unclear.
- Many urban areas' cadastres are not up to date, inaccurate or incomplete.
- There is no established method to value land. The government uses a combination of prices set by government agencies and some market-based estimation.
- Local governments lack administrative capacity.
- According to Article 32 of the Constitution, the government can only expropriate land when absolutely necessary for reasons of national defence, security, national interest, emergency and protection against natural calamities.

Table 2.60. Vietnam: Main instruments

Instrument (OECD-Lincoln taxonomy)	Local name	National legal provisions	Implementation	Use
Strategic land management (public land lease)	<i>Quản lý đất đai chiến lược (cho thuê đất công)</i>	Article 3 of the Land Law/2013	National government, provinces, districts, local governments and special purpose bodies	Frequent

Enabling framework

Vietnam is a unitary state with three subnational levels of government: 63 provinces, 713 districts and 11,162 municipalities (OECD/UCLG, 2019^[11]). Districts and municipalities are the planning authorities and decide on land use and management. Local officials have high discretion when issuing planning permits. The national and local government levels would be in charge of the legal framework for land value capture.

Strategic land management (public land lease)

The government and publicly-owned companies own a large amount of land. The national government, provinces, districts, local governments and special purpose bodies lease public land (*cho thuê đất công*) to generate revenues, provide land for real estate development and encourage planned development as well as development with a public purpose. Subnational governments may require approval from higher levels. The revenues are part of the general budget of the entities leasing land. In 2017, lease revenues amounted to 3% of GDP.

However, corruption hampers the instrument. Often, the government used to lease land to private developers in exchange for public infrastructure. However, the leased land did not necessarily have to relate to the public infrastructure the developers provided. Thus, developers had no incentive to provide the agreed infrastructure on time and with a high quality. Moreover, land valuation is not transparent. In 2020, the national government banned leasing public land in exchange for public infrastructure to tackle corruption.

Other challenges include the government's lack of administrative capacity as well as the lack of coordination between levels of government and public entities.

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OECD Regional Development Studies

Global Compendium of Land Value Capture Policies

The *Global Compendium of Land Value Capture*, a joint project by the OECD and the Lincoln Institute of Land Policy, is an ambitious undertaking to understand the full landscape of land value capture (LVC) instruments, how they are configured and deployed across the globe in OECD and Non-OECD countries, and what it would take to unleash their full potential as a sustainable revenue source. Moreover, little systematic information is available about the LVC instruments that countries use and enabling frameworks at national and regional levels to guide local governments toward greater use. The report features an overview of the political contexts, legal frameworks, and LVC approaches used in 60 countries. Special attention is given to the differences and similarities between countries that have a mature LVC practice, versus countries that have nascent policies and allowances. This will help countries developing the capacity and competences for LVC to understand the opportunities, trade-offs, and pitfalls to avoid when configuring legal, governance, and planning frameworks and institutions to support the implementation of LVC policies.



PRINT ISBN 978-92-64-51699-1

PDF ISBN 978-92-64-69088-2



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