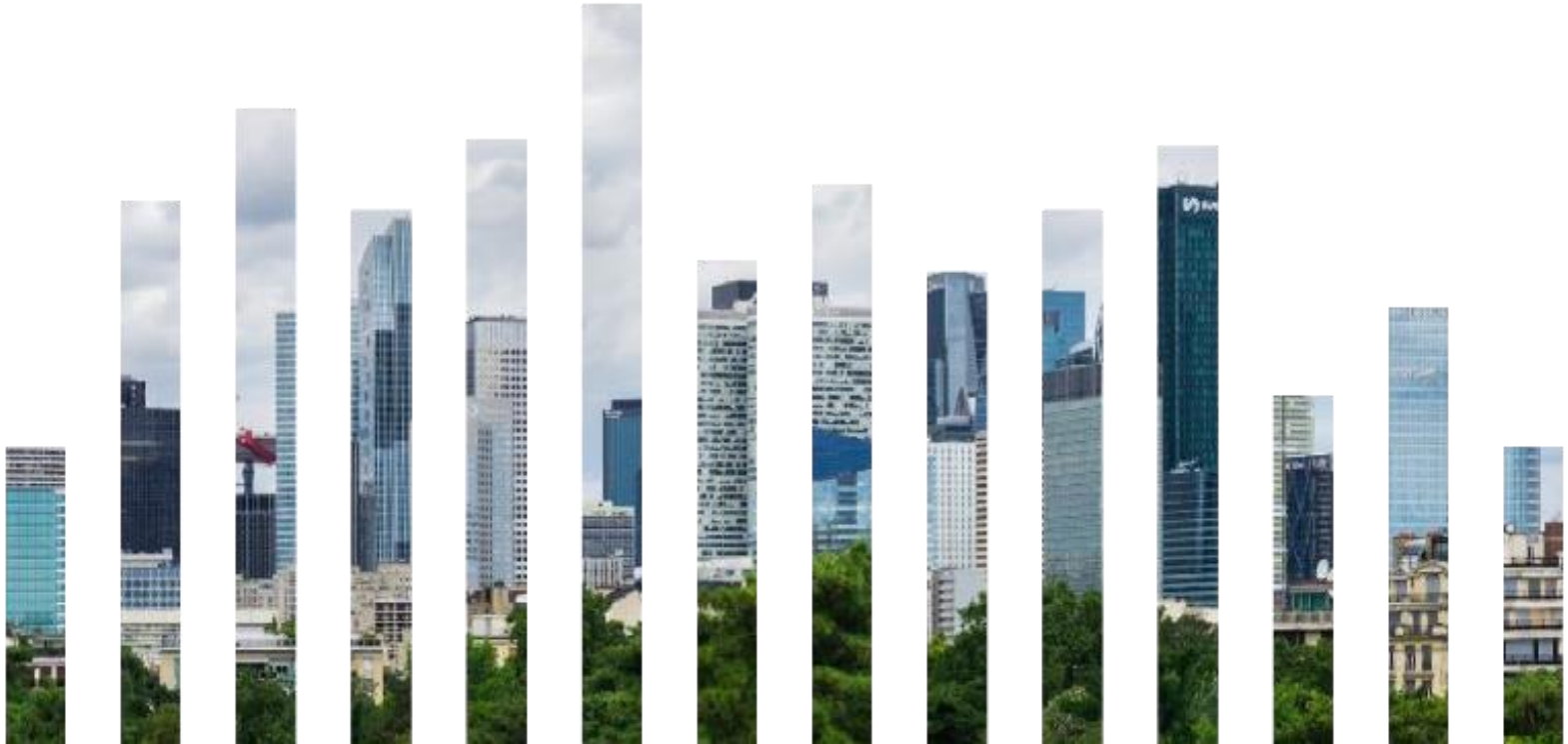
LAND VALUE CAPTURE

INVESTMENT IN INFRASTRUCTURE

City Resilience Program

WORLD BANK GROUP



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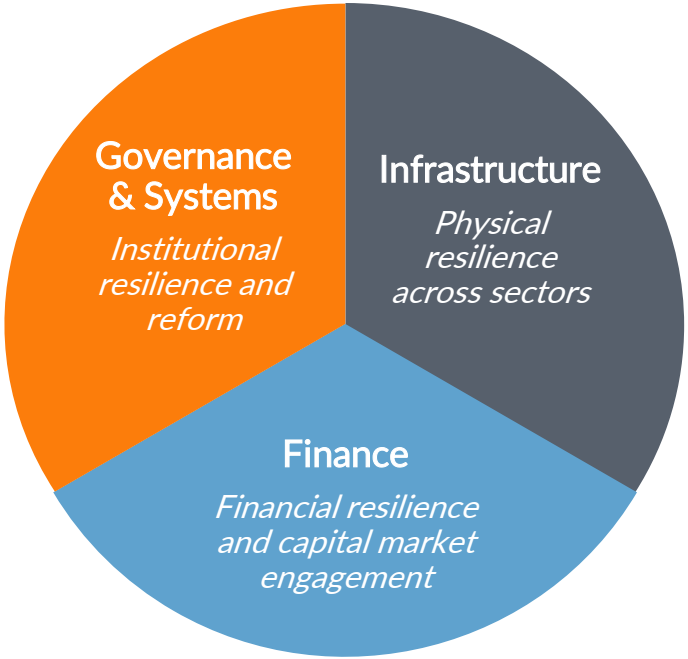
Introduction



INVESTMENT IN INFRASTRUCTURE

Three Pillars of City Resilience

- Investment needs for cities extend beyond the reach of public finances
- Projections show that investments of $4.1 to $4.3 trillion in urban infrastructure are needed every year
- An incremental 9 to 27 percent ($0.4 trillion to $1.1 trillion) will be required to make urban infrastructure climate resilient
- Capital does not flow easily to meet this demand due to lack of knowledge and support from financial services

Private sector investment in infrastructure has three overlapping modalities

Debt	✓ Direct lending to a responsible jurisdiction ✓ Variety of borrowing mechanisms that can complement each other ✓ Full control and financial risk born by public entity
Concession	✓ Public entity transfers some or most of financing (including but not limited to equity project financing), construction and/or operating responsibilities (and risks) to a private partner
Land Value Capture (LVC)	✓ Infrastructure financing is part of a broader development effort ✓ Reduces impact on government balance sheet ✓ Facilitates creation of private economic value in benefiting location

LVC is a Financial Policy Mechanism that Helps Government to:

- ✓ Finance public investment in infrastructure to reduce physical vulnerabilities due to floods, environmental degradation, etc, thereby unlocking land values that are then captured by the city
- ✓ Secure (or reimburse) upfront infrastructure funding by recouping real estate value gains generated by infrastructure upgrades
- ✓ Levy direct beneficiaries of public improvements, which would otherwise benefit from such improvements as “windfall gains”
- ✓ Unlock additional funding in conditions of limited access to traditional sources of public sector financing
- ✓ Promote infrastructure cost-sharing with win-win outcomes to public and private stakeholders
- ✓ Incentivize wider policy measures that increase land value, e.g. reduction of local risks

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Example 1: LVC helps the city of Ahmedabad to open up the riverfront

Blighted urban riverfront

- ✓ Place for the poor to build their hutments
- ✓ Inaccessible
- ✓ No new commercial/ residential development

$17 mln of upfront public investment

- ✓ 22km enforced promenade
- ✓ Slums resettlement
- ✓ Sewage upgrade
- ✓ Environmental rehab
- ✓ Land reclamation

Well serviced, walkable waterfront

- ✓ River access open to public
- ✓ 202 ha of land has been made available for modern development
- ✓ Reduce erosion and exposure of the city to flood risk

30 ha of reclaimed land for sale

- ✓ 15% of sale proceeds recovers the cost of entire upfront public investment

7-10 years

Example 2: LVC helps regenerate Rio de Janeiro's historic area near Bay

Underused industrial lands in the historic core of Rio

- ✓ Low-density uses inherited from cargo port
- ✓ Poor accessibility
- ✓ Contaminated waters
- ✓ Unpleasant views

New density and height regulations adopted

- ✓ City adopted new zoning to allow construction of additional density
- ✓ Structured SPV to sell extra development rights

City earns $1.8 bln from sale of rights to build extra density

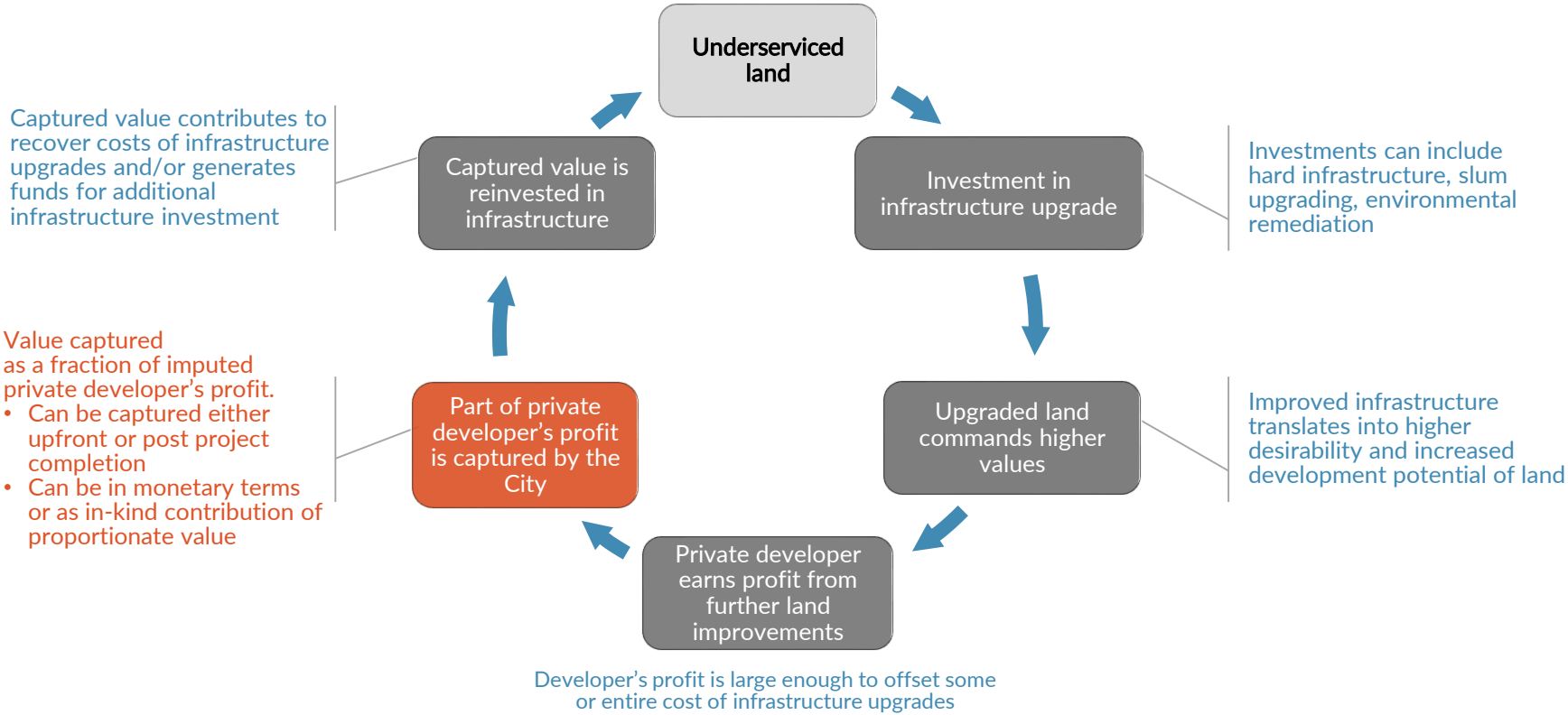
- ✓ Proceeds are directed to hard infrastructure improvements
- ✓ More build-up is facilitated
- ✓ Further sale of development rights

Regenerated modern mixed-use community

- ✓ The area becomes home to 70,000 new mixed-income residents in a well-serviced, accessible community with attractive urban views

3-4 years to sale of a first tranche of development rights, 15 years to fully build out

LVC Established a Virtuous Circle of Value from Infrastructure Upgrades



INVESTMENT IN INFRASTRUCTURE

LVC is a new source of project financing promoted by the World Bank

If there is a $ 1 billion capital investment program contemplated by a city:

Business as usual

- ✓ The World Bank finances $100 million with an interest-bearing term loan
- ✓ Another $900 million is raised from general funds, public/private debt and grants

Leveraging LVC

- ✓ In concert with BAU, The World Bank provides comprehensive technical assistance to the city to help structure additional funding with re-captured land value (e.g. cash proceeds from sale of land / development rights, special tax assessments, etc.)
- ✓ This works towards overall reduction of the principal of interest-bearing loans, general fund appropriations and grant resources and enhances bankability of the $1 bln program

Conceptualization of LVC-hypothetical disaggregation of land value

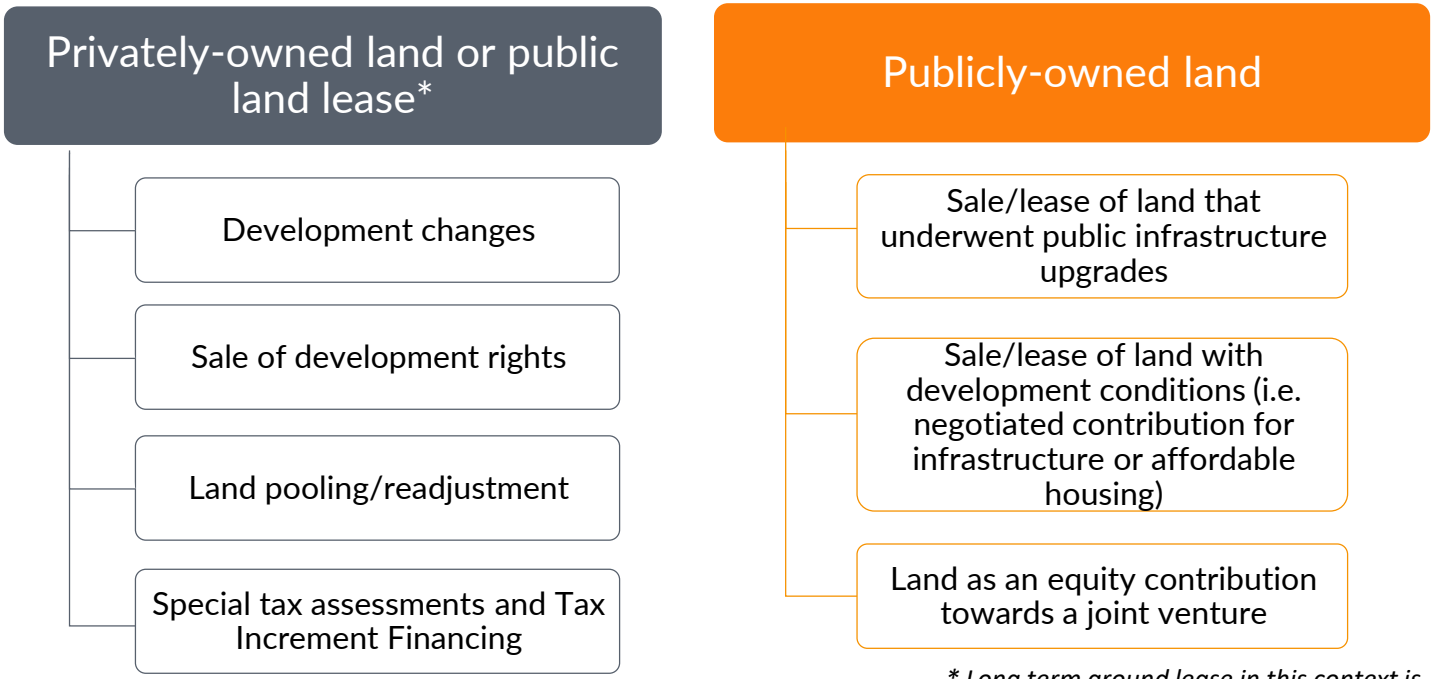
Increases in land value due to population growth and economic development.	The government, on behalf of the general public, may keep this portion of the land value.
Increases in land value due to public investment in infrastructure and changes in land use regulations.	Public service providers could capture this portion of the increment to cover the costs of public infrastructure and local service provision.
Increases in land value due to landowners' investments.	Private land owners should profit from this portion of the increment.
Intrinsic land value	Land buyers (or lessees) pay sellers (lessors) to obtain the property rights of land.

LVC Tools and Mechanism

There is a range of tools used by public sector to capture land value gains

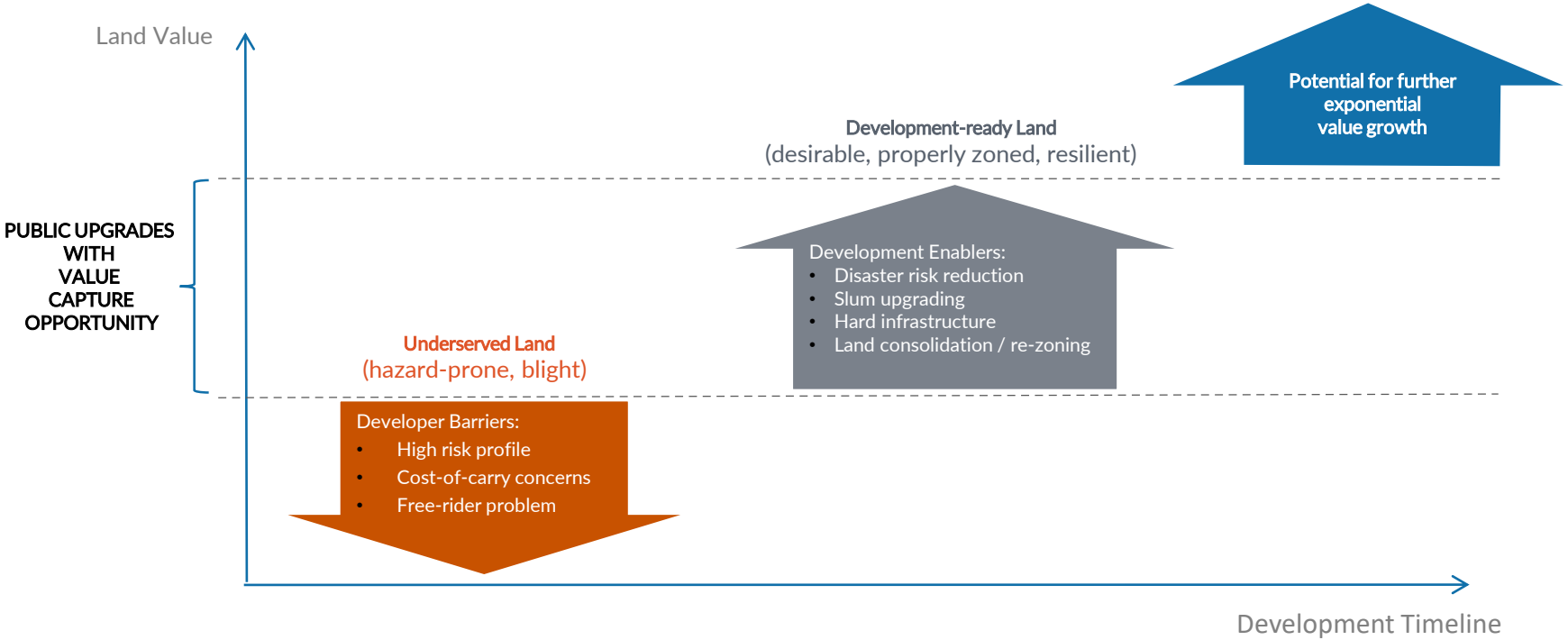
Leveraging public real assets	Disposition (sale or lease) of excess/underutilized public assets (land, property) for cash that is re-invested in local infrastructure
Development charges	Developer receives development rights (or tenure rights in land, or approval of land use changes) in exchange for obligation to compensate in cash (or provide in-kind) the cost of certain items of public infrastructure benefitting larger area.
Sale of development rights	Development rights or certificates of additional density are sold for cash to finance infrastructure improvements
Land pooling /readjustment	Land owners or occupants voluntarily contribute part of their land for infrastructure development and for sale to cover some project cost. In return, each land owner receives a serviced plot of smaller area with higher value within the same neighborhood.
Special assessments/ betterment levies	Locally administered tax increments (property taxes, sales taxes, etc.) that generate additional tax revenues for re-investment in local infrastructure
Tax increment financing	Capturing increases in property/land tax base (after infrastructure upgrades) and using such incremental tax proceeds as collateral and refinancing source for infrastructure loans

LVC mechanisms can be promoted both on privately-owned and public Lands, depending on local context



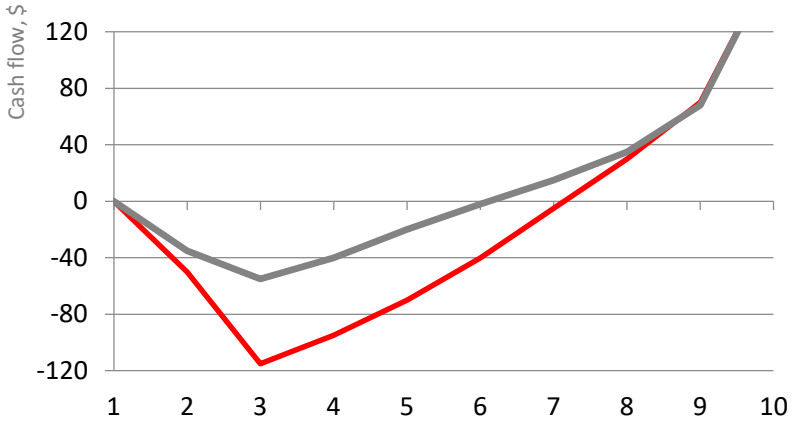
** Long term ground lease in this context is considered equivalent to private ownership*

LVC mechanism allows cost-sharing on initial development stages which helps reduce /re-distribute development activation costs



LVC may be structured to either increase or decrease the infrastructure carrying cost of a private project, depending on the project's risk-return profile

Infrastructure windfall: public costs for infrastructure are offloaded to private sector; private partner's returns are high enough to absorb extra costs and extended payback

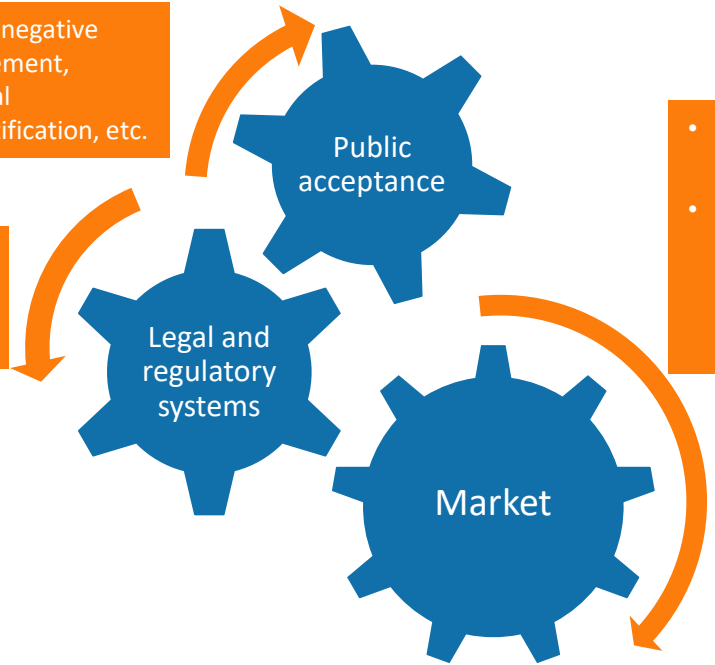


Infrastructure bottleneck: upfront infrastructure costs are too high for private sector and are paid by public funds; public costs are later recovered from private partner's operating revenue

LVC is a universal policy tool, which could be implemented in various contexts

- Development may face negative mindset due to displacement, NIMBY, redlining, spatial segregation, social stratification, etc.

- Inadequate land controls, deficient technology and data systems (e.g. land cadaster) may hinder LVC



- Most effective in burgeoning real estate market
- Highest land value differential is achieved in areas that are most responsive to infrastructure upgrades (urban core, waterfront, etc.)

LVC Economic Opportunities

LVC presets numerous opportunities for local economic development, but may be hindered by local and system-wide constraints

LVC builds into the local economic development context by:

Bringing positive development implications

- Improved urban environment
- Self-financed infrastructure
- Land value gains / Increased tax revenue
- Enhanced budgetary resources for addressing social goals

Being hampered by development challenges

- Lack of real estate market dynamics
- Insecure land / property rights
- Regulatory constraints
- Lack of knowledge / management capacity
- Corruption

Despite being largely associated with transportation upgrades, LVC opens financing opportunities for many more infrastructure items

Areas with proven track record in LVC

- ✓ Transportation and transit-related assets
- ✓ Water-supply sanitation
- ✓ Sewage and landfill

Lack of LVC track record *but high LVC potential*

- ✓ Flood mitigation
- ✓ Slum upgrades and resettlement
- ✓ Water-basin / land decontamination
- ✓ Environment cleaning and rehabilitation
- ✓ Historic preservation
- ✓ Land consolidation

Table below summarizes the common LVC instruments used in practice

Instruments	Description	Examples in developing countries
Leveraging publicly owned land / property	Disposition of "excess" public land generates cash for area-wide infrastructure upgrades. Often involve land consolidation (e.g. through *eminent domain*) or/and entitlement before disposition	• Bonifacio Global City (Philippines); • Sabarmati Riverfront (India)
Development charges / impact fees / developer exactions /	Developer receives development rights in exchange for obligation to compensate in cash (or provide in-kind) the cost of certain items of public infrastructure benefitting larger area.	• Impact fee formula introduced to fund construction of 21-km highway connector between Santiago and northern suburbs • In kind/cash developer exactions in cities of Columbia and Chile
Sale of development rights	Development rights or certificates of additional density are sold for cash to finance infrastructure improvements	• CEPAC bonds (Brazil), e.g. Porto Maravilla drainage upgrades; • Sale of FSI rights in Mumbai (India)
Land pooling / readjustment	Land owners or occupants voluntarily contribute part of their land for infrastructure development and for sale to cover some project cost. In return, each land owner receives a serviced plot of smaller area with higher value within the same neighborhood.	• About 1/3 of total urban area in Japan and 1/4 of total urban area in South Korea were developed through LP/R. • Used in many countries to facilitate peri-urbanization, urban regeneration including slum upgrading, and post-disaster reconstruction.
Introduction of land value taxes	Levy on value of underlying land "as unimproved" (as a substitute or supplement to property tax levied to buildings). Stimulates development to avoid taxation of idling land. Generates property tax and economic activity. Can be effective in areas plagued by disasters	• Separate taxation of land is introduced in select countries (Taiwan) • Land value tax was temporarily introduced in cities of Baja California (Mexico) in early 1990s
Betterment levies / special assessment	Public sector taxes away a portion of land-value gain resulting from publicly funded infrastructure upgrades	• Riverfront in Pimpri-Chinchwad (India); • $2 bln levied during 1997-2015 in Bogota (Columbia) to fund city-wide road/bridge upgrades
Tax Increment Financing (TIF)	TIF aims to capture and leverage estimated future revenues from incremental increases in collection of property (or other) taxes within a geographically specified area of redevelopment, a "TIF district"	• Colombia and South Africa are currently piloting TIF. • "Proxy" TIF in Greater Hyderabad (India) where conventional loans were originated to fund infrastructure projects and set to be refinanced with property tax gains

A wealth of value capture techniques established in practice, can be classified based on the nature and timing of "value-capturing charges"

Tax-based vs. Fee-based vs. Incentive-based

- ✓ **Tax-based**: betterment levies, special assessment, TIF, land value tax
- ✓ **Fee-based**: exactions, sale/lease of public land, sale of development rights
- ✓ **Incentive-based:** land pooling/readjustment, density bonus, negotiated land sale/lease with development conditions, joint development with public land as equity

Value capture timing (one-time vs. recurring; upfront vs. upon completion)

- ✓ **One-time charges**: exactions, sale of development rights, betterment levies, public land sale, land pooling/readjustment (upfront land contribution)
- ✓ **Recurring charges**: TIF, land value tax, special assessment
- ✓ **Either-or**: public land lease

Relevance of LVC tools may vary depending on the implementation conditions of each context (table below only indicative)

LVC tools \ LVC Challenges	Unestablished **land market**	Lack of **land use controls** and regulations	Deficient land **Cadaster** / records	Insecure **property rights**	Limited access to **capital markets**	Non-devolved **fiscal powers**
Impact fees / Exactions	🟠	🟠	🟢	🟠	🟢	🟢
Betterment levies	🟠	🟠	🟠	🟠	🟢	🔴
Leveraging public assets	🟠	🟠	🟠	🟠	🟠	🟠
Land pooling / readjustment	🟠	🟠	🟠	🟠	🟢	🟠
Sale of development rights	🔴	🔴	🟠	🔴	🟠	🟢
Land value tax	🔴	🔴	🔴	🟠	🟢	🔴
Tax Increment Financing	🔴	🔴	🔴	🔴	🔴	🔴

🔴 Prohibitive challenge (regulatory / systemwide changes are prerequisite)

🟠 Significant challenge (regulatory/legislative changes required in certain conditions)

🟢 Limited systemwide arrangements needed. Respective implementation terms can be set at deal level

SELECTED LAND VALUE CAPTURE INSTRUMENTS

APPENDIX

- Negotiated Exactions
- Impact Fees
- Leveraging Public Assets
- Sale of Development Rights
- Land Pooling/Readjustment
- Land Value Tax
- Betterment Levies
- Tax Increment Financing

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Negotiated Exaction: *Overview*

DESCRIPTION

- In-kind (land, improvement) or cash contribution by a developer to foster infrastructure upgrades related to a proposed real estate project (to that end, *Exactions* are similar in principle to *Impact Fees*).
- It typically works as a payment for building exemptions (higher land use, density, or eased construction norms) or other forms of development-enabling certifications.
- In contrast to *Impact Fees* (that are applied systemwide on a formula basis), *Exactions* are typically applied case by case through a *vis-a-vis* negotiated transaction.

KEY REQUIREMENTS / IMPLEMENTATION FACTORS

- Clear land use and town-planning regulations and rigid construction norms (for setting baseline conditions).
- Local government's capacity in planning and implementation (to be able to fulfill infrastructure obligations).
- Rigid public outreach approach to explain what standard building/land use regulations are traded for.

Negotiated Exaction: *Lessons Learned*

CHALLENGES

- As long as exactions are negotiated on case by case, entry barriers to development projects are less predictable
- Regulatory exemptions traded for development permits may fail to generate enough public good outside of a project itself. Infrastructure upgrades and related development with “eased regulations” shall generate wider public benefit and justify diversion from standard regulations
- In view of the above, objection from the public to exaction-driven private development is common

OPPORTUNITIES

- Straightforward two-way transaction
- Minimal fiscal impact
- Minimum framework regulatory arrangements needed. Transaction can be fully structured with *ad hoc* deal terms

Negotiated Exaction: *Sample Project*

Western super-collector, Casablanca, Morocco

Project Description	The project equips the city of Casablanca with a 9-km long collector to drain and canalize floodwater of Oued Bouskoura river and discharge directly into the ocean.
	The collector will reduce exposure of large parts of Greater Casablanca to flooding and will increase the city's flood protection to a 20-year level.
	$90 million, 95% complete as of March 2017. Funding sources include PPP to include government (40%) and municipal funds (30%), National Fund to Combat Natural Disasters, and private funds
Value Capture Component	A fraction of the project was financed with contributions from private companies owning and developing real estate in the flood-affected areas of Oued Bouskoura basin.
	Such contributions included $8 million from the Morocco's largest private company, OCP Group (phosphate producer), which develops industrial facilities and a leisure center in the Bouskoura basin.

Impact Fees: *Overview*

DESCRIPTION

- Developers are assessed an extra cash charge to compensate the cost of area-wide infrastructure upgrades.
- Per standard scheme, it is a one-time charge applied routinely by a local jurisdiction to real estate development projects contemplated in the area impacted by infrastructure upgrades. The proceeds from the charge finance (or refinance) a portion of the cost of facilities upgrades.
- Such charge is assessed on a formula that considers benefit allocation, intensity of land use, distance to the upgraded infrastructure etc.

KEY REQUIREMENTS / IMPLEMENTATION FACTORS

- Strong planning and analytical capacity at local level needed for planning and costing infrastructure upgrades, along with devising a solid approach in allocation of benefits across different locations / projects.
- Strong execution of public investment plans.
- Transparent and stringent formula for impact fee calculation (allowing developers to credibly project impact fees in development financial pro forms).

Impact Fees: *Lessons Learned*

CHALLENGES

- Extra charges may hinder development activity.
- If applied improperly may become a disincentive to develop land to its highest and best use
- Infrastructure benefits are distributed unevenly. Imperfections in apportioning off-site costs are inevitable
- Works best for hard and basic infrastructure that has direct and quantifiable impact (such as transit or sewer/water upgrades). Less prudent for infrastructure items where short-term impacts are less tangible (e.g. resilience enhancement, “green” infrastructure).

OPPORTUNITIES

- Relatively straightforward two-way transaction
- Minimal negative fiscal impact (e.g. municipal cash flow is not ring-fenced in any way)
- Efficient tool to redistribute costs of development-enabling infrastructure (avoids overburdening of first-comers and free-riding of followers)

Impact Fees: *Sampled Project*

New highway to connect sprawled development with urban core, Santiago, Chile

Project Description	In late 1990s Santiago metropolitan region started expanding north in the Chacabuco province with 14 major real estate projects approved (primarily housing), adding 40,000 new households to the metro region.
	The new housing projects were to be built on agricultural land lacking urban infrastructure services. Most notably the new urban districts were lacking connectivity to Santiago's urban core. To address that, a 21-km radial highway connecting to central Santiago was to be built with additional 41-km of byways and interchanges.
	The total cost of new road network development was estimated at US$106 million.
Value Capture Component	National government took the upper hand in planning, organizing a builder concession and structuring funding that comprised 39% government funding and 61% coming from developer impact fees.
	The impact fee formula implied a cash charge levied per buildable housing unit. The fee varied based on each project's formalized impact on regional road network: location relative to new road, project size, and estimated travel demands.
	The impact fee averaged about US $1,600 per housing unit.

Leveraging Public Assets: *Overview*

DESCRIPTION

- Disposition of publicly-owned assets (land, buildings) to a private developer whereby value is realized either directly (e.g. sale proceeds) or through creation of future development value or socioeconomic benefit
- Depending on market conditions and a specific deal structure such disposition may come through direct arm's length sale, auctioning, lease, or conveyance/below-market sale as a form of in-kind contribution to developer equity or for infrastructure or amenity provision
- The asset may be disposed either in "as is" condition (if it immanently represents tangible value to the private-sector partner) or following some initial investment by government

KEY REQUIREMENTS / IMPLEMENTATION FACTORS

- Availability of excess/underutilized public assets either *per se* or through asset consolidation / optimization
- Market value of the public assets can be clearly established and have potential to generate additional value
- Government must communicate effectively to citizens its rationale for disposing public assets
- Public entity must have negotiating capacity *on par* with private sector developers to achieve fair pricing

Leveraging Public Assets: *Lessons Learned*

CHALLENGES

- Sizing and timing market demand requires special knowledge that municipality may not posses
- Regulatory /legislative limitations on public asset disposition may stall or encumber the process
- Sale of municipality-owned land may result in loss of control over future development (especially when city-level land use controls are not robust)
- Negotiated disposition price of publicly-owned assets may face public objection and raise political concerns

OPPORTUNITIES

- Can result in direct cash revenue for a municipality
- Puts a vacant or underutilized asset back into productive use
- Allows quick value recycling (in certain conditions enables a city to invest in infrastructure upgrades upfront without tapping general revenue funds)
- Minimal negative fiscal impact
- Relatively straightforward two-way transaction (once value to private sector partners is established and price of property negotiated)

Leveraging Public Assets: *Sampled Project 1*

Sabarmati Riverfront Upgrade, Ahmedabad, India

Project Description	Aims to provide the city of Ahmedabad with an improved and accessible waterfront along the Sabarmati River, reduce erosion and exposure of the city to flood risk, upgrade sewers, and rehabilitate and resettle slums
	$17 million spent on all heavy engineering works and land reclamation as well as on 22 km lower river promenade complete, upper promenade still in development. Key financing sources are loans from a local municipal corporation and a central government financial institution
	SPV established to manage initial investment in riverfront upgrade and subsequent land sales to the private sector.
Value Capture Component	The project is self-financed – cash for recovery of capital expenditure and operating costs comes from sales of reclaimed and serviced land for commercial development
	Completion of major infrastructural components have already led to increased land values, thus reducing the amount of land that needs to be transacted for servicing the loans.
	Overall the amount invested has been recovered from sales of less than 15% of improved land.

Leveraging Public Assets: *Sampled Project 2*

Bonifacio Global City Drainage, Manila, Philippines

Project Description	An underground drainage detention structure serving as a flood control facility for Bonifacio Global City
	Core element of an elaborate drainage system that collects rainwater from paved urban surfaces then releases it under controlled conditions
	Construction was financed by proceeds from the $800 million land sale following packaging of public/private interests into a development joint venture
Value Capture Component	Funding infrastructure improvements with land sale proceeds post entitlement of undeveloped military lands to real estate development area

Sale of development rights: *Overview*

DESCRIPTION

- Generates funding for public infrastructure by selling development rights instead of rights in land (rights in land may either be already obtained, or not intended for transfer or simply come with development rights)
- Sellable development rights fall into two categories: the right to convert less productive (lower) use to a higher use, and the right to build at greater densities than normally would be allowed by existing zoning
- Sale of development rights can be organized through sale of development certificates that act as financial market derivatives (bonds) transferrable in the stock market and thus able to increase liquidity and cash generating potential of this instrument (such as CEPAC bonds in Brazil)

KEY REQUIREMENTS / IMPLEMENTATION FACTORS

- Larger urban areas with strong real estate markets maintaining enough demand and growth potential for high-density development
- Relatively deep capital markets for realization of schemes similar to CEPACs
- Rigid land use controls, property records (cadaster) and property appraisal systems have to be in place

Sale of Development Rights: *Lessons Learned*

CHALLENGES

- Restricted applicability, i.e. may not work in the secondary markets where demand for higher density development is not strong enough
- Vulnerable to macroeconomic conditions (more than many other LVC tools)
- For efficient and equitable implementation, strong and transparent land use controls are prerequisite

OPPORTUNITIES

- Direct revenue source that may generate cash for front-funding or expedited cost recovery of infrastructure projects – i.e. positive fiscal impact
- More liquid revenue source than sale of land rights
- Sale of development rights better mitigates the risks of loss of control over land use (relative to selling land title alone)

Sale of Development Rights: *Sampled Project*

Porto Maravilha Urban Waterfront Revitalization, Rio de Janeiro, Brazil

Project Description	Revitalization of underutilized Guanabara Bay waterfront (mostly government-owned port and near-port lands) into a brand new mixed-use, mixed-income community. The main rationale is the regeneration of this heavily underserviced area in the heart of Latin America's major metropolis, by intensifying and blending new uses
	The development plan includes complete reconstruction of local water, sanitation, and drainage systems, extensive streetscaping and landscaping, installation of three brand new sanitation plants, historic preservation, social inclusion (at least 3,000 social housing units are being delivered), and cultural and education initiatives
	The area comprises 1,250 acres and is home to 35,000 residents (subject to increase to 100,000 post regeneration). The program commenced in 2009, with full recycling of approved additional density anticipated by 2025.
Value Capture Component	Project-underlying infrastructure has primarily been financed through CEPACs, following adoption of a new law to substantially increase density and height limitations set in the Porto Maravilha area.
	More than 4 million sq m of additional density was sold via CEPACs during 2011-2013 generating US$1.8 billion in upfront infrastructure funding (the initial purchaser of a CEPACs was a state-owned financial bank CEF, which passes CEPACs through, selling them at a profit, to private real estate developers as demand arises)

Land Pooling / Land Readjustment: *Overview*

DESCRIPTION

- A participatory process in which land owners (or occupants) voluntarily contribute a certain percentage of their land for infrastructure development and for sale to cover part of project cost. In return, each land owner receives a serviced plot of smaller area but with higher value within the same neighborhood
- LP/R provides an alternative to expropriation, with minimal displacement
- Many countries used LP/R to facilitate peri-urbanization, urban regeneration including slum upgrading, and post-disaster and post-conflict reconstruction

KEY REQUIREMENTS / IMPLEMENTATION FACTORS

- Generally requires consent of supermajority of land owners to approve the project
- Appropriate legal framework that empowers local authority to legally take land from dissenting landowners when supermajority agrees
- More feasible in areas with high land value increase potential after project completes
- Shall be guided by a city's mater plan
- Quality of property records and cadaster map is important to expedite implementation

Land Pooling / Land Readjustment: *Lessons Learned*

CHALLENGES

- Land owners' consensus can be difficult to obtain especially if projects fully rely on their voluntary participation
- Requires strong project management and technical capacity, particularly in negotiation and building consensus with land owners
- Not all projects can achieve self-financing and may require public funding to cover part of project cost

OPPORTUNITIES

- Assembles land for urban expansion and revitalization with minimal displacement.
- Helps recover a portion of the project cost.
- Promotes intensification of land use, thereby enhancing land value for landowners and expanding the property tax base for the municipality.
- Distributes land redevelopment costs and benefits equitably among landowners and other stakeholders such as the municipality, private developers, and the community, especially the urban poor and landless.
- Encourages public participation in policy decision-making.

Land Pooling / Land Readjustment : *Sampled Project*

Land Pooling/Readjustment Pilot, Tra Vinh, Vietnam

Project Description	With technical assistance from the World Bank, Tra Vinh city in Vietnam is currently piloting land pooling/readjustment approach to redeveloping a centrally located low income neighborhood, in order to address issues of flooding and lack of drainage network and access roads. The city has very limited budget, and LP/R becomes the only viable approach as development cost is shared between the city and local residents.
	The neighborhood has an area of about 24 hectares, including about 1000 land plots that belong to 480 land users (under Vietnam's public leasehold system). A sub-area of 4 hectares was selected as the pilot site. Site plan ensures access to every land parcel yet avoid demolition of existing structures to the extent possible. Over 90% of the land users in the pilot area have agreed to participate in the project so far.
	With World Bank support, a new decree that includes LP/R provisions was approved in January 2017, which became the first legal framework for LP/R in Vietnam.
Value Capture Component	As this is the first pilot project, the city plans to cover about 70% of the total investment cost from its budget in order to reduce land contribution from the land users and gain support from the community. The remaining 30% of the total cost will be covered by sale of surplus land.
	For agriculture land, each land user will contribute 33% of their land area into the project, and for residential land each land user will contribute 13%. Preliminary land value assessment shows that land price on average is estimated to increase by 3.5 to 5 times after the pilot project.
	The city expects that future revenue from land in the project area, such as land transaction tax, land use conversion fee (from agricultural to residential), and land tax, will also increase substantially as a result of the pilot project.

Land Value Tax: *Overview*

DESCRIPTION

- Tax instrument that assesses value of land “as unimproved”, opposite to conventional property tax that focuses on taxing factual value of land with improvements.
- Aims to differentiate tax burden to land owners based on “windfall” benefits of unimproved land – location, physical characteristics and neighboring uses
- Directed at incentivizing improvement of underused urban sites by making land idling and holding prime lands for speculation a burdensome option for landowners

KEY REQUIREMENTS / IMPLEMENTATION FACTORS

- Robust land cadaster, land assessment and regular re-assessment practice
- Effective tax administration capacity at the local level
- Strong local real estate market that naturally differentiates values of land in unimproved condition based purely on location quality and preeminent development potential
- Fiscal decentralization

Land Value Tax: *Lessons Learned*

CHALLENGES

- Might increase complexities of tax administration
- Needs technical capacity at municipal level for maintaining advanced land cadaster and land reassessment systems
- Fiscal powers have to be devolved so that municipalities could structure and impose such a tax

OPPORTUNITIES

- Incentivizes development of unimproved/underutilized land in prime urban locations
- Can leverage property tax assessment systems already in place
- Can be an effective tool to spur revitalization in areas affected by natural hazards
- If adequately structured and implemented can increase tax revenue providing additional funds for public works

Land Value Tax: *Sampled Project*

Introduction of Land Value Tax in the City of Mexicali, Mexico

Project Description	In 1989 the city of Mexicali diverted from conventional practice assessing a composite property tax on both land and permanent structures and started taxing only the value of the land
	This fiscal policy shift involved major changes in tax administration including changes in land assessment promoted by consensus of representatives from real estate organizations and professional appraisal associations
	New tax rates were specified based on distance from pre-specified “high-value locations”. Separate flat-rate surcharges were applied to residential and commercial lands.
	This new tax policy waned out after changes in Mexicali’s municipal administration and the land value tax was eventually terminated in the City of Mexicali. However, the positive results in the first years of land taxing in Mexicali prompted other municipalities of the state of Baja California to implement land value taxing in their jurisdictions
Value Capture Component	During the first periods of implementation the new taxing system allowed the Citi of Mexicali to increase property tax revenue twofold generating additional revenue for infrastructure upgrades

Betterment Levies: *Overview*

DESCRIPTION

- An additional tax/special rate levied to property owners within a specifically defined geographic area, which is regarded as the main concentration of beneficiaries of respective publicly funded infrastructure upgrades
- Betterment levies are also called special assessments in some countries
- Application of betterment levy can be narrowed down to specific types of users or owners within the defined geographic area, such as owners of large commercial building or owners who have an intent to develop in the area and are seeking construction permit
- Rate and length of time of the levy depends on when and how funding requirement is fulfilled
- In contrast to Tax Increment Financing (TIF), betterment levy is applied to full assessed value, whereas in TIF a special assessment applies to incremental property value increase.

KEY REQUIREMENTS / IMPLEMENTATION FACTORS

- Systemwide fiscal regulations should allow special tax assessment and collection at municipal level
- Robust property appraisal and land cadaster systems

Betterment Levies: *Lessons Learned*

CHALLENGES

- Can be a legally complex and time-consuming arrangement
- Requires adoption of special fiscal regulations that are out of control of municipality
- Administration of such tax may be costly
- Delineation of special assessment area often follows jurisdictional borders which causes imperfection in allocation of cost to actual beneficiaries

OPPORTUNITIES

- Generally allows to raise money off balance sheet without increasing city-wide property taxes
- Tends to align costs of public improvements with those who will benefit the most from such improvements
- Recurrent and reliable source of municipal revenue
- Less complex than TIF as another tax-based LVC
- Cost effective alternative to municipal borrowing with no negative fiscal impact

Betterment Levies: *Sampled Project*

Riverfront Development, Pune, India

Project Description	Local Municipal Corporation is considering complex improvements on the banks of three rivers flowing through the municipality (building embankments for flood protection, sewage treatment, desilting, landscaping, and enhancing connectivity between the banks)
	$18 million, concept stage – master planning works started in 2016
	Upfront costs to be covered by government and the municipal corporation
Value Capture Component	Recovery of municipal costs through charging flood premiums on top of construction permitting fees
	Changes in town-planning codes proposed to allow development in the 25-year flood zones on condition of recovering a flood premium from developers
	Flood premium is calculated as 25% of assessed value (“ready reckoner rate”) of land or real property in a respective geographic area of the city
	Such flood premium to be administered by the Municipal Corporation and has to be utilized for riverfront development

Tax Increment Financing (TIF): *Overview*

DESCRIPTION

- TIF provides an alternative to finance urban infrastructure in blighted and underdeveloped areas, unlocking (private) development that wouldn't otherwise occur in the absence of those up-front investments
- TIF aims to capture and leverage estimated future revenues from incremental increases in collection of property (or other) taxes within a geographically specified area of redevelopment, a "TIF district".
- Local governments use a debt instrument (bonds or loans) backed by the projected future tax revenue within the TIF district. The debt instrument proceeds to pay for up-front investments such as land acquisition, upgrade of water system, road improvements, or remediation of environmental contamination.
- Up-front investments create the real estate market and economic conditions that lead to the incremental increase in land value and tax revenue, which closes a virtuous cycle in which "growth pays for growth"

KEY REQUIREMENTS / IMPLEMENTATION FACTORS

- Robust land cadaster, land assessment and tax administration capacity at the local level
- Strong political backing to enabling legislation
- Might require credit enhancement (e.g guarantees) from the city or the nation
- Strong real estate markets maintaining enough demand and growth potential for high-density development
- Relatively deep capital markets

Tax Increment Financing (TIF): *Lessons Learned*

CHALLENGES

- Not all cities, not at all times: it requires a robust real estate market
- Requires a strong cadastre and tax collection system
- It absorbs and restricts the use of future revenues (the delta generated by development)
- It is vulnerable to national and local economic crises, which creates repayment risks
- It requires a strong commitment of the city beyond political cycles to ensue continuity of economic development and TIF legislation between administrations

OPPORTUNITIES

- It complements the traditional financing instruments
- If properly structured, TIF debt does not affect the balance of the city
- Maximizes private investment since it uses financial structuring
- TIF allows for greater private economic investment without requiring infrastructure investment by the city official books
- Strengthens municipal management as it requires high coordination between entities
- Promotes the depth of capital markets in municipal financing

Tax Increment Financing (TIF): *Sampled Project*

Creating the first TIF in Latin America in Medellin, Colombia

Project Description	Since 2011 the World Bank has provided technical advice to the Government of Colombia to support cities to structure & take to market innovative land-based financial instruments that would leverage private finance for urban infrastructure.
	The initiative thus far has focused on ascertaining the legal and financial feasibility of implementing a TIF operation of a major urban renovation project in Medellin called the Innovation District
	The proposed urban development plan includes redevelopment of 184 hectares comprising four neighborhoods in downtown Medellin, targeting to develop 1.6m m2 over a 12 year period, including 60,000 m2 of social housing
	Legal feasibility analysis showed that Colombian legislation indirectly limits the use of incremental revenues by restricting local administrations to securitize future revenues beyond their government periods (four years). With the support of the Bank, the City of Medellin is currently in the process of developing the overall regulatory framework to legally enable the use of TIF at the city level
Value Capture Component	Preliminary results showed that the Innovation District would potentially benefit from use of TIF to fund catalytic public infrastructure
	If the project meets expectations (1.6 million m2), cash-flow analyses showed that the project has the potential to increase tax revenue from the area by over 400% in peak years, which could potentially collect about US$45m in revenue bonds, which would enable the city to fund 25% of projected up-front infrastructure requirements.

THANK YOU