

Key Points

- Meeting developing Asia and the Pacific's demand for high-quality, integrated infrastructure and renewed, sustainable urban environments will require the steady but equitable acquisition of land that is usually owned or inhabited by prior occupants.
- In many countries that favor private property rights, procuring land for public infrastructure through a market process continues to be challenging; usually prolonged and divisive.
- Title certainty and private property ownership do not necessarily guarantee security of tenure and the well-being of urban poor citizens.
- Land readjustment and other case-based policies explained here allows landowners to benefit from the increased land value that occurs due to infrastructure development, or stay in possession rather than being unwillingly relocated.
- These practical policies are designed to minimize or mitigate adverse environmental and social impacts, family disruptions, and promote the rights of those likely to be affected or left behind by the development process. Moreover, they are applicable to developed markets as well.
- A useful toolkit of defined policies and a systematized taxonomy of practices that make land sharing more equitable is also annexed.

15 Fairer Ways to Share Land for Better Infrastructure and Urban Renewal

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Takeaway Messages

Meeting developing Asia and the Pacific's demand for quality infrastructure and renewed urban environments that can support inclusive post-pandemic growth will require the steady but equitable acquisition of land that is usually owned or inhabited by prior occupants. However, geography, settlement patterns, conflicting cultures, and unique country-level land use problems often raise concerns about the fairness of land procurement and can undermine project viability. This brief examines land development challenges and the importance of balancing the rights and interests of vulnerable communities with broader infrastructure and redevelopment imperatives.

Land is a necessary input in any infrastructure or renewal project. These projects require large and contiguous land parcels, which have to be procured in a time-bound manner. The scale of economies associated with infrastructure provisioning makes it difficult for a competitive market to provide many of these services and can lead to market failure. Privately-held or indigenous lands are often required for public purposes. In many countries that favor private property rights, procuring land for public infrastructure through a market process is challenging.

These challenges get further complicated as in many countries, landholding per household is small. Dependency on land for subsistence is high. Property rights are often convoluted, and the connections to land go beyond the economic utility. All these together form a significant hurdle in obtaining or sharing land rights in Asia and the Pacific (and elsewhere).

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The process of compulsory acquisition has evolved to better compensate affected landowners, either through the payment of additional monetary compensation or solatia. In recent amendments to land acquisition statutes in India, for example, there is an acknowledgement that fair compensation extends beyond the market value of land. However, title and private property ownership do not necessarily guarantee security of tenure and the well-being of urban poor citizens. We need to consider the social and political dimensions, such as the power inequality that exists in society and the land administration systems, because these can make the urban poor vulnerable to state- and market-driven displacement.

The other key aspect to make land development equitable would be to consider the issues of governance and financial complexities that hinder infrastructure development. One has to be open to approaches that go beyond the formal.

Land readjustment assembles plots of land from various landowners, which could be all different sizes and shapes, into a large land parcel. A portion of that assembled land is set aside for infrastructure development, and the rest of the land whose value would improve due to the infrastructure is distributed to the original landowners in proportion with their original boundaries. This allows landowners to benefit from the increased land value that occurs due to infrastructure development. It also minimizes the occurrence of conflicts and objections.

The experience of continuously implementing many land readjustment projects in Japan has made that land readjustment system far more mature in terms of the approval process, land reporting techniques, and financing and contributes to quicker and smoother implementation. Other countries like India have also successfully used land pooling as one of the mechanisms to develop infrastructure.

To overcome the challenges that are associated with land use management strategies, project implementing agencies in some countries and multilateral institutions have developed safeguard policy statements as fundamental operational policies. The idea is to avoid, minimize, or mitigate adverse environmental and social impacts and to protect the rights of those likely to be affected or marginalized by the development process.

These policies, to some extent, aim to bridge the gap that existing land use management strategies were supposed

to have been filling, but have not always been able to do so. Therefore, this brief recommends 15 further steps we consider would be necessary to harmonize social protection and infrastructure growth and urban renewal. A useful toolkit of defined policies and a systematized taxonomy of practices that make land sharing more equitable is also annexed.

General Setting

Land is a necessary input in any infrastructure project and can also be used for its financing by unlocking the value of location through the sale of publicly-held land or other assets. Megaprojects and urban (re)development require large and often contiguous land parcels, procured in a time-bound manner. Scale economies associated with the provisioning of infrastructure services, particularly those operating in concentrated geographical areas, make it difficult for competitive markets to provide many infrastructure services, leading to market failure.

From time to time, privately-held or indigenous land is required for public purposes, such as for infrastructure development or other public goods. In countries that favor private property rights, procuring land for public infrastructure through a market process continues to be challenging. The functioning of land markets is constrained by infrequent transactions, information asymmetries, and lumpiness of investment. The situation is further exacerbated in the case of land for infrastructure as on the buy side of the land market, there is frequently only one large buyer of land, which often is the state or its agencies. On the sell side of the land market, there are numerous landowners who exercise different degrees of power, cooperation, and sophistication in the market depending on the size of their landholding, their personal situation and propensity to trust, and the individual's ability to hold out.

In Western liberal economies, it has long been accepted that private rights should give way on occasion to the wider public interest. In theory, the loss to the individual is offset by the gain to the wider community of which the individual is a part. To avoid projects with public purpose being delayed and to ensure that private rights give way when required, legislative bodies across the world have conferred powers of compulsory acquisition over private land. Public authorities such as central and local governments and a host of other regional development and urban renewal agencies have been able to rely on

powers of compulsory purchase to acquire private rights to land, including the creation of new rights falling short of ownership, without the willing consent of its owner or occupant to ensure that public purposes are accomplished.

In practice, the process of land acquisition through compulsion has been cumbersome and unsatisfactory. One of the main reasons cited for delays in the completion of infrastructure projects in the developed and developing world is the delay and uncertainty in land procurement. Private owners whose land is compulsorily acquired are generally dissatisfied with the compensation that they receive, as well as with the process of acquisition, and often resort to resisting, using drawn-out processes of courts or occasionally direct action and resistance. However, there are fairer and less confrontational ways discussed herein to begin resolving these vexed issues of sharing land for mixed and contested purposes.

Core Issues

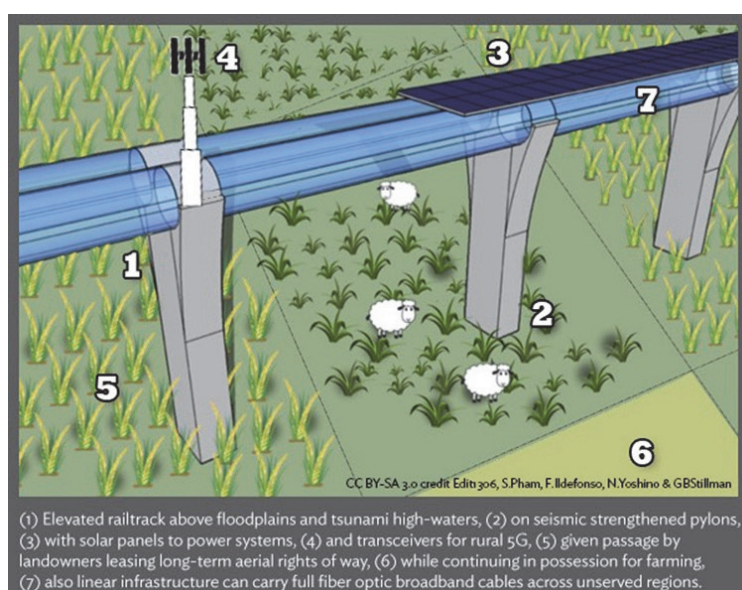
Within this context, this brief addresses the following core issues in the context of the experience of Asia:

- (i) alternative land procurement models (other than compulsory acquisition) for urban development and public infrastructure projects in Asia;

- (ii) the processes and practices involved in large-scale land acquisition, i.e., strategies, alienation, valuation, and compensation in Asian countries;
- (iii) the impact that land use management strategies in Asian countries can have on weaker or marginalized segments of societies and the approaches that could best support them in attaining equitable and sustainable development without unnecessary disruption or social dislocation; and
- (iv) alternative models of land-based financing and their success in infrastructure development.

The treatment in this brief argues that the topic of land use management for equitable infrastructure development is too diverse to be resolved by a single approach. The plurality and customization of land management methods and tools is a virtue. However, it may be possible to identify certain basic principles that can serve as guidance in common country situations. These promising principles definitely include respecting the involvement and participation of stakeholders in projects at all stages, adequate compensation that recognizes losses beyond the asset value, separate ownership and use rights so that alienation from land is minimized, sharing the gains from infrastructure equitably, protecting the rights of First Nation people and of those with informal titles, and leveraging land to finance the project and benefit those whose land is taken for the greater public good.

Figure 1: Elements of High-Quality Infrastructure



These are the key elements of high-quality infrastructure, according to ADBI, that can better accommodate social and environmental concerns while minimizing disruptions and resettlement: seismic-strengthened pylons minimize the ecological footprint of elevated (above floodplain) railway over conserved farmlands, allowing for reduced crop cultivation and the grazing of herds by smallholders continuing in possession while leasing aerial rights-of-way. Note also solar panel placement to power systems that contribute excess electricity to nearby farms and off-grid communities. Pylons can even perform a double duty by supporting 5G transceivers and carrying full fiber optic broadband cables across unserved areas, opening another revenue stream. Diagram by Edit1306 after SpaceX, available Wikimedia Commons; 5G and ground elements remixed by Sarah Pham and Fernando Ildefonso. CC BY-SA 3.0.

Source: Adapted from Stillman and Bharule (2020).

Schedule of 15 Resolves Recommended by ADB and the Institute

As a practical summary of fairer ways, we would like to propose the following schedule of resolves for the consideration of theorists and practitioners. Although they are crafted primarily with developing countries in mind, most of them could be profitably followed in developed and sophisticated markets desiring a more efficient and equitable land use management process as well.

1. *Make original owners first beneficiaries of project design and do no harm to existing communities.*

It is now beyond doubt that sponsors in the developing world will need to become especially sensitive and imaginative to put through their infrastructure routes with the willing acceptance of the existing residents in the areas being served or passed through. If we start from the premise that something must be given to everyone found in a redevelopment site—even respecting the needs of informal settlers and renters—and not just proven landowners, our next question is how to divide up the deal-sweeteners to be offered?

One possibility could be a universal income or windfall, which might be offered regardless of the title situation—like all Saudis and Norwegians get back from their oil industries. Borrowing the argument of Brugman (2020), it could be time to “look beyond [bare] title” so that communal land rights or community land trust approaches for everybody in an affected area might be a better way to go on some occasions instead of concentrating on the specific interests of individuals who can sufficiently prove legal title.

2. *Understand local communities’ expectations and engage with them, working through expert mediators.*

To overcome the challenges associated with land use management strategies for urban development and infrastructure under current laws and practices, project implementing agencies in some countries and multilateral institutions have developed safeguard policy statements as operational policies to “avoid, minimize, or mitigate adverse environmental and social impacts, including protecting the rights of those likely to be affected or marginalized by the development process” (ADB 2013).

Safeguard policies aim at identifying all the impacts of development projects thoroughly and early. Plans to mitigate, avoid, and compensate for those adverse impacts are developed and affected people are fully involved, informed, and consulted during project preparation and implementation stages (Jayasooriya 2020).

3. *Offer a menu of possible land use models that have worked elsewhere to consider adapting for sponsors, host governments, financiers, or local communities.*

What has become clear through rigorous study of various land management strategies and the strategies and legal, social, and economic institutions within which these strategies operate, through the cross-country analyses, is that the pluralism of approaches for the procurement of land for urban development and infrastructure will persist.

It is difficult, if not impossible, to design a foolproof method (other than what is based on legitimate market transactions) for the procurement of land for public purposes that will be applicable for all countries. However, it is possible to identify key elements of land use management strategy that must be part of the toolkits to be used for land procurement in cases where markets fail or are rudimentary.

In the *Overview and Taxonomy*, we set forth as an annex hereto these key and promising elements that could improve land procurement and are essential for rendering land use management equitable (Tiwari and Stillman 2020).

4. *Engage in extensive impact and feasibility studies with multiple public consultation stages and checkpoints.*

This most logical prescription has been well-known for many years in the developed and developing world but still falls short for so many reasons in practice due to human nature and inclination to cut corners. This temptation must be ruthlessly avoided as a short-term hop over a trust-inducing step will only result in medium- and long-term problems later in a project’s

implementation. A society's innate level of trust and cooperation and the rule of law and process will always be useful bulwarks to these temptations but can never hold out against outright corruption or ineptitude (Stillman 2020).

5. Know with humility when to slowdown or even shelve a proposed project that might be better to bring up later.

We do not presume to know all the answers or for that matter even most of the right questions to ask about land use management and urban renewal. But we cannot go wrong by asking as a starting point what is in the best interests of the greater public good and community need.

Finding solutions to the continuing problems of cities and their redevelopment is more than just a patchwork to remedy old and persistent problems. We conceive of a continuing spirit of evolution and introduction of new technologies and systems. Our future cities must always be in a state of re-creation and rejuvenation and must be ever-evolving to become anew. Nevertheless, futurists, planners, and sponsors must not get too far ahead of, or impatient with, the desires of the inhabiting communities or what we call "citizen owners" who may be more cautious or skeptical (Susantono, Boarnet, and Guild 2021). It is wiser to heed their short-term interests rather than rush a project that becomes unwelcome.

6. Bring trusted independent, professional, and qualified property evaluators, quality surveyors, and completion guarantors into projects at all levels.

Project sponsors and financiers should hire independent, third-country quantity surveyors and quality control firms to oversee work and the integrity of materials used (for instance, unimpeachable Norwegian expertise for checking the structural integrity of hydroelectricity and dam construction). These guarantors or watchdogs of quality and propriety may come from within the industry, sector associations, international organizations, or regional cooperatives: it matters little that their genesis so long as they are perceived as bona fide intermediaries and their seal of "good housekeeping" is sought out to cement lasting deals that are genuinely viewed as equitable for all parties (Tiwari and Stillman 2020).

7. Hire social workers and relocation specialists to follow the medium- and long-term impacts on affected people to ensure they receive as many of the promised benefits and livelihood improvements as possible.

The land rights of indigenous peoples are now better understood in the context of their attachment to and dependence on land, and how these generate deeper (frequently spiritual) interests and rights that distinguish them from usually understood property rights and often defy placing a monetary value as compensation.

Recent developments in international law and social and environmental safeguard policies of international financial institutions have strengthened the rights of indigenous peoples vis-à-vis "others" or the rest. Such laws and development policies are needed to protect the status quo of indigenous peoples, but they must be implemented by experienced and sympathetic social workers and relocation specialists who understand the local needs of the communities affected (Perera 2020).

8. Rearrange relocation and displacement packages and benefits for affected people or their descendants as needed and when circumstances change over time.

Exclusions of urban poor communities from the benefits of redevelopment and their forced eviction are regrettably common in the literature and historical record. These cases point out systemic problems in the governance structures of the state, impairing the transparent and successful registration of land and the recognition of land rights for vulnerable groups.

Furthermore, the rapid rates of urban development and the state's protection of foreign investors' interests in land rather point out the importance of empowering, supporting, and building the capacity of civil society organizations and urban poor communities to ensure their participation in land titling projects and to hold the state accountable for its responsibilities in the implementation of inclusionary land titling (Brugman 2020).

9. Honestly admit to fundamental changes in circumstances or miscalculations that retard a project's progress.

Sponsors in the developing world will need to become especially sensitive and honest to put through their infrastructure routes with the willing acceptance of the existing residents of the areas being served or passed through, as well as the wider community.

We might anticipate that novel indexes measuring ease of securing rights of way could someday become one of many illuminating ways to predict the chances of major infrastructure projects proceeding with less risk of local opposition. But all projects must be ultimately accountable to the communities they serve, and if they lose support, must re-evaluate their continuation.

10. Establish trusted avenues to meaningfully complain and to hold sponsors, host governments, and financiers accountable for broken promises or missed benefits.

Law and financial engineering are not always going to be a complete substitute for trust as often cultural virtues must underpin the development of a widely accepted legal, business system. Binding rules, shared concepts, and impartial courts are not always needed as the first resort, but knowing they are there for everyone's benefit and guaranteeing fairness is reassuring and ultimately indispensable as society becomes more sophisticated and diverse.

If governments and sponsors were instead to explain to their affected landowners and indigenous stewards of the land that they are guaranteed to be accountable by legitimate and impartial arbiters and honest brokers, the persistent struggle to achieve more efficient and equitable land use balances might become an easier and less confrontational road for everyone (Stillman 2020).

11. Smart cities can promote the logical mixed use of buildings and open spaces, resulting in a more integrated blend of residential and office areas, so as to achieve equity across households in different income segments.

Rapid urbanization is putting enormous pressure on many cities in developing Asia to provide affordable and adequate housing on a large scale and in a short time. Generally, supply has been too slow in reacting to the increasing demand. As more people crowd into cities for work, decent housing becomes less affordable and slums often pop up and spread out. Once they get started, it is hard to stop the downward spiral of overcrowding and poor housing. Beyond demographic shifts, overly restrictive land use regulations and unnecessarily high construction costs are among the factors constraining supply (Susantono, Boarnet, and Guild 2021). Better planned mixed use urban areas can help create more vibrant neighborhoods that are not deserted after office hours and do not fall prey to vandalism.

Countries should also finance more housing upgrades to help maintain homes to preserve pleasant living conditions and prevent dilapidation. Renovation, rejuvenation, regeneration and upgrading is just as important as constructing new houses and is cheaper in the medium term. Also, pedestrians and non-vehicular and self-powered travelers must be placed first as the "monarchs of the roadways" for these new urban domains (Yoshino and Helble 2016).

12. Governments should balance the pros and cons of home ownership versus renting and adjust their policies accordingly.

In every country, different socioeconomic factors can affect home ownership choices, so if people want to save by building up equity, then owning a home is something to aim for. If they need to keep moving to follow jobs, it probably makes more sense for governments to encourage renting (Yoshino and Helble 2016). Past homeownership assumptions and capital accumulation models must be re-evaluated and challenged if outmoded.

13. Governments should collect housing market data and make it publicly available to detect and prevent a housing bubble, which can lead to a catastrophic impact on an economy and innocent bystanders caught up in the speculation.

To avoid wasteful cycles of housing booms and busts, it is always a good idea to keep buyers and sellers updated with accurate market data via smartphones and other devices. Open and transparent data will promote an efficient and equitable housing market so everybody has an opportunity to find decent and affordable shelter (Yoshino and Helble 2016).

14. Adopt the latest Earth observation and remote digital surveying to leapfrog imperfect analog systems that are struggling to stay current with quickly-changing land uses.

Earth observation involves collecting and analyzing information on the natural and human-made environment, including land usage and ownership patterns, using satellite constellations and new software and methods. There has been a significant increase in its use to address development challenges such as unplanned settlement growth, population shifts, sanitation, food and water security and disaster risk (Susantono, Boarnet, and Guild 2021).

Existing tools that are being enhanced by artificial intelligence, e-solutions, and open-source data can improve project design and development and also the mapping of actual land use and de facto possession and ownership even when the cadastral systems are

imperfect. Countries or regions within countries that have imperfect land title registration systems may be able to skip the analog stage by adopting satellite surveying in combination with on-the-ground proving and authentication leading to a single, unified, permanent, and updatable land information system (Tiwari and Stillman 2020).

15. Encourage the take-up of the principles of “citizen ownership” of the cities and peri-urban domains they inhabit.

An equitable and inclusive city with fair land use is built on a strategic vision shared by well-informed and engaged stakeholders through participatory planning and decision-making. An enabling environment can be created through effective institutions, policies, and governance systems, including integrated planning, sound financial management, appropriate technologies, and regional development and urban renewal authorities (Stillman and Bharule 2020).

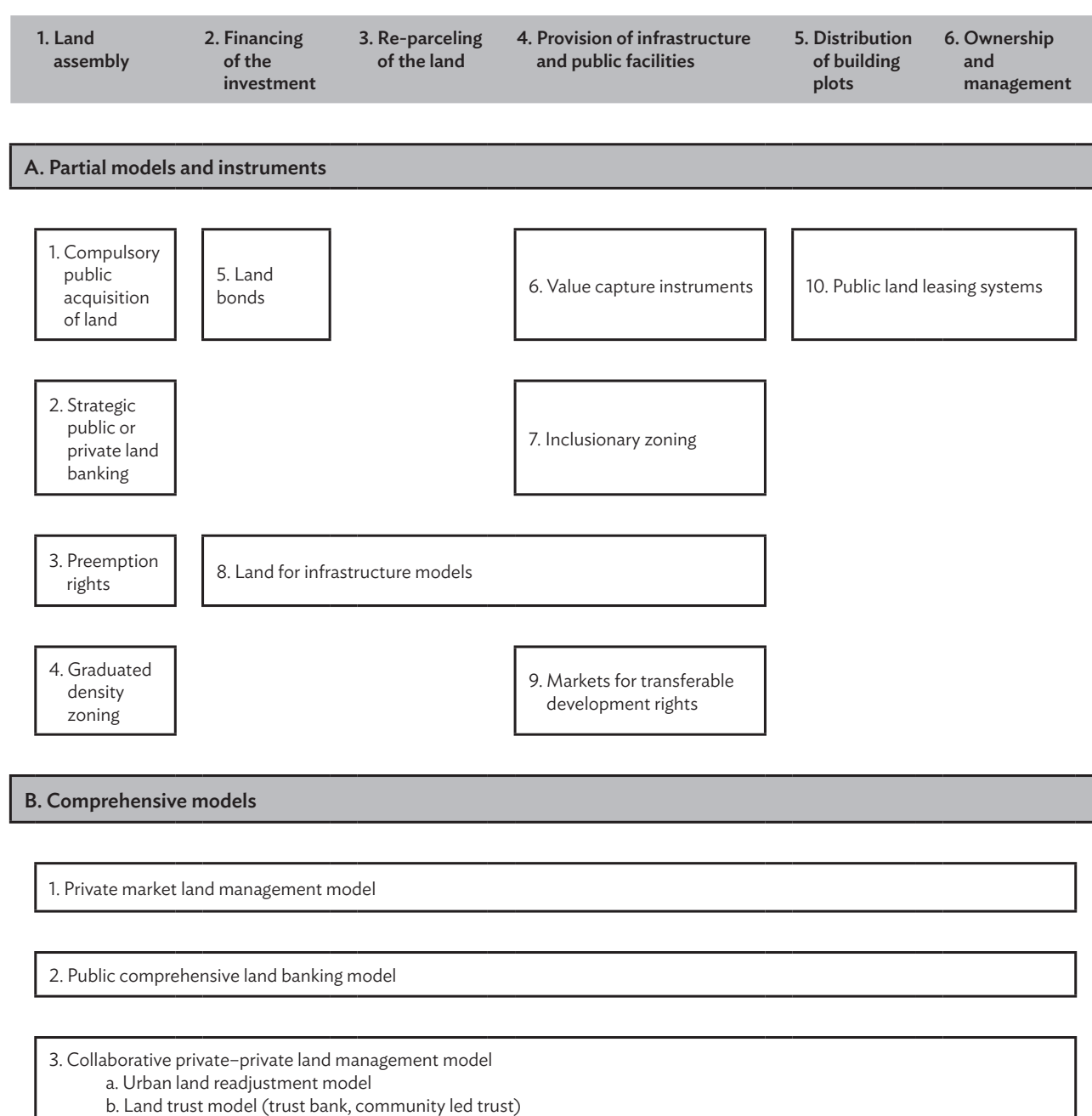
Governments, both central and local, must create enabling and coherent environments through leadership and partnerships that forge synergies among the different sectors and across various stakeholders beginning with the citizens who own the lands they inhabit. Principles, institutions, trust and cooperation developed in other contexts can be successfully transferred to larger city clusters. Such arrangements can have greater authority over land use, transport, and open space planning, and can assign sustainable budgets from the participating local governments, tax districts, and provincial and national governments to invest in the plans and operate and maintain infrastructure.

The aim is to enable transformative change in urban development, but at the same time maximize the impact, sustainability, inclusiveness, and fairness of infrastructure investments (Susantono, Boarnet, and Guild 2021).

Annex: Overview and Taxonomy of Strategies and Tools

Based on the literature, it is possible to distinguish and define at least 10 types of (partial) land management strategies: (1) compulsory public acquisition of land; (2) strategic public or private land banking; (3) reemption rights; (4) graduated density zoning; (5) land bonds; (6) value capture instruments; (7) inclusionary zoning; (8) land for infrastructure models; (9) markets for transferable development rights; and (10) public land leasing systems (van der Krabben, Tiwari, and Shukla 2020).

Figure A1: Land Management Strategies and Tools



Source: Van der Krabben, Tiwari, and Shukla (2020).

Compulsory Public Acquisition of Land

Land transfer from passive to active ownership sometimes requires the compulsory public acquisition of land (also referred to as eminent domain, compulsory purchase, eviction, expropriation, or resumption). Compulsory acquisition is most simply defined as the power of the sovereign to compulsorily acquire private land for public purposes, such as building dams, roads, railways, hospitals, schools, and other public infrastructure.

Comprehensive Land Management Strategies

We have distinguished three types of comprehensive land management strategies: a private market land management strategy, a public comprehensive land banking strategy, and a collaborative private–private land management strategy (see further van der Krabben, Tiwari, and Shukla [2020: 31–40]).

Graduated Density Zoning

Often, it is difficult to encourage redevelopment at a higher density within the city due to the challenges involved in assembling land from multiple small landowners and the typical problem of holdout. If a city needs to increase density around a rail transit line, it may adopt the strategy of allowing, for example, a multifamily housing development of up to 50 units on all plots greater than 1 acre. If the value of land for 50 units significantly exceeds the existing value, there is a strong incentive for landowners to come together voluntarily and pool land to at least 1 acre and allow redevelopment. If graduated density zoning is applied to an area that is large enough to allow multiple collections of owners whose assembled land would trigger high density development, the competition among landowners would reduce the power of holdout and induce the worry of being left out. But graduated density zoning cannot fully eliminate the incentive to hold out, which would result in isolated sites that cannot be combined with other contiguous parcels. Nevertheless, cooperation and trust among the original owners combined with competition among developers may shift and improve capital gains for the original owners (Shoup 2008).

Inclusionary Zoning

Also known as inclusionary housing, inclusionary zoning can be considered as a special kind of value capture mechanism. Alongside “regular” zoning ordinances, there are inclusionary zoning programs that require private developers who undertake residential development or rehabilitation to contribute a portion of their new units toward affordable housing for those who are crowded out in the upscaling residential market. These programs have been mainly applied by local governments in the United States, although they should be expected to have further utility in developing and emerging economies, too (Calavita and Mallach 2009).

Land Bonds

Land bonds are financial bonds used by municipalities in many countries to provide funding for investment in the acquisition of land for (future) urban development (Temel 2001). Municipal land or infrastructure bonds are recommended by the United Nations and other international organizations as attractive financing constructs for more developing countries in Asia (Platz 2009). Rehabilitation bonds are constantly evolving in the United States, particularly in California and other areas with large redevelopment needs (Yoshino and Stillman 2017).

Land for Infrastructure Models

Based on the idea that both road and public transport infrastructure investments—adding to improved locational accessibility—lead to higher land and real estate prices for properties and environs served, many countries have implemented policies for integrated transit-oriented development (TOD) projects. These policies aim to integrate land and real estate development with transport infrastructure investments in different ways. These policies can be seen as partial land management strategies, since they may contribute to the financing of investment in land and also serve as a value capture mechanism. Many general studies have proved how land value can be “captured” (or recycled) to finance TOD. Developing countries in Asia and elsewhere should be able to use land value capture instruments to optimize and finance TOD strategies (Suzuki, Jin, and Hong 2015).

Markets for Transferable Development Rights

In some countries, such as Brazil, India, the Netherlands, and the United States, markets for transferable development rights have been established to support land development. For this, usually two interventions are needed: first, the development right over land must be separated from the ownership right over land; second, a market must be created where the trading of development rights can take place.

The establishment of a market for transferable development rights may serve two different purposes. First, in some countries, governments decide to create a market for development rights, enabling them to raise an income from selling these rights. The income generated from selling the development rights can be used to finance the costs of urban transformation projects and/or public infrastructure (Suzuki, Jin, and Hong 2015). Second, transferable development rights are sometimes offered as non-financial compensation to landowners. The transfer of development rights is based on the ability to transfer additional value from one development to the other. This compensates for losses by those whose planning and development rights are reduced due to a government (planning) intervention (van der Veen, Spaans, and Janssen-Jansen 2010; Alterman 2012).

Preemption

Preemption (or right of first refusal) is the right that a landowner gives the state or local government to buy property first at the market value before other parties (Zevenbergen, Ferlan, and Mattsson 2007). It comprises a formal instrument that entitles the public authority to the first option to buy a property under certain conditions (Holtslag-Broekhof, Hartmann, and Spit 2018).

In the Netherlands, the Municipal Preemption Right Act gives the municipality the right to declare its interest in areas proposed for urban renewal and expansion. As and when the owner is ready to sell land over which municipal preemption has been imposed, the land is first offered to the municipality. The market value at which the municipality would purchase land is determined using the same rules as in expropriation law. Based on the estimated price, the municipality may decide either to buy the land or decline the sale. Also, the owner has the choice of either accepting the estimated price or deciding not to sell at all. Under this version, no appeal is possible for negotiation on price. If the municipality decides not to buy the property, the owner is free to sell in the open market within the next 3 years. These rights are registrable in the Netherlands and are used

to ensure that public interests are protected (Zevenbergen, Ferlan, and Mattsson 2007).

In France, certain zones identified for future development by the government are declared Zones d'Aménagement Différé (zones of deferred development). In these zones, the government has the right of first refusal for any land transaction within a set timeframe. As a process, property owners who want to sell their land are required to declare their intent to sell. Within a set time frame (usually around 2 months), the government will either accept the owner's requested price or, in the case of a dispute over price, agree to a negotiated settlement. Alternatively, the government may approach the court to determine price, which is set at the market rate 2 years before the declaration of the right of preemption. This instrument enables the government to avoid the kind of land speculation that may follow notification on changes to the urban development plans (World Bank 2020).

In Australia, preemption rights are not imposed by statute, although, as a matter of contract law, parties can grant preemption rights or a right of first offer and refusal in relation to the sale of real estate.

In Islamic jurisprudence, the use of preemption rights called *shu'fa* is prevalent, and it provides a right of first refusal over the sale of a given land or property to its direct neighbors.

Where the operator of a piece of infrastructure is only leasing the land or seeking a temporary right of way or passage from the owners, the ADB Institute has also been advocating the addition of rights to purchase at the end of very long-term leases, customarily for 50 or 99 years. This avoids the need for outright purchase at the beginning of the project, allows the landowner to participate in a long-term, guaranteed income stream from the rent, and does not disrupt the running of the infrastructure when the lease eventually comes up for renewal (Hossain and Yoshino 2020; Tiwari and Stillman 2020: 388–389).

Public Land Lease Systems

In countries with state ownership of land, after the development, the land remains state-owned and user rights over that land are leased to the leaseholder for a certain time period. In Asia, the best-known example is the People's Republic of China's (PRC) land lease system (see, generally, Wu and Yang [2020]). For urban development, local governments in the PRC would usually first expropriate rural land and service that land with a basic infrastructure. Then the local government

would sell the user rights of the serviced land to a user for a pre-specified use. The land concession fee is determined either by negotiated agreement or (predominantly) by competitive tendering or auction.

Land leasing is the common way for local governments to capture land value in the PRC. The revenue generated as extra-budgetary income is used to pay for local public infrastructure development, but there is usually no direct link between the lease on a plot of land and the infrastructure provided on that plot (Ingram and Hong 2012). Land financing in the PRC is a significant type of fiscal revenue strategy for local governments to raise revenue through land leasing and land tax in the PRC (van der Krabben, Wang, and Samsura 2020). Instructive examples of public land lease systems can also be found in Viet Nam and, in a very different context, the Netherlands again.

Strategic Public or Private Land Banking

While only a few countries make use of what we refer to as comprehensive (public) land banking strategies, the use of strategic public land banking is a much more common phenomenon. The concept of land banking emerged in the United States as a planning instrument in the latter part of the 20th century to create municipal land reserves for short- and long-term control over urban planning.

In the words of Alexander (2005), a land bank is an entity that assembles and banks land for short- or long-term strategic purposes. Public land banking is the mechanism for the government to assemble land parcels, usually on the periphery of an urban center, with a view to developing or selling them for development at a future date (Stoebuck 1986). These developments may range from creating new towns to the renewal of degenerated inner-city suburbs and the construction of large irrigation projects, future parks, and public buildings.

In the view of Fishman and Gross (1972, cited in Alexander 2005, p.143), public land banks are public bodies that acquire land in future urban growth areas to protect it from unplanned speculative development. Such interventions are necessary to regulate the pace and direction of growth. Depending on the laws that govern them or the jurisdictions that establish them, land banks differ in the kinds of properties that they hold. Despite these differences, one thing that is usually common among land banks is their focus on abandoned or vacant properties (van der Krabben and Jacobs 2013).

Value Capture Instruments

Land value capture (or value recycling) refers to the “creaming off” of increases in land value by a public body from the landowner, where the increased land value is the result of rezoning the land or public infrastructure provision. A large body of literature discusses the legal right of a state body to take part of the landowner’s development gain and use it for public purposes (for an overview of that literature, see Alterman [2012] and Muñoz-Gielen and van der Krabben [2019]).

Perhaps the most well-known dispute over taxing land value increase took place in the 1940s in the United Kingdom after the publication of the Uthwatt Report in 1942. The Uthwatt Committee discussed, among other things, the introduction of a betterment levy to capture the planning gain. A 100% betterment levy was introduced in the 1947 Town and Country Planning Act, and any development required a payment to the Central Land Board. Sale of land in private ownership to developers attracted a levy. However, bitter political opposition to the new regulation arose quickly and the subsequent Conservative government immediately decided to abolish it in the 1954 Planning Act (Muñoz-Gielen and van der Krabben 2019).

Other literature discusses the instruments that can be used for land value capture (for an overview of that literature, see Alterman [2012] and Muñoz-Gielen and van der Krabben [2019]). An often-made distinction is between direct and indirect value capture mechanisms. According to Alterman (2009: 199):

Direct value capture mechanisms refer to an increase in the value of land of private owners through actions undertaken by public authorities or by the general community. The rationale for value capture is thus the fact that the increase in value was not caused personally by an individual and hence should be shared with a broader community.

A classic example would be where services are supplied to an off-grid rural or peri-urban property, such as sewer pipes, and the homeowner readily pays the local government a contribution toward the costs of the connection to the mains and its ongoing maintenance by way of a sewer betterment fee or charge, as it replaces the old septic tank and the chore of having it emptied. Often, however, the betterment is not compensated or charged to the benefitting homeowners, such as where a new stop for a train or bus line is added, increasing access to the private property.

Further Recommended Reading

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