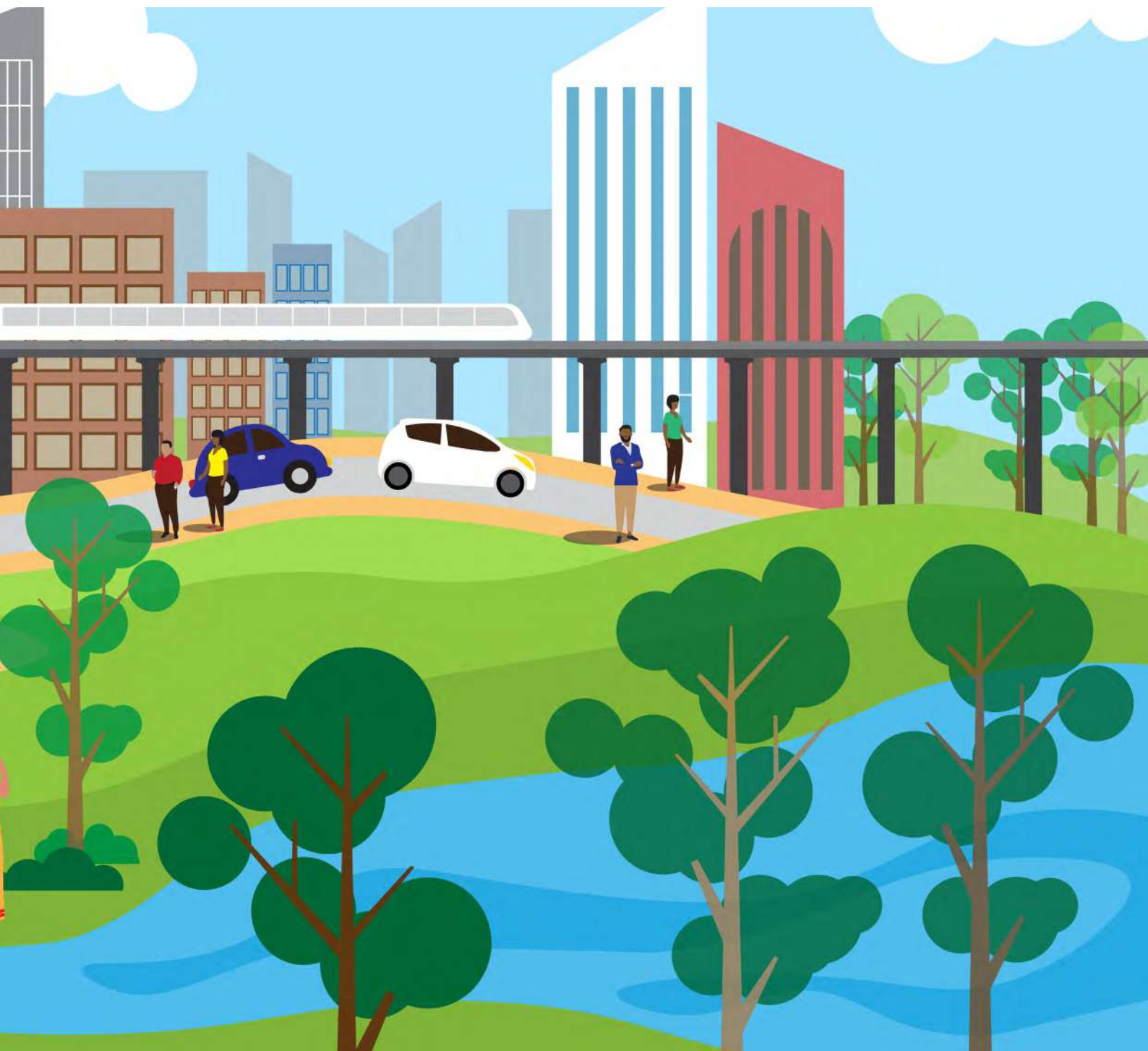


Land Value Capture - Towards Planning and Financing Equitable Cities in India

13-14 December 2021

Workshop Proceedings



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Imprint

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As at

December 2021, New Delhi

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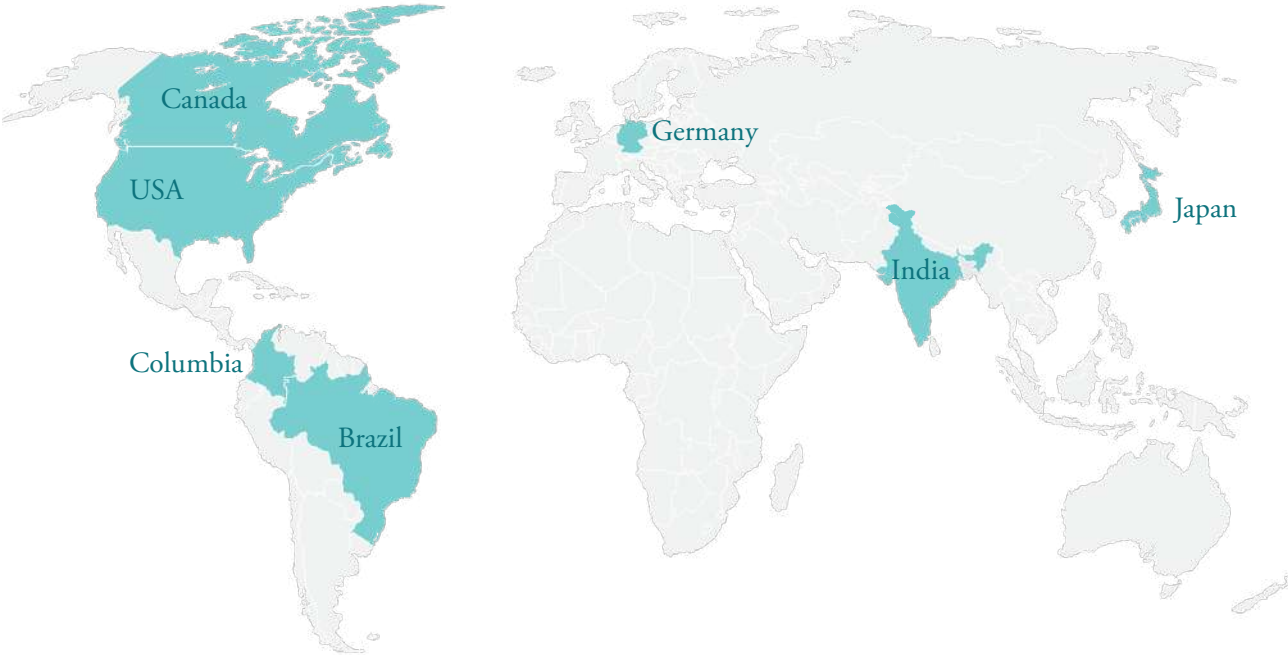
On behalf of the

German Federal Ministry for Economic Cooperation
and Development (BMZ)

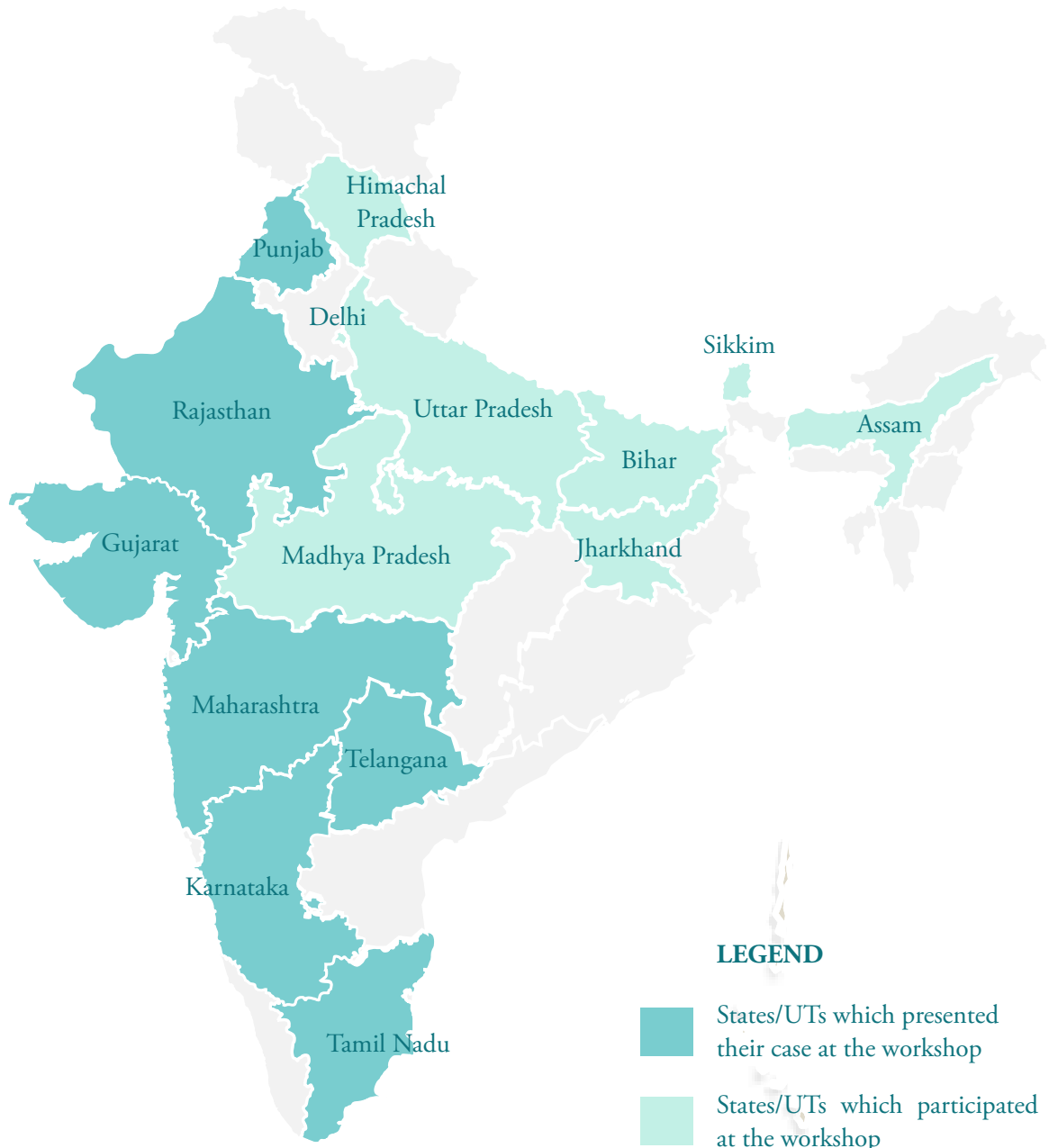
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GLOBAL CASE STUDIES



INDIAN CASE STUDIES AND PARTICIPATION



ABOUT THE EVENT

The National Infrastructure Pipeline proposes an investment of over USD 1354 billions over a period of five years, 50% of which is estimated for developing regional infrastructure and about 17% for urban infrastructure. Such investment is expected to directly impact the valuation of land in its immediate influence zone. Successful cases globally have highlighted the importance of Land Value Capture (LVC) mechanisms for tapping such land value gains. While traditional value capture mechanisms like taxations, duties, etc have shown some successes, newer instruments

accruing the benefits of land value increases like betterment levy, land pooling, impact fee and additional development charges have not picked up the required momentum in Indian cities. With the need to promote faster adoption of LVC mechanisms, NITI Aayog in partnership with GIZ India, plans to undertake the documentation of various LVC mechanisms in practice and legislation across different states in India and improvise the scope, coverage, and use of these.



With land and urban being state subjects, implemented essentially by municipalities, the legislative and regulatory frameworks differ across states resulting in varying interpretations and implementation experiences. It is anticipated that this compendium will support a standardized knowledge and a deeper understanding of the concepts, legislations and existing practices on LVC mechanisms across the country. This Experience Sharing Workshop titled, 'Land Value Capture - Towards Planning & Financing Equitable Cities in India' held on the 13 - 14 December 2021 in hybrid mode is the first step in creating knowledge exchange on land-based financing mechanisms in India. The Workshop embarks on knowledge development on the subject by providing a platform for comprehensive discussions on some of the important LVC mechanisms – betterment levies, land readjustment, additional development rights, and impact fees focusing on both, international and state-wise experiences in India.

The Documentation of various LVC mechanisms across India is a consequence of the collaboration between NITI Aayog, GIZ and the Administrative Staff College of India (ASCI) for contributing the India case to the Global Land Value Capture Compendium initiated by the Organization for Economic Cooperation and Development (OECD) in close cooperation with the Lincoln Institute of Land Policy (LILP). GIZ contributed to this collaboration by documenting experiences for 12 countries. GIZ India specifically contributed with the India and Bangladesh case with the support of the Centre for Management of Land Acquisition, Resettlement and Rehabilitation (CMLARR) of ASCI.

The Experience Sharing Workshop attempted to showcase some of the key Global Experiences while initiating knowledge sharing on some of the key LVC mechanisms in practice in the Indian states. The first day witnessed nine international speakers who discussed experiences of implementing four key mechanisms of value capture in 6 countries (Japan, Germany, Colombia, Brazil, USA and Canada) which included esteemed experts from various organizations like the LILP, World Bank, OECD, GIZ, JICA, and universities from Germany, Colombia and Canada.

The second day had two sessions discussing the implementation experience of the implementation of some of the LVC mechanisms in India. Cases for Betterment Levy and Land Pooling was presented from the states of Gujarat, Karnataka, Punjab and Rajasthan. The experience of implementation of Additional Development Rights and Impact Fees was presented from the states of Telangana, Maharashtra and Tamil Nadu. The presentations as well as the following discussions have provided a deeper insight into the existing practices and legislations in some of the states in India.

The Workshop conducted through hybrid mode and saw a total of about 28 offline and 137 online participants from the national and international organizations, academia, government departments including various officials from Assam, Sikkim, Himachal Pradesh, Uttar Pradesh, Bihar, Jharkhand, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Karnataka, Tamil Nadu, Gujarat, Telangana and Delhi.

PROGRAMME AT A GLANCE

DAY 1 : 13 DECEMBER 2021

SESSION I : INAUGURAL SESSION & CONTEXT SETTING

1600 - 1730 IST

Welcome

Dr Reshmy Nair

Professor & Director, CMLARR, ASCI

Context Setting

Ms Aparna Das

Senior Advisor, SUD-SC, GIZ India

Resilient Infrastructure and LVC Mechanisms

Ms Barbara Scholz

GIZ, Eschborn

Introducing the Global Compendium on LVC

Dr Rudiger Ahrend

Head of Economic Analysis, Data and Statistics Division, OECD

Special Address

Mr K. Padmanabhaiah

Chairman, Court of Governors, ASCI

Special Address

Mr Sudhendu Jyoti Sinha

Advisor, NITI Aayog

Special Address

Mr Kundan Kumar

Advisor, NITI Aayog

BREAK

SESSION II: INTERNATIONAL EXPERIENCES IN LVC IMPLEMENTATION

1745-2045 IST

Session Chair

Mr Sudhendu Jyoti Sinha, Advisor, NITI Aayog

Introduction and Objectives

A - Land Pooling / Readjustment

Mr Takeo Ochi

Senior Advisor, JICA

Prof Hans Joachim Linke

Head, Chair "Land Management", Institute of Geodesy, Germany

B - Betterment Levies

Dr C. Erik Vergel-Tovar

Assistant Professor, Universidad de los Andes.,
Columbia

Dr Lucas Bispo de Oliveira Alves

Urban Planning Department Pacific Consultants Co
Ltd

C - Impact Fee

Prof David Amborski

School of Urban and Regional Planning, Ryerson
University

D - Additional Development Rights & Other LVCs

Prof Martim Smolka

Lincoln Institute of Land Policy

Dr Felipe Francisco De Souza

Lecturer, Darmstadt University of Technology, Germany

Leveraging Land Value Capture – A Global Overview

Mr Jon Kher Kaw

Senior Urban Development Specialist, World Bank

Key Learnings - Session Chair

Q and A

2045 hrs onwards

DINNER

DAY 2 : 14 DECEMBER 2021

LUNCH

SESSION III: BRAINSTORMING SESSION 1 - BETTERMENT LEVY & LAND POOLING

1400 – 1630 IST

Recap of Day 1

Ms Aparna Das

GIZ, India

Unpacking LVC mechanisms

Mr Matteo Schleicher

OECD

Introducing LVC Questionnaire

Dr Reshmy Nair

Professor & Director, CMLARR, ASCI

Session Chair

Mr Vidyadhar Phatak

Former Chief Town Planner, MMRDA,
Maharashtra

Introduction

Case of Betterment Levy – (Law & Practices)

Gujarat

Dr Vatsal Patel

Former Chief City Planner, Ahmedabad
Municipal Corporation

Karnataka

Mr Mahendra Jain

Former ACS, Government of Karnataka

Case of Land Pooling - (Law & Practices)

Punjab

Mr Ravi Bhagat

Special Secretary, DGR and PG, Government of Punjab

Rajasthan

Mr Sandeep Dandawate

ACTP, Department of Town Planning, Urban Development and Housing, Government of Rajasthan

Moderated Discussions - Gujarat, Karnataka, Punjab and Rajasthan

Q&A

Session Chair-Summary & Way Forward

BREAK

SESSION IV: BRAINSTORMING SESSION 2 - IMPACT FEES & ADDITIONAL DEV. RIGHTS

1645 – 1845 IST

Session Chair

Mr Gautam Chatterjee

Former Chairperson, RERA, Maharashtra

Introduction

Maharashtra

Mr Avinash Patil

Director, TP Department, Government of Maharashtra

Telengana

Mr Devendra Reddy

Chief City Planner, Greater Hyderabad Municipal Corporation

Maharashtra

Mr Shankar Deshpande

Chief, T&CP Division, MMRDA

Tamil Nadu

Mr Anshul Mishra

Member Secretary, CMDA

Moderated Discussions – Telengana, Maharashtra and Tamil Nadu

Q&A

Session Chair-Summary & Way Forward

CONCLUDING REMARKS

Ms Aparna Das

Senior Advisor, SUD-SC, GIZ India

CONCLUDING REMARKS AND VOTE OF THANKS

Mr Abishek Agarwal

Senior Specialist Director, Infrastructure Connectivity, NITI Aayog



Experience Sharing Workshop on Land Value Capture - Towards Planning and Financing Equitable Cities in India

13 - 15 December, 2021

Experience Sharing Workshop on Land Value Capture - Towards Planning and Financing Equitable Cities in India

13 - 15 December, 2021

The display features logos for the Ministry of Housing and Urban Affairs, Government of India, and the Urban Infrastructure and Services Development Fund (UISDF). The central text is in bold, and the illustration below shows a modern city with a bridge, trees, and cars.



SESSION SUMMARIES

► INAUGURAL SESSION AND CONTEXT SETTING

© Context

With increasing challenges of rapid urbanization, climate change and natural disasters, there is a growing need for local governments to invest in large-scale infrastructure that benefits all, including the poor and most vulnerable. The New Urban Agenda (NUA) urges the development of quality infrastructure that is resilient and resource-efficient, key for reducing risks of disasters as well as mitigating climate change impacts. Rooted in the idea that public investments and government actions should benefit the general public at large, governments all over the world, have explored various fiscal and spatial planning instruments for financing infrastructure.

► PROCEEDINGS

© Welcome Address

Dr Reshmy Nair
Director and Professor, CMLARR, ASCI

On behalf of the organizing team (NITI Aayog, GIZ, and ASCI), Dr. Nair welcomed all the delegates and online participants to the hybrid event. She briefly explained that this knowledge-sharing platform provided for comprehensive discussions on some of the important LVC mechanisms from across the globe with respect to key factors, such as implementation, finance, social equity, and sustainability.



© Context Setting

Ms Aparna Das
Senior Advisor, SUD-SC, GIZ India

Ms Das provided an overview of the GIZ-supported urban project, SUD-SC (concluded in Dec 2021) and subsequent activities will be taken forward under the next phase of the above project. She emphasized the importance of LVC mechanisms in planning and financing equitable cities.

Ms Das discussed the close linkages of LVC mechanisms with climate change mitigation measures. While traditionally climate change mitigation measures have focused on reduction of emissions, building climate resilience in cities with dense population becomes crucial. As climate change adversely impacts the lives of many, particularly the economically vulnerable groups, it is important to provide infrastructure for all to develop resilience. Ms Das also highlighted that while rapid urbanization has led to loss of natural habitats and landforms, there is an urgent need to utilize urban land optimally to finance long-term goals. Hence, it is crucial to build and enhance capacities of state machineries to develop implementable statutory spatial plans. She also stated the need to develop our cities inclusively and referred to the fact that while 80 per cent of urban workforce is employed in the informal sector, contributing around 30 per cent to the national GDP, they have limited or no stake in urban land.



© Resilient Infrastructure and LVC Mechanisms

Ms Barbara Scholz

Component Leader Planning and Building, Sector Project Cities, GIZ Bonn, Germany

Ms. Scholz emphasized the role of cities in implementing global development and climate goals. With an increase in the rate of urbanization, there is an enormous demand for the improvement and expansion of infrastructure. Hence, it is imperative to adopt effective approaches to meet current needs, and to set the course for future development.

She informed that around 30 per cent of the technical assistance and more than 50 per cent of the financial cooperation provided by the German Development Cooperation is addressing urban needs, mainly related to decentralization, municipal service delivery, and infrastructure development, especially water/sanitation. The principal challenge is to ensure that planning and financing urban development is action-oriented, demand driven, and strategic in terms of long term impact on climate.

Highlighting the global experiences, Ms Scholz informed that LVC mechanisms have contributed to the following:

1. Secure housing in line with demand and affordable building land,
2. Secure space for environmental and climate protection and adaptation,
3. Address market failure and influence land price increases,
4. Finance urban infrastructure costs, and mobilize private capital for public investments, and,
5. Boost public revenues.

She also added that some of the risks and bottlenecks involved in implementing LVC mechanisms have included limited technical and human capacity, unclear policy and legal frameworks, possible political resistance, and conflicting mandates of institutions. In conclusion, she stressed upon the key success factors, such as stakeholder involvement, accountability & transparency, and trust, reliability and credibility, in order to enhance urban governance and urban management.

In conclusion, Ms Scholz highlighted the need for cities to experiment with innovative solutions based on context specific and traditional good practices as one size does not fit all.

© Introducing the Global Compendium on LVC

Dr Rüdiger Ahrend
Head of Economic Analysis, Data and Statistics Division, OECD

Dr Ahrend gave an overview of the initial learnings from the LVC compendium and commended the significant role of GIZ in administering the surveys in 12 partner countries. The compendium, to be published in early 2022, is first-of-its-kind, giving an overview of the use of LVC mechanisms globally (37 OECD countries and 24 non-OECD countries). Dr Ahrend expressed that while most of the countries predominantly use instruments, such as Strategic Land Management and Developer Obligations, options like Land Readjustment, Infrastructure Levy, and Development Rights Charges are less popular. He further explained the content of the compendium for each country includes enabling framework, conditions to use the instruments, implementation and technical aspects, and enabling factors/obstacles.



© Special Address

Mr K. Padmanabhaiah Chairman, Court of Governors, ASCI

Mr Padmanabhaiah highlighted the significant role urban areas can play in ensuring sustainability, given the fact that 2/3rd of the world population would be residing in cities by 2050. There is no uniformity in land legislations across India, as land is a state subject. He stated that it is crucial to define terms, such as land, land value, land value capture, urban areas, metropolitan areas, etc. He also stressed upon the importance of considering peri-urban, semi-urban, and adjoining agricultural land during planning stage. He mentioned that some of the key issues in urban areas arise from state actions such as regularisation of illegal layouts/ unauthorised colonies, land auction, leading to significant rise in land prices. He suggested that to address this, it was important to adequately invest in affordable housing, slum redevelopment, job creation, infrastructure, environmental protection, housing for migrant labour force, energy-efficient system, etc. However, with inadequate finances, such investments by state do not occur uniformly. He added that property taxes, which form one of the main issues in inadequate finances with local governments, also have not been revised in many states for decades. In conclusion, Mr Padmanabhaiah highlighted the success of Transferable Development Rights (TDR) mechanism in Mumbai stressing the need for learning by doing and the need for mainstreaming successful practices within policy discourse.



© Special Address

Mr Sudhendu Jyoti Sinha

Advisor (Infrastructure Connectivity – Transport and Electric Mobility), NITI Aayog

Mr Sinha thanked the speakers for giving a comprehensive overview of the various LVC mechanisms. He stated that any new connectivity projects (roads, railways, civil aviation, ports, metro, etc.) lead to rise in adjoining land prices. It is important to change the concept of infrastructure from an expenditure-model to a revenue-model. He commended the work done by the current regime in combining the 17 economic and 5 social infrastructure parameters to give them a new impetus. With the rise in demand for more infrastructure, it is imperative to focus on the quality aspects as well, to make the development sustainable, resilient, and ethical. He added that government has also empowered the local communities to monitor infrastructure projects to increase accountability and improve quality of construction.



© Special Address

Mr Kundan Kumar

Advisor (Skill Development, MU & NITI Evolution), NITI Aayog

Mr. Kumar complimented NITI Aayog, GIZ, and ASCI for organising this comprehensive experience workshop that would cover state experiences as well as international best practices. He highlighted the importance of urban areas as engines of growth. As an administrator on field, he has always felt the necessity to focus on quality infrastructure in cities and regions and the funding for it. He re-emphasised the importance of the LVC instruments in funding India's ambitious infrastructure projects. The potential for any infrastructure project needs to be distributed across society for betterment at large. While the concept of LVC is important, the science of how this can be implemented of ground needs to be developed so that it is understood equally by administrators, urban planners and elected representatives at local level in our country. He also emphasized the need to scale the implementation of LVC across the country and not remain restricted to only a few states/cities. He thanked all the speakers for setting a clear context for the upcoming discussions.





Experience Sharing Workshop on Land Value Capture – Towards Planning and Financing Equitable Cities in India

 13 - 15 December, 2021









INTERNATIONAL EXPERIENCES IN LVC IMPLEMENTATION

© Context

Land Value Capture (LVC) mechanisms have been implemented in various countries to recover and reinvest land value increases for financing development of infrastructure and amenities. Mechanisms like ‘betterment levies’ have been in existence for over a hundred years, especially in Latin America providing valuable learnings in this regard. In addition to augmenting investments in physical infrastructure, LVC has also proved to be an integral tool in achieving positive social and environmental outcomes.

The session aimed to understand the implementation of four primary LVC mechanisms and their implementation in various countries across the globe through the presentations of 8 different experts. The case of Land Pooling / Land Readjustment was explored in Japan and Germany, Betterment Levies in Columbia and Brazil, Impact Fee in USA and Canada, Additional Development Rights and Other LVC mechanisms in the case of Latin American countries. An overview of the various mechanisms was also presented.

➤ PROCEEDINGS

© Land Pooling/Land Readjustment

There are plots of land that are not leveraged to their most efficient use as per the land use of the jurisdiction or public infrastructure plans. Land parcels in that situation are pooled and readjusted into a different shape and size in an orderly configuration, making space for public improvements such as utilities, roads, transit lines, or parks. After the land readjustment, involved landowners typically receive a smaller tract of land, whose value is higher than the original plot because of up-zoning and the improvements made to the immediate area.

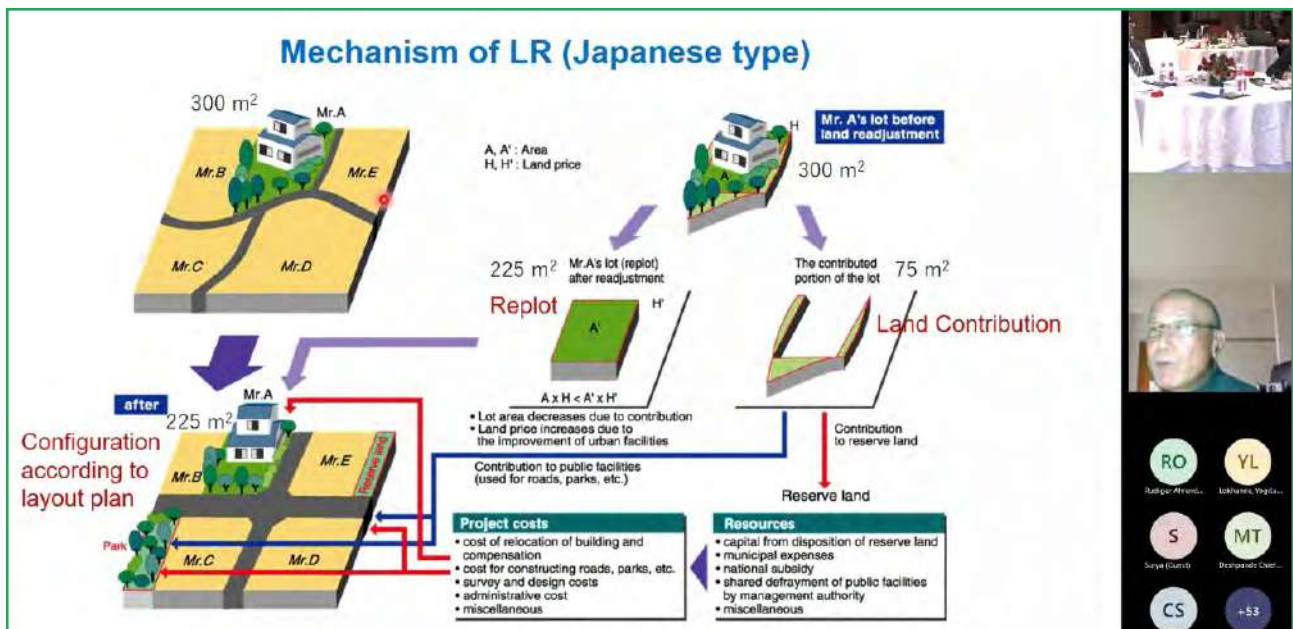
Key elements of this land value capture approach include:

1. An unplanned, irregular, or inefficient pattern of plots, land use, floor area ratios
2. Insufficient land space for public services or needed infrastructure
3. Lack of funding or ability to expropriate private land to create public space
4. Pooling of plots in terms of shape & size, so that space is created for public improvements
5. Landowners contribute to the upgrade by trading a larger plot for a smaller (but more valuable) plot
6. Sometimes, the readjustment of the newly planned area could include the creation of collectively or publicly-owned parcels that are leased or sold to generate additional revenue for the planned area

Mr Takeo Ochi
Senior Advisor, JICA

Mr Takeo Ochi presented the process of land readjustment in urban planning in Japan through examples of projects post 1923 earthquake and after World War II. Some of the major challenges he stated for LVC mechanisms are the evaluation of land value increase, identification of area or beneficiaries and methods to recoup their benefits. Land Readjustment provides a solution to overcome the challenges. The private landowners contribute about 10 - 15% of land free of cost for public infrastructure. Anything more than 15% is compensated for.


Prof Ochi highlighted two key aspects of land evaluation which can result in success of the scheme: measuring land value increase (vertical evaluation) and fair distribution of increases value among the land lots in the project area (horizontal evaluation). He further explained that two methods have been adopted by land Readjustment projects in Japan. One, Street Value Evaluation Method for large scale new urban development, which evaluates a large amount of land in a short period of time and focuses on urban infrastructure development and not individual building construction projects. And, second, methods like real Estate Appraisal, Comparable Method and Income Capitalization Method in case of projects for effective use of land in built up areas where the focus is on evaluating profitability on market price for small scale projects. The land evaluation is done in 3 stages in case of such projects. Prof Ochi also stressed for the need to conceptualize operationalization and capacity building as on going processes for each project.




Prof Hans Joachim Linke
Head, Chair “Land Management”, Institute of Geodesy, Germany

Prof Hans Linke presented the LVC practices prevalent in Germany with a focus on redevelopment of existing areas through three key steps. The first is Binding Land Use Plan initiated by the Municipality. The land value increases in this case are retained by the landowners. The second step is Land Readjustment where responsibility lies with the landowner and in case they do not come to an agreement, then the municipality takes over. The land value increased through this step is skimmed by the municipality. The third step is developing Public Infrastructure by the municipality, but the cost is paid by the landowners. Prof Linke further highlighted the ways in which various challenges arising in the process are mitigated. Some of the key ones being, a contract between the landowner and municipality to carry out the measures that cannot be regulated in the binding land-use plan including construction of affordable housing and climate friendly measures. Second, being the free-hand acquisition of all land by municipality and sale to landowners with a building obligation. And third, the measure of expropriation when landowners are unwilling to sell.

Current idea of Urban Development – City of Wiesbaden / Ostfeld




TECHNISCHE
UNIVERSITÄT
DARMSTADT



Core City

Development area
Ostfeld



Building area -
location of
authorities

Commercial
area

Urban City-Quarter

Living area for 8.000 – 12.000 inhabitants

TO

Ochi, Takeo[徳島]

YL

Lokhande, Yogita...

S

Sunya (Guest)

MT

Deshpande, Chef...

© Betterment Levy

There is a public improvement or service that benefits adjacent parcels of land, and beneficiaries (property owners) contribute by paying a charge or fee to defray the cost of the improvement. For operationalization, the specific public improvements to be made is to be identified first followed by the areas that will benefit from the improvements. The cost of the improvements (or a portion of it) is then accordingly assigned to each parcel based on the share of benefits received.

Key elements of this land value capture approach include:

1. Public improvement projects or services benefitting specific tracts of land
2. Benefited property owners pay a charge or fee
3. Charges are either one-time or ongoing for a fixed period
4. Charges vary depending on area of influence or benefit from the public improvement



Dr C. Erik Vergel-Tovar
Assistant Professor, Universidad de los Andes., Columbia

Dr C. Erik Vergel-Tovar presented about the Colombian experience of Betterment Levy, a compulsory charge imposed by the government since 1921 on select group of properties to defray, in whole or part, the cost of a specific improvement presumed for general benefit to public and special benefit to the select property owners. Betterment Levy has played a significant role in financing public works and is a major contributor to municipal revenue across Colombia and is now adopted by the local, regional and national governments. He further explained that the value of the levy is calculated based on the cost of the project and distributed proportionately on the group of beneficiaries based on the degree of benefit they receive. Dr Erik also explained that the process follows socio-economic studies to determine the payment capacity for residential uses while in commercial uses, it is based on the rent. He attributed the excellent performance of property tax system and the updating process of cadastral values of properties as an important factor for estimating the benefits and allocating them in the successful implementation of this mechanism.

Experience in Colombia
Benefit and area of influence

Bogotá Betterment Levy 1995-2000 Estimated revenue of US\$632 million Legal Agreement 25

To reduce the average amount of the levy, an effort is made to include the largest possible number of lots within the area of influence (Borrero, 2011)

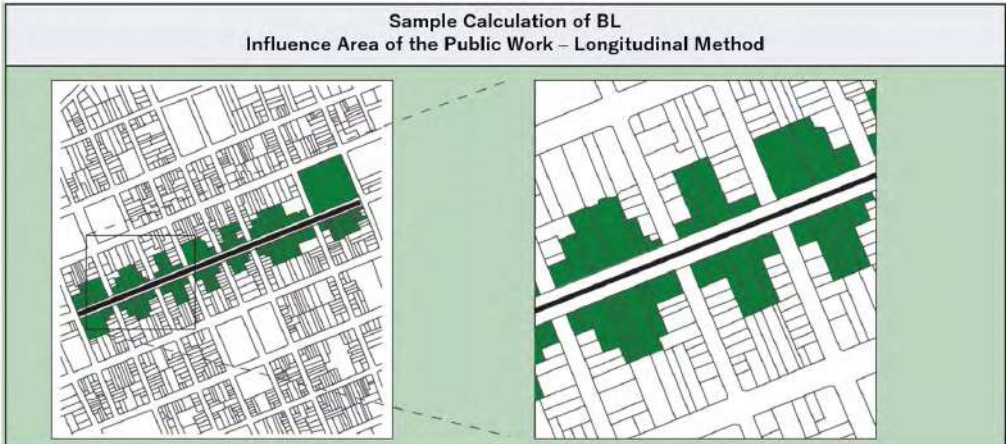
The area of influence is estimated to be at the level of accessibility with ranges between the axis and 3km/5km

Dr Lucas Bispo de Oliveira Alves
Urban Planning Department Pacific Consultants Co Ltd

Dr Lucas Bispo de Oliveira Alves presented the experience in Brazil of Betterment Levy as a source of revenue for financially constrained municipalities. This is a special tax on land value increase resulting from public works which is proposed and admitted by specific law before commencement of work. It is however launched after the conclusion of the work and verification of land value increase and is a source of revenue for the municipalities paid by the direct beneficiaries only. Dr Lucas added that this helps strengthen public participation and encourages public supervision of works. The betterment levies are often used for development basic services like piped water, pavement work, drainage, beautification of streets, parks, revitalization of neighborhoods, rehabilitation plazas etc. Explaining the legal framework for this instrument, he mentioned that the law of the federal constitutions provides legal recognition at the highest level while the national tax code sets the general and individual limits. The statute of the city introduces the idea that betterment levy should be used as a financial and tax instrument of urban policy. The implementation has been more successful in case of smaller cities which are financially more constrained. Brazil has a Betterment Levy Guidebook that provides the detailed step by step guide for its implementation as well as sample calculations. Dr Lucas outlined the major challenges as lack of public support, Government's legitimacy, limited financial capacity of the citizens and lack of institutional capacity. He also attributed the key success factors to the national legal framework, flexibility at local level, an updated, comprehensive and trusted real estate registry and capacity building.

3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL
iii. Knowledge Sharing – BL Guidebook

Sample Calculation of BL
Influence Area of the Public Work – Longitudinal Method



Source: Excerpt from the Brazilian Betterment Levies Guidebook, page 52

MS
Erik Vergeer
ET
TO
YL
Ody, Takos
Luisheer, Nigla...

© Impact Fee

Developers are required to make a payment (cash or in-kind) to obtain development approvals. The payment is intended to compensate for the impact of new development on existing infrastructure or for the cost of providing the infrastructure and improvements needed by new development.

Key elements of this land value capture approach include:

1. A one-time payment (cash or in-kind) determined during the approval of development or issuance of building permissions, and paid by approval-seeking developers
2. Generally intended to compensate or mitigate the impact of new development on existing infrastructure as well as other negative externalities
3. In most instances, cash or in-kind charges are set at a level that has a documented link to actual public infrastructure and in some cases the social costs incurred by the jurisdiction due to new developments
4. Development approvals and corresponding payments may be for on-site or off-site improvements, or for other social improvements



Prof David Amborski
School of Urban and Regional Planning, Ryerson University

Prof David Amborski presented the case of Impact Fee (Development Charges) as a LVC tool adopted in many countries especially in different states or provinces of USA and Canada. He presented a case of the province of Ontario of Canada through the genesis of these growth-related tools. The early applications of these began in North America in 1960s & 1970s. Though the objective was not LVC but it inadvertently led to capture of the land value increase. In Canada, the legislation of Development Charge came in 1989 and presently 4 out of 10 provinces have legislations in place. While in USA the first legislation came in 1989 in Texas and currently 29 out of 50 states have legislations in place. He further mentioned from his research that similar applications have been adopted in England (Community Infrastructure Levy), South Africa (SPLUMA), New Zealand (Local Government Act 'Casual Nexus Approach') nationally, In New South Wales in Australia (Environment Planning and Assessment Act) and in 20 states of India though these are with different names and based on different criteria. Prof Amborski also highlighted some criteria that need to be considered while designing the related policy like 'Which services to include (Property/ growth related), When the payment is required, Exemptions or Reductions, Methods for calculating the charge, Accountability and Transparency' are to be considered

The image shows a Zoom meeting slide with the following content:

- Ryerson University** logo and **Centre for Urban Research & Land Development**, Faculty of Community Services.
- Quote: *"Promoting Better Urban Policy through Economic Understanding"*
- Background image of a city skyline at night.
- Impact Fees (Development Charges) as a Land Value Capture Tool**
- Land Value Capture - Towards Planning and Financing Equitable Cities in India**
- Experience Sharing Workshop**
- December 13-15, 2021**
- Presentation by:**
David Amborski
Director, Centre for Urban Research and Land Development
Ryerson University

On the right side of the slide, there is a Zoom participant list with icons for DA (David Amborski), LA (Lucas AVES), MS (Martin Senica), ET (Erik Vogel-Tosar), S (Surya Gharti), MT (Desiquete-Chef...), CS (C.S. Sarda), N (Nagaran), NK (Narmada Kapoor...), and LP (Laurie Dufour, AL...), along with a +30 icon.

© Additional Development Rights

Typically, there will be an established density and/or height baseline, and developers or landowners wanting to build beyond that baseline (but within the maximum density permitted by the zoning plan) need to contribute as specifically required by the regulation. Developers or landowners are required to pay cash or in-kind (e.g. affordable housing) in exchange for additional development rights following governments decision to rezone their plots of land or change of land use. Second, if decides to rezone an area, the required payment for additional development rights or different land use can either depend on the increase in value due to the rezoning decision or can be a uniform fixed charge.

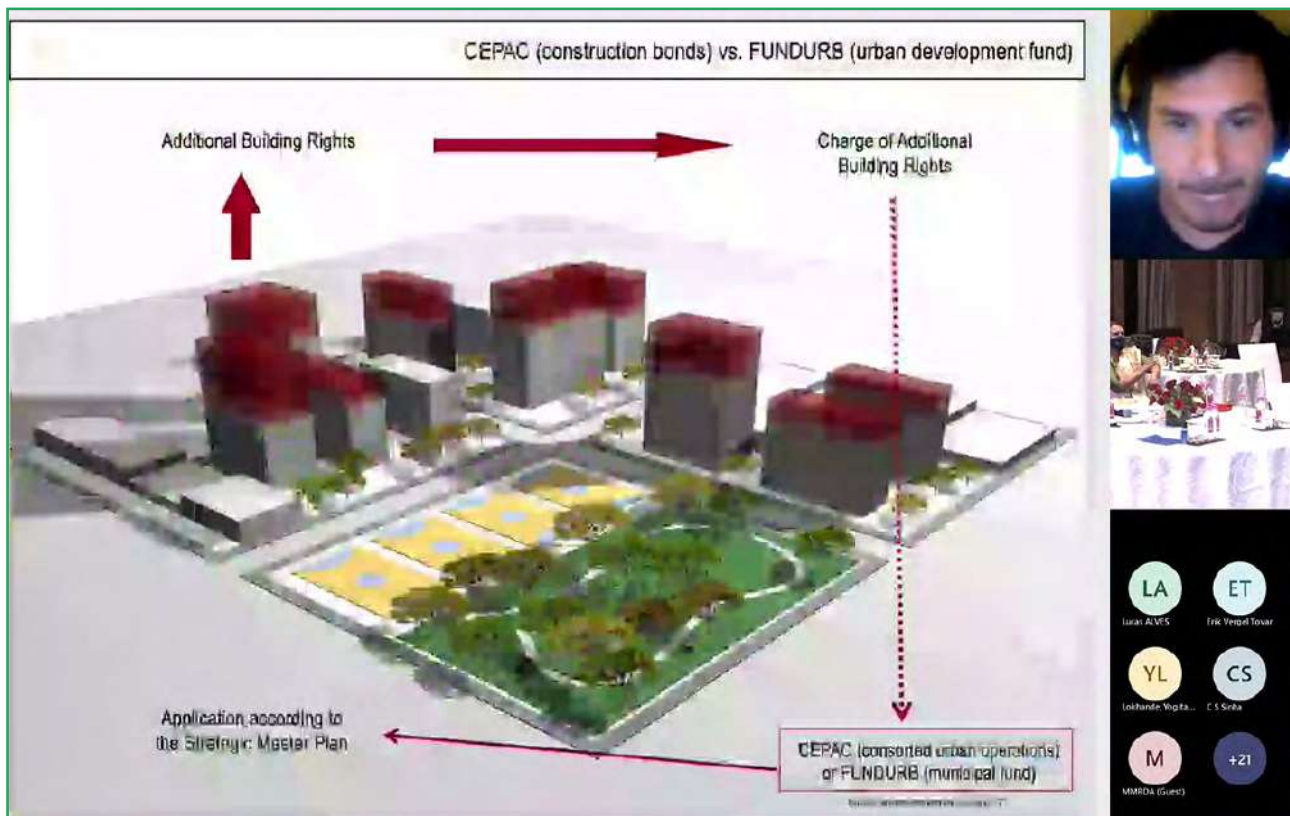
Key elements of this land value capture approach include:

1. Premium FSI; Change of Land Use Charges; Transfer of development rights (TDR); Inclusionary housing/ zoning



Dr Felipe Francisco De Souza
Lecturer, Darmstadt University of Technology, Germany

Dr Felipe Francisco De Souza presented the experience with the charge of Additional Development Rights from Sao Paulo, Brazil. The evolution of the planning systems of Brazil along with the outlines of masterplans in Sao Paulo of 1991, 2002 and 2014. De Felipe further explained the integrated approach of various schemes, zoning regulations and CEPACs and its relationship to the masterplans. He mentioned that the urban planning tools in Sao Paulo were successful only in progressive governments committed to the rights of the city. This tool is unlikely to be successful in large scale when project's cost is higher than the contribution obtained from the sale of additional building rights or there is not enough demand for additional development rights.



© Overview

This presentation described the various instruments available globally and those that are being implemented by various countries

Mr Jon Kher Kaw Senior Urban Development Specialist, World Bank

Mr Jon Kher Kaw presented on various LVC instruments used by local governments globally and how they are leveraged with examples from various countries. Mr Kaw focused on 16 LVC instruments used globally categorized into 3 sections: Control of government owned land/ property with linkages to public access management, Powers to regulate land uses or parameters on both public and private land with linkages to urban planning, and Powers to mandate taxes, fees and in-kind contributions on private land (fiscal instruments) with linkages to municipal finance. He explained that although there is a huge number of instruments available, only about five are used globally: Air rights contracts, PPPs/ Joint development agreements, Intensification of land uses, Sale of development rights/ density bonuses, and Land readjustment. He explained the pros and cons as well as the prerequisites of these instruments. He also presented his study on the list of countries successfully implementing different LVC instruments and their potential public benefits.

Sale of development rights (DRs) or density bonuses
Example: Bonus gross floor area for green building features, Singapore

Greenery and public spaces in return for density and/or height bonuses



Source: Kaw, Lee, Wahba (2020)



Funan Mall, Singapore. Source: Grant Associates



WORLD BANK GROUP

KEY LEARNINGS FROM DAY 1

© Summary

1. There are a wide range of LVC instruments (16 in number) used globally, however not many are commonly used. We therefore need to develop sufficient knowledge about the use of these in related contexts.
2. The knowledge needs to account for the powers of the different levels of government and a thorough understanding of which LVC instrument can be implemented by what type of government agency, for what purpose and what is the potential.
3. The Land Readjustment case from Germany identifies the need for acceptance of the availability of unearned profits of landowners for the public for a successful implementation of the Land Readjustment mechanism. However, this needs to be treaded cautiously especially in contexts such as India where the existence of multiple 'use' rights also needs to be considered on the given parcel of land.
4. The case of Land Readjustment in Tokyo highlighted the need for conceptualizing operationalization and capacity building as a simultaneous process.
5. The case of the Betterment Levy in Columbia highlights the need for a consistent policy approach and implementation strategies over a long duration for developing public acceptance and catalyzing a cultural change.
6. The Brazilian experience of CEPACs requires a very sophisticated and transparent market and a highly developed capacity of local bodies.



BRAINSTORMING SESSION: BETTERMENT LEVY & LAND POOLING

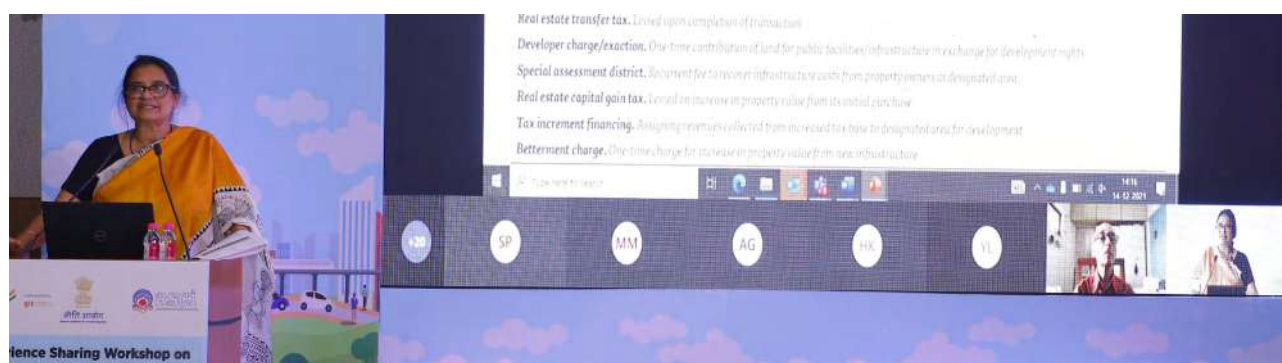
© Context

The session aimed to understand the implementation of Betterment Levy and Land Pooling in the states of Gujarat, Karnataka, Punjab and Rajasthan with specific focus on the process of implementation of Land Pooling.

© Recep of Day 1

Ms Aparna Das
Senior Advisor, GIZ India

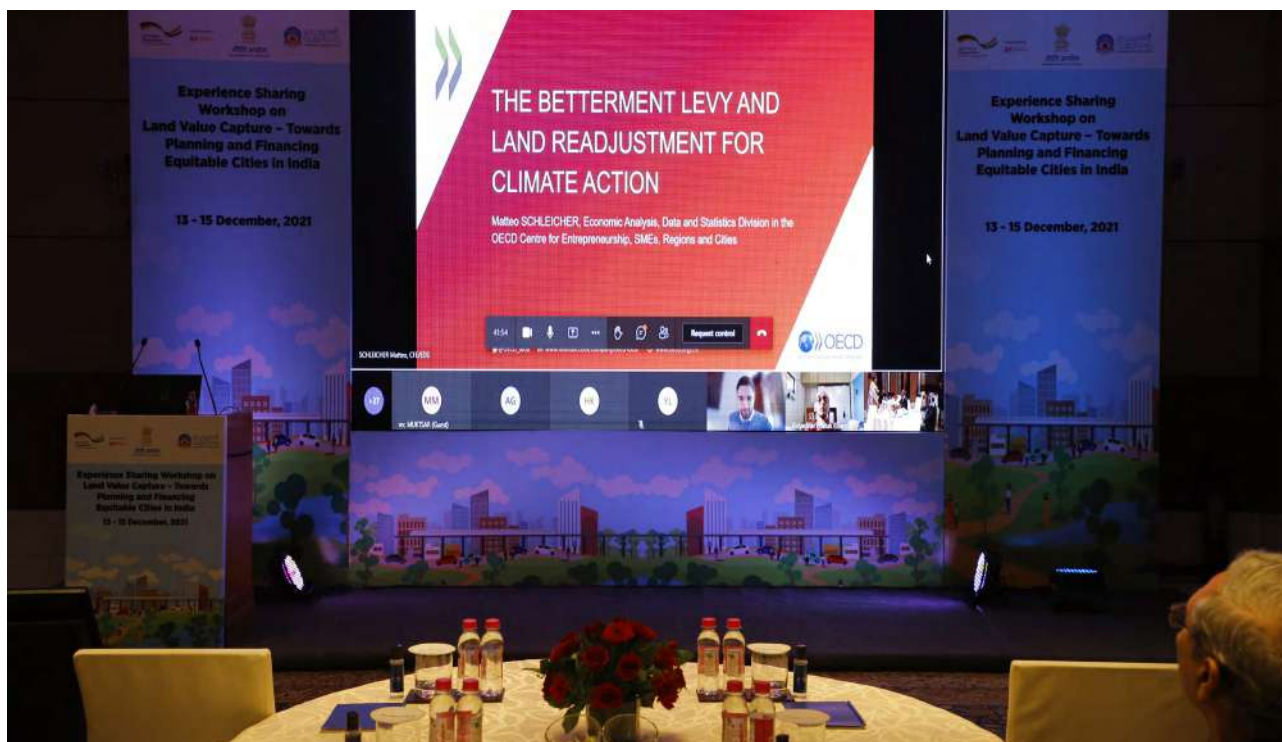
Ms Aparna Das from GIZ India, provided a recap of the key discussions and issues highlighted during Day 1 of the Workshop. Reiterating Mr Padmanabhaiah, she stressed on the need for learning by doing and the need for mainstreaming in the policy discourse. She highlighted the slide shared by Mr Jon Kher Kaw regarding the number of LVC instruments that exist of which we have knowledge of only a few. She highlighted that it was important to understand all these, know who can implement and what is the potential of each. Moving on to the presentation by Dr Erik on the case of Betterment Levy in Colombia, she stressed on the aspect that acceptance of any instrument or policy needs a fairly long time to be adopted as culture. With the examples of Land readjustment shared by Prof Linke, Ms Das tried to understand the processes in the India context where 'use' rights are equally important especially when 'ownership' rights are ambiguous. Regarding Brazil's CEPACs, she reminded us the need for a very efficient local government and a sophisticated and transparent market for its success. Based on Prof Ochi's presentation, she urged everyone to view operationalization and capacity building as simultaneous processes and that each individual case will have its unique learnings. She culminated by reminding everyone of the key takeaways from Ms Scholz's presentation of the need to be context specific and creative where each city would require innovation. Ms Das, posed the following questions important to bear in mind for Day 2 proceedings, What is Land valuation?, What are statutory plans? Who implements? Success cases in India? Is TPS successful? How is success measured?



© LVC and its Linkages with Climate Action

Mr Matteo Schleicher, Economic Analysis, Data and Statistics Division OECD Centre for Entrepreneurship, SMEs, Regions and Cities

Mr Matteo provided an overview of the Global Compendium of LVC that has been undertaken by OECD in collaboration with LILP covering 61 countries. Stating the need for countries to explore ways for financing climate action, he stressed on the potential provided by use of land value capture instruments. He provided an example of how this can be achieved through case experiences of using betterment levy and land readjustment to provide cleaner mobility systems, green spaces, parks, infrastructure for energy transition and creation of flood-risk infrastructure and drainage systems.



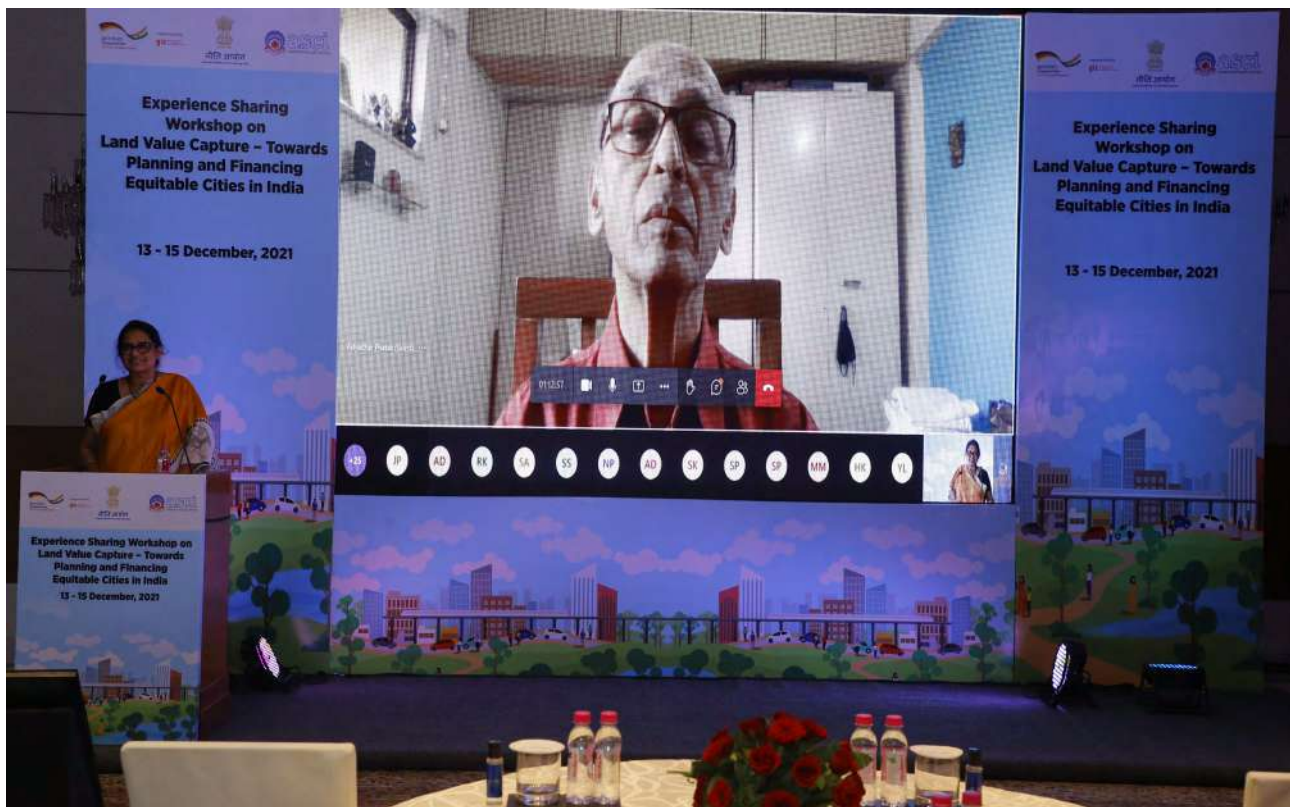
© Introduction

Session Chair

Mr Vidyadhar Phatak

Former Chief Town Planner, MMRDA, Maharashtra

At the onset Mr Phatak explained what LVC meant and that it attempted to capture a part of the value gain arising on account of state action, where the revenue from such could be used for any state function. The need for large infrastructure outlays especially for metros became a necessity where conventional financing was inadequate, also the unavailability of large-scale land acquisitions resulted in alternative sources of financing infrastructure. He also mentioned the various Central Government reports and recommendations that have highlighted the need for tapping land-based financing instruments since 2009. However in practice, this concept has been is application in various Indian states for a long time through their various state acts.



© Betterment Levy in Gujarat

Dr Vatsal Patel

Former Chief City Planner, Ahmedabad Municipal Corporation

At the onset Dr Vatsal Patel provided an overview of the Gujarat Town Planning Schemes as an example of sharing land value gains. He highlighted intensive public participation and consultation at several stages in the process. He detailed out the Land Valuation part of the process where he explained the requirement of certain pre-requisites that include land record certifications, registered sale deeds to determine the original land value and developed land value. Undeveloped land value is useful to determine compensation, while the developed land value is important to collect betterment charges. He mentioned that 50% of the increment in land value, that is difference between the undeveloped original plots and the developed final plots is collected as betterment. He also mentioned that the relevant Gujarat Town Planning Act of 1976, however, does not mention the term 'betterment charge' and hence the collection is more as a levy. After explaining the process, Dr Patel highlighted that TP Scheme implementation is applicable and successful only in areas where the land demand is very high and there is development pressure with land value is consistently increasing.



© Betterment Levy in Karnataka

Mr Mahendra Jain

Former ACS, Government of Karnataka

Through the case of Bangalore, Mr Jain illustrated the need for innovative sources of financing infrastructure and urban development requirements, to keep pace with rapid urbanization. He added that the estimated requirement of 50 million USD for Indian cities over the next 20 years would not be possible to be met through traditional sources and that it was important for every city to think innovatively and adopt a multi-pronged approach towards infrastructure financing. According to Mr Jain, raising resources from direct beneficiaries of public investments, can not only offset the cost of infrastructure provision needs, but also, mitigate the adverse impacts on other groups of people. He listed some of the innovative methods adopted by Bangalore linked to a derived guidance value based on the market value in addition to the betterment levies and various cess. Some have been listed below:

1. Land value capture along the outer ring road property prices of parcels in immediate vicinity increased from 5-7 lakh per acre to about 10 crore per acre in about 15 years.
2. Naming rights of metro stations including advertising rights, commercial space, etc. Similarly, utilization of space built within transport hubs.
3. Provision of developed land instead of compensation during land acquisition along adjoining roads.
4. Change of land use fees.
5. Additional FSI on payment of fees along 1 km width of metro corridor
6. Securitization of future cash flows by state authorities and revolving funds.
7. Crowd funding by community initiatives



He also mentioned some of the amendments to various acts, and GOs issued in Karnataka to facilitate the use of the abovementioned innovative instruments. He also reiterated the need to simultaneously study various obstacles, reasons for resistance, legal framework, and need for a guideline document to provide clarity for local bodies to implement various instruments in a more comprehensive and beneficial way.

© Land Pooling in Punjab

Mr Ravi Bhagat
Government of Punjab

Mr Bhagat mentioned two key reasons for the Punjab State implementing the Land Pooling Policy as compared to acquisition of Land from farmers for development. One, being that of the time requirement amounting to 6-7 years for completing the entire process of land acquisition in case it goes into any litigation, and second was that of higher compensation demanded by land owners. The concept of land pooling in Punjab provides the farmers with an option of participating in land pooling or getting a cash compensation and benefits development authorities as they do not need to raise finances at the time of initiation of the project. Experience in Punjab has highlighted that the Land Pooling Schemes have doubled the income of the landowners as compared to cash compensation. Through the Land Pooling experience in Mohali and Patiala, Mr Bhagat explained the evolution of the components and the ratio of land distribution between landowners and development authorities emphasizing the need for a flexible land pooling policy.



Some of the key lessons he highlighted were the need for a flexible policy, and, added interactions and consultations with the landowners to minimize litigations and remove the middlemen altogether. Some of the challenges that the state government needs to work to refine the policy further is the inability of landowners to sell at market price, timely completion of projects and adequate subsistence allowance to the landowners to meet their demands.

© Land Pooling in Rajasthan

**Mr Sandeep Dandawate, ACTP, Department of Town Planning
Urban Development and Housing, Government of Rajasthan**

Initially the policies 25% of developed land was provided to landowners which included 20% residential and 5% commercial. Revised Land pooling scheme act and the rules have been formulated. While the state has been working on a few pilot projects under this, although it is in a preliminary stage. Although the Act is like what is being followed by other states for long like Gujarat. But Gujarat uses the phrase ‘to the extent of’ and provides a lot of flexibility when you are using it. But actual experience has yet to be gained.



© Summing Up By Modetator

Although there is sufficient literature in acts and policies regarding what the exact terminologies require to be used, in reality there is a confusion in terms of terminologies used. Terminologies used internationally are also distinctly different and therefore it is important to understand the context of the specific country or the state and the scenarios in which these terminologies are applied to understand the real implications. Mr Phatak further clarified the key terms and added that the use of these require provisions in laws as per supreme court judgements and nothing can be done through executive orders:

1. Tax – General taxation like property tax, the usages of the proceeds are not clearly defined and the collecting agency can use these as defined in the budgetary systems of the government.
2. Benefit Tax is where the purpose of the usage of proceeds is clearly defined in the corresponding acts like development charge defined in state town planning acts. So it can be used for the purpose designated but cannot be challenged.
3. Fees on the other hand characterized by the concept of quid pro quo.

Mr Phatak also highlighted that there is a general feeling that you provide infrastructure and the value of land goes up. But this is not a linear relationship. But the demand side and what is the land being used for are another set of determining factors that control monetary increases.

Mr Phatak commented on the Brazil case where Brazilian laws and the statute allow for extraction of maximum value of additional development rights (over that of the FSI as per Master Plans which stands nationalized) to be extracted by local authorities and therefore they can adopt auctioning like in CPACs. In Indian contexts, however, development rights cannot be considered nationalized and the rationale for describing FSI in TP Law is more in terms of securing health, safety, sustainability, infrastructure availability but does not mean that the additional FSI can be sold. What we can do in the Indian context is tax the additional FSI or levy a surcharge on stamp duty like Maharashtra to capture the increased value through transactions and is not in the terms of one-time charge.

Lastly, Mr Phatak also highlighted the need to use other instruments like bonds and borrowings to not burden the present generation through use of land value capture instruments for the infrastructure that will be available for future generations too.



© Discussions

1. Difference between ringfencing and revolving funds especially in case of the discussed Karnataka case

Ringfencing is capturing value from specific infrastructure project and reinvesting there and revolving funds is capturing land value from one and investing in other areas. With respect to revolving funds, the state government has provided a grant to KUIDFC. KUIDFC also raise money from the market at lower costs/bonds and then money is given to various local governments for their services. Debt servicing happens when part of the grant provided by state government to local government as per the State Finance Commission are restored and used for debt servicing. This revolving fund is working well and the corpus with KUIDFC is almost Rs 2000 cr.

2. Land readjustment for a brownfield development:

Improvement of road/water supply network can generate increased values which can then be captured and shared between city and state governments agency which are investing. However, presently, there is no mechanism where the captured value can be shared by various agencies and is hence one of the biggest impediments. In Gujarat TPS is also applicable for brownfield. Classic example of brownfield is rehabilitation of Bhuj.

3. Do citizens really pay. What is the percentage of recovery? What is the cost of collection verses actual recovery?

Collection happens at the time of building plan approval. 80-90% of plots are developed in 4-5 months with recovery of betterment charges. Collection cost is not there as there is no need to provide a separate requirement of staff/human resources.

Recovery happens when person comes at time of layout or building approval. There is a need to understand difference between betterment levy and premium FSI which is optional. But betterment levy is mandatory at the time of construction and recovery happens only then. Collection charges too are very minimal.

4. What is the human resources investment required for any other state to take up any similar activities?

Since the betterment charges are collected at the time of sanctioning development, it does not require any additional human resources for the concerned Government Departments to implement this instrument.

5. Difference between Betterment levy and Impact fee

What is considered as costs typically in Gujarat is the cost of developing local infrastructure. Cost of source development (like in case of water supply) is not considered as cost under the TPS. While contribution in terms of Betterment Levy is important, it is not substantial. Comparatively, mortgaging plots with financial

institutions provides a larger resource and hence and it is essential to retain lands for the agencies.

Over the years Gujarat has developed a culture of TPS and hence it is acceptable by the larger public and therefore easy to implement.

6. Tax increment financing

This has been widely used in the USA and is closely linked to how property taxes are managed. Though it has a lot of potential, it has been difficult to adopt this India as we do not have any legislation regarding this. Also, past experiences in Indian cities have highlighted is a lot of political interference in terms of deciding rates, concessions, etc for property tax and hence it is not a reliable source of finance.



BRAINSTORMING SESSION: IMPACT FEES AND ADDITIONAL DEVELOPMENT RIGHTS

© Context

The session aimed to understand the implementation of Impact Fees and Additional Development Rights in the states of Maharashtra, Telangana and Tamil Nadu with specific focus on the cities of Mumbai, Hyderabad and Chennai.

© Introduction

Session Chair

Mr Gautam Chatterjee,
Former Chairperson, RERA, Maharashtra

This is not just about capturing the value but how to use the captured value and share the same with inclusive cities. Knowledge gaps were highlighted by Reshmy. There are practices that are not documented, there are many legislations that are not practiced and there are many practices that are not legislated across different states in the country. That is the major challenge. There are some states who are not represented in the workshop but who are implementing the important value capture tools maybe under different names. Value capture is practiced widely across the world and the basic principle is that private lands and buildings benefit from measures like infrastructure and policy decisions of the government or parastatal agencies. These are various value capture tools that are being discussed today. The current theme would be on six points:

1. How do we obtain land for public purposes for creating economic physical and social infrastructure including affordable housing
2. Urban renewal for retrofitting, refurbishment
3. New townships with affordable housing
4. City expansions with per-urban areas and what are the tools can be used
5. Foster inclusivity through sharing of land value with affordable spaces for work and living including affordable rentals
6. How do we raise finances from urban land development



Terms such as Impact fee are being used but not in the manner that is expected as per the concepts in North America. In India 'impact fee' has been used in various nomenclature with or without legislative backing to capture land value and how do we use this as a tool uniformly.

Second aspect, Additional Development Rights including Transferable Developable Rights allowing more buildability is charged and fund is generated. Additionally, the case of incentive FSI based on certain conditionalities will also be discussed in the session.

© Additional Development Rights in Maharashtra

Mr Avinash Patil

Director, TP Department, Government of Maharashtra

Mr Patil explained the innovative methods adopted in Maharashtra that have resulted in a paradigm shift. One was the amendment of the MRTP Act in 2010 where all charges on Additional FSI were linked to since 2020 with the Unified Development Control and Promotion Regulations (UDCPR). Mr Patil primarily discussed this change by elaborately explaining the following charges for ADR:

1. Development Charges based on the Annual Assessment of Rates (ASR), indicating value capturing with rates differing plot wise and area-wise.
2. Additional FSI chargeable as Premium based on congestion / density in the areas, varying plot-wise and area-wise, and the size class of the cities in Maharashtra.
3. FSI charged on Ancillary areas resulting in very high returns over the last year.
4. 'Zone conversion charges' as another instrument as premium payment to government.

Mr Patil further explained that every local authority is expected to create a development fund wherein 20% of all development charges are deposited. This development fund is then used for infrastructure including procuring of land for public purposes. While some city governments are following this, many are not. He further added that UDCPR has also introduced a new version of Accommodation Reservation, where the landowner receives all potential FSI benefits for 100 % land area even when local authorities have acquired 40% of it creating a win-win situation.



© Impact Fee and Additional Development Charges

Mr Devendra Reddy Chief City Planner, Greater Hyderabad Municipal Corporation

Being one of the fastest growing cities, the necessity of generating additional sources for infrastructure provision is higher for Hyderabad. Mr Reddy provided a detailed insight into the LVC instruments used by the Greater Hyderabad Municipal Corporation (GHMC):

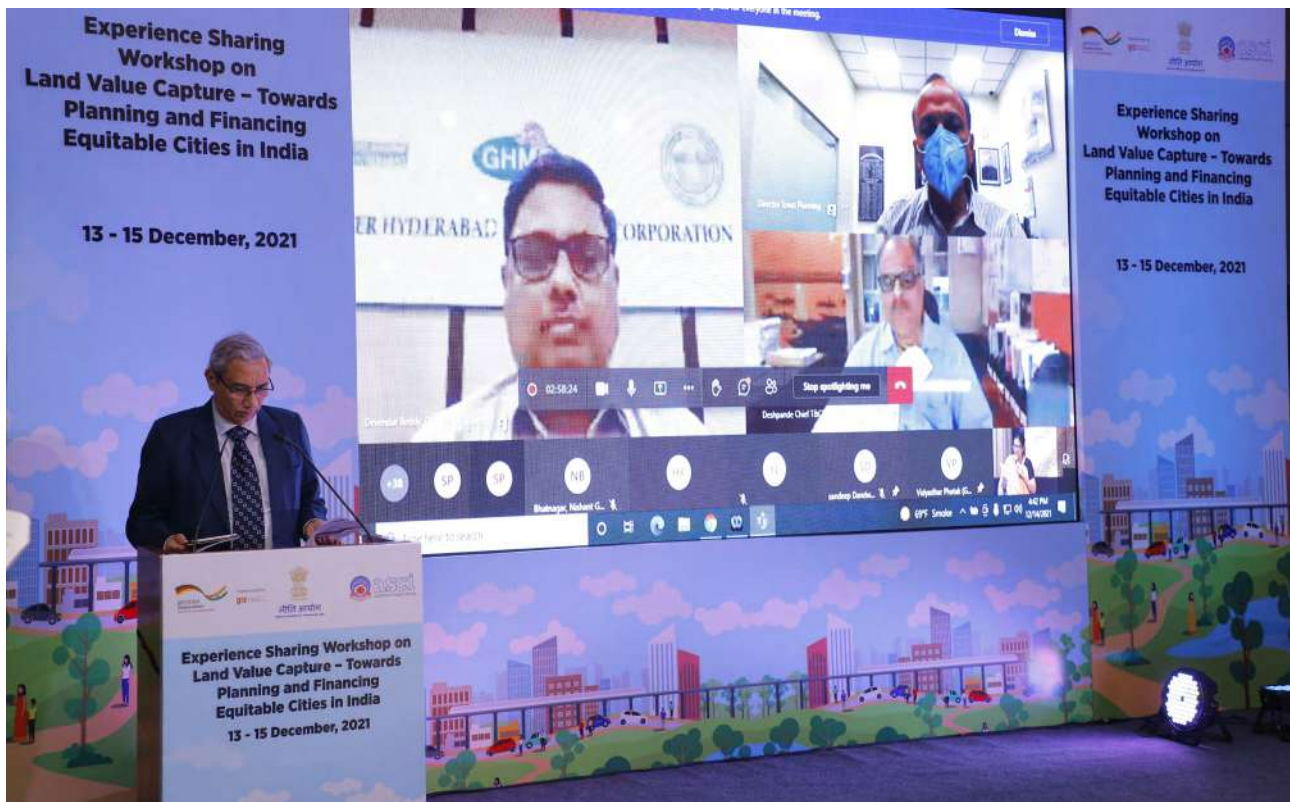
1. Commercial Impact Fee, 1996: This was the first LVC instrument implemented in Hyderabad. With a continuous need for development of new areas especially commercial areas, the GHMC, as required, declares certain areas as commercial irrespective of its status in the master plan. To avail these provisions, land / property owners are required to pay an impact fee which is based on road width, activities permitted and land values. Amount collected through this instrument of impact fee is being used exclusively for improvement of infrastructure in the area.
2. Additional Development Charges: Although not supported by a legislative act, as part of the common building rules, urban local bodies in Telangana with the special permission of the state government, are permitted to levy additional development charges along the ring roads, mass transit systems or any other public transport systems. GHMC is undertaking development of new roads due to which the value of land of surrounding areas has increased substantially. Additional Development Charges are planned to be levied in this case at the time of granting building permissions. Two zones have been delineated with 200 mt width and 300 mts width where differential rates. The amount collected will be reinvested in road networks in the surrounding area
3. City level Infrastructure Impact Fee: FSI restrictions for all urban areas were dispensed in 2006, instead urban areas are now classified as Congested areas, Areas prohibited for high rise development and Newly Developed Areas and imposed with height restrictions. Impact Fee is levied for all building above 15 metres varying on the basis of use of the building and size of the city. In newly developed areas, development is permitted on payment of city level infrastructure impact fee. In Hyderabad, 25% of the collected Impact Fee is exclusively reserved for water-supply and drainage.

Mr Reddy also highlighted some challenges faced by GHMC while implementing LVC instruments. Most impeding being the difference between the actual value of land and the book value, inadequate capture of land value increases during land transactions prior to building permissions, and issues of non-compliance due to excessive charges and fees. One important issue highlighted by Mr Reddy was that since development charges are collected from the developers, this burden is eventually pushed onto the homebuyers resulting in enormous increase of home prices, while the landowners who have profited by exorbitant increase in land values are not charged for their unearned incomes.

© Experience of Mumbai Metropolitan Regional Development Authority (MMRDA)

Mr Shankar Deshpande
Chief, T&CP Division, MMRDA

Mr Deshpande mentioned that the examples of Impact Fee and Additional Development Right are seen in the development of Bandra-Kurla Complex. MMRDA started the BKC with its reclamation in 1990 and started capturing the value of the land with basic FSI and then the surplus was then pulled up to develop infrastructure. The capital investment for the metro lines coming up in Mumbai are financed by the sale proceeds of BKC. Initially it was basic FSI and then Additional FSI instrument which resulted in raising capital of Rs 7000 crs as compared to Rs 10000 crs through basic FSI in 3-4 years. This experience highlights that there is a huge potential to raise finances through LVC by this method on prime land or public land for optimising the use of land in urban areas. The rollout of the metro which was previously 150 km based on the master plan and now extended to 300 kms. The latest CTS Study for Mumbai estimates a requirement of about 500 km of metro lines requiring an investment of about Rs 5 lakh crores over next 20 years. The Study also estimates the requirement for various road and infrastructure projects. To raise finances, MMRDA with the support of the State Government, has proposed the following policies:



1. Development Charge Model: In addition to the conventional development charge, a regulation that provides for an enhancement of 100% of statutory development charges in the areas surrounding a metro line in a given urban local body in the Mumbai Metropolitan Region exclusively for the development of the metro. MMRDA anticipates an annual collection of about Rs 1500 crs through this additional development charge.
2. A Government Notification provides for 1% of the surcharge on Stamp Duty for any transaction in any of the urban local bodies in the MMR that are being benefitted by a metro, will be accrued by MMRDA. An estimated Rs 2000 crs are anticipated through the use of this instrument.
3. The TOD policy prepared by MMRDA proposes intense development within 500 mts radius of specific nodes for Corporation areas and within 1 km radius in greenfield areas can generate about Rs 3000 crs annually through sale of Additional Development Rights in these areas.
4. To capture untapped potential based in properties which do not develop and therefore do not pay development charges but whose value increases. MMRDA has taken up a study on increasing the land and property value in the adjoining areas of all existing and proposed transit stations based on which MMRDA will determine whether a uniform betterment charge, which is provided for in the MMRDA Act but not utilised till now, could be levied to capture through
5. While urban local governments end up spending 70-80% of their revenues on maintenance of infrastructure, MMRDA invests in capital infrastructure. For servicing the newly created infrastructure, MMRDA is proposing a concept called Asset Monetization
6. Rental housing scheme created 50,000 housing units for Affordable Housing
7. Land banking and JV development have also been initiated in Maharashtra

© TDR Experience of CMDA

Mr Anshul Mishra Member Secretary, CMDA

Introduced as part of the Master Plan for Chennai in 2009, TDR was used to give planning permission to developers. TDR is used in two ways based on a set mechanism to calculate the value of TDR:

1. Given to land/property owners or developers in lieu of land provided for new roads, road widening or anything related to transportation from the point of view of urban development
2. Given to Tamil Nadu Housing and Urban Development Board (TNHUDB) for rehabilitating dwellers on untenable lands like water bodies, or any other objectionable government lands.

Total TDRs issued so far is around 32,000 sq mts only, but this is slowly picking up. Earlier issue was regarding guideline value, but now TDRs can be utilized based on 2.25 times of the guideline value of the surrendered land. Another issue was of the TDRs accumulated by TNHUDB which they are unable to sell in the market. CMDA is also exploring ways of adopting the Gujarat TPS experience.

© Summing Up My Moderator

In Maharashtra, two innovative solutions have resulted in creating additional revenues for the local governments to finance capital investments in cities:

1. In 2010 the MRTP Act 1966 was amended to create a buoyancy in collection of all the charges by linking it to the Circle Rates.
2. In 2020 the UDCPR for the entire state including the provisions under accommodation reservations, which earlier only existed for Mumbai, allowing for creation of social infrastructure and housing across all urban areas in the state.

In Telangana, Impact fee in the name of infrastructure impact fee is being levied though the name is similar it has a different meaning than what is understood globally. The Act provides for Additional Development Charges but since there is no buoyancy in the act there have been also additional charges imposed to capture the actual land value increases. More transparency is required in land value.



© Discussions

1. Has TDR utilization in a city be linked to Spatial Plan of the city?

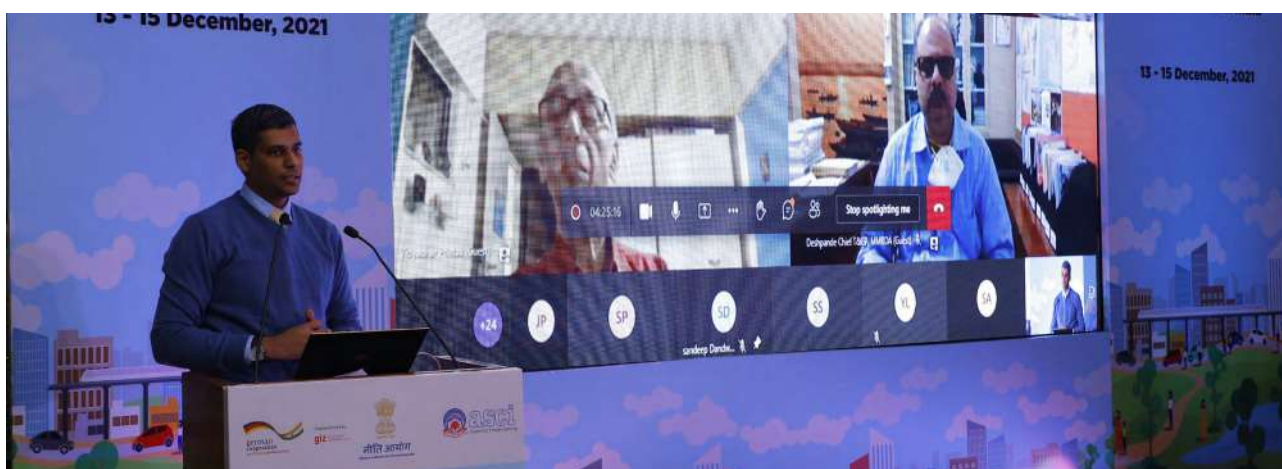
Mr Deshpande explained that in the case of Mumbai, TDR in Mumbai is used to balance the development in prime and non-prime areas. With TDR generation and utilization getting optimized in Mumbai, TDR is anticipated to only be restricted to development of reservations as per the Development Plan of the city and not for trading as was the earlier case. Mr Phatak added that the Development Plan of Mumbai has structured the FSI in terms of the base FSI, Premium FSI and TDR. Hence the maximum consumption on a given plot through TDR is already specified. Effectively, the plan has considered the amount and place from where TDR can be generated and where it can be used.

2. What are the reasons why the TDR generated by TNHUDB is not being utilized?

One of the main reasons is that the TNHUDB is not able to price it at a value that is lesser than the actual value of TDR being a Government Body and presently CMDA is unable to determine the selling price of TDR which can be used also be a developer.

Projects related to water conservation zones and rejuvenation of water bodies in case of Chennai, Mumbai and Hyderabad are generating substantial development at the periphery where the no development zones end. How is this real estate development being tapped for capturing land value?

In the case of Mumbai, there is a property tax structure linked to the ready reckoner which is responsive to such conditions on ground which is capable of capturing the land values. However, there is no provision for ring-fencing or sharing of the value with different government agencies. In case of Hyderabad too, there is no direct land value capture for environmental projects, but wherever there are large projects coming up in the vicinity of the lakes, the projects proponents are required to contribute CSR funding for the lake rejuvenation projects. Although in Chennai that has not been explored so far, the upcoming land pooling policy is expected to address this.



3. How is the issue of reduced land values or reduced development rights mitigated?

In the case of Chennai, the provision for mitigating the negative impact of land value decrease for villages that have been identified for no development or minimum development zones as they are going to act as water reservoirs or water recharge zones also needs to be tackled. Mr Phatak also added that there is no legal provision of compensation unless land has been acquired. In case of reservations for open spaces on a private land, the landowner is compensated with TDR for surrendering the land. The only area where the landowner is compensated without taking over the land/property is in the case of heritage properties through TDR. However, the origins of TDR lie in the green conservation in the USA where TDR is provided without surrendering land as a compensation for developmental value. In Mumbai, however when it was applied in 1991, it was used as an alternative to compensation for taking over private land. Presently, we have a lot of buffer zones being applied by various authorities which take away the development rights without providing any compensation.

4. Recommendation for Urban Infrastructure Benefit Tax as way ahead in the Indian context

This recommendation was in the context of linking the base to the value to create buoyancy for development charge as has been done in the case of Maharashtra instead of putting development charge as absolute value. However, presently the use of the development charge lacks a clear definition, but this ideally needs to be ring-fenced for capital infrastructure for urban development instead of management of services. This probably could be a legislatively backed alternative that could be explored in Indian states instead of arbitrary imposition of Additional Development Charges.



LEARNINGS FROM DAY 2

1. There is a need to understand the exact context in terms of laws of the land to understand the meaning of various terminologies used which maybe same but have different implications.
2. There is a need to develop a buoyancy in terms of collection of increased values through land value capture instruments by connecting it with market prices reflected in regularly updated ready reckoners or guidance value or circle rates as the context specifies.
3. It is important to understand that certain actions of the state can also result in decrease of land value or opportunity for the landowner and therefore needs to be adequately compensated.
4. One needs to be cautious of implementing too many charges or taxes from the point of view of land value capture as this can be a deterrent for development or can result in evading of payment.
5. The capture of land value increases through development charges alone results in the burdening on the homebuyers eventually increasing the cost of housing while the original landowner takes away a larger share of unearned income. The need to capture the land value increases through surcharge on Stamp Duty as experienced in Maharashtra could be one option to mitigate this issue.
6. With the implementation of LVC instruments, especially when this is in the form of one-time charge, one needs to be cautious of the implications of burdening the present generation with the contributions towards development of infrastructure for many future generations to come. In addition to LVC instruments other sources of financing infrastructure are also important to be considered.



CONCLUDING SESSION

Ms Aparna Das
Senior Advisor, GIZ India

Ms Das appreciated the intense deliberations during the session and also remarked that there is a need to develop a consensus on where to begin. But reflecting back to the training of professionals or the academic curriculum of the related courses, it is important to understand how the conceptual clarity lies with a few administrators and planners in select cities could be expanded to cover all of our 8000 urban settlements. With reference to the importance given to the BKC in Mumbai as against the Mithi river or the reducing water in the Yamuna river, she also added that there are certain cautious decisions that need to be taken while speaking of urban development and land value capture. She also stressed on the absolute necessity of a spatial plan for every city requiring certain professional skills to manage the cities. The need for a zoomed out perspective on this issue is essential where NITI Aayog's guidance will be very helpful.

CONCLUDING REMARKS AND VOTE OF THANKS

Mr Abhishek Agarwal
Senior Specialist Director, NITI Aayog

Mr Agarwal appreciating the enriching deliberations of the past two days on land value capture. He stated the importance of this topic as India has planned a substantial investment in infrastructure of over Rs 100 lakh crores over the next five years. He reiterated the need for exploring innovative approaches for financing infrastructure projects without the stressing the present-day resources. Reflecting on previous OECD studies, Mr Agarwal mentioned that 80-90% of capital value is actually available in terms of land and buildings. He mentioned that in this peculiar context, in addition to capturing land value increases in urban areas, it was also important to understand the need for capture of land value increases in peri-urban and rural areas effecting due to regional infrastructural projects accounting for almost 50% of the infrastructural investment. Mr Agarwal also highlighted the need for exploring methods of sharing the gains amongst different departments and different levels of the Government.

Referring to the deliberations and the contribution made to the Global Compendium, Mr Agarwal mentioned that there is a need to standardise the conceptual understanding and the use of terminologies for the various LVC instruments. With land being a state subject, state governments along with the local governments play a vital role in capturing land values. Mr Agarwal also mentioned the need for Capacity Building for all levels of the government. He added that this workshop needs to be seen as a beginning of a larger programme for land value capturing along with capacity building programmes at local government levels and actual demonstration in select cities. He ended his remarks with a vote of thanks to all the participants of the inaugural session, the international speakers, state speakers, moderators and organisers from GIZ India, ASCI and NITI Aayog teams including Mr Sinha and Mr Amitabh Kant for their encouragement contributing to the success of this workshop.

SPEAKERS PROFILE

Session 1 : Inaugural Session and Context Setting

Dr Reshmy Nair

Professor & Director

CMLARR, Administrative Staff College of India



As the Professor & Director, CMLARR, ASCI, Dr Nair has been leading the capacity building interventions for Land Acquisition, Resettlement & Rehabilitation (LARR) in South Asia. The Centre has conducted more than 100 national / international programs on LARR covering 4500 officers & 114 organizations conducted so far. She has led consultancy assignments on land pooling for various clients like the World Bank and studies on social assessment and evaluation of LARR. She is a Member of several national Committees on land related issues. She has graduated in Economics (Hons.) from SRCC, Delhi University and holds M. Phil & Doctorate degrees in Economics from Jawaharlal Nehru University.

Ms Aparna Das

Senior Advisor

SUD-SC, GIZ INDIA



Ms Das is an urban planning professional with more than 20 years of experience with different sector partners at all levels of government, national / international NGOs, multi / bilateral agencies such as UNICEF, UNDP, DFID India, and the World Bank. Her key sectors of experience are affordable housing, municipal governance, basic urban services, urban planning, and in situ slum upgrading and linkages of these thematic areas with the land legislation and land tenure in urban areas. She has been a Senior Advisor with GIZ for the last ten years. She received her master's degree in Urban Development Planning from University College London (UCL), in 2000. Aparna received a SPURS fellowship (2018-19) located within the Massachusetts Institute of Technology (MIT). Here she focused on urbanization aspects in the Global South and explored methodologies for efficiently distributing economic resources and achieving spatial justice in urban areas.

Session 1 : Inaugural Session and Context Setting

Ms Barbara Scholz

Program Manager

Cities and City-Regions 2030, GIZ



Since 2015 Ms. Scholz advises the German Federal Ministry for Economic Cooperation BMZ, Urban Development Division, on sectoral policies, joint initiatives with multilateral agencies such as UN Habitat, Cities Alliance, UNEP or OECD, and on its portfolio related to urban development in Asia, the Mediterranean, Africa and Latin America. She is an urban and regional planner at TU Berlin with extensive experience in urban planning, land management and institutional solutions related to social housing, urban infrastructure, urban expansion and urban renewal. She collaborated with national governments, municipalities, development banks, NGOs and the private sector in Germany, Ecuador, Colombia and Chile. She was adjunct professor at Bauhaus Universität Weimar.

Dr Rudiger Ahrend

Head of Economic Analysis, Data & Statistics Division

OECD



Dr Rudiger Ahrend is Head of the Economic Analysis, Data and Statistics Division in the OECD Centre for Entrepreneurship, SMEs, Regions and Cities. He also oversees the activities of the OECD Laboratory for Geospatial Analysis. Since 2002, has been supervising projects in a wide area of subjects, including industrial transition, regional and urban innovation and development, sub-national finance, spatial productivity, metropolitan governance, land value capture, housing, climate change, transport, metropolitan governance, and national urban policies. Dr Ahrend was also earlier in charge of the OECD Working Party on Urban Policies, as well as the OECD Roundtable of Mayors and Ministers.

Special Address

Mr Sudhendhu Jyoti Sinha

Advisor, (Infrastructure Connectivity – Transport and Electric Mobility)

NITI Aayog



Mr Sinha is the Advisor, Infrastructure Connectivity – Transport and Electric Mobility, NITI Aayog. He has over 27 years of experience in operations, infrastructure planning, coordination and management at field and policy making levels in the Indian Railways. His performance has been recognized and was awarded the national Award for e-Governance 2019 – 20 for ‘Excellence in providing Citizen – centric delivery’ and the ‘National Award for Outstanding Service’. He also served as Dean of the Indian Railway Institute of Transport Management (IRITM), Lucknow, and General Manager Web Applications at the Centre for Railway Information Systems (CRIS). He has training and enrichment from Japan, Malaysia, Singapore, Germany and the USA

Mr Kundan Kumar

Advisor (Skill Development, MU & NITI Evolution)

NITI Aayog



Mr Kumar belongs to the Indian Administrative Services, 2004 Batch, and is presently posted in NITI Aayog as Adviser, Managing Urbanization (Urban Development), Skill Development, Labor & Employment, and Industry-I verticals. Prior to NITI Aayog, he was the Private Secretary (PS) to Union Defence Minister and led collaborations across various defence verticals to deliver reforms aimed at strengthening India’s external security. He has also served as a Private Secretary to Union Home Minister wherein he worked comprehensively in subjects related to border areas development, women safety, emergency response support, and matters concerning India’s internal security.

Special Address

Mr K. Padmanabhaiah

Chairman, Court of Governors

ASCI



Mr K. Padmanabhaiah (b. 1938) is a retired Indian civil servant and a former Home Secretary of India. He is the chairman of the Court of Governors of the Administrative Staff College of India, and has headed many government committees such as the Committee on Police Reforms (2000), the Committee on Reorganization of the Services Selection Board, and the Committee to Review the working of National Institute of Urban Management. The Government of India awarded him the third highest civilian honour of the Padma Bhushan, in 2008, for his contributions to Indian civil service. In 1996, he received two awards, the Indira Gandhi Award for National Integration and the Shiromani Award of the Shiromani Institute, Delhi for contributions to National Development, Integration and Enrichment of Life.

Session 2 : International Experience in LVC Implementation

Mr Takeo Ochi

Senior Advisor

Japan International Cooperation Agency (JICA)



Mr Ochi has been working for technical cooperation projects regarding urban planning and development in many countries, including Department of Town and Country Planning, Ministry of Interior, Thailand (1994-1997); Vietnam Institute of Urban and Rural Planning, Ministry of Construction (2009-2012) along with other countries like Mongolia, Brazil, Madagascar, and Timor-Leste (2016-2018) to enhance their urban planning methodology. Besides, he has been also conducting JICA land readjustment training program and other training programs.

Session 2 : International Experience in LVC Implementation

Prof Hans Joachim Linke

Head, Chair “Land Management”

Institute of Geodesy, Germany



Prof Dr-Ing. Hans-Joachim Linke is the scientific director of the chair of Land Management at the Technical University Darmstadt since 2002, and Chair of Spatial and Infrastructure planning since 2016. Prior to this, he worked as a project leader in the field of building land development at at Landesentwicklungsgesellschaft NRW GmbH. His research interests are in the field of sustainable urban and rural development, with a focus on citizen participation, real estate market and real estate valuation, process management, spatial and infrastructure planning, environmental services. Since 2013, Prof Linke is the Academic leader of the sustainable urban development master study program at the Vietnamese-Ger-man-University in Ho Chi Minh city, Vietnam.

Dr C. Erik Vergel-Tovar

Assistant Professor

Universidad de los Andes., Columbia



Dr Erik Vergel is an Assistant Professor in the Department of Architecture at Universidad de los Andes. Professor Vergel-Tovar received his PhD in City and Regional Planning at the University of North Carolina at Chapel Hill in the United States. He studied Architecture at the National University of Colombia in Bogota (Colombia) and received a Master’s on Urban Management and Development with Distinction at the Institute for Housing and Urban Development Studies IHS at the Erasmus University of Rotterdam, The Netherlands. He participated in the Land Readjustment International Training Course offered by the Japanese International Cooperation Agency JICA in Tokyo, Japan.

Session 2 : International Experience in LVC Implementation

Dr Lucas Bispo de Oliveira Alves

Urban Planning Department

Pacific Consultants Co Ltd



Dr Lucas is a specialist in Urban Planning with a special focus on Transportation, financial and economic modeling, funding solutions and implementation strategies, including Land Value Capture. In Brazil, he served at the Ministry of Finance, dealing with regulatory matters in several industries and at the national Antitrust Agency, assisting in the analysis and approval of an M&A operation involving the country's major railway operator. While based in Japan, Lucas has been providing consulting services for clients such as the Japan International Cooperation Agency, Japan's Ministry of Transportation and the Inter-American Development Bank. These projects cover themes such as disaster resilient urban planning and feasibility studies for transit systems in Japan and several other countries, including Brazil, Colombia and Mozambique.

Prof David Amborski

School of Urban and Regional Planning

Ryerson University



Prof Amborski has been researching Impact Fees and Development Charges in Canada for several years. He has coauthored a chapter in the book titled "Development Obligations in Canada: The Experience in Four Provinces" in Public Infrastructure, Private Finance in 2019. He has been an advisor for the National Treasury in South Africa on their development control legislation a few years ago. He has also completed a chapter on international applications of impact fees for a book by Chris Nelson and Julian Jurgensmeyer, where he approached the experts who supported the OECD questionnaire from different countries, with a short questionnaire on the application of impact fees. He has been coauthoring specific chapters in other books of Chris Nelson since 1988.

Session 2 : International Experience in LVC Implementation

Prof Martim Smolka

Senior Fellow and Director

Lincoln Institute of Land Policy



Prof Smolka is a Senior Fellow and Director of the Program on Latin America and the Caribbean, Lincoln Institute of Land Policy, Washington DC. His areas of expertise include land markets and land policy, access to land by the urban poor, the structuring of property markets in Latin America and property tax systems, including the use of land value increment charges to finance urban development and infrastructure. A graduate of the University of Pennsylvania (M.A./Ph.D.). He is the co-founder and former president of the Brazilian National Association for Research and Graduate Studies on Urban and Regional Planning.

Dr Felipe Francisco De Souza

Lecturer

Institute of Geodesy, Germany



Dr De Souza has 10 years of experience as a project manager for the municipal government of São Paulo, dealing with land value capture instruments, land-use planning, and master plans. He has also supported as a consultant for banks and international cooperation agencies such as JICA, UN-Habitat, World Bank and the Inter-American Development Bank. Additionally, Dr. De Souza authored several working papers and books including his latest book “Land Readjustment: Solving Urban Problems Through Innovative Approach” (ed. 2018 with Takeo Ochi and Akio Hosono) published by JICA Research Institute. Currently, he is a research associate and lecturer for the department of civil and environmental engineering at the Darmstadt University of Technology, Germany, working under the auspices of Prof. Hans-Joachim Linke.

Session 2 : International Experience in LVC Implementation

Mr Jon Kher Kaw

Senior Urban Development Specialist

World Bank



Mr Kher Kaw is a Senior Urban Specialist, South Asian Urban Unit of the World Bank, based in Washington, DC. He brings with him expertise in integrated urban planning, sustainable development and real estate economics. Prior to joining the World Bank, Jon Kher served as at the Urban Re development Authority (URA), the national planning agency of Singapore.

Session 3 : Brainstorming Session : Better Levy and Land Pooling

Mr Matteo Scheicher

Junior Policy Analyst

OECD



Mr Schleicher is a Junior Policy Analyst in the Economic Analysis, Data and Statistics Division in the OECD Centre for Entrepreneurship, SMEs, Regions and Cities. He has been working on urban and regional development issues, land value capture, land use, housing and environmental policy. Currently, he is working on the development of an OECD-Lincoln Institute Global Compendium of Land Value Capture. The Compendium will provide systematic and comparable information about the use of land value capture in 61 countries.

Session 3 : Brainstorming Session : Better Levy and Land Pooling

Mr Vidyadhar Phatak

Former Chief Town Planner

MMRDA, Maharashtra



Mr Phatak is the former Chief Town Planner of Mumbai Metropolitan Regional Development Authority. With 49 years of experience in real time planning, the new dean of planning, Mr Vidyadar Phatak, is a personification of professionalism in every sense. He likes to identify himself as a planner above anything else, due to his experiences as a result of association with CIDCO and MMRDA for a dominant period of his career. Working along with pioneers in the realm of planning like Shirish Patel, Charles Correa and Alain Bertaud, he has been a part of two visionary regional plans of Mumbai and World Bank funded projects to mention a few.

Session 4 : Brainstorming Session : Impact Fees and Additional Development Rights

Mr Gautam Chatterjee

Former Chairperson

RERA, Maharashtra



Mr Chatterjee is a retired officer of the Indian Administrative Service of the Maharashtra Cadre belonging to the batch of 1982. Mr. Chatterjee has held several important assignments both in the Govt of Maharashtra and Govt of India including being Addn. Municipal Commissioner of Mumbai Municipal Corporation, Jt Director General of Foreign Trade in the Ministry of Commerce and CEO of Maharashtra Housing and Area Development Authority. He served as CEO of Slum Rehabilitation Authority and Dharavi Redevelopment Project, Pr. Secretary of Maharashtra Housing Department, Jt Secretary in the Ministry of Defence. Further to this, he was the Dir. General of Shipping in the Ministry of Shipping, Govt of India and Addn. Chief Secretary, Transport and Ports, Government of Maharashtra. After his superannuation, he served as Officer on Special Duty (OSD) to the Chief Minister of Maharashtra before taking over as the first Chairperson of the Maharashtra Real Estate Regulatory Authority (MahaRERA) where he served till January 2021.

Session 4 : Brainstorming Session : Impact Fees and Additional Development Rights

Mr Anshul Mishra

Member Secretary

Chennai Metropolitan Development Authority



Mr Mishra is the Member Secretary of the Chennai Metropolitan Development Authority. Mr Mishra was earlier the Commissioner of Coimbatore Corporation and the District Collector of Madurai. He has also served in the Ministry of Finance and the Ministry of Civil aviation. Mr Mishra holds a Masters in Regional Planning in City and Regional Planning from Cornell University.

Concluding Remarks and Vote of Thanks

Mr Abhishek Agarwal

Senior Specialist Director, Infrastructure Connectivity

NITI Aayog



Mr Agarwal has 15 years of multi-sectoral and pan India experience in Planning Profession. Previously, he has led teams for creating state spatial strategies and hierarchical land use planning policies with GIZ, has been an Urban Development Advisor to Ms Vasundhara Raje, Ex-Chief Minister of Rajasthan during his association with UNDP, and worked with IL&FS on numerous PPP projects. Within NITI he has been looking after the roads and transportation sector including logistics and urban transport infrastructure. He is also extensively involved with the Managing Urbanisation and Development Monitoring and Evaluation Teams at NITI Aayog.

LIST OF SPEAKERS

A. Inaugural Session:

1. Dr Reshmy Nair, Professor & Director, CMLARR, ASCI
2. Ms Aparna Das, Senior Advisor, GIZ India
3. Ms Barbara Scholz, Head of Component, Planning and Building, GIZ, Eschborn
4. Dr Rudiger Ahrend, Head of Economic Analysis, Data and Statistics Division, OECD
5. Mr K. Padmanabhaiah, IAS (Retd.), Chairman, Court of Governors, ASCI
6. Mr Sudhendu Jyoti Sinha, Advisor (Infrastructure and Connectivity), NITI Aayog
7. Mr Kundan Kumar, Advisor (Skill Development, MU and NITI Evolution)

B. International Experiences Session:

Moderator: Mr Sudhendu Jyoti Sinha, Advisor (Infrastructure and Connectivity), NITI Aayog

Presenters:

1. Mr Takeo Ochi, Senior Advisor, JICA
2. Prof Hans Joachim Linke, Head, Chair “Land Management”, Institute of Geodesy, Germany
3. Dr C. Erik Vergel-Tovar, Assistant Professor, Universidad de los Andes., Columbia
4. Dr Lucas Bispo de Oliveira Alves, Urban Planning Department Pacific Consultants Co Ltd
5. Prof David Amborski, School of Urban and Regional Planning, Ryerson University
6. Prof Martim Smolka, Lincoln Institute of Land Policy
7. Dr Felipe Francisco De Souza, Lecturer, Darmstadt University of Technology, Germany
8. Mr Jon Kher Kaw, Senior Urban Development Specialist, World Bank
9. Mr Matteo Schleicher, OECD

C. Indian Experiences Session:

Moderator: Mr Vidyadhar Phatak, Former Chief Town Planner, MMRDA, Maharashtra

Moderator: Mr Gautam Chatterjee, Former Chairperson, RERA, Maharashtra

Presenters:

1. Gujarat – Dr Vatsal Patel, Former Chief City Planner, Ahmedabad Municipal Corporation
2. Karnataka – Mr Mahendra Jain, Former ACS, Government of Karnataka
3. Punjab – Mr Ravi Bhagat, Special Secretary, DGR and PG, Government of Punjab
4. Rajasthan – Mr Sandeep Dandwate
5. Telengana – Mr Devendra Reddy, Chief City Planner, Greater Hyderabad Municipal Corporation
6. Maharashtra – Mr Avinash Patil, Director, TP Department, Government of Maharashtra
7. Maharashtra - Mr Shankar Deshpande, Chief, T&CP Division, MMRDA
8. Tamil Nadu – Mr Anshul Mishra I.A.S, Member Secretary, CMDA

D. Concluding Remarks and Vote of Thanks

1. Mr Abhishek Agarwal, Senior Specialist Director, Infrastructure Connectivity, NITI Aayog

LIST OF PARTICIPANTS

- | | | |
|-------------------------------|-------------------------|-------------------------------|
| 1. Avadhanulu (LEA) | 13. Arpan Mazumdar, GIZ | 25. CMDA |
| 2. Abhijit Lokre | 14. Aparna Soni, SPA | 26. CS Nawani |
| 3. Abhinav M | 15. Archana Kothari | 27. CS Sinha |
| 4. Aditi Yadav | 16. Ashish Pandey, AIM | 28. CTCP, MMRDA |
| 5. Aishwarya Prem | 17. Assam PWRD | 29. Debajit Bhuyan, Assam |
| 6. Ajay Katuri | 18. Avanish Pendharkar | 30. Deshpande MMRDA |
| 7. Amarpreet Kaur bal | 19. Azam | 31. Devang Karnani |
| 8. Amit Gotecha | 20. Bibhu Tripathy, GIZ | 32. Devendar Reddy, GHMC |
| 9. Anand Iyer | 21. BL Gupta, CE Agra | 33. Dhanunjai Guptha |
| 10. Anshika Gupta, NITI Aayog | 22. BM Setty | 34. Digpal Singh Kushwah |
| 11. Anuja Gokhale | 23. Chetan Vaidya | 35. Dilip Das, AEE, Assam PWD |
| 12. Anumita | 24. Chintan Chokshi | 36. Dilip Kumar Tiriveedhi |

- | | | |
|--------------------------------|----------------------------------|---------------------------|
| 37. Dinker Gurung, Sikkim | 71. Manogna | 105. Rajneesh Porwal |
| 38. Director Town Planning | 72. Manoj Kumar | 106. Ramakrishna Rao Ravi |
| 39. Directorate of Environment | 73. Mayank | 107. Ravinder |
| 40. Dishant Meshram | 74. MC Muktsar | 108. Reshma |
| 41. Dr Renu Kumar | 75. Meena Shadab | 109. Rike Thonke |
| 42. Dr Tanu Sethi | 76. Mohit Singh | 110. Saibal Thakurata |
| 43. Fahmida Aumi | 77. Mohit Yadav | 111. Saikia, Tora Mai GIZ |
| 44. Farha Irani | 78. Monika Bahl, GIZ | 112. Saswat |
| 45. Felix Knopf | 79. Monika Goyal, NITI | 113. Sayali Marawar, IHF |
| 46. Gautam Kumar | 80. Mugdha Shekhar (LASA) | 114. Shikha Puri |
| 47. G L Gupta | 81. Mukesh Yadav | 115. Shrawan Acharya |
| 48. Harendra Kumar | 82. Nagarjun | 116. Shruti Dubey |
| 49. Hari | 83. Namrata Kapoor, IIHS | 117. Shruti Phatak (LASA) |
| 50. Harshit Sosan Lakra | 84. Nathani Kishore | 118. Shweta Dua, GIZ |
| 51. Harshitarch | 85. Neha Singh Yojna Aayog U. P. | 119. Simran |
| 52. Herry Gulabani, IIHS | 86. Nishant Bhatnagar, GIZ | 120. Siva |
| 53. Hirok | 87. Nilesh Rajadhyaksha, NIUA | 121. Sneha Sharma |
| 54. Issac Francis Assisi | 88. Nisha Parveen | 122. Sobith Mathew Jose |
| 55. Iswarya, IIHS | 89. Nishi Shetti | 123. Souvik Nath |
| 56. J Ravinder Rao - LASA | 90. NK Sudhansu Maharashtra | 124. SS Jha |
| 57. J. Jegadeesh | 91. Nodal officer MSCL | 125. STP K LG Punjab |
| 58. Jaivardhan Rai | 92. Noopur | 126. Suryakant |
| 59. Jalaja Saji | 93. Paras Parikh, NITI | 127. Surya Pratap Singh |
| 60. Jayakumar P. | 94. Peeyush Naidu | 128. Sushma Tanuja |
| 61. Jayapal P | 95. Piyush Goyal | 129. Suvidh Kapoor, NITI |
| 62. Kaalimuthu | 96. Pragya Sharma, NIUA | 130. Swati Khanna, KfW |
| 63. Kamaljeet Kaur | 97. Pranab Nanda | 131. Swayamprava Mohanty |
| 64. Kaushal Mehta | 98. Pranav Pendharkar | 132. Vibhore Bakshi |
| 65. Kunal | 99. Priyanka | 133. Vijaya |
| 66. Loisier Dufour Alix GIZ | 100. Pruthvi | 134. Vikas Kumar |
| 67. Loveleen Garg | 101. R. Ramana | 135. Vineet Kumar |
| 68. Mahima Kanojia | 102. Rachana | 136. Yash Shah |
| 69. Manav jain | 103. Raj Kumar Boppana | 137. Yogita Lokhande, GIZ |
| 70. Manikandan KP, HIS | 104. Rajalakshmi N | |

PRESENTATIONS

Attached in the order as they appear in the agenda, from next page onwards.

Resilient Infrastructure and LVC Mechanisms

Presented by Barbara Scholz, Component Leader Planning and Building

Sector Project Cities | 13.12.2021

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

A. Megatrend Urbanisation

1. Cities play a key role in the implementation of **global development and climate goals**.
 - By 2050, 2.5 billion additional people will live in cities
 - 70% of GHG emissions are produced by cities.
2. Enormous demand for the **improvement and expansion of infrastructure: Global demand for low-emission, climate-resilient urban infrastructure will be in the order of \$4.5 trillion to \$5.4 trillion annually from 2015 to 2030.** ([CCFLA SCCFR 2015, page 14](#)).
3. Challenges:
 - Abandon anti-climate **path dependencies**
 - Create sustainable **alternatives for satisfying the needs of the urban poor**

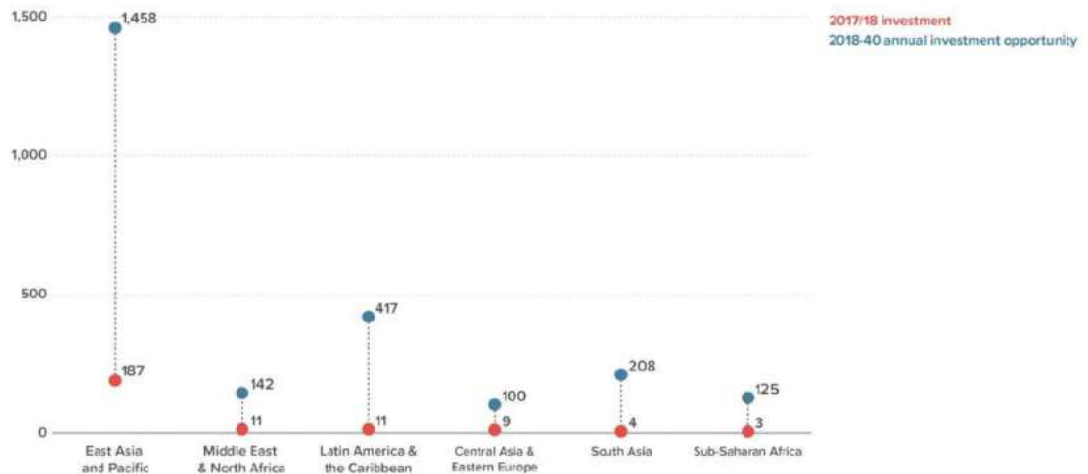
→ We need effective approaches to meet current needs (**supply backlog**)

AND

→ setting the course for future development (**climate protection and adaptation**).

There are huge untapped investment opportunities in emerging markets.

Urban climate finance estimated in 2017-2018 compared to the annual private sector investment opportunity, by emerging market region (USD billion)



7

B. Infrastructure in the German Development Cooperation (DC)

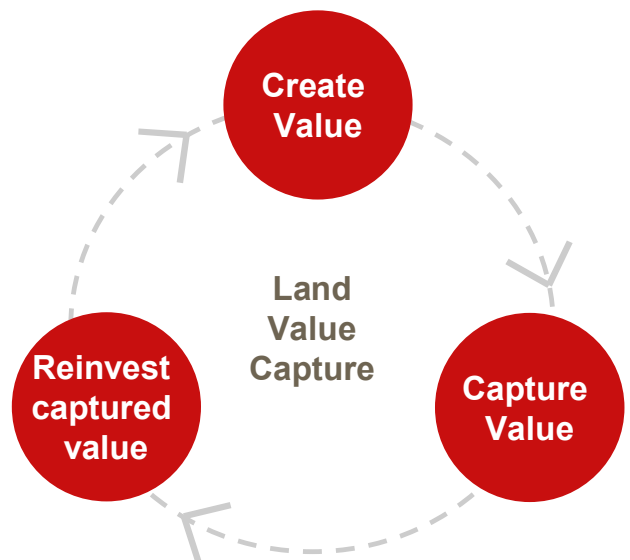
- **30% of the technical assistance and more than 50% of the financial cooperation** is addressing urban needs
- Mainly related to **decentralization, municipal service delivery and infrastructure development**, especially water/sanitation.
- **The challenge:** Planning and financing urban development needs to be **action oriented, demand driven and strategic** in terms of longterm impact on climate:
 - **Integrated approaches:** sectors, spaces, actors and tiers of government
 - **Innovative institutional solutions:** technical, financial and political complexity
 - **Alignment of national urban development and land policies:** mandates, resources, regulations and instruments
 - **Capacity building:** practical and multidisciplinary education and training, spatial and market monitoring
 - **Access to climate financing:** project preparation facilities, funds, global and regional alliances

C. LVC contributes to

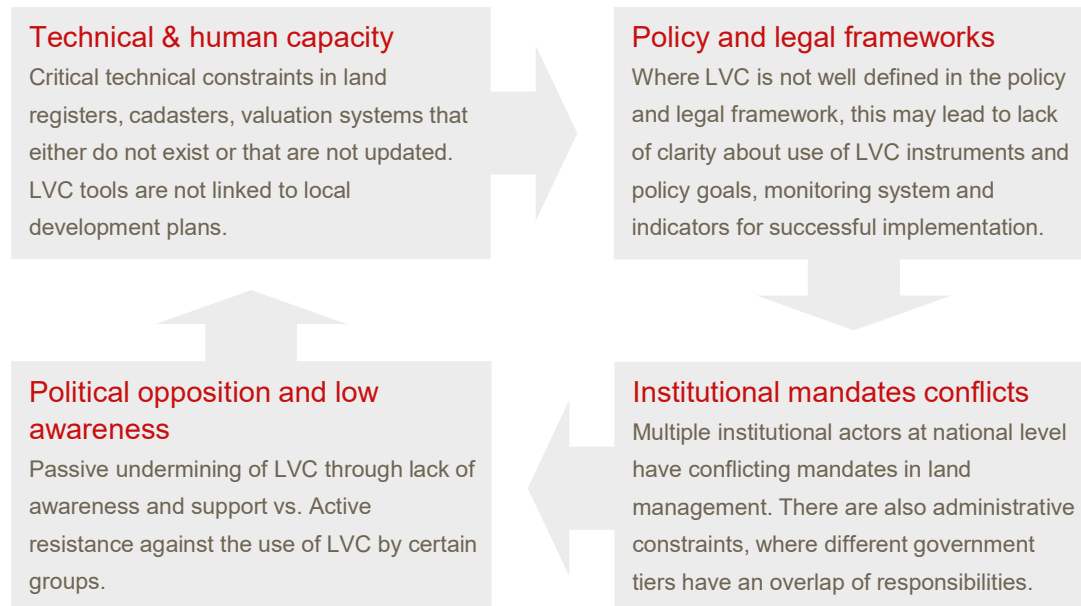


Multi-dimensional Approach

- **Outcomes:**
 - Viability of planning instruments
 - Transparency
 - Legitimacy
 - Multi-stakeholder implementation of plans
- **Key success factors:**
 - Multidisciplinary approach
 - Effective institutional solutions



D. LVC implementation risks and bottlenecks



E. Conclusions

- The use of **LVC instruments must be clearly aligned with objectives of the common good.**
- Urban development means a **permanent negotiation** between:
 - financial and economic efficiency,
 - equal opportunities and social justice
 - environmental sustainability.
- **Urban governance** and **urban management** are at the centre of urbanization processes. Thus, key success factors are:
 - Stakeholder involvement,
 - Accountability & transparency,
 - Trust, reliability and credibility.

Cities often are pioneers in the development of innovative instruments!

Have the courage to experiment, not one size fits all!

Be context-specific and creative with local or traditional good practices!

Contact



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<https://www.facebook.com/gizprofile/>

Land Value Capture in Land Readjustment

OCHI Takeo, JICA Senior Advisor

LAND VALUE CAPTURE-TOWARDS PLANNING & FINANCING EQUITABLE CITIES
IN INDIA

13 December 2021

Land Value Capture (LVC) mechanisms

- To recoup land value increases generated by public infrastructure investment
- Based on “Principle of beneficiary pays.”

Challenges:

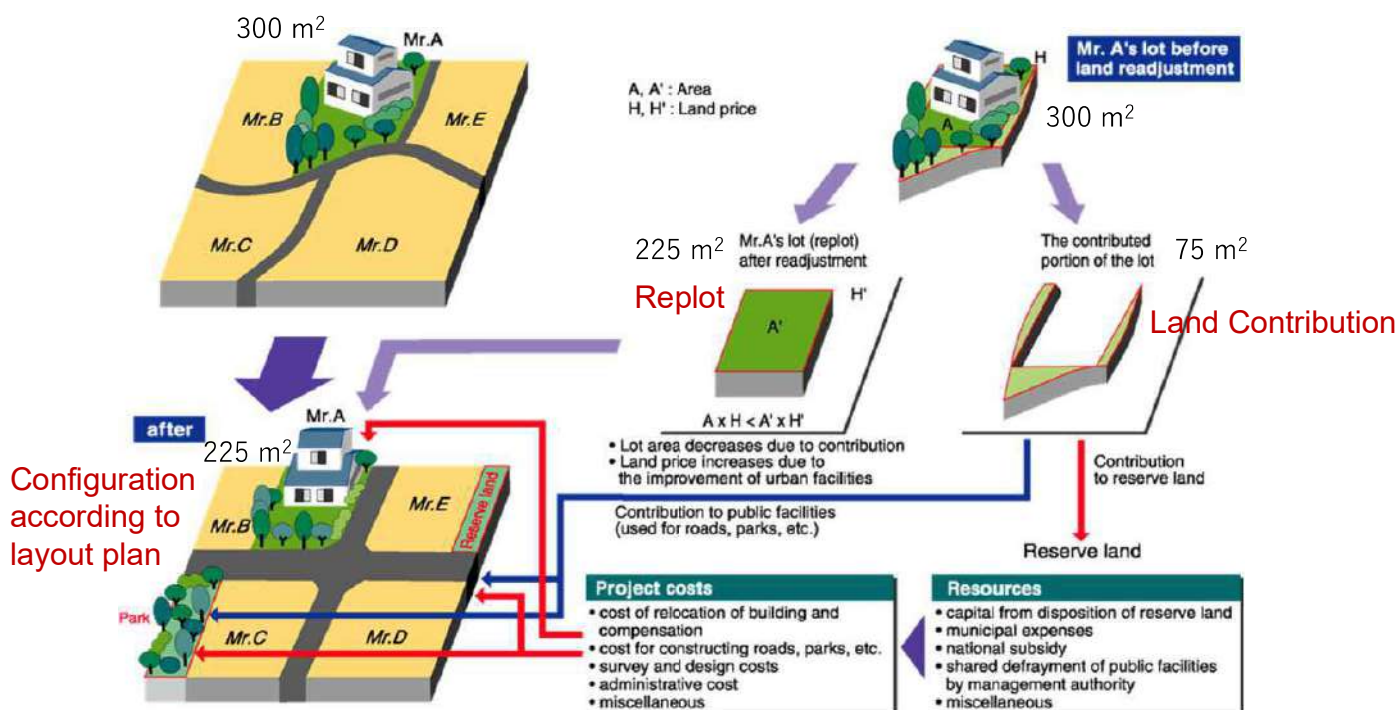
- How to evaluate land value increase?
- How to identify the area for LVC (How to identify the beneficiaries)?
- How to recoup their benefits?



Land Readjustment can provide solutions to these questions;

Landowners in a LR project share the project cost and necessary land for new urban infrastructure with landowners' land contribution according to their profits/benefits bought by the project.

Mechanism of LR (Japanese type)



Great Kanto Earthquake 1923



450,000 buildings burnt down,
130,000 buildings destroyed,
140,000 people missing or dead.



Land Readjustment Projects in 3,117ha

- (1) 10% of the land to be contributed free of charge.
- (2) The street value evaluation method was employed.

World War II

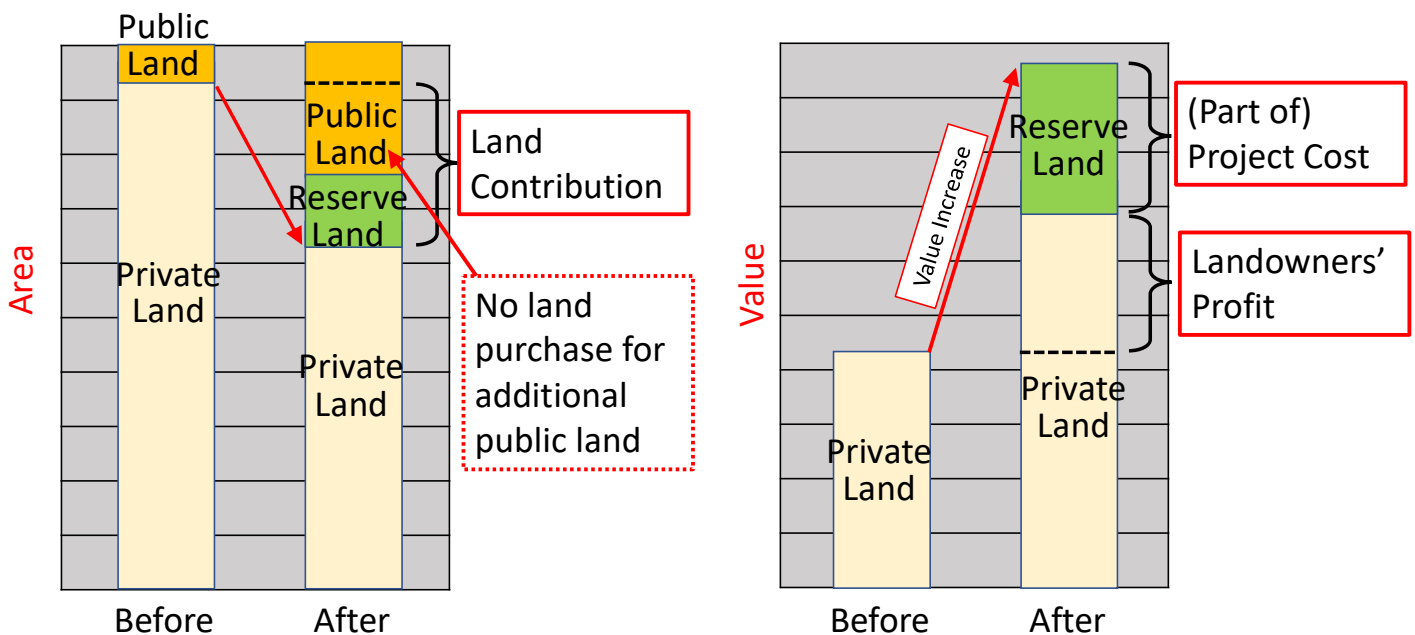


War-devastated cities designated:
115 cities, 63,153ha

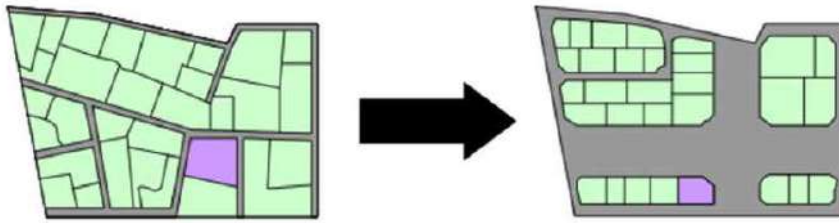
- (1) 15% of the land to be contributed free of charge.
(The contribution portion in excess of 15% to be compensated.)
- (2) Improvement of LR procedures

<http://www.missedinhistory.com/blog/missed-in-history-the-great-kanto-earthquake/>
<https://ja.wikipedia.org/>

Mechanism of LVC in LR (LVC by Land Contribution)



Premise: Total value of private land to be increased by the LR project



Public Land	20,000 m ²	60,000 m ²
Private land	100,000 m ²	60,000 m ²
Land value	200,000 Yen/m ²	250,000 Yen/m ²
Total Value	20,000 million Yen	15,000 million Yen

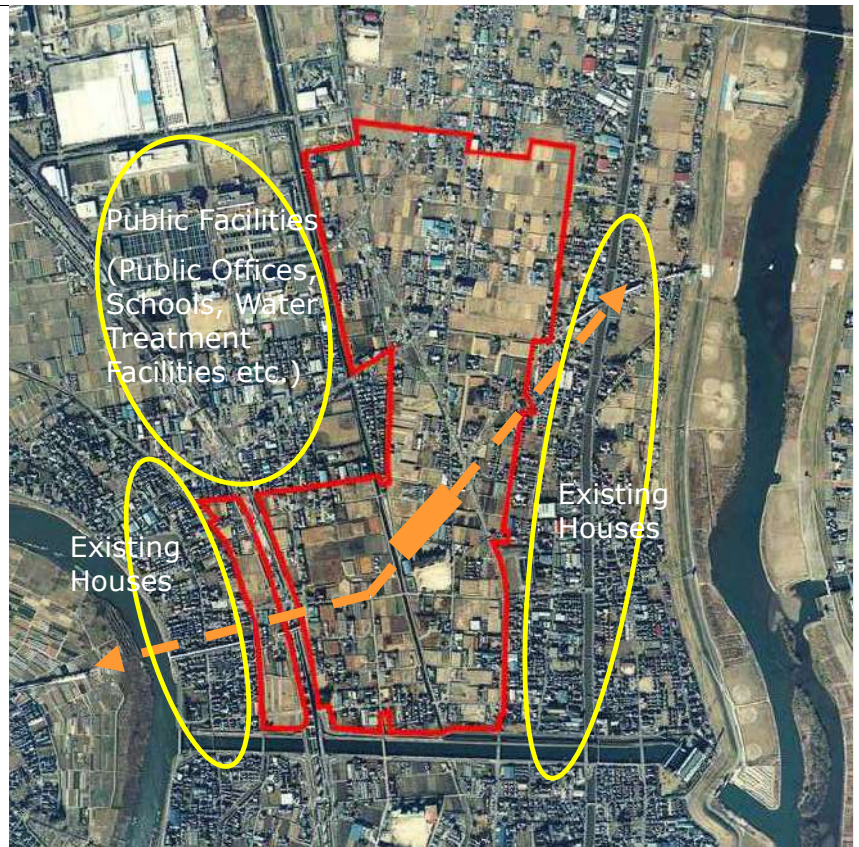
Example of a LR Project in the
outskirt of Tokyo Metropolitan
Area
(Misato Chuo Project 114.8 ha)

Urban development integrated with
railroad development

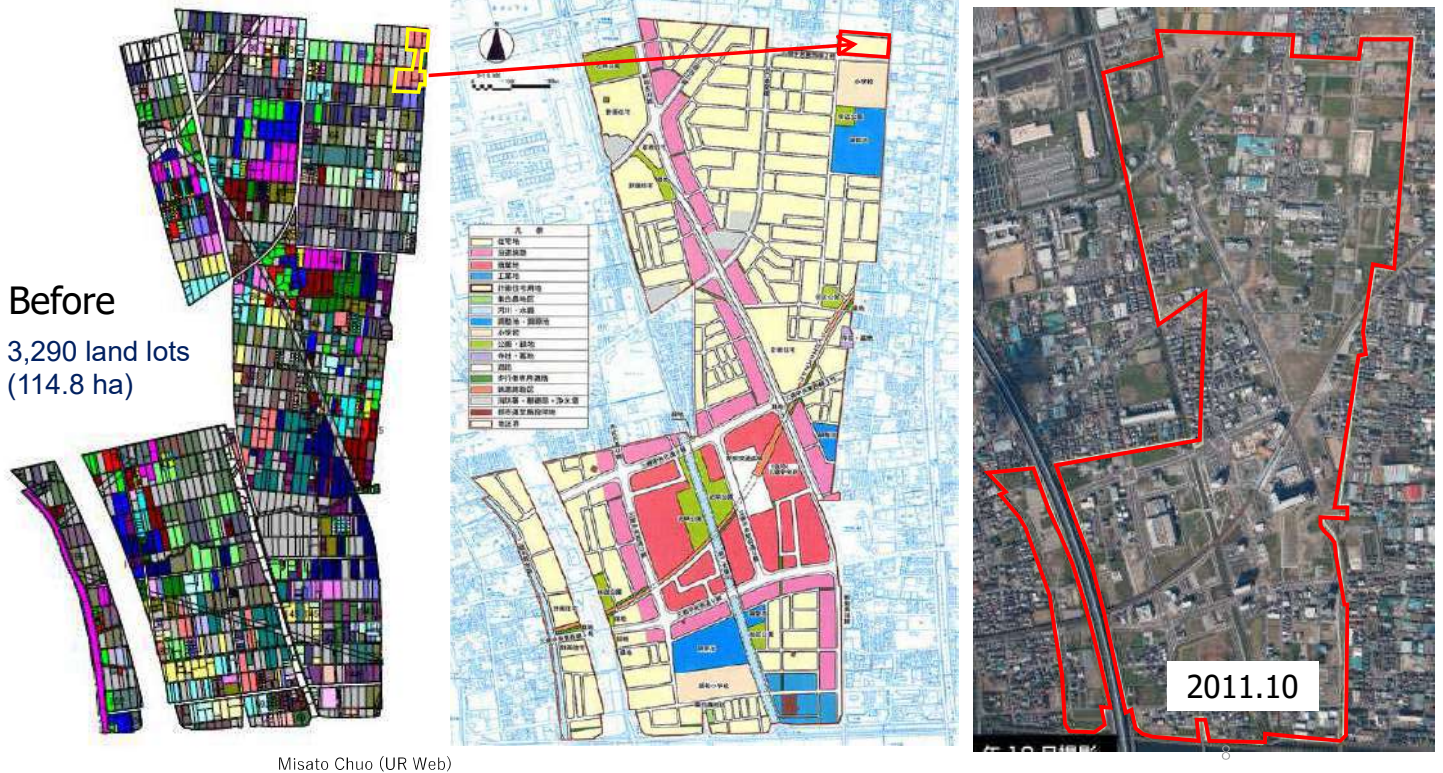
Contribution ratio	
For infrastructure	21.6 %
For reserve land	16.2 %
Total	37.8 %

Land price (evaluated)	
Before	151,000 Yen
After	295,000 Yen

Reserve land covers 31% of the total
project cost.



Land re-plotting (reconfiguration) according to the layout plan



Key to Success of LVC = Land Evaluation

Two Important Aspects of Land Evaluation in LR

1. How much land value will be increased by a LR project. (**Vertical Evaluation**)
2. Evaluate the fairness between each land lots in the project area.
= Fair distribution of the increase in land value (**Horizontal Evaluation**)

Land Evaluation Method to be employed depends on the characteristics of the project.

Large-scale new urban development



Street Value Evaluation Method

- Evaluate a large amount of land in a short period of time,
- Focuses on urban infrastructure development such as streets, and does not consider individual building construction projects.

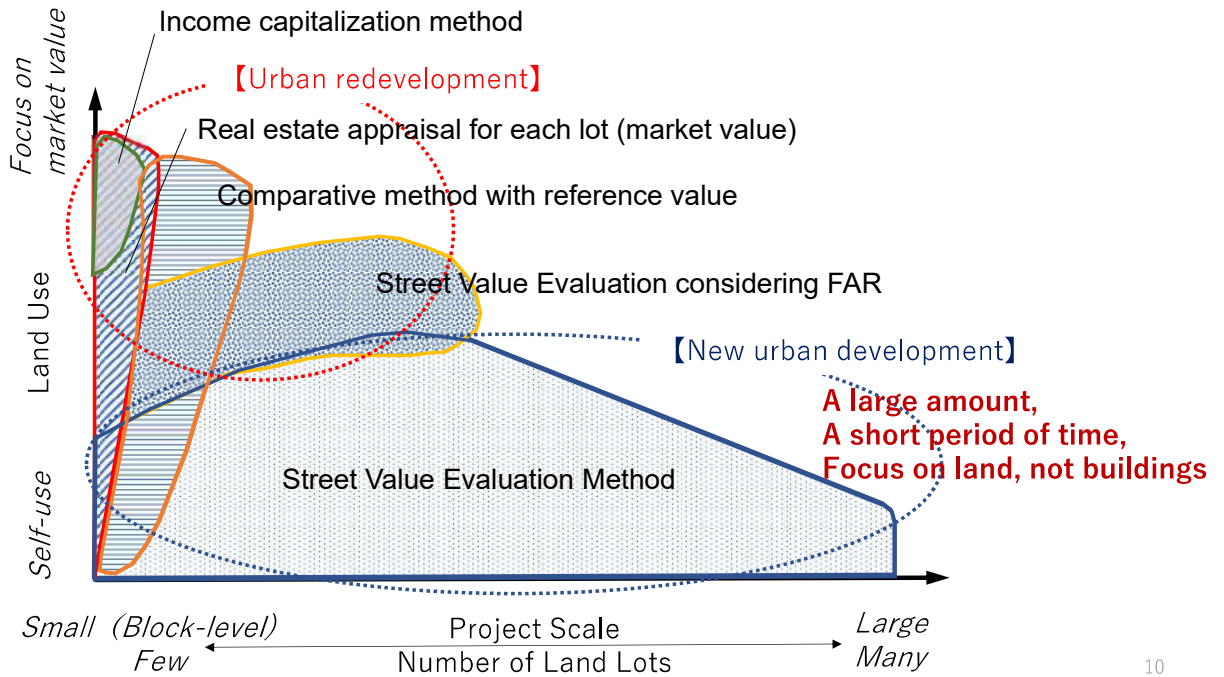
Effective use of land in built-up areas



Real Estate Appraisal,
Comparable Method,
Income Capitalization Method

- Small scale
- Evaluate the profitability as real estate (focus on market price)

Land Evaluation Methods



Street Value Evaluation Method

Street Value = a unit value of a standard lot



Two Steps of Evaluation

- (1) Calculate street values.
- (2) Modification by individual characteristics of a lot

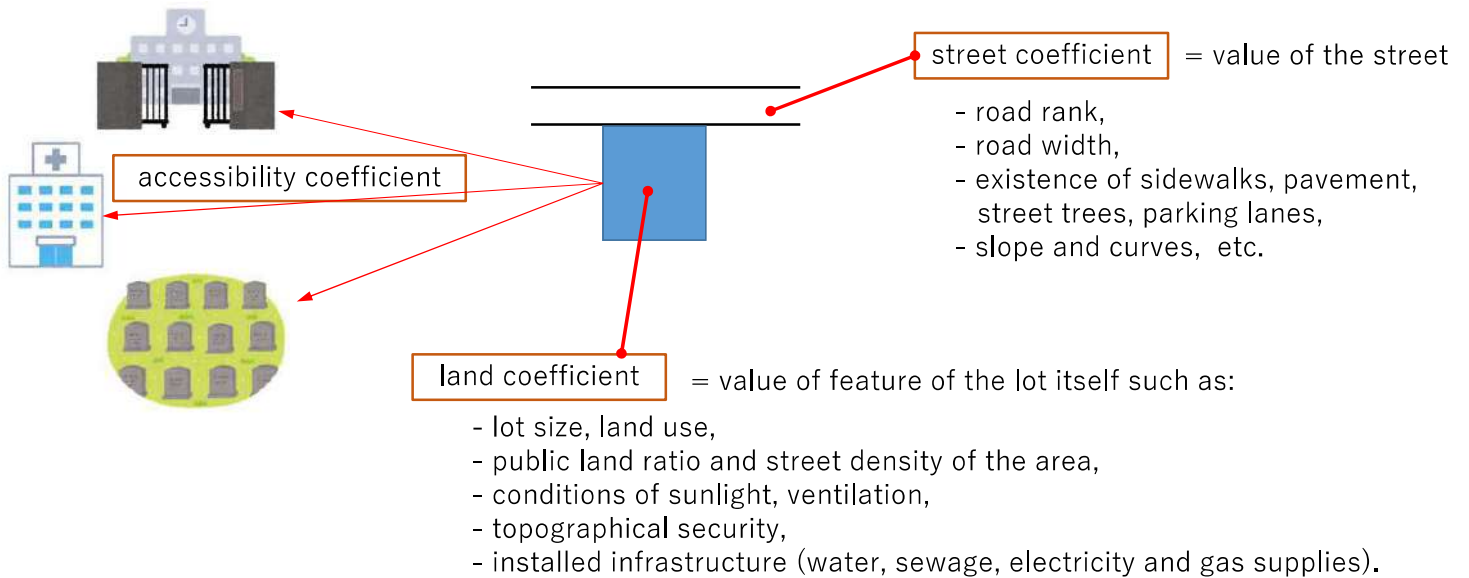


Principle of Land Evaluation

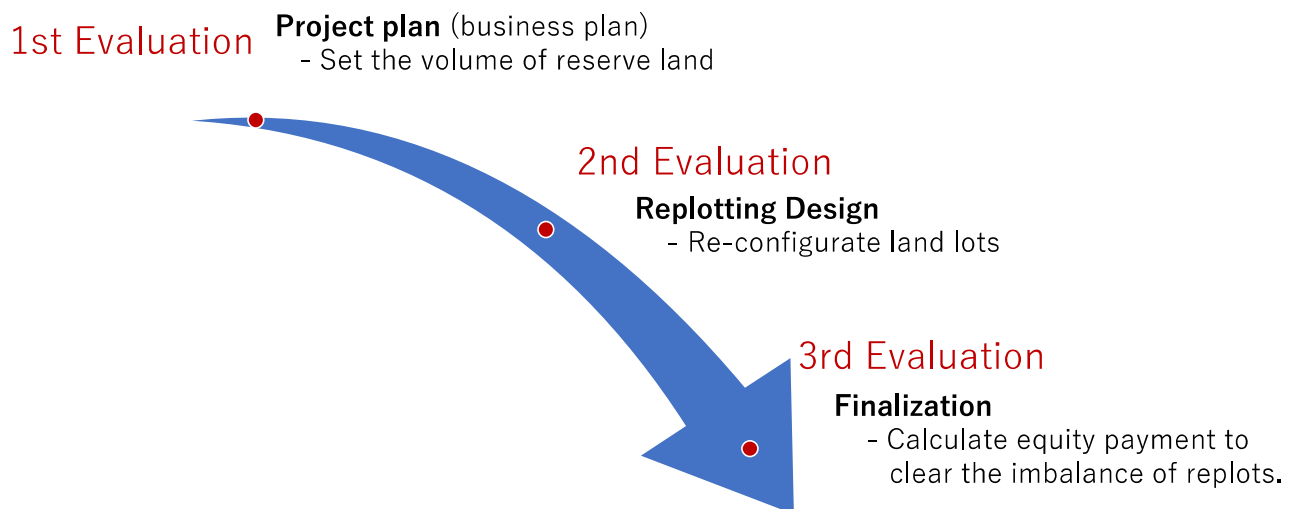
- Consider only factors that first appeared due to the project.
- Exclude - Land price increase due to the location of commercial facilities outside the district
 - Land price increase due to land speculation, etc.

Calculation of a Street Value

$$\text{Street Value} = \text{street coefficient} + \text{accessibility coefficient} + \text{land coefficient}$$



Timing of Evaluation in a LR Project

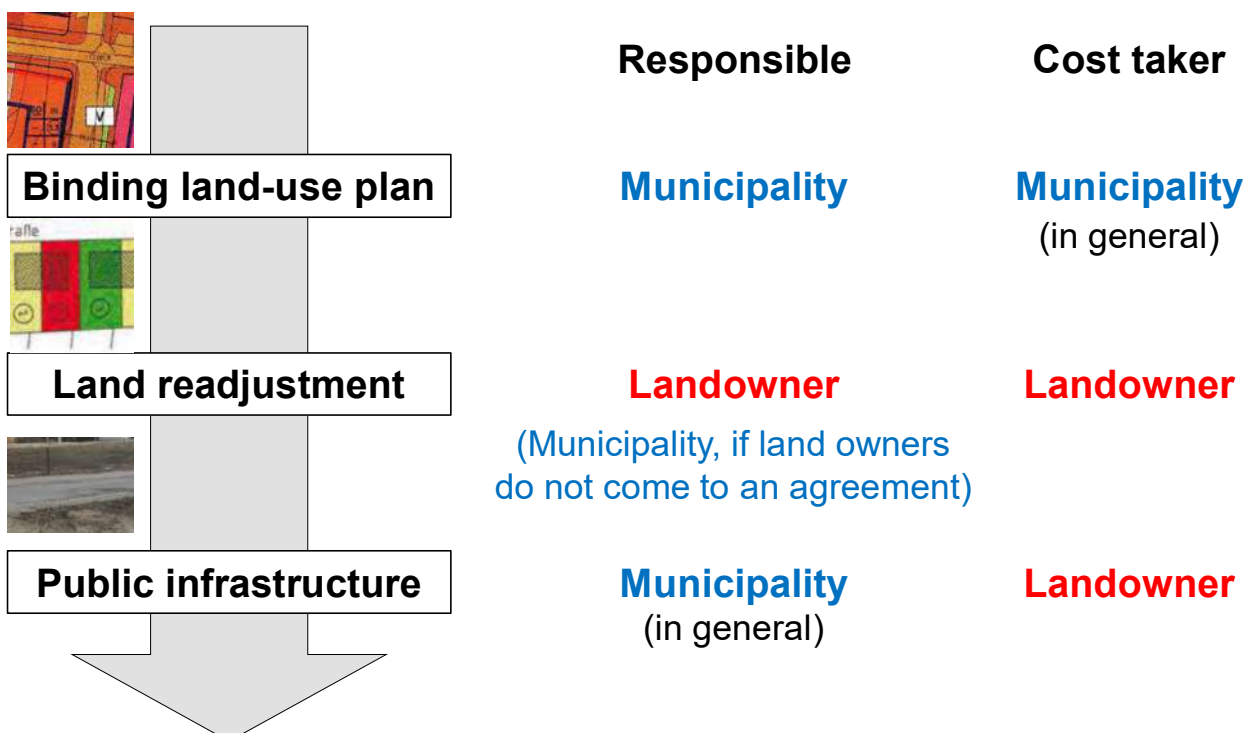


Land Value Capture in Urban Development in Germany

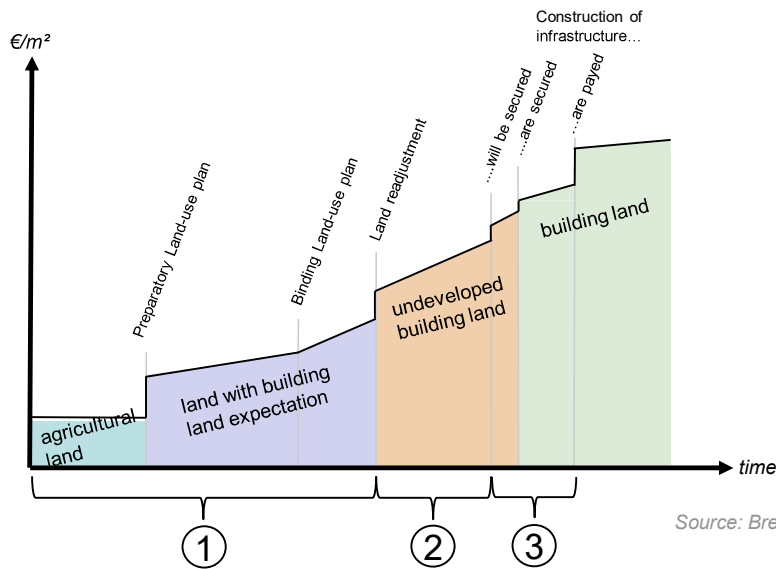
Workshop:
Land Value Capture - Towards Planning & Financing Equitable Cities in India
December 13-15, 2021

Prof. Dr.-Ing. Hans Joachim Linke

General steps of the development of a new building area or an area to be redeveloped

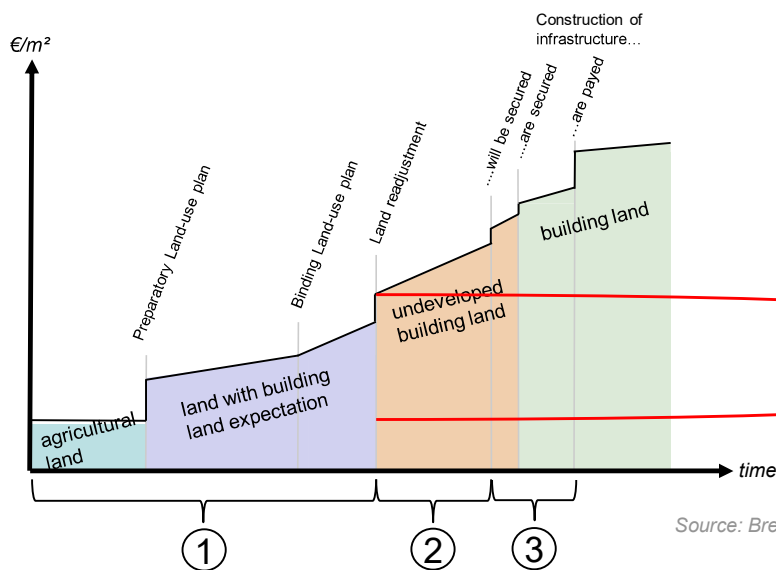


Value of land at different levels of building land development (qualities)



- ① value increase through planning (remains by the land owners)
- ② value increase through land readjustment (skimmed by the municipality)
- ③ costs to construct public infrastructure (payed by the land owners)

1st challenge: Unearned profits of landowners available to the general public.



Landowner receives increase in land value without making any contributions (unearned profits)

- ① value increase through planning (remains by the landowners)
- ② value increase through land readjustment (skimmed by the municipality)
- ③ costs to construct public infrastructure (payed by the landowners)

2nd challenge: Immediate construction on the land plots.

Developed plots by land readjustment are not used to construct a building.



Example:

- Unused plots for single family homes in a construction area that has been developed 40 years ago.
- Small city 30 km in the south of Frankfurt.
- Value of land increases by 5 to 10 % per year.

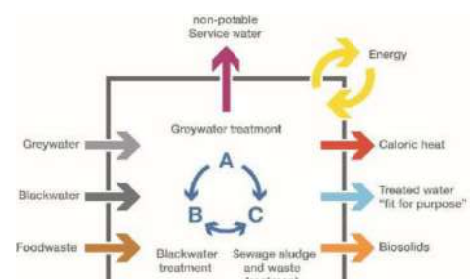
3rd challenge: Creating affordable housing, efficient and environment-friendly use of resources (e.g. energy, water).

A binding land-use plan in Germany cannot define mandatory regulations for several purposes, for e.g.:

- Obligation of the landowner to construct and rent **affordable housing**.
- Obligation of the landowner to use **common infrastructure** of a construction area that ensures efficient use of energy (e.g. biomass combined heat and power station) and water (e.g. water-reuse).

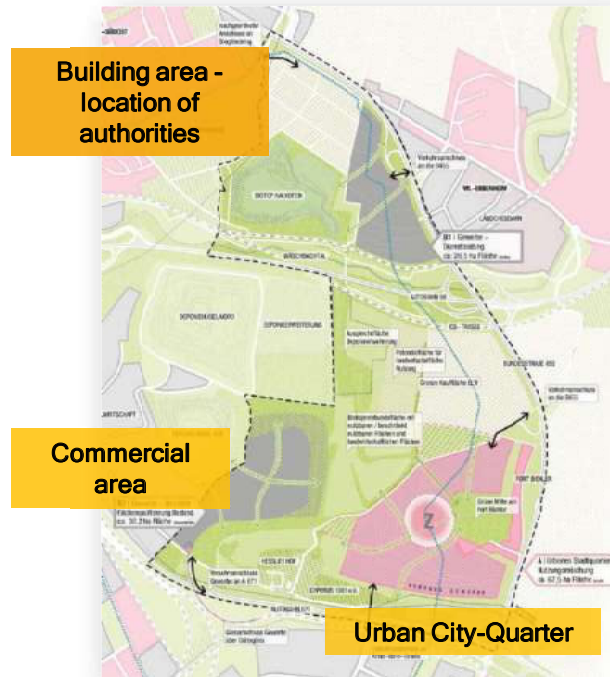
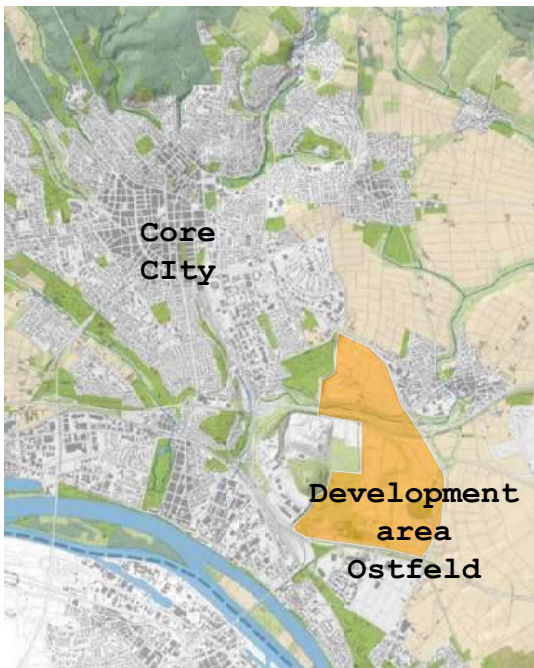


Source: www.semizentral.de



Source: www.semizentral.de

Current idea of Urban Development – City of Wiesbaden / Ostfeld



Living area for 8.000 – 12.000 inhabitants

Requirements for the new living area

**30 % of apartments
available as social housing**

**Cooperative housing,
multigenerational housing**

**Sensitive and efficient
water management**

Climate-optimized open space concept

plus-energy district

**green path connection from
the Taunus to the banks of the Rhine**

**optimal bicycle and
pedestrian infrastructure**

**car-free district
with neighborhood shared garages**

Light railway connection to the inner-city of Wiesbaden and Mainz

Solutions to deal with the challenges

1. Contract between the landowners and the municipality

- **Landowners** contractually undertake to carry out the **measures** that cannot be regulated in the binding land-use plan.
- Legal regulations of **land readjustment** are supplemented by **contract contents**.
- **Landowners** can also contractually assume the **construction of public infrastructure**.

2. Freehand Acquisition of all land by the municipality

- **Municipality** carries out the development of the building area.
- **Building plots** are (partially) sold to the existing **landowners** with a **building obligation**.
- **Municipality finances** the development of the building area through the income from the **sale of the building plots**.

Solutions to deal with the challenges

3. Urban Development Measure

- **Expropriation** occurs when landowners are not willing to sell.
- **Municipality** carries out the development of the building area.
- **Building plots** are (partially) sold to the existing **landowners** with a **building obligation**.
- **Municipality finances** the development of the building area through the income from the **sale of the building plots**.

Urban land development by contract

Framework:

- Municipality requires landowners to agree to **urban development contract** before preparing a **binding land-use plan**: no signing urban development contract => no binding land-use plan => no increase in land value

Advantage:

- **Low economic risk** to the municipality, as no extensive land acquisition by the municipality is required.

Risk:

- Required **complex contractual arrangements** complicate negotiations with landowners.
- **Lack of cooperation** from individual landowners prevents use of urban development contract.

Use in practice:

- **Experience** in negotiating and executing urban development contracts is needed.

Urban land development by freehand acquisition of municipality

Framework:

- **Municipality** prepares a binding land-use plan only if the municipality has previously been able to acquire **all the land** at a **fixed price**.

Advantage:

- The **special obligations of the future landowner**, e.g. a building obligation, are **easier to realize** in a **private property purchase contract** than in an urban development contract.

Risk:

- **Lack of willingness to sell** by landowners prevents development of the area.

Use in practice:

- Approach can also be implemented by **smaller municipalities** due to its **lower complexity**.
- **Social ties** in smaller municipalities support acquisition through **social pressure** on landowners unwilling to sell.

Urban Development Measure

Framework:

- The special instrument of **urban development measures** is only permissible if the **public good requires it**, e.g. in the case of a **long-term high demand for living space**.
- In the case of the urban development measure, the **municipality** has the right of **expropriation**. The **amount of compensation** for the land owner is **limited** to the **value of the land** with no prospect of (new) construction development.

Advantage:

- **Municipality** can contract a **building obligation**, the use of special infrastructures and the construction of **affordable housing** under private law in the property purchase contract with the future land owner.

Use in practice:

- Only in **large cities** does the **public good require the use of this instrument**, so that it can be permissibly used.

Final remarks

- German municipalities have a **variety of instruments** at their disposal for sustainable urban land development.
 - **Local politics**, especially in smaller municipalities, lacks the insight and experience to use these modern instruments.
 - There is a **widespread belief** among the German society that the **unearned increases in land value** that occur as a result of urban development planning belong to the **land owners**.
- => Therefore, **extensive information of the municipalities** and **intensive discussions with the land owners** are required in order to successfully implement the modern instruments of sustainable urban development.

MANY THANKS FOR YOUR ATTENTION!

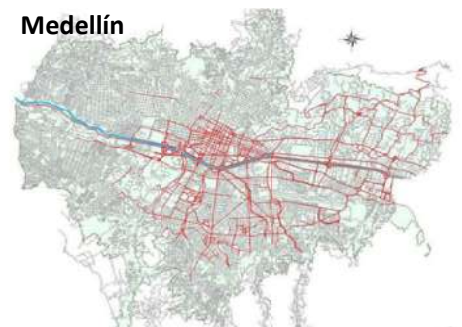
A century implementing Betterment Levy in Colombia



Source: <https://bogota.gov.co/asi-vamos/obras/obras-viales-con-recursos-de-valorizacion>



Source: <https://bogota.gov.co/asi-vamos/obras/obras-viales-con-recursos-de-valorizacion>



Source: <https://www.mmvivienda.gov.co/ceministerio-de-vivienda/espacio-urbano-y-territorial/aula-de-financiamiento/contribucion-por-valorizacion>

LAND VALUE CAPTURE-TOWARDS PLANNING & FINANCING EQUITABLE CITIES IN INDIA



Experience Sharing Workshop



C. Erik Vergel-Tovar, Ph.D.

Assistant Professor

School of Architecture and Design

Universidad de los Andes, Colombia

Outline

- Introduction
- Legal framework over time
- Experience in Colombia
- Lessons for India

Introduction

- The betterment levy is a “compulsory charge imposed by a government on the owners of a selected group of properties to defray, in whole or in part, the cost of a specific improvement or services that is presumed to be of general benefit to the public and of special benefit to the owners of such properties”

International Association of Assessing Officers, 1997

- In Colombia this levy, known as *Contribución de Valorización (CV)*, has been collected since 1921

Introduction

- In Colombia the betterment levy has played a significant role in financing public works and has been a major contributor to municipal revenues, although collections have fluctuated over time:
- 1960s:
 - 16% of revenues in Bogotá
 - 45 % of revenues in Medellín
- 1980s:
 - 30% of revenues in Cali,
- 1993:
 - 24 % of revenues in Bogotá
- 2000s:
 - The instrument has been used more intensively in Bogotá, Medellín, Cali, Manizales, Bucaramanga, Barranquilla, and cities above 300,000
- 2010s:
 - Metropolitan Areas
 - National Government (infrastructure projects)

Borrero Ochoa, 2011, CONPES Document 3996, 2020

Introduction

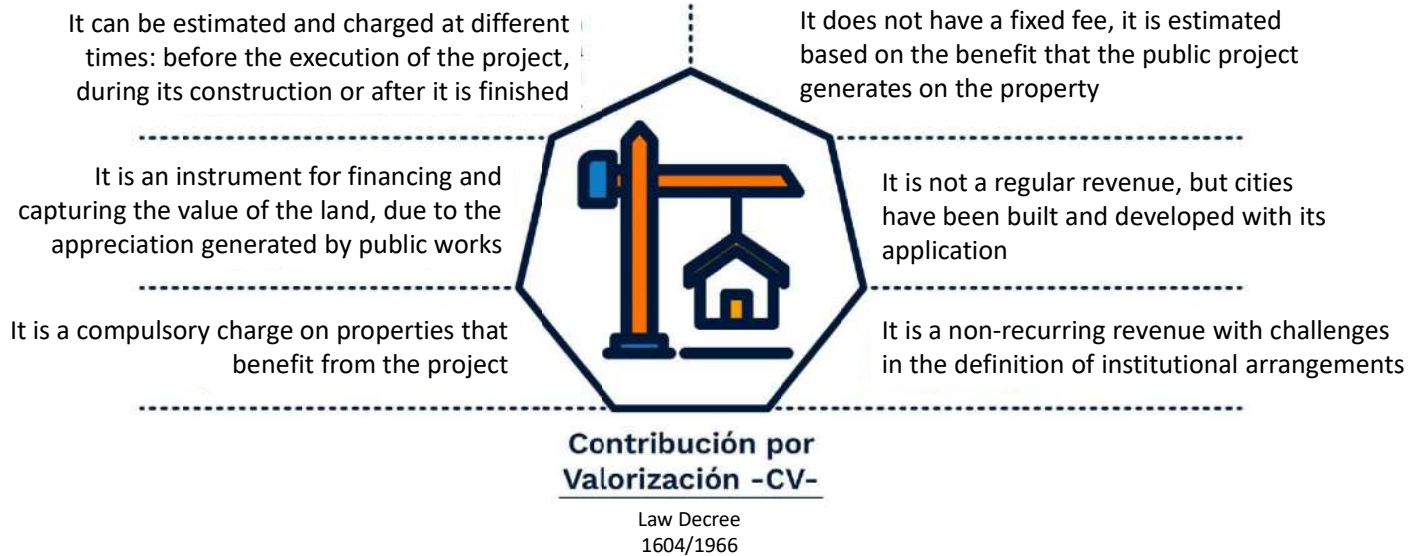
What is Betterment Levy in Colombia?

- It is a compulsory charge on properties, which is subject to registration and is used for funding infrastructure projects, plan or set of projects of public interest that is imposed on the owners or possessors of those properties that benefit from the execution of the works
- The value of the contribution depends on the cost of the work, which is distributed among the affected properties in proportion to the degree of the benefit. Its collection is the responsibility of the entity that executes the works, be it national, departmental or municipal or, exceptionally, a regional autonomous corporation, an association of municipalities or a metropolitan board

Source: <https://www.minvivienda.gov.co/viceministerio-de-vivienda/espacio-urbano-y-territorial/aula-de-financiamiento/contribucion-por-valorizacion>

Introduction

What is Betterment Levy in Colombia?



Source: <https://www.minvivienda.gov.co/viceministerio-de-vivienda/espacio-urbano-y-territorial/aula-de-financiamiento/contribucion-por-valorizacion>

Introduction

- Legal framework
 - Local (Law Decree 1333/1986)
 - Regional governments (Law Decree 1222/1986)
 - National government (Law 1819/2016)
- Adoption framework
 - It can be implemented by local, regional governments as well as by the national governments.
 - It can be used for infrastructure projects at the local, regional and national scales

Source: Magda Montaña <https://www.lincolinst.edu/courses-events/courses/2021-10-serie-webinarios-contribucion-valorizacion-colombia-america-latina>

Introduction

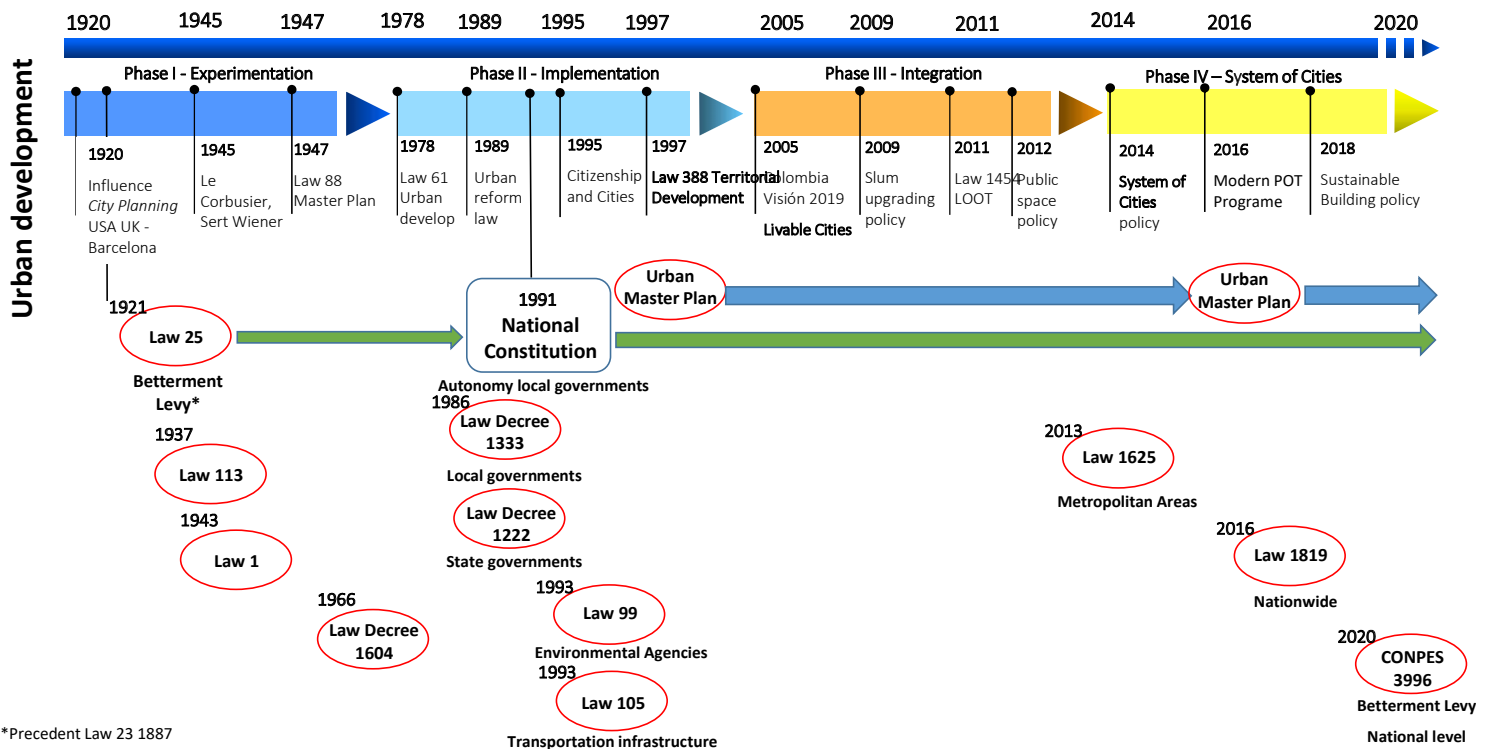
- Summary of recent implementation in cities and regional governments

Location	Year	Estimated amount in US Dollars	Share of fiscal revenue
Bogota	2009-2013	\$ 521,053,152.63	25%
Medellin	2010	\$ 76,280,839	15%
Barranquilla	2005	\$ 78,801,516	NA
	2012	\$ 214,904,170	68%
Cali	2008	\$ 356,571,388	75%
Bucaramanga*	2013	\$ 139,088,555	108%
Armenia	2014	\$ 52,665,457	140%
Popayán	2017	\$ 28,485,255	102%
Valle	2017	\$ 25,134,048	9%

Adjusted from Magda Montaña presentation about *Contribución por Valorización*, Lincoln Institute of Land Policy
 Note: estimations in US dollars correspond to the exchange rate of the Colombian peso for each year

Source: Magda Montaña <https://www.lincolninstitute.edu/courses-events/courses/2021-10-serie-webinarios-contribucion-valorizacion-colombia-america-latina>

Summary of urban development policies and legal framework in Colombia



Experience in Colombia

Cities and States with experience implementing Betterment Levy in Colombia

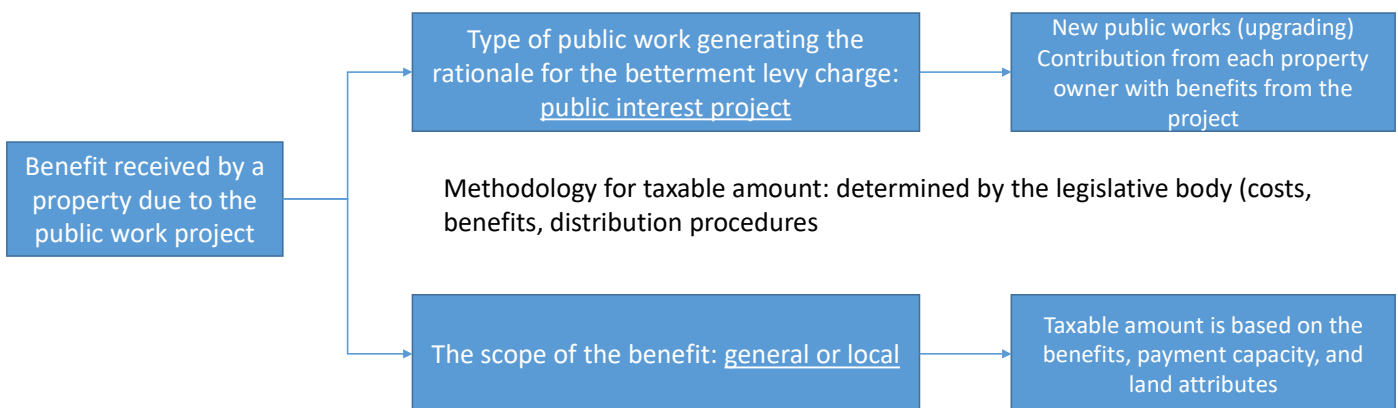
Location	Year	Number of infrastructure projects	US dollars in 2019
Barranquilla	2012	14	\$ 115,693,867
Armenia	2015	12	\$ 43,452,523
Manizales	2016	1	\$ 292,328
Manizales	2016	2	\$ 6,458,375
Popayán	2017	14	\$ 25,937,250
Atlantico State	2017	1	\$ 64,080,265
Valle del Cauca State	2018	1	\$ 38,757,575
Bogotá	2018	16	\$ 276,637,251
Antioquia State	2016-2019	90.5km (roads)	\$ 44,611,781
Rionegro	2018	23km (roads)	\$ 137,315

Source: CONPES Document 3996, 2020, Montaña & Borrero, 2019, Local and State Governments. *Estimations based on Colombian Peso data converted to US dollars with the exchange rate of 2019

The experience of these cities shows that the betterment levy constitutes a land based financing instrument mostly used by local and regional governments in order to provide funding for large infrastructure projects

Experience in Colombia

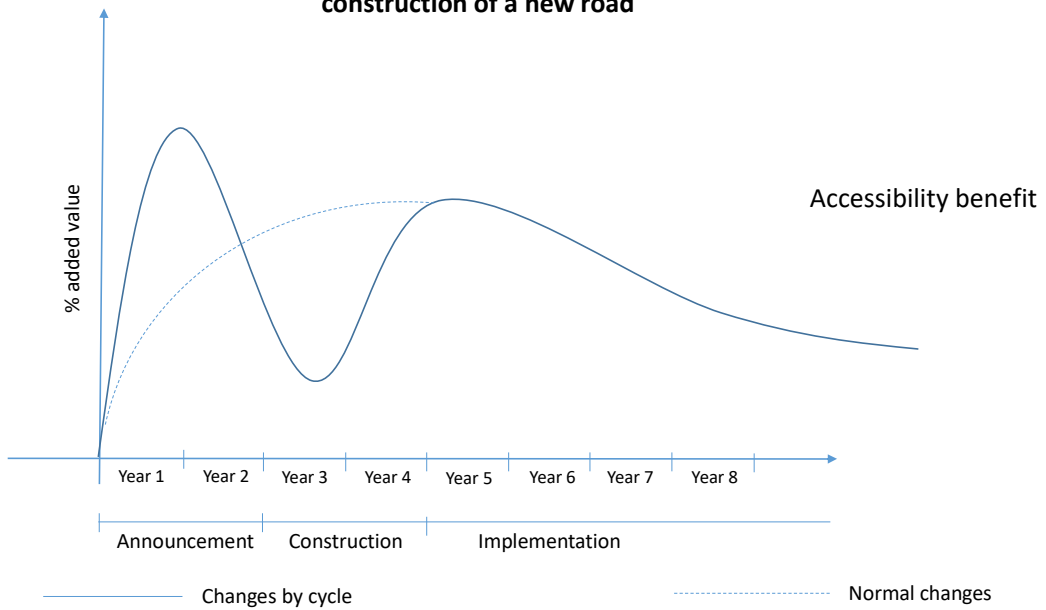
Action generating the charge (local and regional level)



The revenue must be invested in the construction of the public works or in other infrastructure projects that are generating the benefit for property owners

Experience in Colombia

Theoretical framework of land value increments generated by the construction of a new road

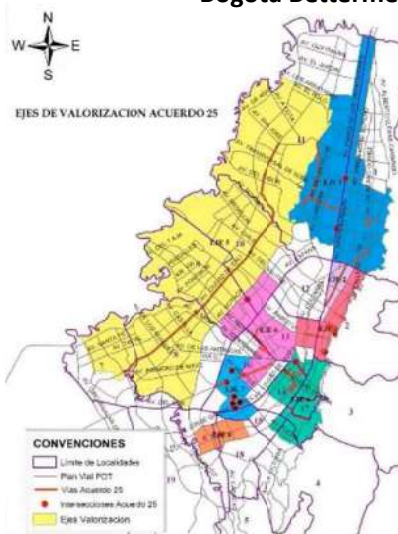


Source: Oscar Borrero <https://www.lincolinst.edu/courses-events/courses/2021-10-serie-webinarios-contribucion-valorizacion-colombia-america-latina>

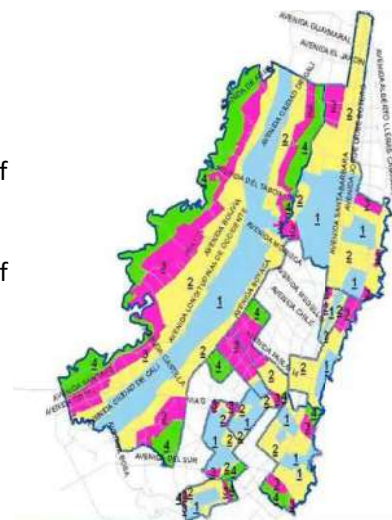
Experience in Colombia

Benefit and area of influence

Bogotá Betterment Levy 1995-2000 Estimated revenue of US632 million Legal Agreement 25



To reduce the average amount of the levy, an effort is made to include the largest possible number of lots within the area of influence (Borrero, 2011)



The area of influence is estimated according to the level of accessibility with ranges between the axis and 3km/5km

Source: Oscar Borrero <https://www.lincolinst.edu/courses-events/courses/2021-10-serie-webinarios-contribucion-valorizacion-colombia-america-latina>

Experience in Colombia

Payment capacity: socioeconomic study

- The payment capacity is estimated as a collective effort
- The relationship of the capacity of payment for each property is between 2% and 3%
- The relationship with the property tax (annual) is equal to three times this tax if the cadaster appraisal is up to date (80%)
- The relationship with the property tax is approximately a 1% of the commercial assessment
- In residential uses is associated with socioeconomic studies
- In commercial uses it is based on the rent generated by the properties

Source: Oscar Borrero <https://www.lincolinst.edu/courses-events/courses/2021-10-serie-webinarios-contribucion-valorizacion-colombia-america-latina>

Experience in Colombia

Methodologies

- The methodological procedures in order to estimate the costs and benefits and the distribution must be determined by law
- Some of the methods used are:
 - Parcel size in front of the infrastructure
 - Absorption tables
 - Double appraisal
 - Distribution factors
 - Appraisal (cadastral or commercial) and distance

Source: Oscar Borrero <https://www.lincolinst.edu/courses-events/courses/2021-10-serie-webinarios-contribucion-valorizacion-colombia-america-latina>

Experience in Colombia

Methodologies – distribution factors

- General increments on values: absorption degree + benefit factors
- Bogotá: benefit factors
- Medellín: double appraisal to estimate the benefit
- Benefit factors used:
 - Parcel size
 - Land use (economic activity)
 - Number of floors (density)
 - Socioeconomic level (geographic area)
 - Benefit assessment

Source: Oscar Borrero <https://www.lincolinst.edu/courses-events/courses/2021-10-serie-webinarios-contribucion-valorizacion-colombia-america-latina>

Experience in Colombia – Medellin

Methodologies – dual appraisal

Local benefit – values without project



Local benefit – estimated values with project



Source: Oscar Borrero <https://www.lincolinst.edu/courses-events/courses/2021-10-serie-webinarios-contribucion-valorizacion-colombia-america-latina>

Experience in Colombia

Methodologies – dual appraisal

- Define the area of influence
- Calculate the benefit and generate an isoprises map based on a sample of properties
- Estimate the benefit
- Allocate the benefit
- Establish the level of benefit (focal point)
- Distribute the levy
- Determine affordability

Source: Oscar Borrero <https://www.lincolinst.edu/courses-events/courses/2021-10-serie-webinarios-contribucion-valorizacion-colombia-america-latina>

Lessons for India

- India already has at the State level the capacity to determine urban development policies and planning instruments providing the opportunity to define a framework at the regional government level
- India has experience with Town Planning Schemes TPS in which value capture mechanisms are promoted and thus the potential of implementing the betterment levy can be supported on that experience
- It is extremely important an excellent performance of the property tax system and the updating process of the cadastral values of properties

Thank you

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Betterment Levies in Brazil: Review of the Recent Experience

Experience Sharing Workshop 'Land Value Capture-Towards
Planning & Financing Equitable Cities in India'
13 -15 Dec 2021

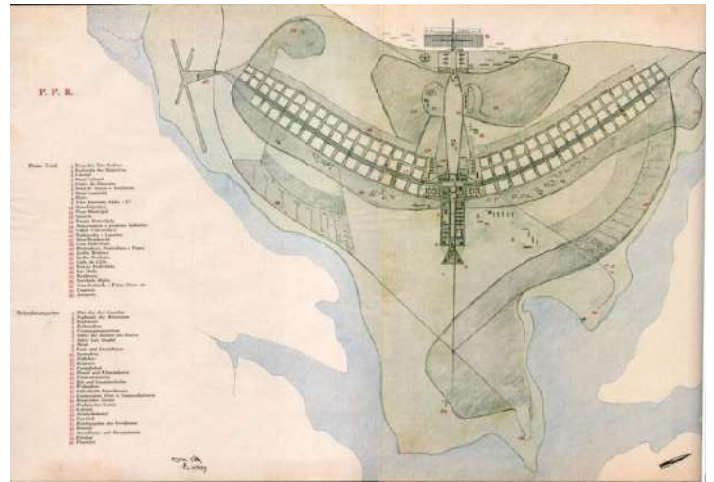


**Pacific
Consultants**

Lucas Bispo de Oliveira Alves, PhD
Chief Researcher
Urban Development Department

Summary

- 1 Brief Self-Introduction
- 2 Introduction to Betterment Levies In Brazil
- 3 Current Status of Implementation of Betterment Levies in Brazil
 - I. Legal Framework
 - II. Data on the Implementation of BL
 - III. Knowledge Sharing :
 - a. "Portal Capacidades"
 - b. Betterment Levies Guidebook
- 4 Conclusion: Main Challenges and Key Success Factors
- 5 References



Brasilia's Master Plan. Lucio Costa, 1957

1. Brief Self Introduction

- Chief Research Consultant – Urban Development Department Pacific Consultants Co., Ltd. Japan.
- Major Clients: JICA, Japanese Ministries, Inter-American Development Bank
- PhD in Transportation Planning – University of Tokyo
- Major fields of activity
 - Transit-Oriented Development (Including LVC)
 - Smart Cities and Logistics Planning
 - Disaster Resilient Urban Planning
 - Transportation Project Appraisals



98th Transportation Research Board Conference, Washington DC, January 2019.

My timeline



2. INTRODUCTION TO BETTERMENT LEVIES

What are Betterment Levies?

- Special Tax on Land Value **Increase** resulting from public works
 - General Limit: total amount of the public work
 - Individual Limit: value increase attributable to the specific public work
- Proposed and admitted by specific law **before commencement** of works
- Launched after the conclusion of works **and verification of land value increase**

Why Betterment Levies?

- Source of revenue for financially constrained Municipalities
- *The “fairest” tax:*
 - *Paid by direct beneficiaries only*
 - *Not a payment for a public service, but the public recovery of a private economic gain*
 - *Important redistributive effects if well applied*
- Encourages **democracy** by strengthening public participation
- Encourages public supervision of public works → **“anti-corruption”** tax

4

2. INTRODUCTION TO BETTERMENT LEVIES

What type of public works can be associated to Betterment Levies?

- Often used for:
 - Pavement works
 - Drainage
 - Public Lighting
 - Sewage
 - Piped Water
- Other public works, as long as dully authorized in specific law
 - Beautification of Streets
 - Revitalization of neighborhoods
 - Construction or rehabilitation of plazas and parks and etc.

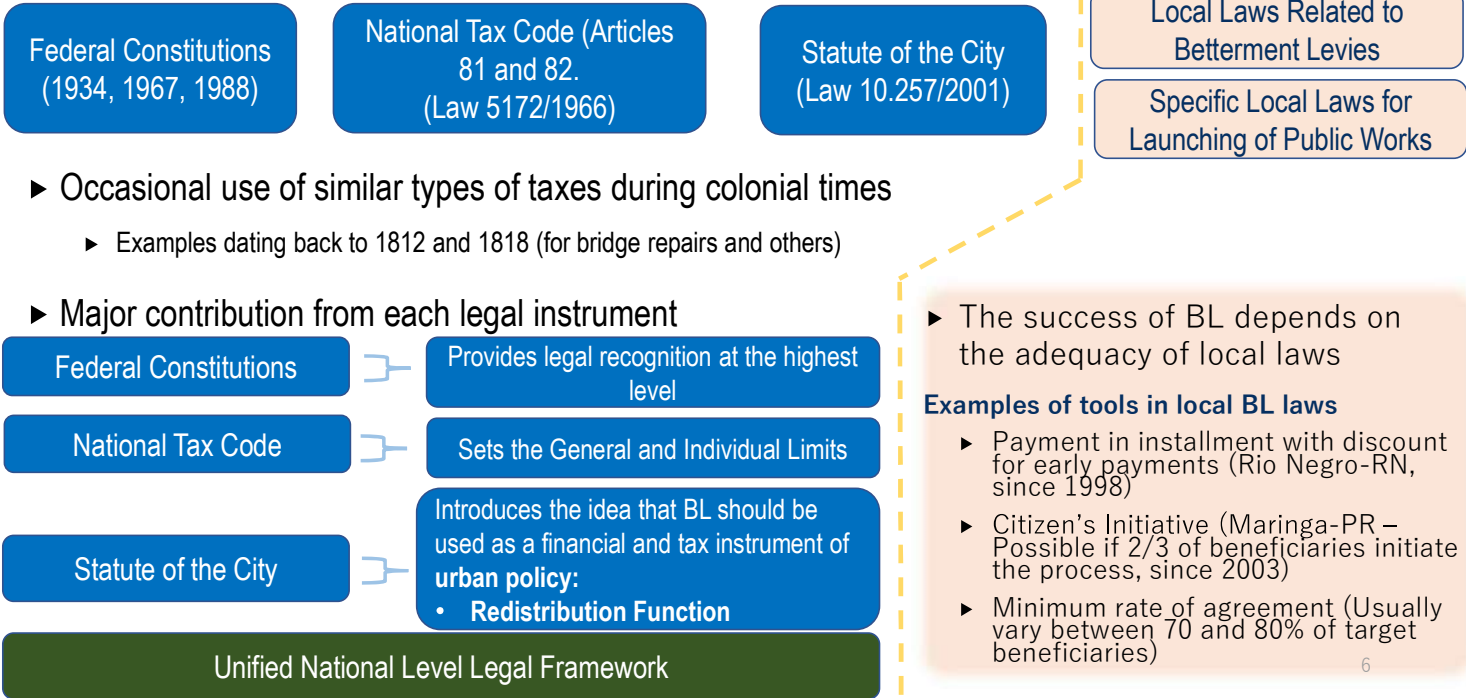
What public work cannot be associated with Betterment Levies

- Simple maintenance of streets or pavement
- Installation of curbs
- Construction of essential equipment related to education, health and social services
 - Considered a basic function of the government, to be funded by general taxes in all its jurisdiction
- Change of geometry of streets
- **Any works in social housing settlements.**
 - **Consider citizen’s “capacity to contribute/pay taxes”**

5

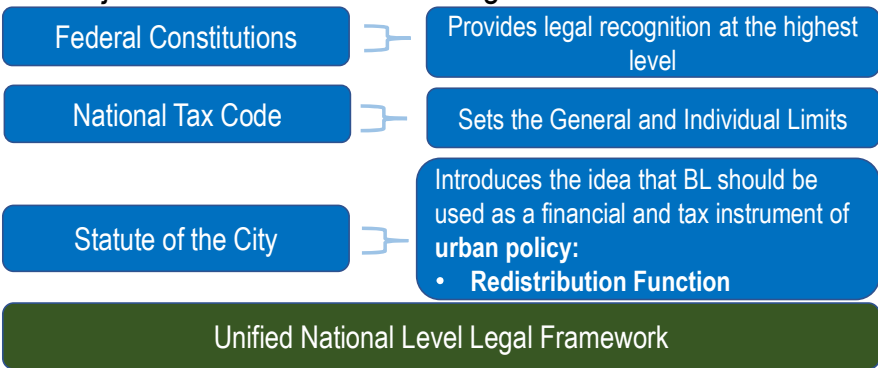
3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL

i. Legal Framework



- ▶ Occasional use of similar types of taxes during colonial times
 - ▶ Examples dating back to 1812 and 1818 (for bridge repairs and others)

▶ Major contribution from each legal instrument



- ▶ The success of BL depends on the adequacy of local laws

Examples of tools in local BL laws

- ▶ Payment in installment with discount for early payments (Rio Negro-RN, since 1998)
- ▶ Citizen's Initiative (Maringá-PR – Possible if 2/3 of beneficiaries initiate the process, since 2003)
- ▶ Minimum rate of agreement (Usually vary between 70 and 80% of target beneficiaries)

3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL

ii. Data on the Implementation of BL

- Approximately 2060 Municipalities used BL from 2000 to 2010

- About 37% (Total 5565)

Partial Success: Intention to increase the number of Municipalities that apply BL

- Data shows that **small cities** are more successful in applying BL

- **More financially constrained**
 - Public sector commitment
 - Understanding of the population
- **Proximity and trust between public authorities and citizens**

State	City	Population (2010)	Per Capita GDP (2010 US\$)	BL (US\$)	BL Per Capita (US\$)
MS	CAMPO GRANDE	786.797	8.812,87	13.569.715,47	17,25
PR	MARINGÁ	357.077	11.569,92	12.418.487,28	34,78
RJ	NOVA IGUAÇU	796.257	5.971,15	12.271.504,78	15,41
SP	ITANHAEM	87.057	5.384,60	10.719.243,77	123,13
SP	CARAPICUÍBA	369.584	4.635,49	8.253.423,88	22,33
PR	SÃO JOSÉ DOS PINHAIS	264.210	25.980,10	6.683.912,73	25,30
MA	BACABAL	100.014	2.610,71	6.525.800,67	65,25
SP	GUARULHOS	1.221.979	15.191,72	6.215.967,85	5,09
SP	PIRACICABA	364.571	14.979,60	5.739.373,38	15,74
RJ	NILÓPOLIS	157.425	5.298,86	5.681.830,17	36,09
SP	MARÍLIA	216.745	9.038,47	5.654.352,13	26,09
PR	CASCAVEL	286.205	9.069,50	5.288.251,23	18,48
SP	GUARUJÁ	290.752	7.141,50	5.235.874,72	18,01
SP	PRAIA GRANDE	262.051	6.079,41	5.191.002,66	19,81
SP	INDAIATUBA	201.619	14.452,93	5.185.191,16	25,72
GO	GOIANÉSIA	59.549	5.595,46	4.390.140,44	73,72
SC	BRUSQUE	105.503	13.956,10	4.363.952,40	41,36
BA	CAMACARI	242.970	27.531,76	4.159.989,23	17,12
PR	GUARAPUAVA	167.328	7.913,52	4.029.795,81	24,08
BRASIL		193.252.604	9.883,17	615.967.980,71	3,19

Municipalities with highest revenues from Betterment Levies between 2000 and 2010 in Brazil. / Source: Pereira, 2012, based on National Treasury Data

3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL

ii. Data on the Implementation of BL

Typical case - Municipality of Venâncio Aires

- Population (2019): 71,554
- Per capita GDP (2008): ~9,000USD
- Main industries:
 - Tobacco
 - Tea Herbs

Location of Venâncio Aires Municipality



Cel. Brito Street in Venancio Aires Municipality, before and after public work with application of BL
Images by Chulipa Moller 8

3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL

iii. Knowledge Sharing - Portal “Capacidades”

- Maintained by Brazil’s Ministry of Regional Development
 - Case Studies
 - Glossary of Urban Development
 - Forums, Blogs and Chats
 - E-Learning Tool
 - 10 tracks:
 - Accessibility
 - Legal Frameworks
 - Project Management
 - Mobility
 - Land Registry Management
- Partners: IADB, Brazil’s Federal Bank and Lincoln Institute of Land Policy





3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL

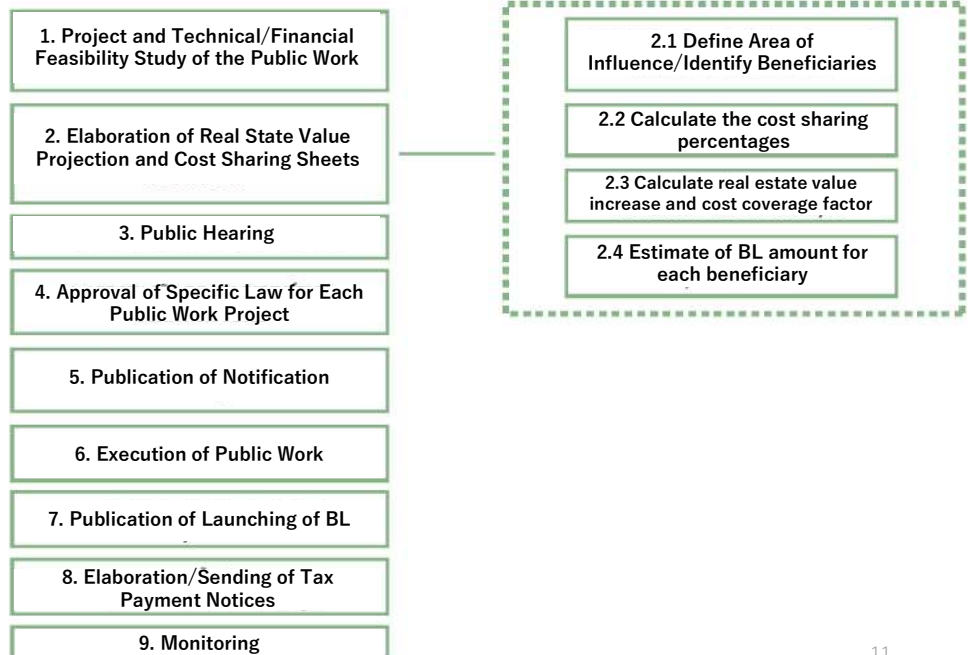
iii. Knowledge Sharing – BL Guidebook

- Library item in Portal “Capacidades”
- Technical Books on Regulation and Implementation of Instruments of the Statute of the City
 - Issue 5: Betterment Levies
 - Implementation Step-by-Step
 - Economic tools for land value projections
 - Sample Municipal Law of Betterment Levies
 - Sample notifications and decrees
 - Sample cost sharing tables
 - Longitudinal Method
 - Radial Method

3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL

iii. Knowledge Sharing – BL Guidebook

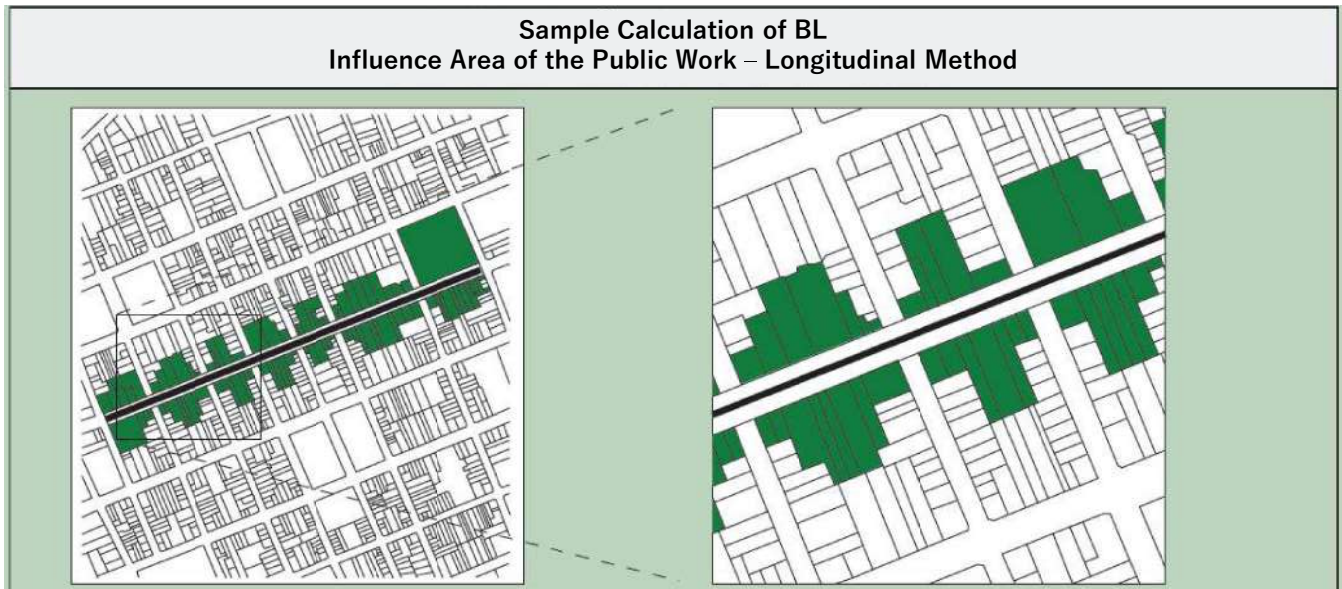
Step-by-Step Implementation of public work with BL



Source: Excerpt from the Brazilian Betterment Levies Guidebook, page 43

3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL

iii. Knowledge Sharing – BL Guidebook

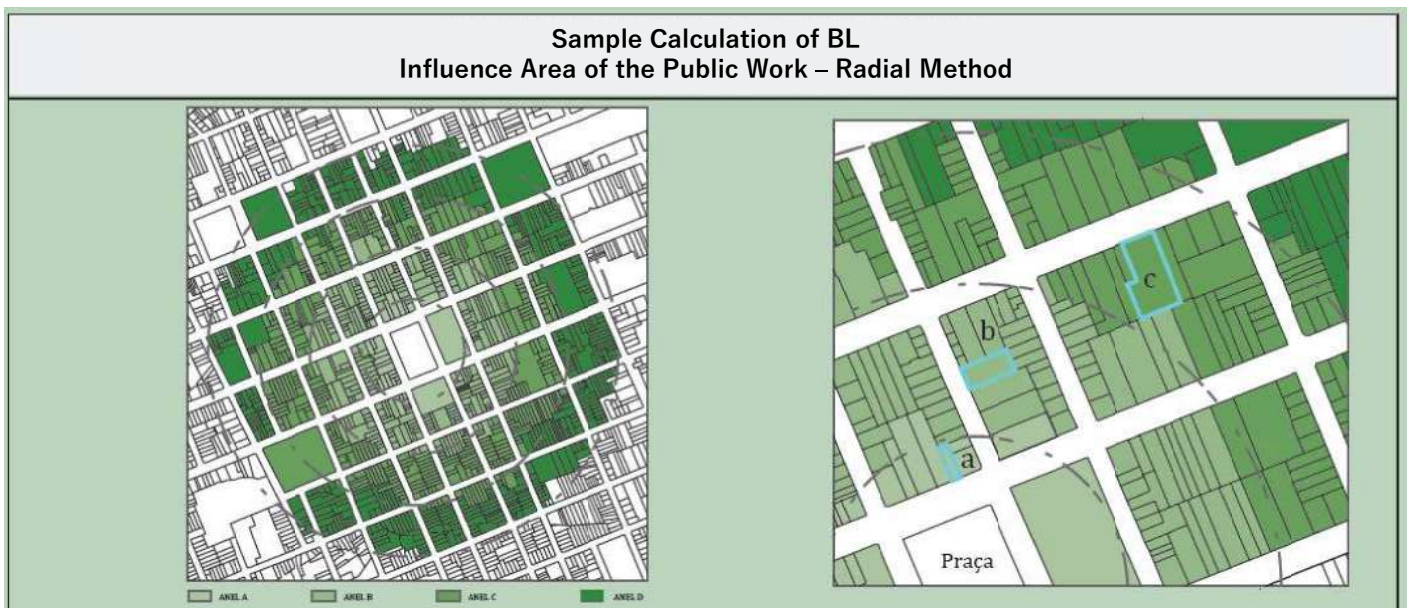


Source: Excerpt from the Brazilian Betterment Levies Guidebook, page 52

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3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL

iii. Knowledge Sharing – BL Guidebook



Source: Excerpt from the Brazilian Betterment Levies Guidebook, page 53

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3. CURRENT STATUS OF IMPLEMENTATION OF BETTERMENT LEVIES IN BRAZIL

iii. Knowledge Sharing – BL Guidebook

Strategies for land value survey when the Municipality does not have sufficient data

- Collect Data from the Property Sales Tax (ITBI);
- Collect Data from expropriation processes
- Collect Data before and after the execution of the public work
- Collect Data from internet real estate databases



Must be conducted according to the guidelines of NBR-14.653 (Rulebook) for real estate value assessments

Sample of BL calculation sheet using the longitudinal method

QUADRA	LOTE	CONTRIBUINTE	INSCRIÇÃO IMOB.	LOTE (m ²)	TESTADA (m)	VALOR VENAL (R\$)	ÁREA LINDEIRA BENEFICIADA (m ²)	ÁREA LINDEIRA BENEFICIADA CORRIGIDA (m ²)	VAL. IMOB. (R\$)	RATEIO (R\$)	CONTRIBUIÇÃO (R\$)
A	1	ELEONORA SANTOS	00.000.000-01	360	16	R\$ 100.000,00	96	105,6	R\$ 5.000,00	R\$ 3.520,00	R\$ 3.520,00
	2	RIBAMAR AMORIM	00.000.000-02	360	16	R\$ 80.000,00	96	105,6	R\$ 4.000,00	R\$ 3.520,00	R\$ 3.520,00
	3	CRISTOVÃO DIAS	00.000.000-03	580	18	R\$ 200.000,00	108	117,6	R\$ 10.000,00	R\$ 3.920,00	R\$ 3.920,00
	4	GRACIANE SUZUKI	00.000.000-04	360	12	R\$ 300.000,00	72	81,6	R\$ 15.000,00	R\$ 2.720,00	R\$ 2.720,00
	5	PABLO MAYER	00.000.000-05	580	12	R\$ 50.000,00	72	81,6	R\$ 2.500,00	R\$ 2.720,00	R\$ 2.500,00
	6	ALCEBÍADES MULLER	00.000.000-06	420	17	R\$ 125.000,00	102	111,6	R\$ 6.250,00	R\$ 3.720,00	R\$ 3.720,00
	7	PORTAS LTDA	00.000.000-07	400	15	R\$ 60.000,00	90	99,6	R\$ 3.000,00	R\$ 3.320,00	R\$ 3.000,00
	8	CLEO GONÇALVES	00.000.000-08	500	20	R\$ 85.000,00	120	129,6	R\$ 4.250,00	R\$ 4.320,00	R\$ 4.250,00
TOTAL							10.848 m ²	12.000 m ²		R\$ 400.000,00	R\$ 300.000,00

Source: Excerpt from the Brazilian Betterment Levies Guidebook, page 87

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4. Conclusion: Main Challenges and Key Success Factors

Main Challenges

- Lack of Public Support
 - “Why should we pay more taxes?”
 - “If other public works are funded without this additional tax, why should we pay it this time?”
- Government’s Legitimacy
 - Perception of low quality in the delivery of public services
 - Lack of trust
 - Corruption
- Limited financial capacity of citizens
- Lack of institutional capacity

Key Success Factors

- National legal framework and flexibility for local setting of some parameters
- Municipalities must have an updated, comprehensive and trusted real estate registry
 - Key for building trust in BL
 - Solution: Keeping 2 registries, one for BL and one for Property Tax
- Capacity building for public servants in **negotiation** and **consensus building**
- Capacity building in **administrative process**
 - Avoid litigation

Put democracy in practice

Political will to counter “passivity” culture

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5. REFERENCES

Portal Capacidades. Ministerio do Desenvolvimento Regional. Disponível em:
<https://www.capacidades.gov.br/login>

Contribuição de Melhoria: Caderno Técnico de Regulamentação e Implementação de Instrumentos do Estatuto da Cidade / Pereira, Gislene; Fernandes, Cintia Estefania; Chulipa Möller, Luiz Fernando; Cavalcanti, Carolina. Brasília: Ministério das Cidades, 2018.

Pereira, Gislene. Das fintas ao tributo: a trajetória da Contribuição de Melhoria no Brasil. Urbe. Revista Brasileira de Gestão Urbana, v. 4, p. 207-213, 2012.

Carmo, Aendria de Souza do. Contribuição de Melhoria: Tributo Justo e Pouco Aplicado, Mas Valioso aos Fundamentos e Objetivos Constitucionais.



Impact Fees (Development Charges) as a Land Value Capture Tool

Land Value Capture - Towards Planning and Financing Equitable Cities in India

Experience Sharing Workshop

December 13-15, 2021

Presentation by:

David Amborski
Director, Centre for Urban Research and Land Development
Ryerson University

Genesis of *These* Growth Related Tools

- These Financial Requirements began based on the recognition that that serving land adds to the value of land, and that governments deserve to be compensated for the provision of these services.
- Early applications often lacked a theoretical basis when determining the quantum to be charged such as a tax structure, or servicing pricing application
- When these applications were envisioned and first applied, they most often did not include a land value capture rationale, but often inadvertently captured land value

Early North American Applications

Early Applications Began in the 1960s and 1970s

- Began in high growth states (Florida and California) and high growth provinces (Ontario and British Columbia)
- Partly in response to decreasing infrastructure grants from senior levels of government
- Early research question: Was the charge based on tax (Land Development or Betterment); or based on charge related to costs of growth (Service Pricing Application)

The Service Pricing/User Charge Application

General Establishing Principle: “Growth Pays for Growth” (Capital Costs)

- Objective may not be Land Value Capture, but inadvertently does capture land value increases related to servicing
- Internal services in a subdivision may be provided “in kind” by developers (at Municipal Standards) via subdivision agreements
- There is a need for clear enabling legislation; and then careful application by municipalities

Establishing Enabling Legislation in North America

- In both **Canada** and **United States** the practice of these charges/fees began prior to establishing legislation at the State and Provincial Governments
- **Canada**: Charges began in the 1960-70's
 - First “Development Charge” Legislation 1989 (Ontario), previous legal basis, “Planning Act”
 - Currently 4 (10) Provinces have legislation
- **United States**: Fees began 1970-80's
 - First Legislation 1987 (Texas)
 - Currently 29 (50) States have legislation, previous basis “police powers”

Guiding Principles

- Growth Should Pay for Growth: Services for New Development Should Not Be Subsidized By Existing Residents/Taxpayers
- New Development Should Pay for the Growth Related “Capital Costs” That It Requires (“in kind” and cash payments)
- The “Rational Nexus Test” should apply (especially in the US)

Other International Applications

- England: 2008 Community Infrastructure Levy
- South Africa: Began locally 1980's, 2013 SPLUMA
- Australia: 1979 New South Wales, Environmental Planning and Assessment Act
- New Zealand: 2002 Local Government Act, “casual nexus approach”
- India: Legislation in 20 States (Mathur, 2020)

Choices in Designing the Policy

- Which Services to Include?
 - Hard/Property related services: Roads/Sewer/Water
 - All Growth related: Parks/ Fire/ Police/ Recreation/ Libraries/ Education/ etc.
- When the Payment is Required?
 - subdivision approval/ building permit/ phased or deferred
- Exemptions or Reductions
 - Nonprofit or Seniors Housing/ employment lands

Choices in Designing the Policy

- Method for Calculating the Charge
 - Projections: Population and Capital Costs (timeframe)
 - Service Standard Applied
 - Area wide (average cost) or area specific (marginal cost)
- Accountability
 - Collection of the revenue (earmarked reserve funds)
 - Expenditure (rational nexus)
- Transparency

Transparency, Incidence and Land Value Capture

- Payment of the fee or charge is made by the land developer or builder, but who bears the ultimate burden or incidence is important
- For these charges to capture land value they need to be capitalized into the predevelopment land value when the land is purchased
- This requires the transaction to occur after the imposition of the charge and there to be transparency regarding the charge for the purchaser to take it into account in the land purchase decision

The Province of Ontario Case

- Legislation: The Development Charges Act
- A Development Charge Study must be undertaken to determine the Capital Costs and the quantum of the charge for various types of development (defined planning horizon and method)
- A by-law must be passed to implement the charge Schedule (it is in effect for 5 years)
- All or part of the by-law may be appealed

The Province of Ontario Case

- The residential charge varies by housing type (per capita charge multiplied by average number of persons per household)
- In the Greater Toronto Area development charges are imposed by: Regional Governments/ Local Municipalities and School Boards
- I contend that the highest charges/ fees in the world are applied in the Greater Toronto Area
- The combined charge in several jurisdiction exceeds \$100,000CDN for a single family detached house!

Conclusion: Impact Fees/Development Charges as a Land Value Capture Tool

- Servicing/Expenditures on Capital Costs does Enhance Land Values
- Part or all of these increased values may be captured by imposing a fee or charge
- As these fees/charges reflect the cost of servicing, they may not reflect all of the increased value
- The “rational nexus test” is an important consideration to link benefits to expenditure; area specific charges should be applied where possible (especially transit)

Conclusion: Impact Fees/Development Charges as a Land Value Capture Tool

- The explicit objective of these fees may not be land value capture, but they do in fact capture land value
- This application is widely used in a number of counties and has a history of being applied for fifty years in some jurisdictions
- The policy design/application has to be sensitive to local market conditions and the local legislative and political context

Contact

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www.ryerson.ca/centre-urban-research-land-development/

LAND VALUE CAPTURE-TOWARDS PLANNING & FINANCING EQUITABLE CITIES IN INDIA

Experience Sharing Workshop



LINCOLN INSTITUTE
OF LAND POLICY

SESSION II: INTERNATIONAL EXPERIENCES IN LVC IMPLEMENTATION

Additional Development Rights & Other LVCs

Martim O. Smolka

December 13, 2021

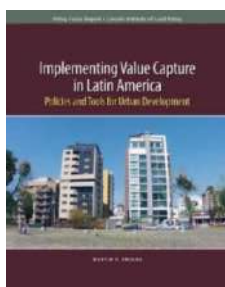


Points/Prospects

1 Need for non-Tributary alternatives to finance urban development



2 Potential for public selling of development rights;



3 The Experience of S Paulo, Brazil .

Urbanization generates strong windfalls (especially in third world countries)

- Conversion Rural to urban land
- Higher FARs
- Rezoning
- Public spaces

Barry Downard

VC GIZ-India Dec 21

Martim O. Smolka

3

Urban Multiplier

Conversion from rural to urban land

Over 400% increase

Global - Angel and May (1996)

Latin America (Bouillon 2012)

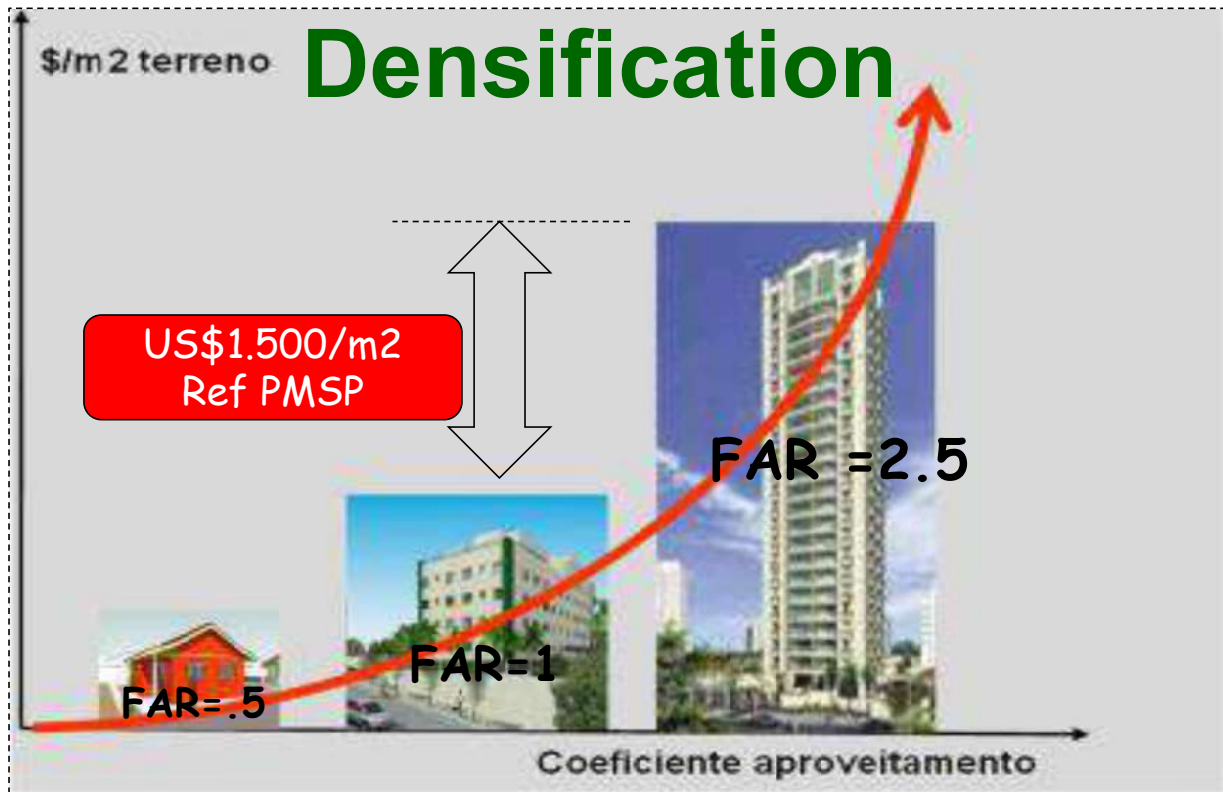


Photo: E Reese. Latin American City Growth Forms, Public Policies and Land Markets Presentation - Urban Development for Latin American Journalists Lincoln Institute Lima, Peru March 17-19, 2016

VC GIZ-India Dec 21

Martim O. Smolka

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From: http://abeiradourbanismo.blogspot.com/2011/06/o-traseiro-da-teletela-e-o-lucro_07.html - Postado por Pedro Jorgensen às terça-feira, junho 07, 2011

Change from residential to commercial use

Bogotá, Col.

(Borrero, 2018)

El Chico



\$3.214/m² – Commercial



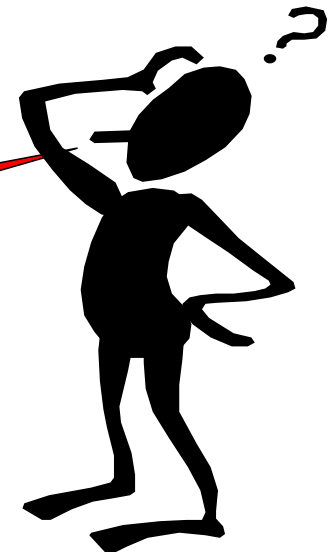
\$2.143/m² – Residential



Plots in 'partial plans' to the North 1,800 ha

Residential use at a FAR of 2.2 x \$1,285/m²,
Commercial/office use at a FAR of 2.7 > \$2,500/m² CA.

Regulation



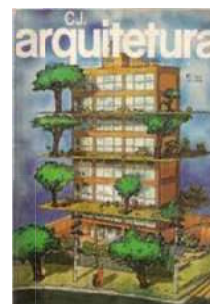
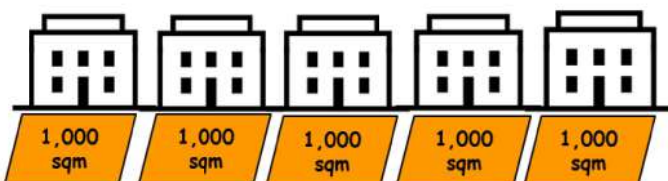
What is the market value of land use regulation?

Implications for funding urban infrastructure and services and of social housing

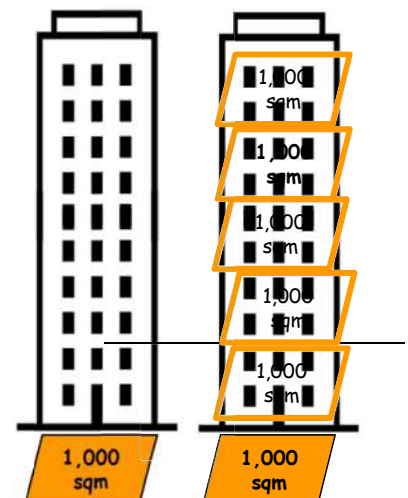
Fundamentals

Developing 5,000 sqm of housing

With a FAR=1
Developer may need to buy 5 plots of 1,000 sqm each



With a FAR=5
Developer may need to buy 1 plot of 1,000 sqm to build same amount of housing units



Fundamentals

Developing 5,000 sqm of housing



Sale of building rights



Additional building rights bought for

In Curitiba, Brazil, the taller building on the left graphically illustrates the area above the basic FAR of about six stories for which building rights were charged. The taller building on the right also paid for additional building rights but did not dramatize that fact in its design. © Gislene Pereira



São Paulo: some numbers (2018)

Attribute	Value
Population City	12.2 million
Population Metropolitan Area	21.6 million
Municipal area	1,521.11 km ² (587.3039 sq mi)
Total Revenue	\$6.8 Billion* (R\$25.254.523.982.-)
Property taxes	\$2.7 Billion* (R\$9.940.931.420.-)
Per capita GDP	\$39,624*

* Conversion at R\$3.7 per US\$

<https://www.prefeitura.sp.gov.br/cidade/secretarias/fazenda/contaspublicas/index.php?p=3216>

Milestones

1976	<ul style="list-style-type: none"> 'Solo Criado' - (Created land) French - 'Plafond Legal de Densite'
1980's	<ul style="list-style-type: none"> Linkage Operations <p>SP - \$150 million 1988/1998 15,000 social housings</p>
1986	<ul style="list-style-type: none"> First OODC in SP
1990's	<ul style="list-style-type: none"> Urban Operations - (Large Scale Urban Redevelopment Projects)
1988	<ul style="list-style-type: none"> BR New Constitution - 1988 #182 & 183 Social function - City and property
2001	<ul style="list-style-type: none"> The 'City Statute' - land development act Selling of Building Rights - OODC
2002	<ul style="list-style-type: none"> SP Master Plan
2014	<ul style="list-style-type: none"> City-wide Basic FAR=1 Max FAR up to 4 according to zone

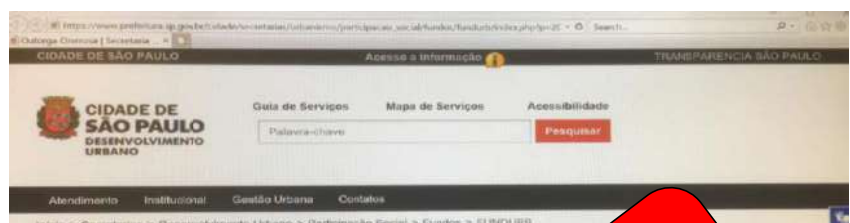
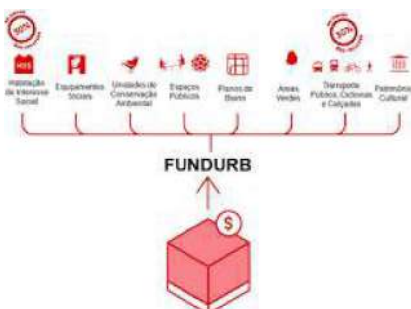


A city-wide basic FAR was set as 1.0 in S Paulo, in 2014!

- Other cities in Brazil are following suit with city-wide FAR=1 as Belo Horizonte, Recife, Florianopolis etc.
- Many others (Curitiba, Goiania, Niteroi, Salvador, Natal, Porto Alegre, etc.) do have basic FARs distinct from the max FAR according to various criteria



- Social Housing
- Social Equipment
- Environment Conservation
- Public spaces
- Public transport
- Etc.



Mês/Fonte	2021 (R\$)	2020 (R\$)	2019 (R\$)	2018 (R\$)
Janeiro	79.750.860,21	41.818.315,72	38.990,59	
Fevereiro	68.118.803,66	52.515.800,00	72,12	
Março	60.284.813,61	56.000.000,00	5.053,14	
Abril	29.994.559,96	22.752.143,48		
Maio	53.838.200,00	19.106.724,24		
Junho	59.000.000,00	27.754.115,36		
Julho	67.118.058,12	32.094.913,46		
Agosto	59.218.301,22	45.795.644,04		
Setembro	36.112.847,84	26.646.757,95		
Outubro	44.727.851,08	68.159.116,53	31.320.128,17	
Novembro	55.301.235,91	56.220.612,87	27.469.261,64	
Dezembro	68.774.654,92	40.458.064,13		
Total	616.651.604,50	542.877.159,42	741.373.274,58	335.075.268,32

2019: ~\$187 Million
 2020: ~\$104 Million
 Jan/Oct 2021: ~\$116 Million

Potential Revenues from OODC

Since 2004 - 2021
 About 3,160 projects w/ OODC
 Over US\$ 1.3 billions in revenues

\$187 million
 Max in 2019

Basic FAR 1.0 only since 2014

Virtual plot \$ ~ 30% mrkt value

Discounting factors - >25%

Exemptions for Social Housing Buildings

Non-computable area ~59%!

Adiron's rule (1979-2014) + FAR 1 for occupancy rates at 25%.

~\$1 Billion
 per year!

OODC case



US\$837,468 OODC Residential
 Source: gafisa.com.br

	Attribute	Value
1	Plot size	2,000 m ²
2	Basic FAR	1.0
3	Max FAR	2.0
4	Virtual plot \$	\$598/m ²
5	Planning factor	.7
6	Social Interest factor	1.0
7	Compensation	\$837,000
8	Compensation/m ²	\$419.- /m ²
9	Proxy Market \$ plot	\$4.45 million
10	Plot Market \$/m ²	\$2,225.- /m ²

$$C (\$ 837,000) = \$598/1.0 * (2.0 - 1.0) * .7 * 1.0 * 2,000$$

$$C = (V / FAR_{basic}) * (FAR_{Max} - FAR_{Basic}) * Fp * Fs * Plot\ area$$



- Building 4,000 m² land plot.
- Acquiring *additional 6,000 m² of building rights for \$6 millions*



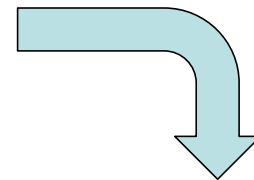
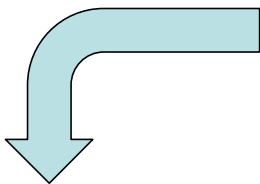
Cross-subsidy?

30 additional high-income apt. at \$200k/u

200 social housing at \$30k/unit

CEPACs in S. Paulo

Created in 1995, sanctioned by the 'City Statute'
(Brazilian Land Development Act) of 2001



Additional FARs licensed against CEPACs auctioned in the market



Certificates of Additional Development Potential CEPACs



Municipal Bond

- Sold by electronic auction in the São Paulo Stock Exchange Market and controlled by CVM (=SEC)

Urban
Operations

- >500Has - Rezoning/Redevelopment

Value

- CEPAC => 1 m² (>.8m², <1.2)

Auctions

- \$550/m² (2004) to \$2,100/m² (2010)
- First Auctions in 2004



Revenues

- Over **\$2,762 Billion** from 2004/2017
- Faria Lima and Agua Espraiada UOs (currently 14!)



Certificates of Additional Development Potential CEPACs



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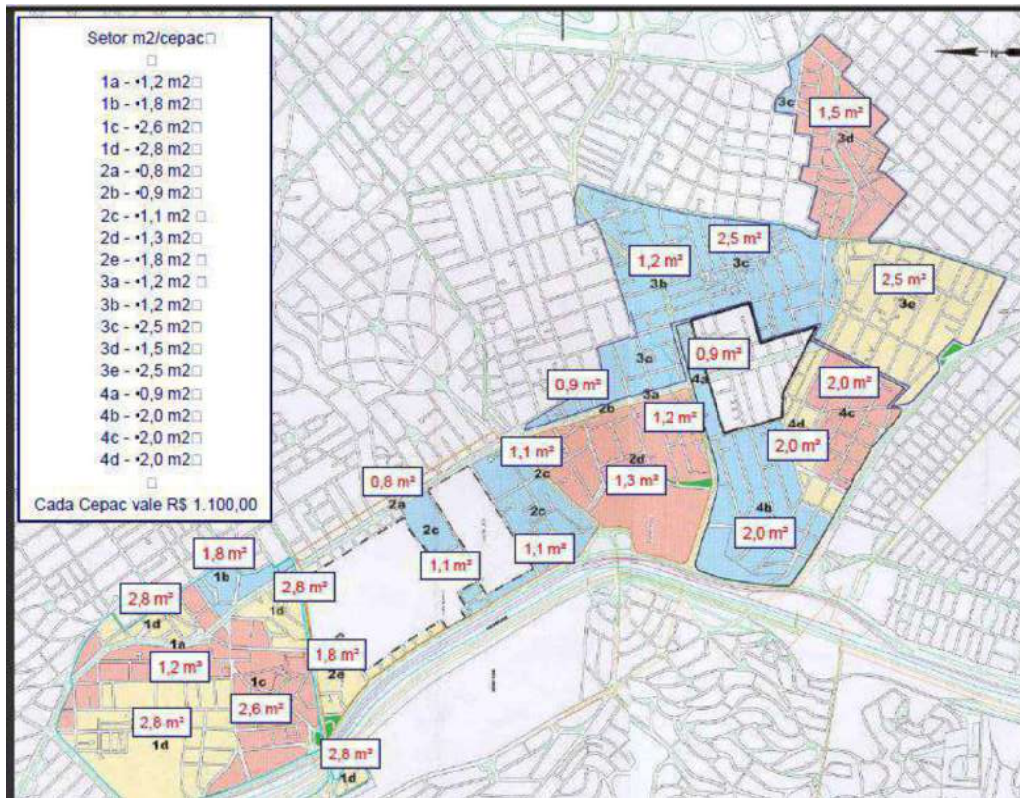


Revenues

- Over **\$3.2 Billion** from 2004/2019
- Faria Lima and Agua Espraiada UOs (currently 14!)



• Last Faria Lima Auction of CEPACs in December 2019
 • 16 real estate firms competing
 • For 93,000 CEPACs
 • Generated ~\$400 millions revenues
 • Over \$4,100.- per sqm



From Sandroni - 2013



CEPAC case

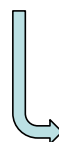
Former Bicycle factory
converted to a mixed-use
development - 2014



US\$120 million CEPAC
mixed-use development.
Source: orealizacoes.com.br

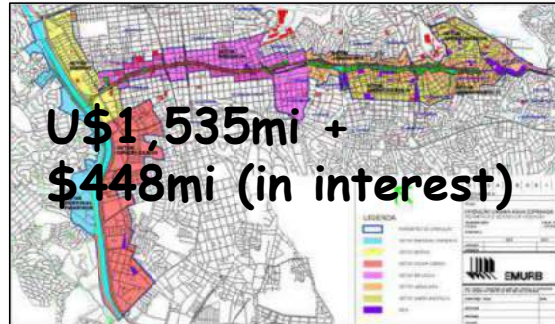
	Attribute	Value
1	Plot size	80,000 m ²
2	Acquisition \$	\$145 million
3	CEPACs acquired	246,076
4	Auctioned bid	\$120 million
5	FAR additional	3
6	2/1	\$1,812.50/m²
7	4/3	\$487.65/m²

Compare rows: 6 and 7



- Non-computable areas
 - garages, balconies, playgrounds, etc.
- Auctioning conditions
 - no higher bids to compete with
- other externalities
 - e.g., a planned transit station.

Income from Cepacs (2004/19): UO Faria Lima and Agua Espraiada



Total = U\$ 3,241 mi

~ 15% of all municipal investments (2004/19)



Fuente: Paulo Sandroni, Urban development, increasing land prices, and instruments to capture value and to avoid exclusion in São Paulo, Brazil, unpublished 2020 - also in "CONCENTRAÇÃO DA TERRA URBANA, CAPTURA DE MAIS VALIAS E ESPECULAÇÃO: OUTORGA ONEROSA E CEPACS NA CIDADE DE SÃO PAULO - Ensaios teóricos, empíricos e ficcionais"

Benefits

City benefitting from investments in UOs (besides the supporting urban infrastructure in the redevelopment project)



- Jardim Edith slum
Occupants resettled in new building in the same area funded by CEPACs
US\$30 Million



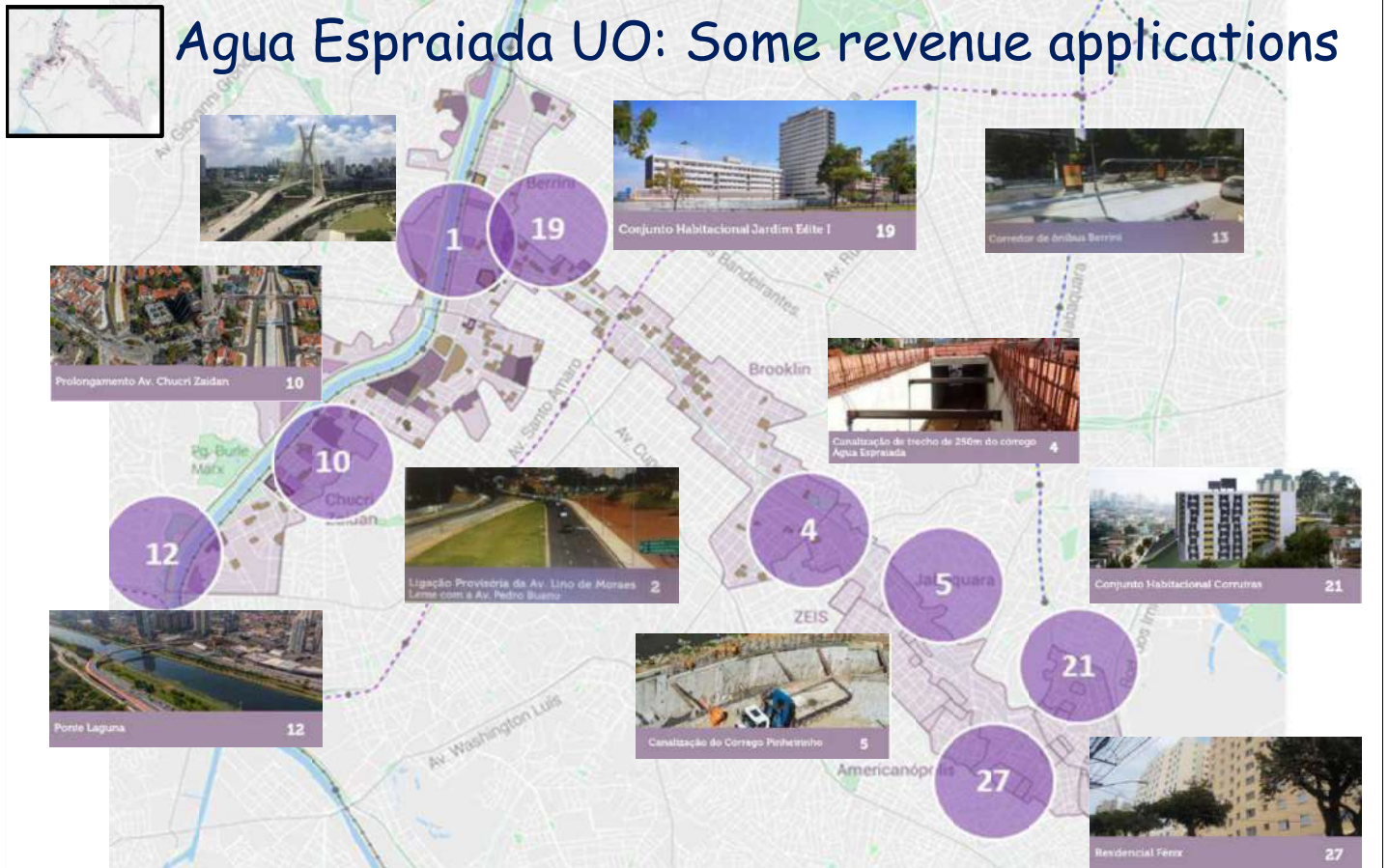
- Stayed Bridge
US\$100 Million
Access to Immigrants highway



- Metro Line 17 (ouro)
US\$150 million invested



Água Espraiada UO: Some revenue applications



Mex 2021

Martim O. Smolka

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Advantages of CEPACs

Auction

Overcomes need for calculation of land value increment

Ex- ante

Anticipation of funds to public adm. invest - economies with UIS

Sold in 'tranches'

Allows monitoring and fine calibration of the market

Earmarked

• Confidence of developers

Caveats

Supported by sophisticated capital market

- credibility of the bonds - access and disposal.
- limited use in less developed areas;

Two cases FL and AE: cherry of the cake

- Other UOs not so attractive to investors

In UO FL revenues in excess

- May generate wasteful/superfluous expenditures
- Ref Ponte Estaiada (needed ...but, could be cheaper)

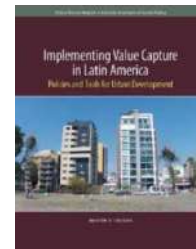
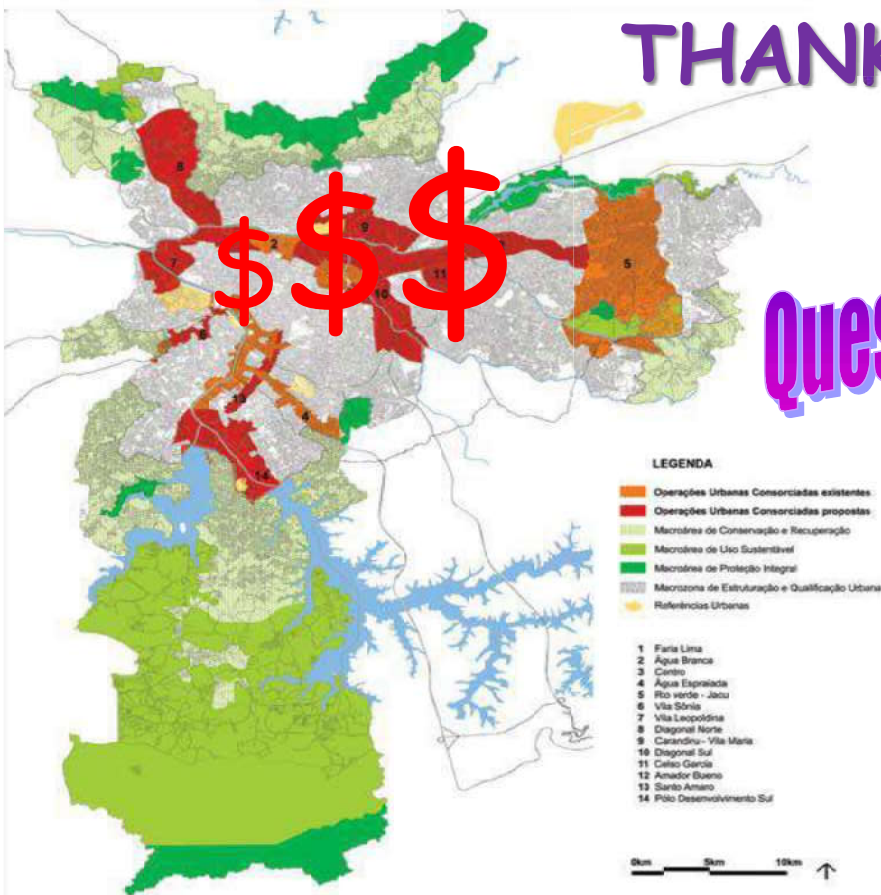
NYU Marron July 19 27 Martim O. Smolka

Thank you

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LINCOLN INSTITUTE OF LAND POLICY
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THANKS FOR YOUR ATTENTION

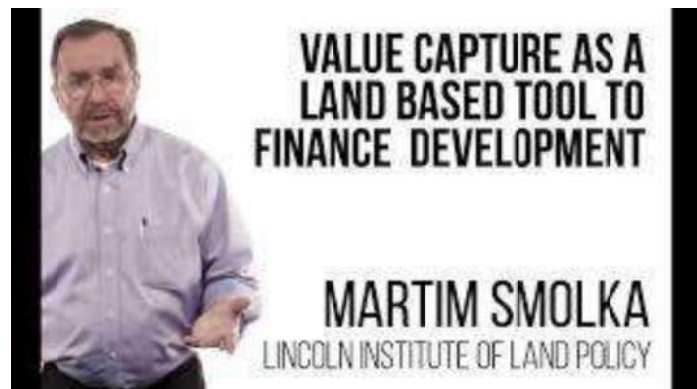
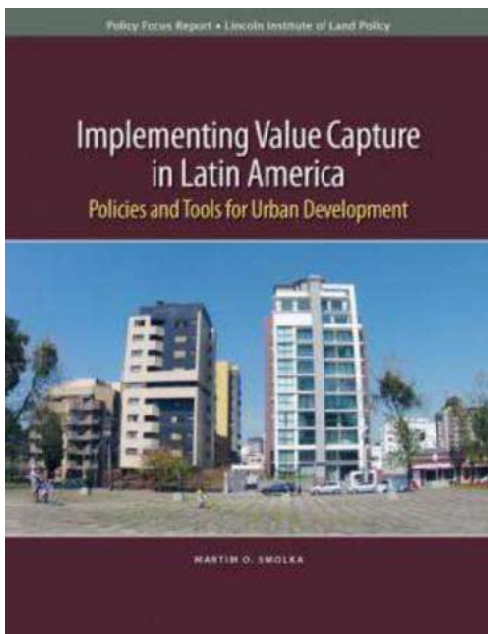
Questions?



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[UN-Habitat worldwide](http://www.unhabitat.org)

Published on Apr 22, 2014

<https://www.youtube.com/watch?v=vEZOGF2jSW8>

Auctions of CEPACs

- ❑ CEPACs issued by EMURB (the urban development agency) for the Municipality
 - EMURB also responsible for management and information on investment program for the UO
- ❑ Fiscalizations by CEF (a social federal bank)
- ❑ Each auction linked to defined investments
 - Infrastructure, social housing etc
- ❑ CVM (Brazilian equivalent to SEC)
 - Authorizes auctions in the Stock Market
 - Registers UO to which CEPACs are linked
 - Is informed of any initiative to change the Master Plan



Risks with CEPACs

Prices may float as with any other bond

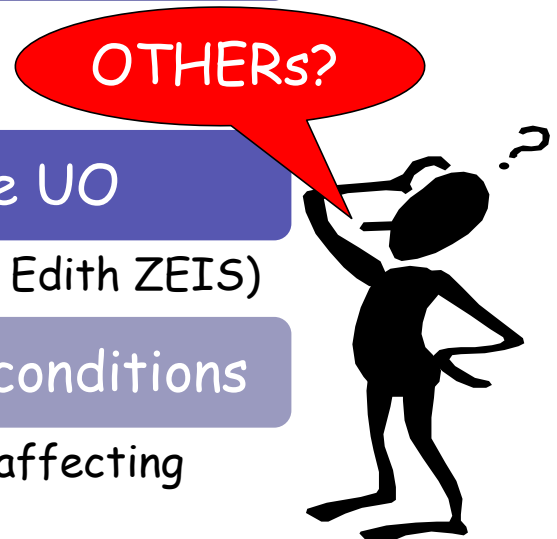
- Real estate market
- Systemic - financial market

Legal injunctions affecting the UO

- E.g. non-removal of slums - (Jardim Edith ZEIS)

Changes in supra municipality conditions

- E.g. new environmental restrictions affecting the UO



Criticisms

'Preferential option' for high-end projects

- lower payment capacity
- perceived negative externalities

building rights bids < public investment threshold costs

- Subsidies =>

Noise in the auctioning process

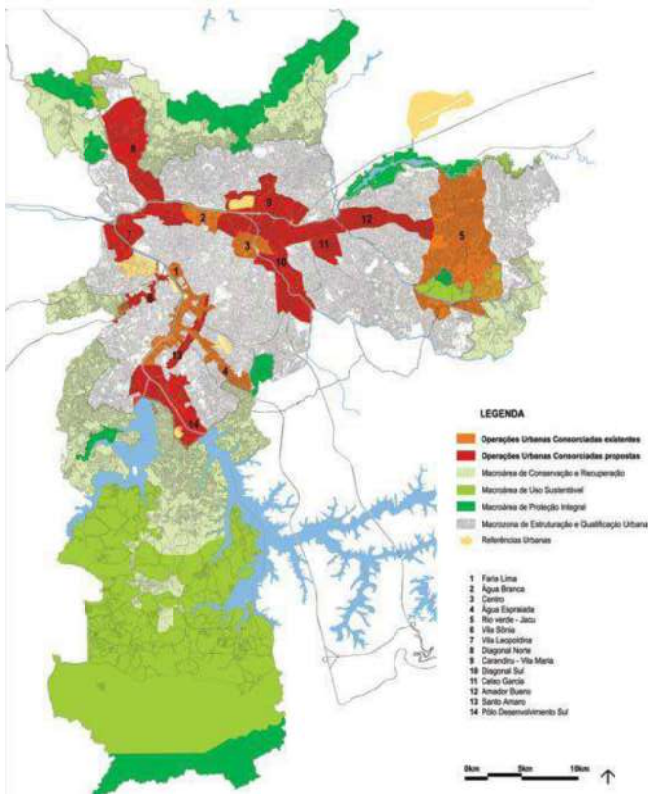
Gentrifying UO likely more successfully



UO precedes CEPACs or opportunity to use CEPACs define UO?

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Urban Operations (UOs) in São paulo



- 13 on-going UOs in São Paulo
 - 4 from 1990 to 2002
- 8 proposed Master Plan of 2002 yet to be approved (200 Km²)
- .20% of city area (300/1,500Km²) or 30% of urbanized area
- CEPACs used in 2 of them
 - Faria Lima and
 - Água Espraiada
- Most recent (new): Água Branca UO

Source: "Land Readjustment and Joint Urban Operations", Montandon, Daniel T. and De Sousa, Felipe F. Romano Guerra Editora, São Paulo, 2007

HYPERLINKS

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Uses of CEPACs revenues

Land regularization

Social Housing

Land reserves

Urban management

Provision of infrastructure and equipments

Creation of public spaces - and green areas

Environmental protection

Historical preservation and cultural areas



URBAN OPERATIONS

Urban Operations - UOs

Delimited urban areas (polygons) subjected to zoning redefinition of (land-use and density) supported by improved urban infrastructure

Involves typically large scale areas and private-public partnerships

Relies in charging for building rights over and above the restrictions imposed by existing the Master Plan or Zoning Ordinances;

Revenues resulting from such selling of building rights must be fully reverted to the UO area in urban infrastructure, social housing etc.

Initiative may be made public or private agent - but must be approved by the City Council and sanctioned by the Mayor

Land Value Capture – Towards Planning & Financing Equitable Cities in India
Experience Sharing Workshop (December 13–15, 2021)

São Paulo, Brazil



Session II: International Experiences in LVC Implementation
São Paulo (Brazil) Experience with the Charge of Additional Development Rights

Felipe Francisco De Souza (Ph.D.)
Lecturer / Research Associate / Postdoc



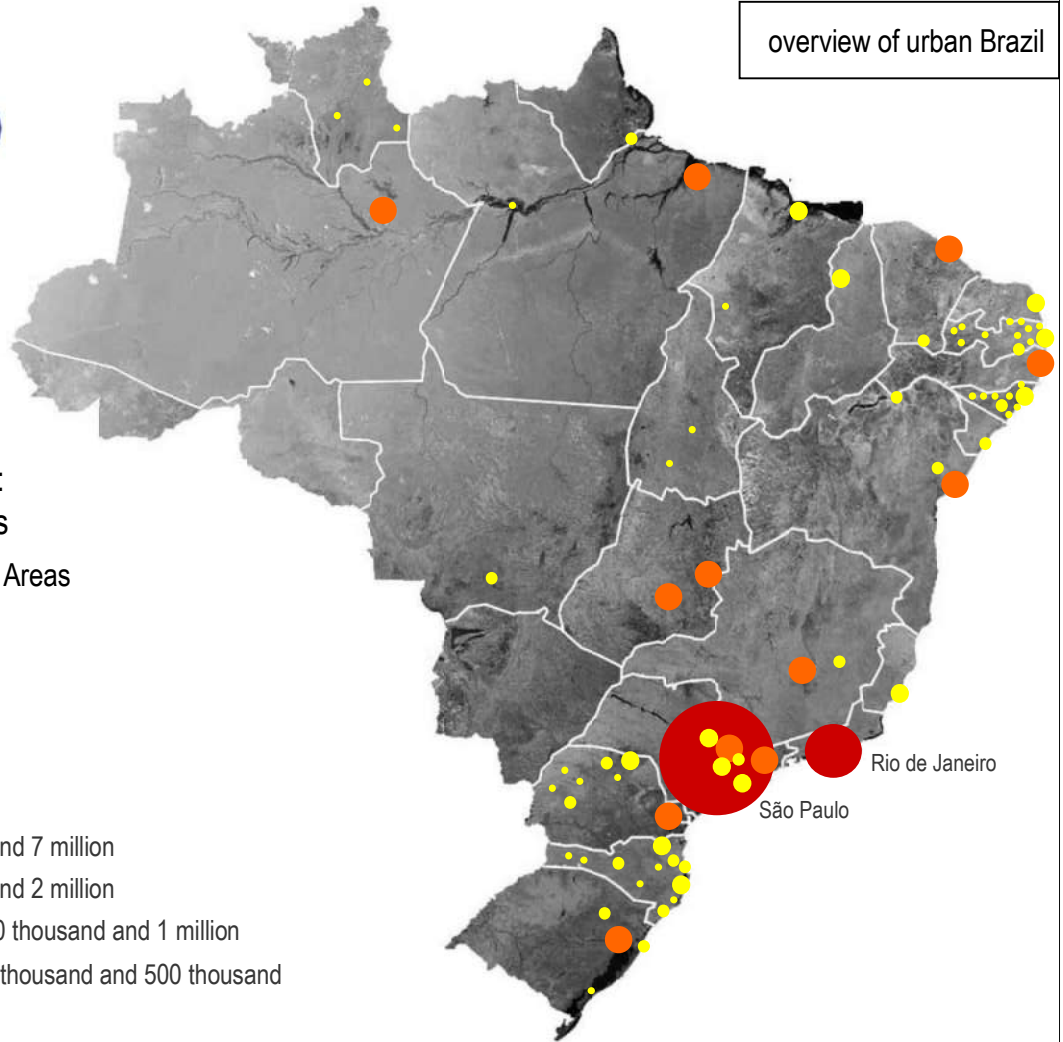
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Contents of Presentation:

1. Evolution of Planning System of Brazil: from Embu Charter to the Statute of the City
2. Evolution of Planning System of São Paulo: São Paulo Master Plans 2002 and 2014
3. São Paulo Experience with the Charge of Additional Development Rights:
 - . CEPAC (Construction Bonds) vs. FUNDURB (Urban Development Fund)
 - . Consorted Urban Operations: “Faria Lima” and “Água Espraiada”
 - . Charge of Additional Development Rights (Land Use, Floor Area Ratio)
 - . FUNDURB (Financing Public Policies)
4. Conclusions and References

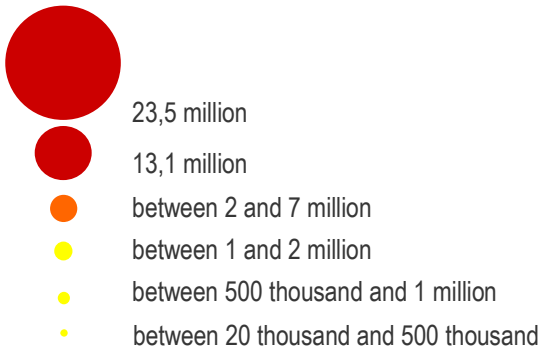


Brazilian regions



Total Population (2020):
212.6 million inhabitants

Population in Metropolitan Areas
(number of inhabitants)



Source: IBGE 2021.

evolution of planning system of Brazil: from Embu Charter to the Statute of the City

Expropriation

Decree-Law

No. 3,365, 1941

(compulsory acquisition of private property for public utility due monetary compensation)

Land Parcelling Law

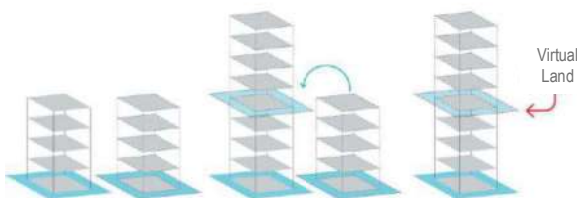
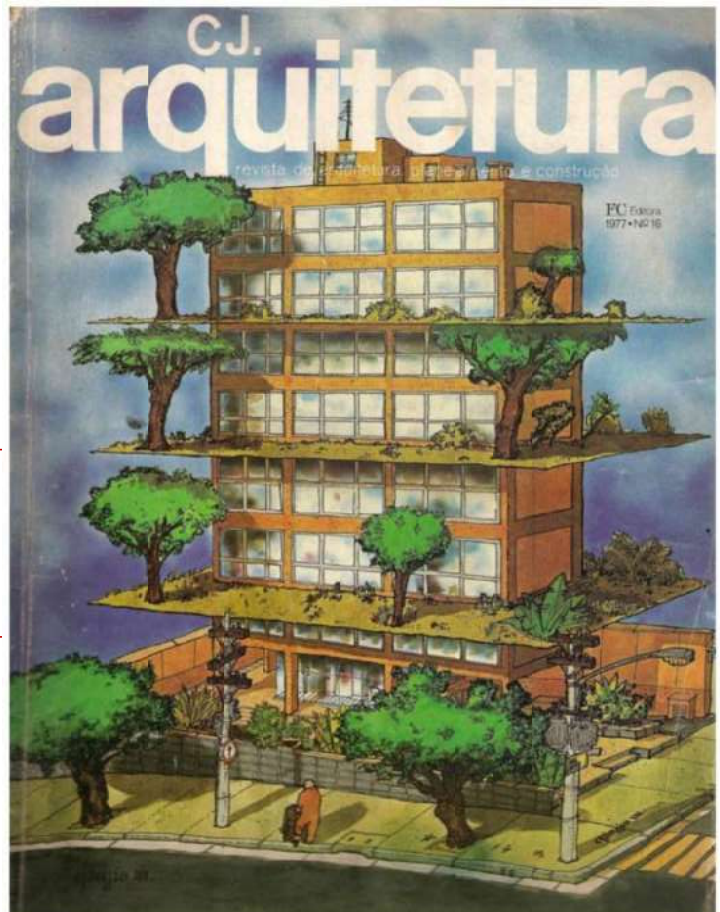
No. 6,766, 1979

(urban land parcelling provisions and approvals)

Embu Charter

1977

(divide the land property ownership and the building rights' concepts)



Source: Inter-American Development Bank 2017.

Source: C.J. Arquitetura Magazine 1977.

evolution of planning system of Brazil: from Embu Charter to the Statute of the City

Expropriation Decree-Law

No. 3,365, 1941

(compulsory acquisition of private property for public utility due monetary compensation)

Land Parcelling Law

No. 6,766, 1979

(urban land parcelling provisions and approvals)

Embu Charter

1977

(divide the land property ownership and the building rights' concepts)

Federal Constitution
1988

art. 182

On Urban Policy

(§ 1 the master plan as the main tool for urban policies)

(§ 2 urban property shall comply with its social role)

(§ 3 expropriation by means of fair compensation)

(§ 4 compulsory actions for unbuilt, underused, and unused urban land)

art. 183

On Urban Policy

(acquisition by prescription after 5 years of occupation,

§ 1 regardless sex, § 2 right not recognized twice,

§ 3 right not recognized in public real estate)

Statute of the City
No. 10,257, 2001

art. 2 **Policy Guidelines**

(democratic administration, public private partnerships, land use control, distribution of costs and benefits, etc.)

art. 4

Urban Planning Tools

(among others: master plan, land parcelling, land tenure regularization, etc.)

art. 8 **Expropriation**

art. 28 **Charge of**

Additional Building Rights

art. 32–34A **Consorted**

Urban Operations

art. 35 **Transfer of**

Building Rights

Evaluation “Constitution and Statute”
(2001 - 2021)

Decentralization and municipal autonomy;

Promise of social inequalities confrontation;

Progressive technical apparatus;

BUT STILL...

Low effectivity of 1,700 master plans countrywide (municipalities over 20,000 inhabitants);

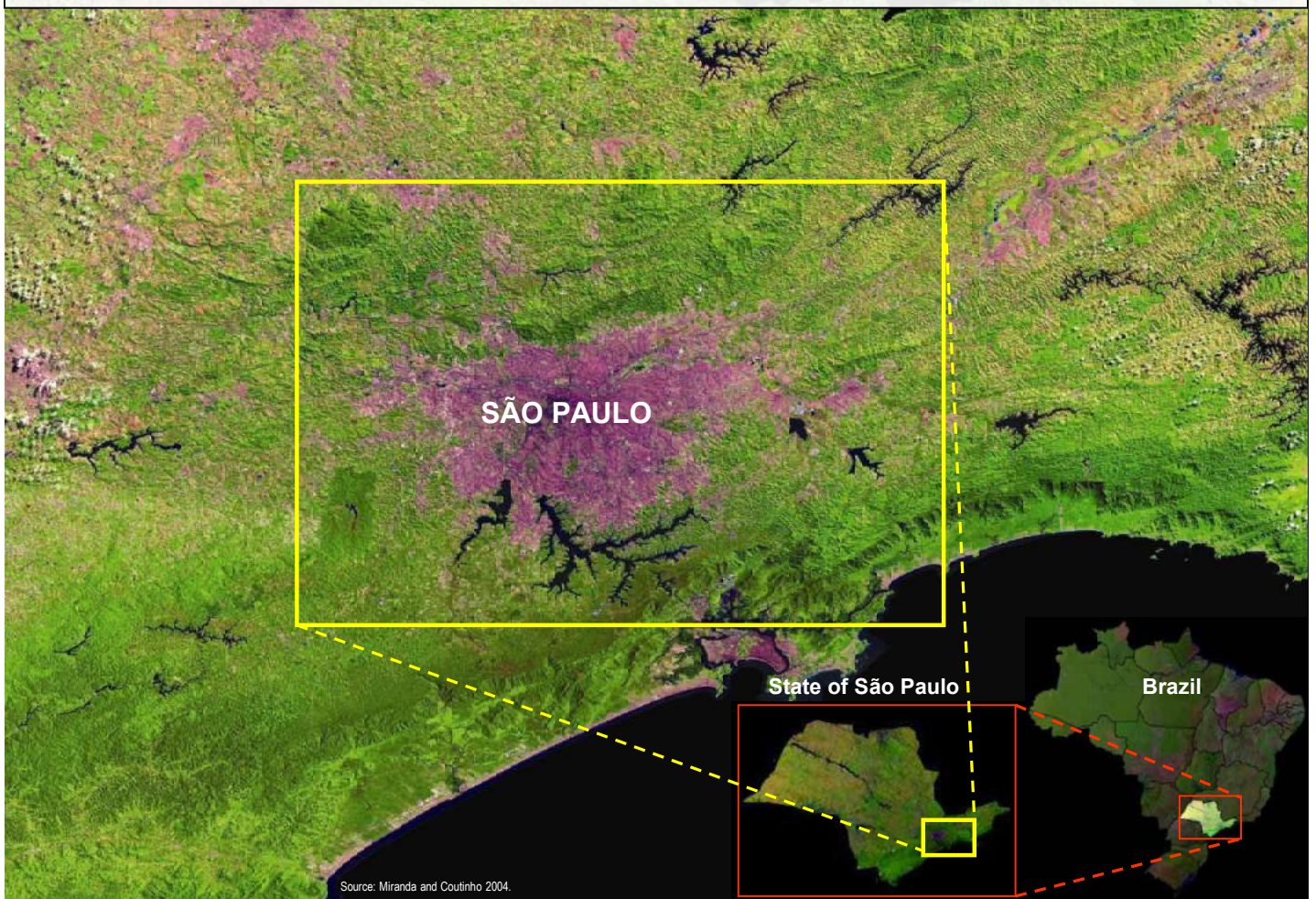
Urban planning tools not efficiently applied or not effective enough to confront reality;

Renovation discourse over it was not necessarily followed by proper renewal;

Lack of public institutions and the challenge to overcome historical deficiencies;

Brazil tops the rank in land valuation and real estate speculation in emerging markets.

São Paulo metropolitan area





evolution of planning system of São Paulo: São Paulo master plans 2002 and 2014

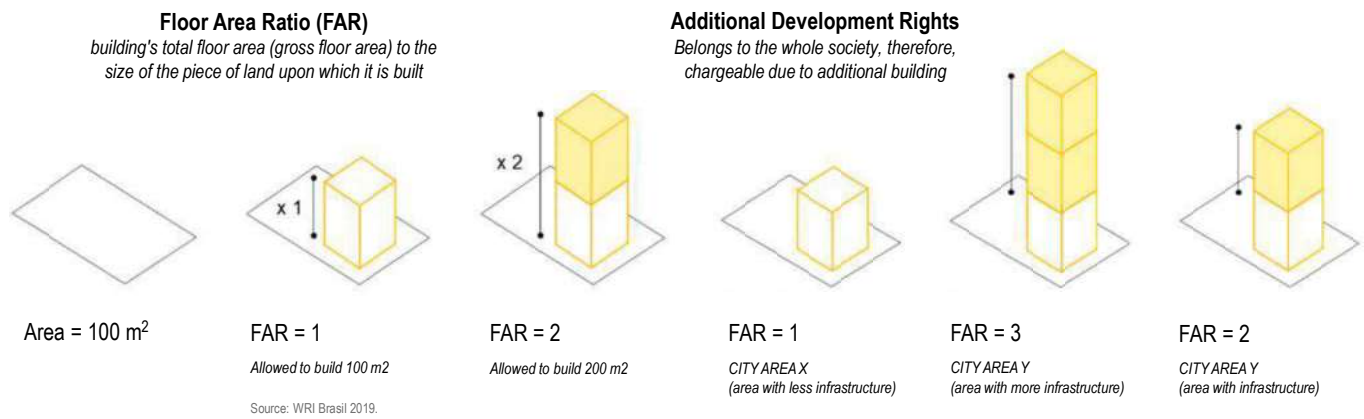
	From 1988 to 2001	From 2001 to 2014	From 2014
Master Plans:	Proposal for São Paulo master plan of 1991	São Paulo strategic master plan (PDE) 2002	São Paulo strategic master plan (PDE) 2014
Zoning:	General Zoning Law 1972	Zoning Law 2002	Zoning Law 2016
Consorted Urban Operations:	Consorted Urban Operations "Faria Lima," "Água Branca," and "Centro"	Consorted Urban Operation "Água Espraiada" and review of "Faria Lima," and "Água Branca"	Proposal for New Consorted Urban Operations
CEPAC: (Certificate for Additional Construction Potential Bonds)	Proposal for Urban Operation "Faria Lima"	Implemented	Implemented
Transfer of Building Rights:	Implemented	Implemented	Implemented
Municipal Council for Urban Policies:	-	Implemented	Implemented

Charge of Additional Building Rights:

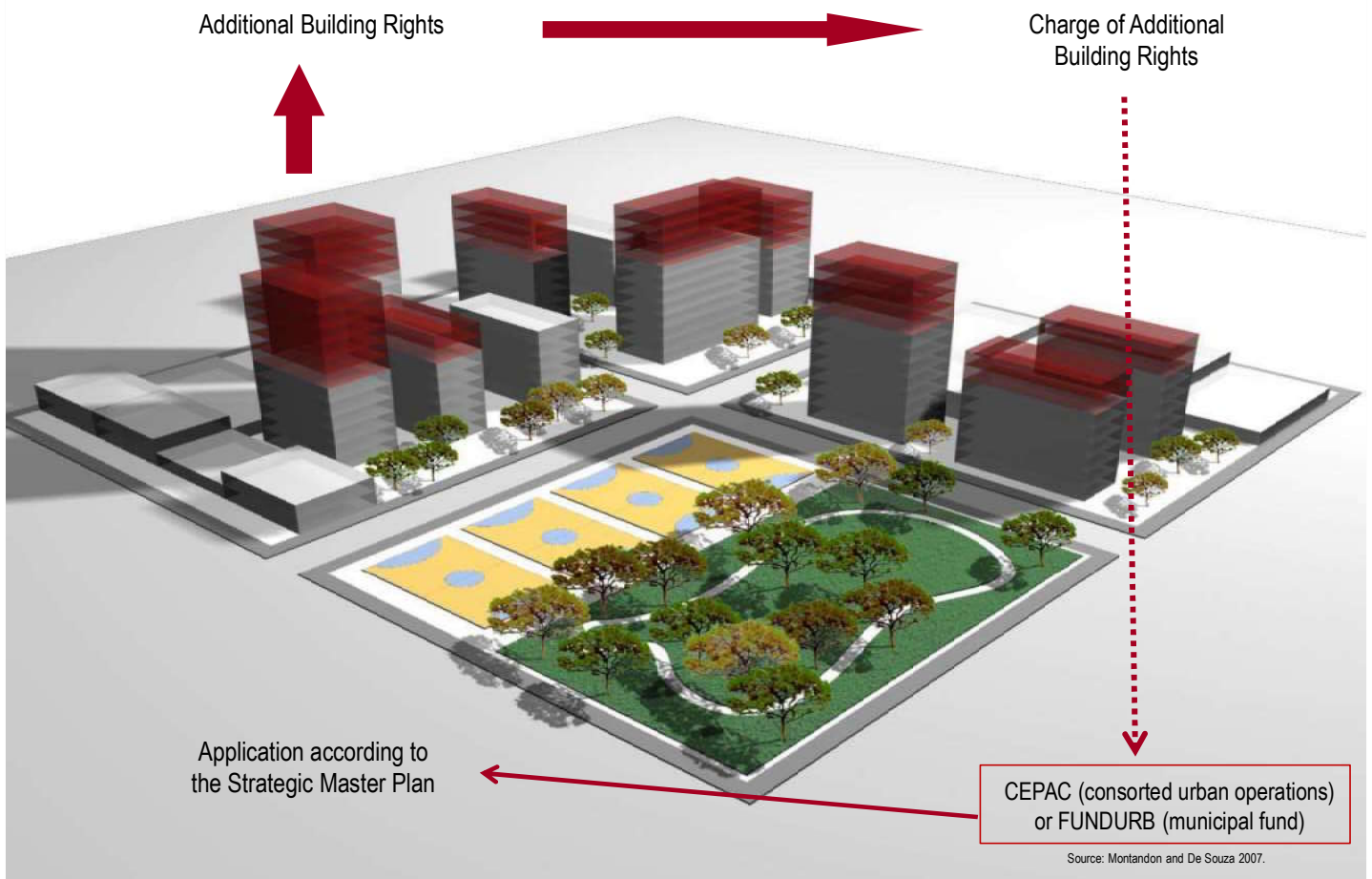
Or the sale of additional development rights is the right to build above the basic floor area ratio established by the master plan, through compensation paid by the beneficiary.

Consorted Urban Operations

Set of interventions and coordinated measures by the municipal government, with the participation of property owners, residents, permanent users, and private investors, aiming to achieve structural urban transformations, social improvements and environmental enhancement within an area.



CEPAC (construction bonds) vs. FUNDURB (urban development fund)





Source: PMSP 1979-2004.



consorted urban operation "Faria Lima"

Source: PMSP 2004.



consorted urban operation "Água Espraiada"

Source: Flavio França 2021.



charge of additional development rights in São Paulo: overall evaluation

Graph shows the revenue evolution, through charge of additional development rights, annually for the municipality of São Paulo.

From

2004

To

2020



Source: PMSP 2020.

charge of additional development rights in São Paulo: land use

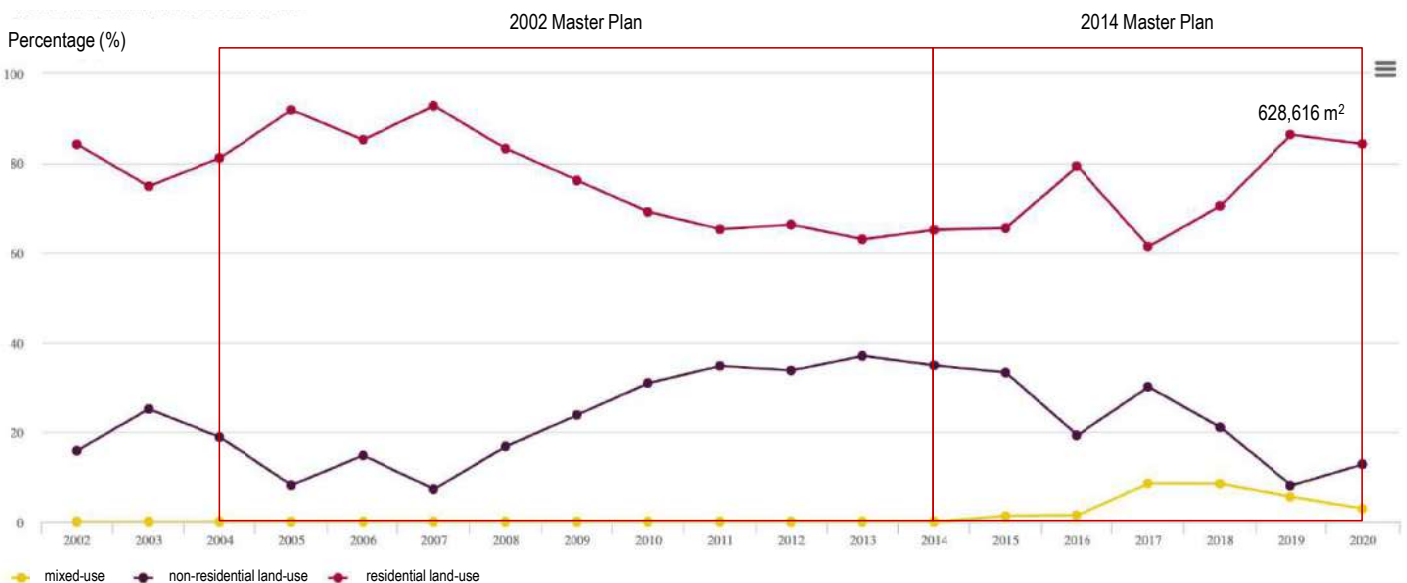
Graph shows the distribution of charge of additional development rights per land-use (residential, non-residential, mixed-use), annually for the municipality of São Paulo.

From

2002

To

2020



Source: PMSP 2020.

charge of additional development rights in São Paulo: floor area ratio

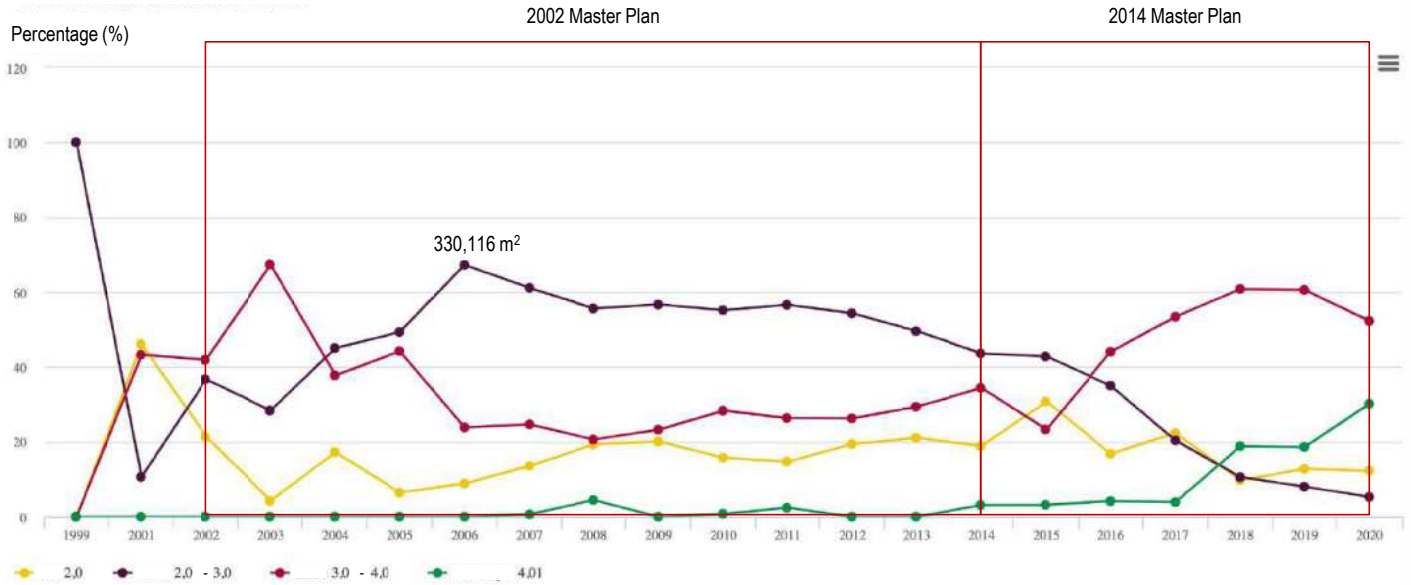
Graph shows the distribution of charge of additional development rights per floor area ratio (2, 2 to 3, 3 to 4, more than 4), annually for the municipality of São Paulo.

From

1999

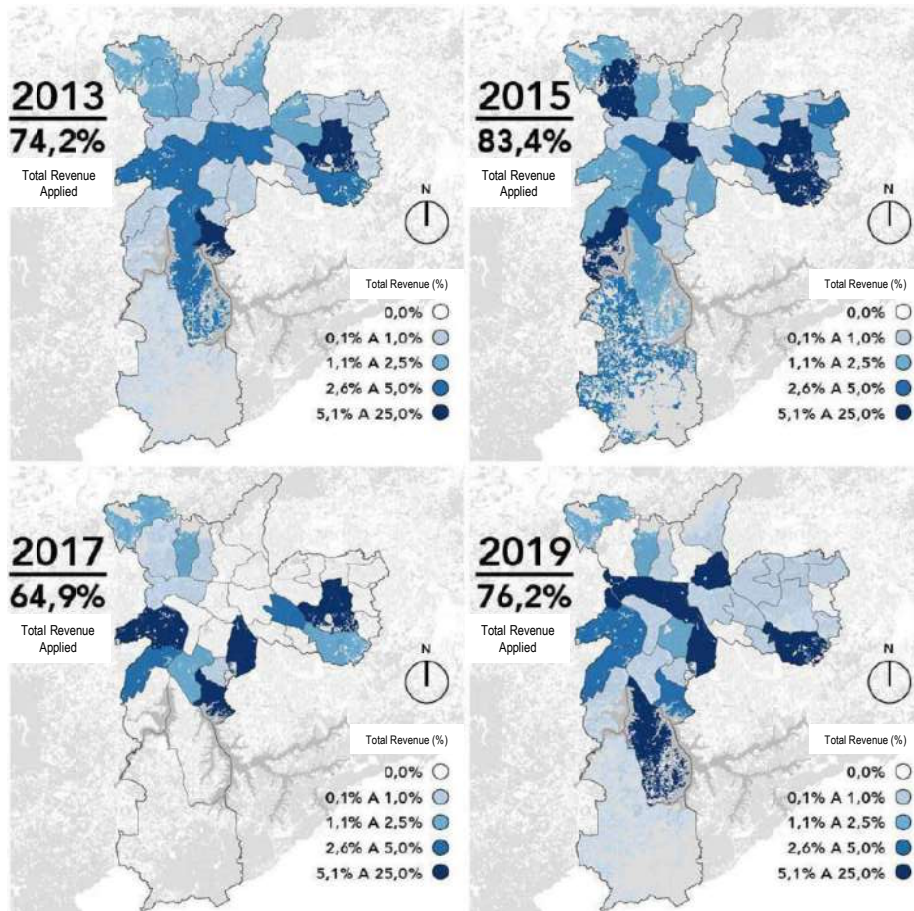
To

2020



Source: PMSP 2020.

charge of additional development rights in São Paulo: FUNDURB



Source: PMSP 2020.

charge of additional development rights in São Paulo: FUNDURB and public policies

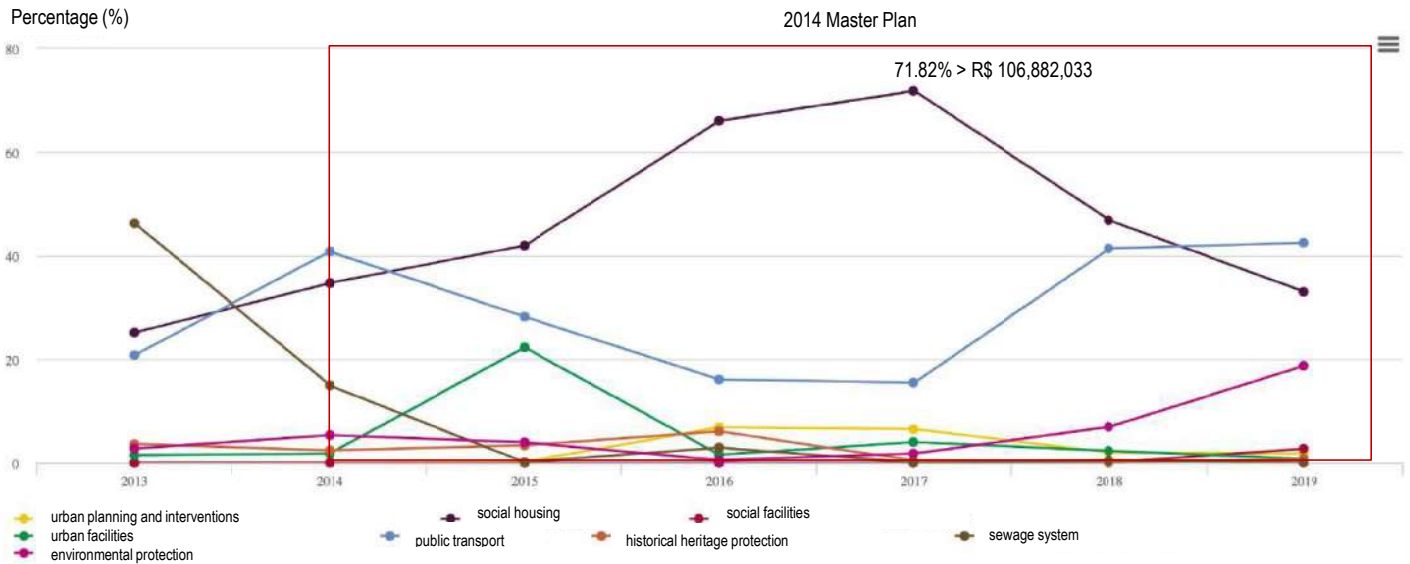
Graph shows the distribution of charge of additional development rights per public policy, through FUNDURB, annually for the municipality of São Paulo.

From

2013

To

2020



charge of additional development rights in São Paulo: some conclusions

1. Evaluation **Urban Planning Tools in the Context of São Paulo**

- . Implementation of the City Statute at the local level is very limited in Brazil.
- . The case of São Paulo is the most relevant (ONU Habitat > New Urban Agenda).

2. Urban planning tool **Charge of Additional Development Rights**

- . Criticism on the lack of proportion/scale between density to be increased and proper infrastructure expansion.
- . Urban planning tools were successful in São Paulo only in progressive governments committed to the right to the city.

3. Urban planning tool **Consorted Urban Operations**

- . Criticism on a mechanism based on the capacity of real state market investment and later acquisition of land by the government.
- . This urban planning tool is unlikely to be successful in large scale when project's cost is higher than the contribution obtained from the sale of additional building rights, there is not enough demand for additional development rights, and social projects are not fully completed to accommodate the entire low-income population living prior to the urban project.

4. References **São Paulo Master Plan**

São Paulo Master Plan (in Portuguese): <https://gestaourbana.prefeitura.sp.gov.br/marco-regulatorio/plano-diretor/arquivos/>

São Paulo Master Plan – explanatory videos (in Portuguese):

<https://gestaourbana.prefeitura.sp.gov.br/marco-regulatorio/plano-diretor/videos-pde/>

São Paulo Master Plan – illustrated (in Portuguese):

<https://gestaourbana.prefeitura.sp.gov.br/marco-regulatorio/plano-diretor/texto-da-lei-ilustrado/>

São Paulo Master Plan – data monitoring (in Portuguese): <https://monitoramentopde.gestaourbana.prefeitura.sp.gov.br/>

SHANGHAI MANUAL
Guide for Sustainable Urban Development

Integração Social e
Cidades Inclusivas



Land Value Capture – Towards Planning & Financing Equitable Cities in India
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Thank You!

questions?
<felipefrancisco@gmail.com>

Session II: International Experiences in LVC Implementation
São Paulo (Brazil) Experience with the Charge of Additional Development Rights

Felipe Francisco De Souza (Ph.D.)
Lecturer / Research Associate / Postdoc



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Leveraging land value capture

A global scan of land-based financing instruments used by local governments

GIZ-ASCI International Conference in partnership with NITI Aayog, Government of India
December 13, 2021

Jon Kher Kaw
Senior Urban Development Specialist
The World Bank

Based on research conducted by Olga Kaganova, Jon Kher Kaw and Gabor Peteri

What is land value capture (LVC)?

Land value capture (LVC) instruments (land-based financing) is an umbrella term used for a set of instruments that leverage the government's ability to obtain public benefits through its powers over both private and government-owned land and property

The benefits from LVC can be:

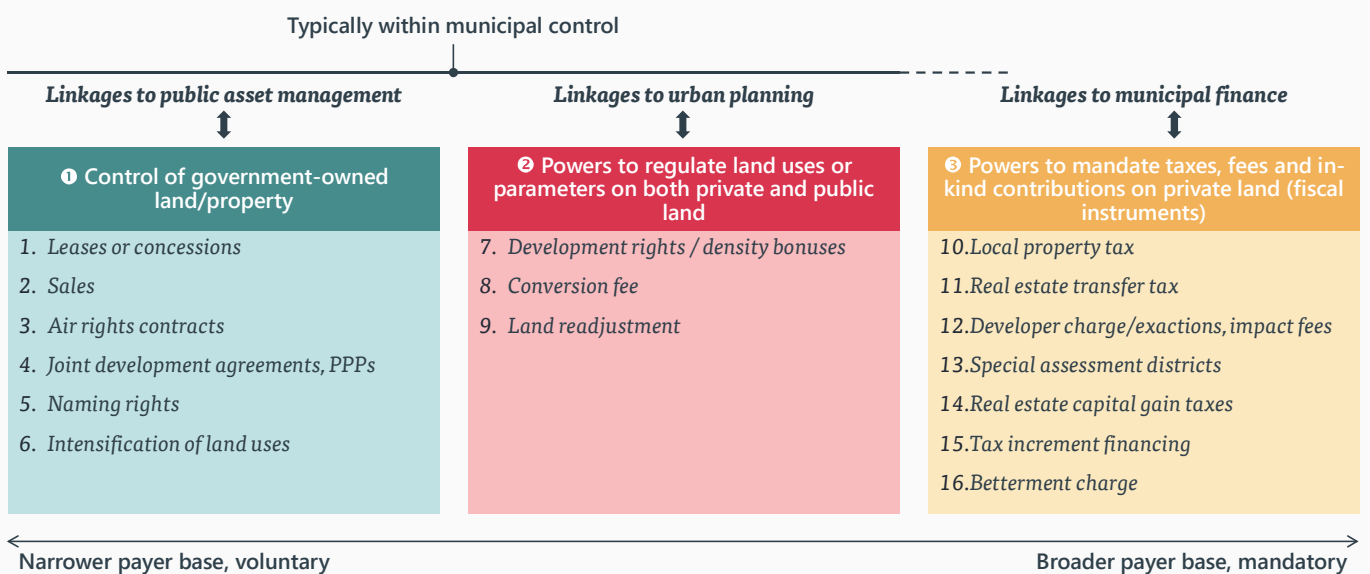
- Monetary (e.g., revenues or avoided expenses)
- In-kind (e.g., land or infrastructure for public use)

Additional benefits:

- Improved urban development and economic development (e.g., directing private investments or increasing productivity of land)

Which government powers are used in LVC instruments?

There are roughly about 16 LVC instruments used globally



Wide range of LVC instruments

Leases or concessions. Contract allowing a private sector tenant rights to use a site for a period of time, for a payment

Land/property sale. Sale of ownership of vacant or underused municipal land or property

Air rights contracts. Rights to use the space above land in to build a private property

PPPs / Joint development agreements. Joint development between municipality and developer for private and/or public use on municipal land

Naming rights. Selling the naming rights of municipal property to help renovate or maintain their facilities.

Intensification of land uses. Combining several public uses on a government land site or sharing public land or facilities with the private sector.

Sale of development rights / density bonuses. Rights that allow a developer or property owner to exceed the base zoning density in exchange for a payment or an in-kind contribution of public use facility (such as public spaces)

Conversion fee. Conversion of land classified as not-developable for development

Land readjustment. Government re-parcels and regularizes privately-owned land in predefined area; reserves spaces for public use and infrastructure; some sites to pay for infrastructure; and returns smaller but more valuable plots to previous owners

Local property tax. Mandatory recurrent tax levied on land, buildings

Real estate transfer tax. Levied upon completion of transaction

Developer charge/exaction. One-time contribution of land for public facilities/infrastructure in exchange for development rights

Special assessment district. Recurrent fee to recover infrastructure costs from property owners in designated area

Real estate capital gain tax. Levied on increase in property value from its initial purchase

Tax increment financing. Assigning revenues collected from increased tax base to designated area for development

Betterment charge. One-time charge for increase in property value from new infrastructure



Wide range of LVC instruments

(I will focus on just a few)

Leases or concessions. Contract allowing a private sector tenant rights to use a site for a period of time, for a payment

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Air rights contracts

A contract that grants a private sector partner a right to use, for a specified time period, the space above government-owned land in order to build a private property, in exchange for a payment. Air-rights contracts can also be between two private parties

Pros

- Creates economic use of space otherwise unutilized
- Additional source of revenues for municipal budget
- Known internationally, though rarely used
- Voluntary for private sector partners, so doesn't face opposition

Cons

- Used in unique spatial situations only
- Very narrow base for OSR
- Negotiation-based, so may lack transparency

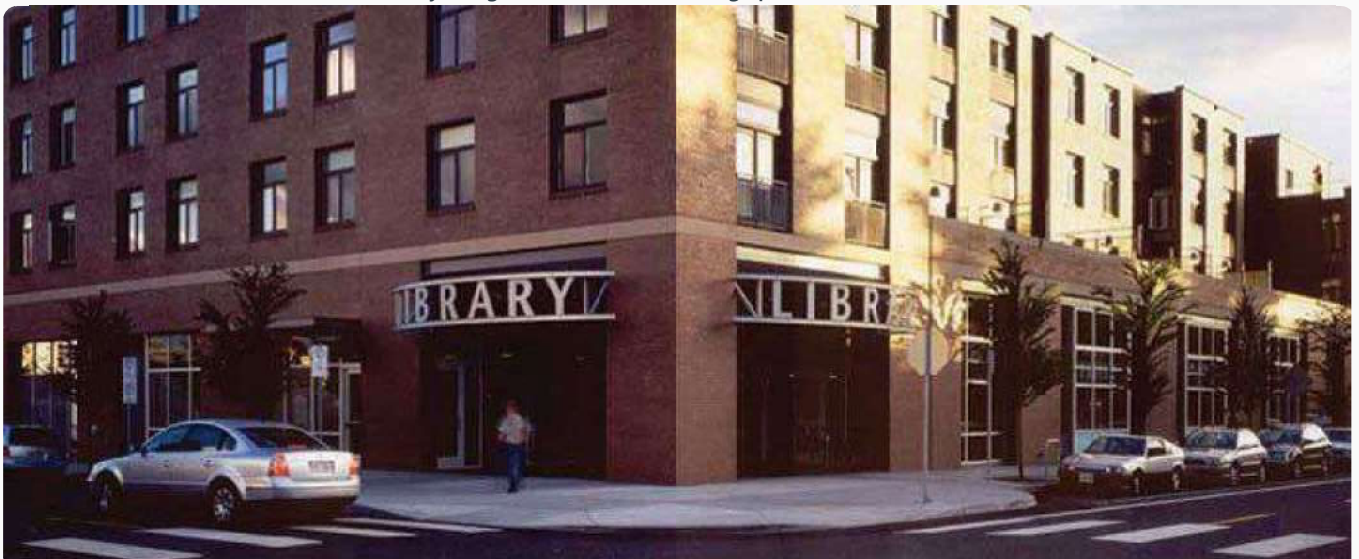
Some critical prerequisites

- Regulations allowing air-rights leases or JDAs
- Regulation and zoning allowing public-private use of land sites
- Capacity at municipalities or their investment arms to negotiate and manage such contracts

Air rights contracts

Example: Multnomah County, Oregon

Multnomah County, Oregon, US, allowed building apartments above one of its libraries



Source: Lisa Swimmer / THA Architecture

Joint Development Agreements (JDAs)

A contract between a municipality and a developer for joint development of real estate for private or public use (or both) on a municipally-owned site. JDAs can be:

Revenue-sharing, when the municipality receives a share of proceeds from sales of speculative real estate (e.g., apartments) financed and built by the developer, or

Cost-sharing, when the private sector voluntarily contributes directly to funding and/or builds a public-use facility (e.g., railway station), in exchange for some incentive such as a density bonus; in this case, JDAs are a form of PPPs

Pros

- International success stories for cost-sharing JDAs in TOD projects
- Delivers public infrastructure without public monetary investment or with a reduced amount of it
- Voluntary for private sector participants, so doesn't face opposition

Cons

- Always case-specific and expensive to prepare, cannot be used on a mass scale
- Revenue-sharing JDAs expose municipal land to risks of speculative real estate development
- Not stable as a source of revenues
- Cost-sharing JDAs can be financially viable only in locations with vibrant real estate markets
- Negotiation-based / non-transparent

Some critical prerequisites

- Policy and regulations that encourage cost-sharing JDAs for delivery of public facilities / infrastructure and discourage and limit speculative revenue-sharing JDAs
- Very advanced municipal capacity for conceptualizing, preparing, procuring, negotiating, and managing JDAs

Joint Development Agreements (JDAs)

Example: City of Strumica, North Macedonia

A retail mall built and owned by a private investor on municipal land, at the location of a former dilapidated public market



The municipality owns the new space for the public market inside the mall



Sale of development rights (DRs) or density bonuses

Allows a developer / property owner to exceed the base density defined by zoning and go up to the maximum density that the area can support, in exchange for a payment or an in-kind contribution, such as funding and building a public-use facility on his land site (e.g., a theatre, playground, public space, etc.).

Applies to urban areas that are designated to be receivers of such extra density (can be a corridor along a metro line or a major street or an entire city). DRs can be sold to an individual property or auctioned as certificates applicable to any property in a receiving zone.

Pros

- Mobilizes resources for public capital investment or obtains public-use facilities or amenities without public spending
- Revenues can be very substantial
- Voluntary for private sector developers / property owners, so in most cases doesn't face strong opposition

Cons

- Is controversial, because government may hold the base density artificially low, in order to extract payments from developers / owners
- One-time revenue, not stable or predictable
- Can work only in areas of vibrant real estate markets with demand for higher density
- Complex and costly administrative system
- Non-transparent procedures of approval prone to political influence and corruption

Some critical prerequisites

- Policy and implementation regulation allowing sales of DR / density bonuses
- Special zoning that allows sales of DR / density bonuses
- Complex administration

Sale of development rights (DRs) or density bonuses

Example: Bethesda, MD, USA

Montgomery County, MD, granted the Chevy Chase Bank the right to build a two-tower building (instead of one tower permitted by base zoning)...



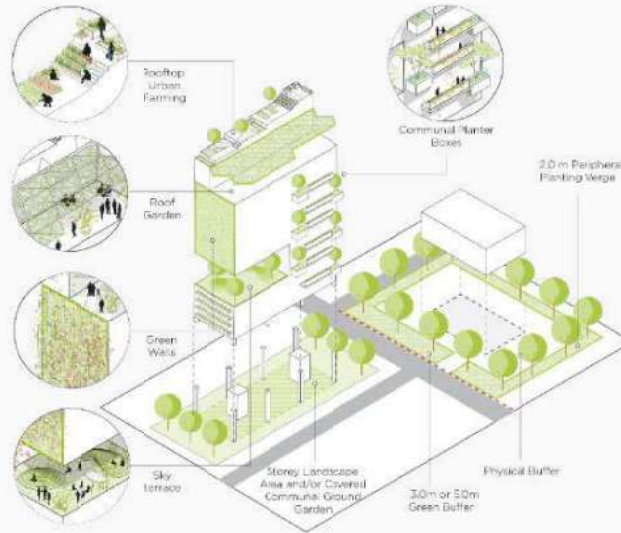
...in exchange for the Chevy Chase constructing a public theater on its own land site



Sale of development rights (DRs) or density bonuses

Example: Bonus gross floor area for green building features, Singapore

Greenery and public spaces in return for density and/or height bonuses



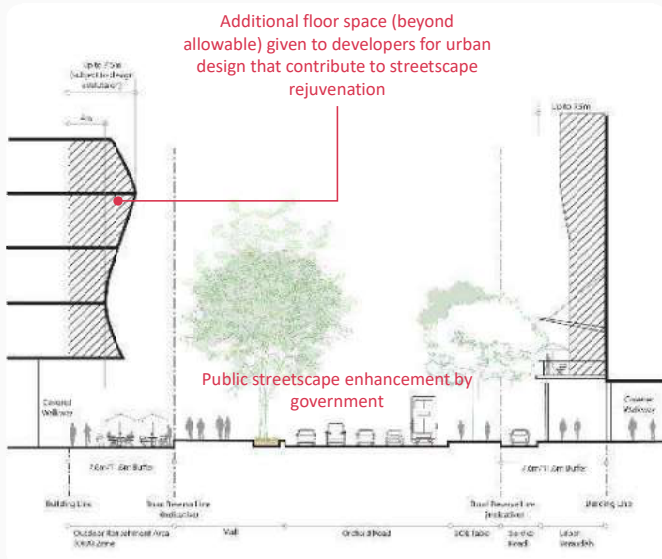
Source: Kaw, Lee, Wahba (2020)



Sale of development rights (DRs) or density bonuses

Example: Façade articulation incentive, Singapore

Private developer incentives to enhance private building facades



Source: Kaw, Lee, Wahba (2020)

Before and after streetscape and private development rejuvenation



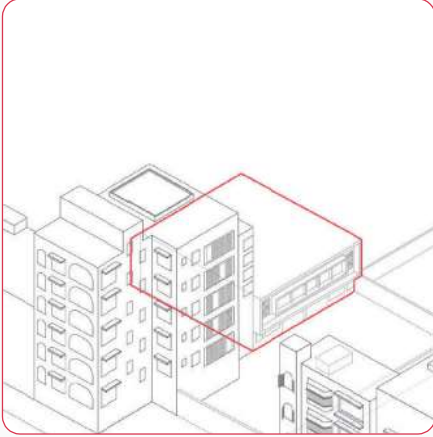
Source: DP Architects



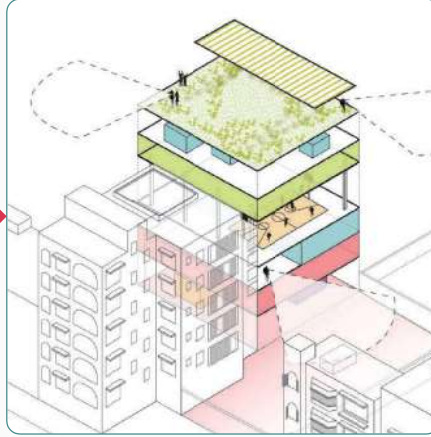
Intensification of land uses

Example: Dhaka City Neighborhood Upgrading Project, Bangladesh

From existing single-storey, single-use municipal community centers

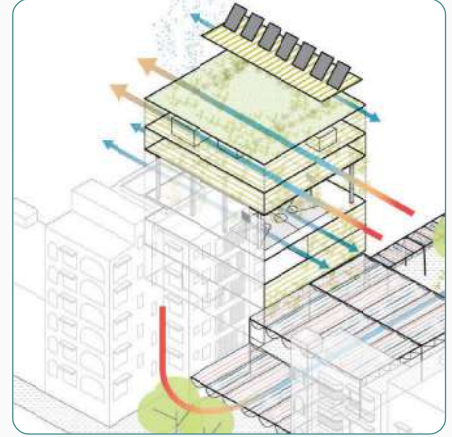


To intensification with multiple public uses: community center; sports facility; police post; health clinic



Source: Kaw, Lee, Wahba (2020)

Integration of green building features such as: natural ventilation, solar and rainwater harvesting



Intensification of land uses

Example: Co-located community hubs, Singapore

Planners in Singapore plan to build upon the sense of place of an existing library, by creating a hub around it



Clementi Library, Singapore
Source: National Library Board, Singapore

Co-located community hubs in Singapore required a collaborative inter-agency governance approach



Our Tampines Hub, Singapore

Multiple public uses in same location seen as a strategy to rejuvenate neighborhoods



Countries where LVC instruments are being successfully implemented

INSTRUMENT	COUNTRIES WHERE INSTRUMENT IS USED
Leases or concessions	Widely used for short-term leases of vacant municipal land/property; less for commercial investments
Land/property sale	Widely used when applicable
Air rights contracts	Used in Canada, France, India, Philippines, US, Poland , and by government entities managing TOD
PPPs / Joint development agreements	Cost-sharing JDAs for delivering public-use facilities widely used in OECD countries (as PPPs)
Sale of development rights / density bonuses	Some big cities in many OECD countries, Singapore , and some cities in Brazil
Conversion fee	Used in India, Indonesia , and US
Land readjustment	Germany, Japan, India, Ethiopia, South Korea, Philippines
Local property tax	Canada, US, Latin America (16 countries), Europe (33 countries), Asia (24 countries), Africa (25 countries)
Real estate transfer tax	Australia, France, Japan, Russia, Turkey, UK , and US
Developer charge/exaction	Widely used for funding off-site infrastructure and municipal services
Special assessment district	US for medium/large scale infrastructure development (roads, water)
Real estate capital gain tax	Canada, Pakistan and US
Tax increment financing	US states , for medium/large scale infrastructure, urban regeneration, environmental rehabilitation
Betterment charge	Spain, Israel , and a few cities in Latin America

LVC instruments and their potential public benefits

INSTRUMENT	FISCAL	IN-KIND	OTHER BENEFITS
Leases or concessions			Land/space for private economic activities
Land/property sale	Increase revenues		
Air rights contracts			More intensive use of space
PPPs / Joint development agreements	Sale revenue, reduction of expenditure		
Sale of development rights / density bonuses	Revenues for infrastructure	Public-use facility on private land	
Conversion fee	Increase revenues		
Land readjustment	Recover infrastructure costs	Land for public uses	
Local property tax	Increase OSR		
Real estate transfer tax			
Developer charge/exaction	Revenues for infrastructure or to recover infrastructure costs	Land for public use on large projects; or in lieu of payment	
Special assessment district			
Real estate capital gain tax	Increase revenues		
Tax increment financing	Recover infrastructure costs		
Betterment charge	Increase revenues		

How wide is the payer's base?

INSTRUMENT	WHO PAYS?	PARTICIPATION	PAYER'S BASE
Leases or concessions	Lessee	Voluntary	Varies, rare
Land/property sale	Future owner		
Air rights contracts	Owner		
PPPs / Joint development agreements	Developer		
Sale of development rights / density bonuses	Developer	Voluntary	Rare
Conversion fee	Owners	Voluntary, then mandatory	Medium
Land readjustment			Rare
Local property tax	Owner	Mandatory	Wide
Real estate transfer tax	Seller or buyer		
Developer charge/exaction	Developer		
Special assessment district	Owner		
Real estate capital gain tax	Seller		
Tax increment financing	Owners		
Betterment charge			Rare

Considerations to implementing LVC instruments

1. **What are the primary public benefits, and who pays?**
2. **How wide is payers' base? Is this one-time or recurrent? How suitable for short-term vs long-term?**
3. **What level of capacity is needed? What are the transaction costs? And is municipal regulation required / prerequisites met?**
4. **Is there political acceptance?**

Land value capture in the face of COVID-19 and climate change

5. How can cities still benefit from LVC in the face of COVID-19?

- Financial pressures create need for other sources of revenues
- Additional strain on municipal infrastructure and budgets (e.g., need to reconfigure spaces in public properties)
- COVID-19 induced market environment, with its general economic downturn expected to lower demand for office space and specialized properties

6. Can LVC instruments be used strategically to address city resilience and climate change?

- Need to deliver green and resilient infrastructure to address climate change mitigation and climate change



Source: Jon Kher Kaw

References

1. O. Kaganova, 2020. *How American Cities Can Benefit from "Land Value Capture" Instruments in the Time of COVID-19 and Beyond*. Real Estate Issues, Volume 44, Number 18.
2. Kaw, Jon Kher, Hyunji Lee, and Sameh Wahba, editors. 2020. *The Hidden Wealth of Cities: Creating, Financing, and Managing Public Spaces*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1449-5.

Thank you

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Key Learnings from International Experience

Land Value Capture - Towards Planning & Financing Equitable Cities In India

Aparna Das

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Overview of LVC Experience in India – Mr Padmanabhaiah

Learning by Doing

Mainstreaming in the policy discourse

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Wide Range of LVC Instruments – Mr Jon Kher Kaw, WB

However, many are not used commonly

Leases or concessions. Contract allowing a private sector tenant rights to use a site for a period of time, for a payment

Land/property sale. Sale of ownership of vacant or underused municipal land or property

Air rights contracts. Rights to use the space above land in to build a private property

PPPs / Joint development agreements. Joint development between municipality and developer for private and/or public use on municipal land

Naming rights. Selling the naming rights of municipal property to help renovate or maintain their facilities.

Intensification of land uses. Combining several public uses on a government land site or sharing public land or facilities with the private sector.

Sale of development rights / density bonuses. Rights that allow a developer or property owner to exceed the base zoning density in exchange for a payment or an in-kind contribution of public use facility (such as public spaces)

Conversion fee. Conversion of land classified as not-developable for development

Land readjustment. Government re-parcels and regularizes privately-owned land in predefined area; reserves spaces for public use and infrastructure; some sites to pay for infrastructure; and returns smaller but more valuable plots to previous owners

Local property tax. Mandatory recurrent tax levied on land, buildings

Real estate transfer tax. Levied upon completion of transaction

Developer charge/exaction. One-time contribution of land for public facilities/infrastructure in exchange for development rights

Special assessment district. Recurrent fee to recover infrastructure costs from property owners in designated area

Real estate capital gain tax. Levied on increase in property value from its initial purchase

Tax increment financing. Assigning revenues collected from increased tax base to designated area for development

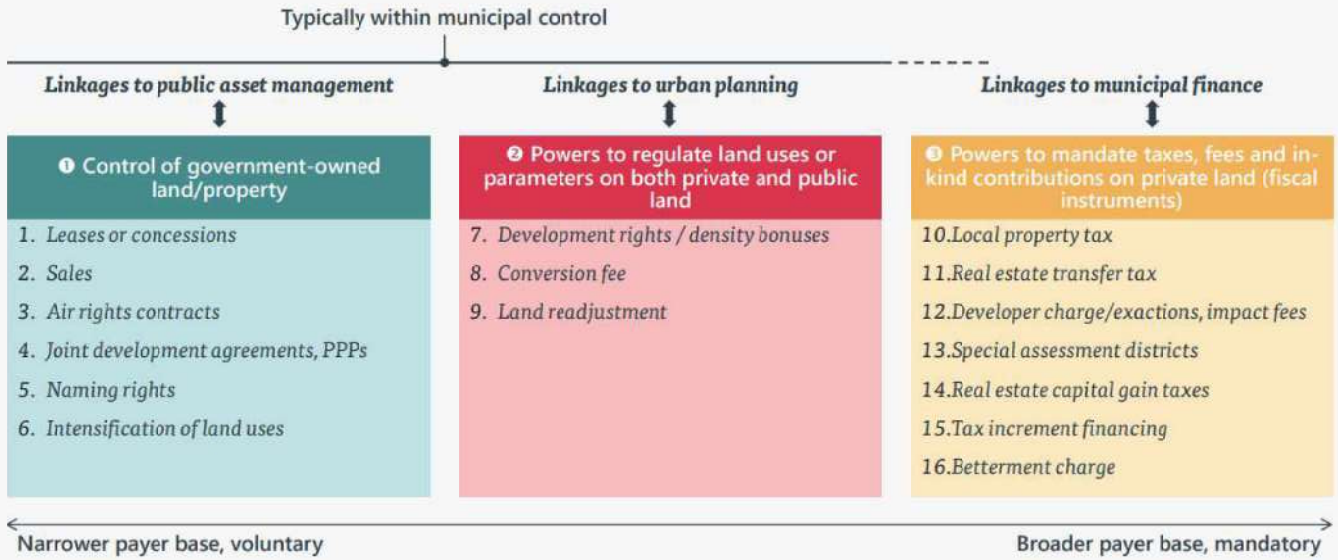
Betterment charge. One-time charge for increase in property value from new infrastructure

Wide Range of LVC Instruments – Mr Jon Kher Kaw, WB

Who can implement, and, what is the potential

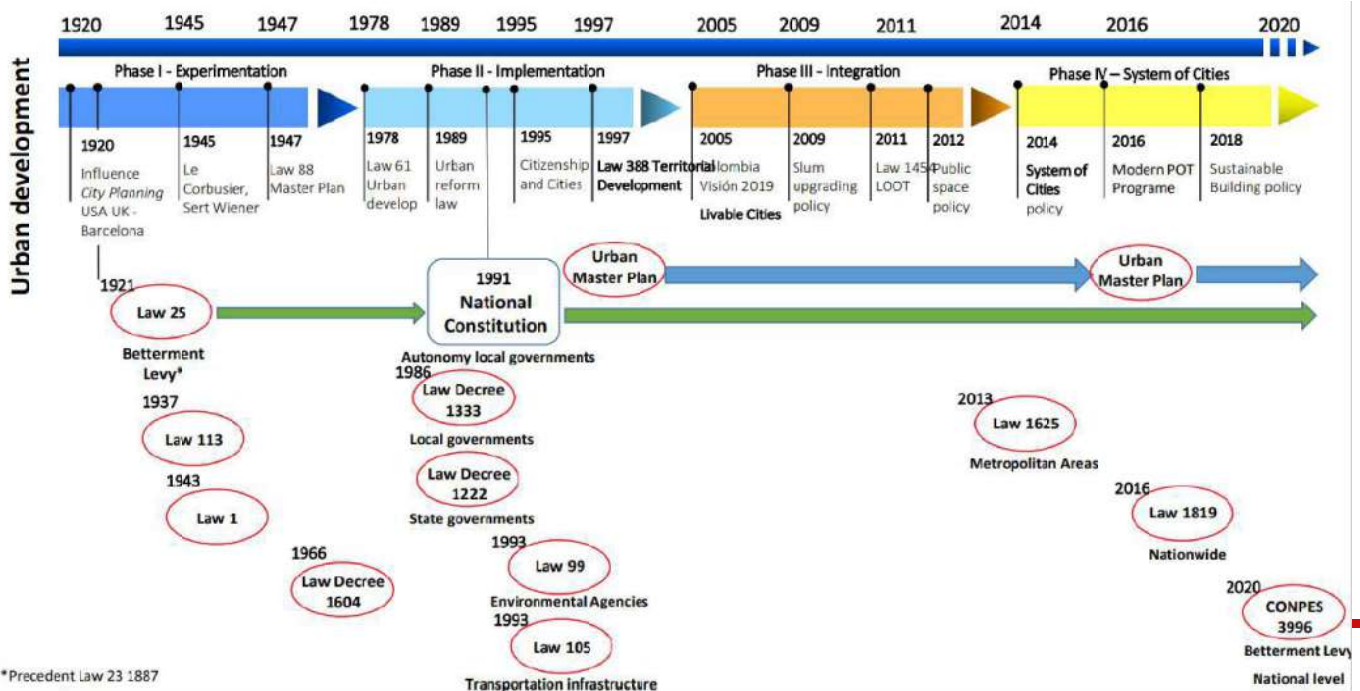
Which government powers are used in LVC instruments?

There are roughly about 16 LVC instruments used globally



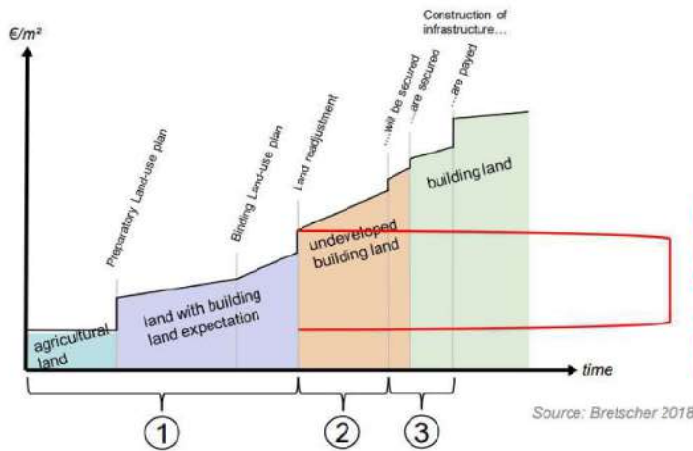
Betterment Levy – Colombia Experience (Dr Erik)

Acceptance needs time and become Cultural



Land Readjustment – Germany (Prof Linke)

1st challenge: Unearned profits of landowners available to the general public.



How can this be understood in the Indian case where we not only understand ownership rights but also 'use' rights

Landowner receives increase in land value without making any contributions (unearned profits)

- ① value increase through planning (remains by the landowners)
- ② value increase through land readjustment (skimmed by the municipality)
- ③ costs to construct public infrastructure (paid by the landowners)

ADR – CEPACs – Brazilian Experience (Prof Smolka)



Certificates of Additional Development Potential CEPACs

	Municipal Bond	• Sold by electronic auction in the São Paulo Stock Exchange Market and controlled by CVM (=SEC)
	Urban Operations	• >500Has - Rezoning/Redevelopment
	Value	• CEPAC => 1 m ² (>.8m ² , <1.2)
	Auctions	• \$550/m ² (2004) to \$2,100/m ² (2010) • First Auctions in 2004
	Revenues	• Over \$2,762 Billion from 2004/2017 • Faria Lima and Agua Espraiada UOs (currently 14!)

CEPAC – requires a very sophisticated and transparent market

Also, Capacity of Local Bodies

Land Readjustment – Tokyo (Prof Ochi) – operationalisation and capacity building is a simultaneous process

Example of a LR Project in the outskirts of Tokyo Metropolitan Area
(Misato Chuo Project 114.8 ha)

Urban development integrated with railroad development

Contribution ratio	
For infrastructure	21.6 %
For reserve land	16.2 %
Total	37.8 %

Land price (evaluated)	
Before	151,000 Yen
After	295,000 Yen

Reserve land covers 31% of the total project cost.



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LVC Implementation Risks and Bottlenecks (Barbara)

Technical & human capacity

Critical technical constraints in land registers, cadasters, valuation systems that either do not exist or that are not updated. LVC tools are not linked to local development plans.

Policy and legal frameworks

Where LVC is not well defined in the policy and legal framework, this may lead to lack of clarity about use of LVC instruments and policy goals, monitoring system and indicators for successful implementation.

Political opposition and low awareness

Passive undermining of LVC through lack of awareness and support vs. Active resistance against the use of LVC by certain groups.

Institutional mandates conflicts

Multiple institutional actors at national level have conflicting mandates in land management. There are also administrative constraints, where different government tiers have an overlap of responsibilities.

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LVC Implementation (Barbara)

- The use of **LVC instruments must be clearly aligned with objectives of the common good.**
- Urban development means a **permanent negotiation** between:
 - financial and economic efficiency,
 - equal opportunities and social justice
 - environmental sustainability.
- **Urban governance** and **urban management** are at the centre of urbanization processes. Thus, key success factors are:
 - Stakeholder involvement,
 - Accountability & transparency,
 - Trust, reliability and credibility.

Cities often are pioneers in the development of innovative instruments!

Have the courage to experiment, not one size fits all!

Be context-specific and creative with local or traditional good practices!

Where do we begin? Are there any prerequisites?

Land Valuation?

Statutory Plans?

Who implements?

Do we have success cases in India?

Is TPS a successful instrument? How do we measure success?

Rationale for Developing a India Compendium

1. Assess READINESS of States / ULBs

2. Nuanced information as not all land records are digitised and also a lot of land is under informal.

3. Disconnect between spatial planning and regular regime.

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THE BETTERMENT LEVY AND LAND READJUSTMENT FOR CLIMATE ACTION

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Introduction



Global Compendium of Land Value Capture

- First systematic overview of the use of land value capture globally
- Provides comparable information across countries and local governments
- Covers 61 countries
- Will be published in early 2022



Relevance of land value capture today

- Countries need ways to finance climate action
- Land value capture has a lot of potential
- Public actions create value and this value could be used for climate action



The betterment levy



The betterment levy's mechanism

- Value creation: the government builds public infrastructure or services that benefit nearby plots
- Value recovery: landowners pay a levy



Source: © Borrero Ochoa y Asociados Ltda., Bogotá; Martim Smolka; and Diego Erba in Smolka, M. (2013) *Implementing Value Capture in Latin America: Policies and Tools for Urban Development*, Lincoln Institute of Land Policy, pp.25, 27 and 29



The betterment levy's mechanism cont.

- The levy often amounts to the estimated total cost of public works
- The increase in land values or an 'impact rule' identify landowners who benefit and are charged
- Landowners are charged according to a formula



Source: Rojas Eberhard and Rave (2013) in Smolka, M. (2013) *Implementing Value Capture in Latin America: Policies and Tools for Urban Development*, Lincoln Institute of Land Policy, p.50



The betterment levy for climate action

- Cleaner mobility systems
- Green spaces, parks, trees
- Bike lanes
- Infrastructure for the energy transition
- Flood-risk-reduction infrastructure, drainage systems

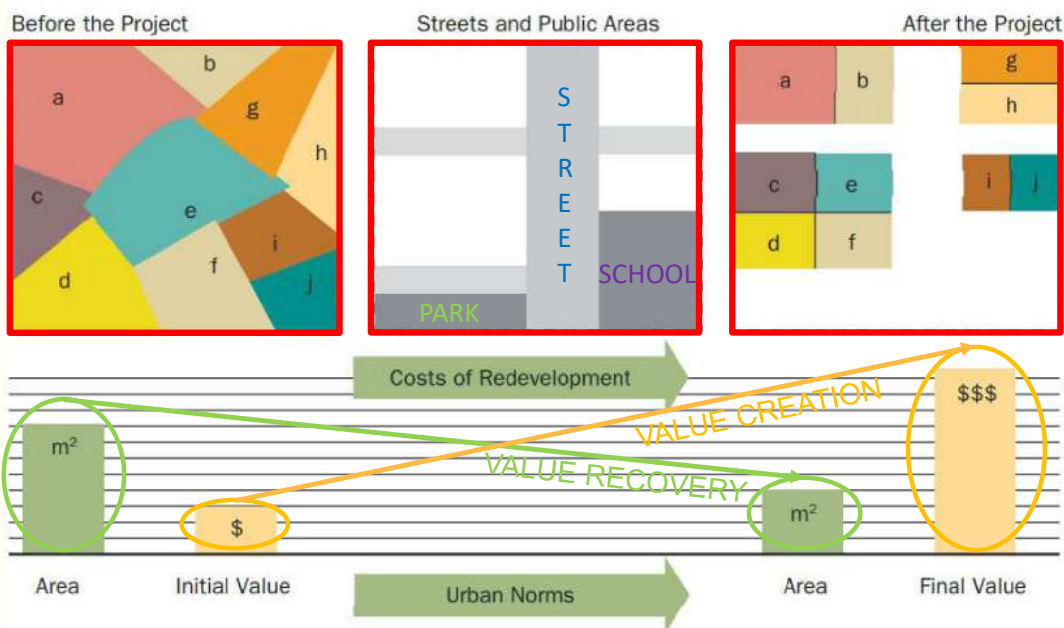


Source: OECD CFE website

Land readjustment



Land readjustment's mechanism



Source: Created by Maria Cristina Rojas Eberhard (2011) in Smolka, M. (2013) *Implementing Value Capture in Latin America: Policies and Tools for Urban Development*, Lincoln Institute of Land Policy, p.49



Land readjustment for climate action

- Cleaner mobility systems
- Green spaces, parks, trees
- Infrastructure for the energy transition
- Flood-risk-reduction infrastructure, drainage systems



Source: OECD CFE website



Other instruments for climate action

- Developer obligations
- Special assessments
- Transfer of development rights
- Strategic land management ('project announcement')

Thank you!

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Land Value Capture – Towards Planning and Financing Equitable cities in India
Presentation

DR. VATSAL PATEL

14th December, 2021

What is Land Value Capture (LVC)?

- Land Value Capture refers to a type of public financing.
- Increase in land values due to government interventions through different policies, land readjustment , new public (social or physical) infrastructure are captured through a land related taxes / levies. E.g.
 - Property tax
 - Betterment charges
 - Development charges
 - Impact fees
 - Infrastructure charges
 - TDR
 - Chargeble FSI(Additional FSI)
 - Air space selling

TOWN PLANNING SCHEME (TPs) IN GUJARAT: Sharing Land-Value Gains

- Town Planning schemes being implemented in Gujarat in contrast to direct land acquisitions.
- Landowners opposition to forcible land acquisition and combined with extremely limited fiscal capacity has left ULBs with very few options to develop well- planned and serviced urban land.
- TPs is a tool that addresses both these issues by allowing landowners to share the gain in the land value from provision of infrastructure and services developed by the government (ULBs).

TOWN PLANNING SCHEME (TPs) IN GUJARAT: Sharing Land-Value Gains

- **TPs are micro plans prepared for about 100 to 800 hectares typically involving 100 to 500 landowners.**
- **Land parcels or plots are simultaneously reorganized to provide access to each land parcel or plot by carving out roads.**
- **Land for public uses are carved out by taking a portion from each landholding.**
- **Detailed infrastructure is designed and cost estimates are prepared.**
- **This process involves intensive public participation and consultation at several stages**

Land Valuation under TPs

- **Original land parcels are considered as original plots.**
- **Land record certification by DILR (District Inspector of Land Records)**
- **Collection of Sale deed of original land parcel from registrar office**
- **Find out total land value under TPs area**

Land Valuation under TPs

- **New plots (Final plots) are reorganized/ reconstituted after carving out roads and public utility plots (E.g. EWS housing , gardens, playgrounds, schools, hospital, fire station etc.)**
- **The landlord gets 50 %~70% of their plots in the form of new plots.**
- **Collect data of Sale deed from registrar for near-by developed TPs.**
- **Final plot values should be derived from collected Sale deed data.**

Land Valuation under TPs

- **The difference between original land value and final plot land value after TPs will be distributed 50-50% between land lord and authority as a contribution towards infrastructure development.**
- **This contribution of enhanced value is generally known as betterment charge.**
- **In the Gujarat Town Planning and Urban Development Act (GTPUD Act), 1976 “Betterment charge” word is not used but it is considered as levies against urban infrastructure.**

A Simplified Example



Survey No	Original Plot No	Owner	Original Plot Area (sq m)
1	2	3	4
314	1	Ajaybhai	1300
315	2	Harishbhai	2500
316	3	Kantibhai	2700
317	4	Chiragbhai	2200
318	5	Maheshbhai	2400
319	6	Kanubhai	2700
320	7	Natubhai	2200

A Simplified Example



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316	3	Kantibhai	2700
317	4	Chiragbhai	2200
318	5	Maheshbhai	2400
319	6	Kanubhai	2700
320	7	Natubhai	2200
		Total	16000
		Road	1100
		Infrastructure	600
		Garden	1200
		Land for Sale	1100
		Total	4000

A Simplified Example



Survey No	Original Plot No	Owner	Original Plot Area (sq m)	25 % Deduction
1	2	3	4	5
				25% of 4
314	1	Ajaybhai	1300	325
315	2	Harishbhai	2500	625
316	3	Kantibhai	2700	675
317	4	Chiragbhai	2200	550
318	5	Maheshbhai	2400	600
319	6	Kanubhai	2700	675
320	7	Natubhai	2200	550
		Total	16000	4000
		Road	1100	
		Infrastructure	600	
		Garden	1200	
		Land for Sale	1100	
		Total	4000	

A Simplified Example



Survey No	Original Plot No	Owner	Original Plot Area (sq m)	25 % Deduction	Final Plot Area (sq m)
1	2	3	4	5	6
				25% of 4	4 - 5
314	1	Ajaybhai	1300	325	975
315	2	Harishbhai	2500	625	1875
316	3	Kantibhai	2700	675	2025
317	4	Chiragbhai	2200	550	1650
318	5	Maheshbhai	2400	600	1800
319	6	Kanubhai	2700	675	2025
320	7	Natubhai	2200	550	1650
		Total	16000	4000	12000
		Road	1100		
		Infrastructure	600		
		Garden	1200		
		Land for Sale	1100		
		Total	4000		

A Simplified Example



Survey No	Original Plot No	Owner	Original Plot Area (sq m)	25 % Deduction	Final Plot Area (sq m)
1	2	3	4	5	6
				25% of 4	4 - 5
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315	2	Harishbhai	2500	625	1875
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317	4	Chiragbhai	2200	550	1650
318	5	Maheshbhai	2400	600	1800
319	6	Kanubhai	2700	675	2025
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		Land for Sale	1100		
		Total	4000		

A Simplified Example



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318	5	Maheshbhai	2400	600	1800
319	6	Kanubhai	2700	675	2025
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		Total	16000	4000	12000
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		Infrastructure	600		
		Garden	1200		
		Land for Sale	1100		
		Total	4000		

A Simplified Example



Survey No	Original Plot No	Owner	Original Plot Area (sq m)	25 % Deduction	Final Plot Area (sq m)
1	2	3	4	5	6
				25% of 4	4 - 5
314	1	Ajaybhai	1300	325	975
315	2	Harishbhai	2500	625	1875
316	3	Kantibhai	2700	675	2025
317	4	Chiragbhai	2200	550	1650
318	5	Maheshbhai	2400	600	1800
319	6	Kanubhai	2700	675	2025
320	7	Natubhai	2200	550	1650
		Total	16000	4000	12000
		Road	1100		
		Infrastructure	600		
		Garden	1200		
		Land for Sale	1100		
		Total	4000		

A Simplified Example



Survey No	Original Plot No	Owner	Original Plot Area (sq m)	25 % Deduction	Final Plot Area (sq m)	Original Plot Value (Rs. per sq m)	Compensation (Rs.)
1	2	3	4	5	6	7	8
				25% of 4	4 - 5		5 x 7
314	1	Ajaybhai	1300	325	975	175	56875
315	2	Harishbhai	2500	625	1875	175	109375
316	3	Kantibhai	2700	675	2025	200	135000
317	4	Chiragbhai	2200	550	1650	200	110000
318	5	Maheshbhai	2400	600	1800	200	120000
319	6	Kanubhai	2700	675	2025	225	151875
320	7	Natubhai	2200	550	1650	225	123750
		Total	16000	4000	12000		
		Road	1100				
		Infrastructure	600				
		Garden	1200				
		Land for Sale	1100				
		Total	4000				

A Simplified Example



Survey No	Original Plot No	Owner	Original Plot Area (sq m)	25 % Deduction	Final Plot Area (sq m)	Original Plot Value (Rs. per sq m)	Compensation (Rs.)	Final Plot Value (Rs. per sq m)	Final Plot Value (Rs.)
1	2	3	4	5	6	7	8	9	10
				25% of 4	4 - 5		5 x 7		6 x 9
314	1	Ajaybhai	1300	325	975	175	56875	525	511875
315	2	Harishbhai	2500	625	1875	175	109375	525	984375
316	3	Kantibhai	2700	675	2025	200	135000	600	1215000
317	4	Chiragbhai	2200	550	1650	200	110000	600	990000
318	5	Maheshbhai	2400	600	1800	200	120000	600	1080000
319	6	Kanubhai	2700	675	2025	225	151875	675	1366875
320	7	Natubhai	2200	550	1650	225	123750	675	1113750
		Total	16000	4000	12000				
		Road	1100						
		Infrastructure	600						
		Garden	1200						
		Land for Sale	1100						
		Total	4000						

A Simplified Example



Survey No	Original Plot No	Owner	Original Plot Area (sq m)	25 % Deduction	Final Plot Area (sq m)	Original Plot Value (Rs. per sq m)	Compensation (Rs.)	Final Plot Value (Rs. per sq m)	Final Plot Value (Rs.)	Increment in Land Value (Rs.)
1	2	3	4	5	6	7	8	9	10	11
				25% of 4	4 - 5		5 x 7		6 x 9	10 - (6x7)
314	1	Ajaybhai	1300	325	975	175	56875	525	511875	341250
315	2	Harishbhai	2500	625	1875	175	109375	525	984375	656250
316	3	Kantibhai	2700	675	2025	200	135000	600	1215000	810000
317	4	Chiragbhai	2200	550	1650	200	110000	600	990000	660000
318	5	Maheshbhai	2400	600	1800	200	120000	600	1080000	720000
319	6	Kanubhai	2700	675	2025	225	151875	675	1366875	911250
320	7	Natubhai	2200	550	1650	225	123750	675	1113750	742500
		Total	16000	4000	12000					
		Road	1100							
		Infrastructure	600							
		Garden	1200							
		Land for Sale	1100							
		Total	4000							

A Simplified Example



Survey No	Original Plot No	Owner	Original Plot Area (sq m)	25 % Deduction	Final Plot Area (sq m)	Original Plot Value (Rs. per sq m)	Compensation (Rs.)	Final Plot Value (Rs. per sq m)	Final Plot Value (Rs.)	Increment in Land Value (Rs.)	50% of Increment in Land Value (Rs.)	Net Demand (Rs.)	Net Gain of Land Owner (Rs.)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
				25% of 4	4 - 5		5 x 7		6 x 9	10 - (6x7)	50% of 11	12 - 8	10 - 13
314	1	Ajaybhai	1300	325	975	175	56875	525	511875	341250	170625	113750	170625
315	2	Harishbhai	2500	625	1875	175	109375	525	984375	656250	328125	218750	328125
316	3	Kantibhai	2700	675	2025	200	135000	600	1215000	810000	405000	270000	405000
317	4	Chiragbhai	2200	550	1650	200	110000	600	990000	660000	330000	220000	330000
318	5	Maheshbhai	2400	600	1800	200	120000	600	1080000	720000	360000	240000	360000
319	6	Kanubhai	2700	675	2025	225	151875	675	1366875	911250	455625	303750	455625
320	7	Natubhai	2200	550	1650	225	123750	675	1113750	742500	371250	247500	371250
		Total	16000	4000	12000								
		Road	1100										
		Infrastructure	600										
		Garden	1200										
		Land for Sale	1100										
		Total	4000										

Financial Analysis

- Original plot value (market value)
- Semi-final value (market value on date of declaration – intention)
- Final value (developed condition)
- Increment (increase due to TPS)
- Compensation (for injurious affection)
- Contribution to be levied (Betterment charges) (increase in efficiency of private plot due to TPS)

Open for Discussion...

- Property tax
- **Betterment charges**
- Development charges
- Impact fees
- Infrastructure charges
- TDR
- Chargeable FSI(Additional FSI)
- Air space selling

THANK YOU

INNOVATIVE FINANCING OF URBAN INFRASTRUCTURE

The Karnataka Experience

The Context

- 1. WE ARE INCREASINGLY BECOMING MORE AND MORE AN URBAN SOCIETY. INFRASTRUCTURE GROWTH HAS NOT KEPT PACE WITH GROWING URBANIZATION**
- 2. IMPROVED INFRASTRUCTURE IS AN INEVITABLE IMPERATIVE. IT WILL HELP IN**
 - OPENING NEW AREAS FOR ECONOMIC DEVELOPMENT & GROWTH
 - AND IMPROVE EFFICIENCY OF VARIOUS FACTORS OF PRODUCTION
- 3. WHAT WE NEED TO HASTEN IN COMING YEARS:**
 - CLEANER ENVIRONMENT
 - DECONGESTING CITY CENTERS BY CORRIDOR DEVELOPMENT AND SATELLITE TOWNS
 - BETTER PUBLIC TRANSPORT INCL NMT
 - SAFER & EFFICIENT ROAD INFRASTRUCTURE
 - SAFE DRINKING WATER
 - RELIABLE, CLEANER ENERGY AND SO ON...

Financing Options

1. WILL NEED: MASSIVE CAPITAL INVESTMENTS \$50 BILLION
2. TRADITIONAL SOURCES OF: GOVT GRANTS/ PROPERTY TAXES/ BANK LOANS WILL NOT WORK
3. EVEN MARKET-BASED SOURCES OF FINANCE AND PPP WILL HAVE SEVERE LIMITATIONS
4. THEREFORE, WILL NEED TO DO OUT OF BOX THINKING TO IDENTIFY INNOVATIVE MEANS OF FINANCING URBAN INFRASTRUCTURE

Categories Of People Affected By Major Infrastructure Projects And Instruments Available For Financing:

1. **CLEAR WINNERS**
PEOPLE IN CLOSE VICINITY OF IMPACT ZONES: PREMIUM FSI (METRO CORRIDORS) AND BETTERMENT LEVIES (NEW LAYOUTS)
2. **POTENTIAL WINNERS**
 - A) WHO HAVE LANDS IN VICINITY, BUT WHOSE PERMISSIBLE LAND USE IS AGRICULTURAL - SEAMLESS CHANGE OF LAND USE ON PAYMENT OF FEES.
 - B) LARGE ESTABLISHMENTS: FOR COMMERCIAL ACTIVITIES SUCH AS ADVERTISING
 - SPACE ABOVE TRANSPORTATION HUBS METRO STATIONS
 - DIRECT ACCESS TO HUBS, STATIONS
 - NAMING RIGHTS ETC.
3. **LOSERS**
WHO HAVE TO FOREGO THEIR LAND. :GIVE DEVELOPED LANDS AS PARTIAL OR FULL COMPENSATION (EG: PRR, BDA LAYOUTS)
4. DIRECT USERS OF INFRASTRUCTURE :BY WAY OF TOLLS, ELECTRONIC PRICING ETC

We Will Need Multiple Strategies

A. LOWER THE COSTS:

- 1) OF LAND ACQUISITION, BY GIVING DEVELOPED LAND AS PARTIAL OR FULL COMPENSATION, AND.
- 2) GOVT FUNDING, BY ADOPTING PPP ROUTE, WHERE POSSIBLE

B. ENHANCE POTENTIAL REVENUE:

- 1) PREMIUM FSI IN THE IMMEDIATE IMPACT ZONE
- 2) BETTERMENT LEVY & CESS
- 3) SEAMLESS CHANGE OF LAND USE ON PAYMENT OF ENHANCED FEES
- 4) MONETIZE BENEFITS BY.

A) DIRECT ACCESS TO CREATED INFRASTRUCTURE SUCH AS METRO STATIONS, TRANSPORTATION HUBS ETC.

B) NAMING RIGHTS,

C) COMMERCIAL ACTIVITIES SUCH AS ADVERTISING RIGHTS, USE OF COMMERCIAL SPACE CREATED NEAR THE INFRASTRUCTURE PROJECTS ETC

MULTIPLE STRATEGIES (contd)

D) ADVANCE TAX RECEIPTS , BY SECURITIZATION OF FUTURE CASH FLOWS

E) CREATION OF REVOLVING FUND, BY GIVING PART TO THE CITY AS LOAN AND POOLING THE REPAYMENT OF LOAN IN THE REVOLVING FUND

F) GREEN REVOLVING FUND, BY EFFECTING COST SAVINGS THROUGH ENERGY EFFICIENCY AND RENEWABLE ENERGY PROGRAMS AND ESCROW THE SAVINGS FOR GREEN INVESTMENTS

MULTIPLE STRATEGIES (Contd)

G) INCREMENTAL PROPERTY TAX FINANCING BY INVESTING SELECTED NEW PROPERTY TAX RECOVERY INTO A SPECIFIC INFRASTRUCTURE FUND, AND NOT IN GENERAL FUND

H) CROWD FUNDING, FOR LOW COST COMMUNITY DEVELOPMENT INITIATIVES SUCH AS PARK DEVELOPMENT, CYCLE TRACKS AND FOOTPATHS FOR NMT ETC.

MEASURES TAKEN IN KARNATAKA

1. GOVT ORDER ISSUED TO FACILITATE SEVERAL OF THE ABOVE INNOVATIVE FINANCING METHODS
2. SECTION 18 OF TOWN & COUNTRY PLANNING ACT AMENDED FOR COLLECTION OF BETTERMENT LEVY AND CESS FOR MASS RAPID TRANSPORT, RING ROADS, SLUM IMPROVEMENTS, WATER SUPPLY SCHEMES, WHERE THE CESS/LEVIES ARE LINKED TO MARKET VALUE/GUIDANCE VALUE OF THE PROPERTY.

(Contd)

3. SECTION 18B OF THE TOWN AND COUNTRY PLANNING ACT AMENDED TO ENABLE COLLECTION OF CHARGES FOR PERMITTING PREMIUM FSI(OVER AND ABOVE PERMISSIBLE FSI)

4. 0.6 TIMES OF PERMISSIBLE FSI ALLOWED ON PAYMENT OF 50% OF GUIDANCE VALUE

THANK YOU

PRESENTATION ON Land Pooling scheme in Punjab

**RAVI BHAGAT I.A.S
SECRETARY MANDI BOARD
and
CEO e-GOVERNANCE**

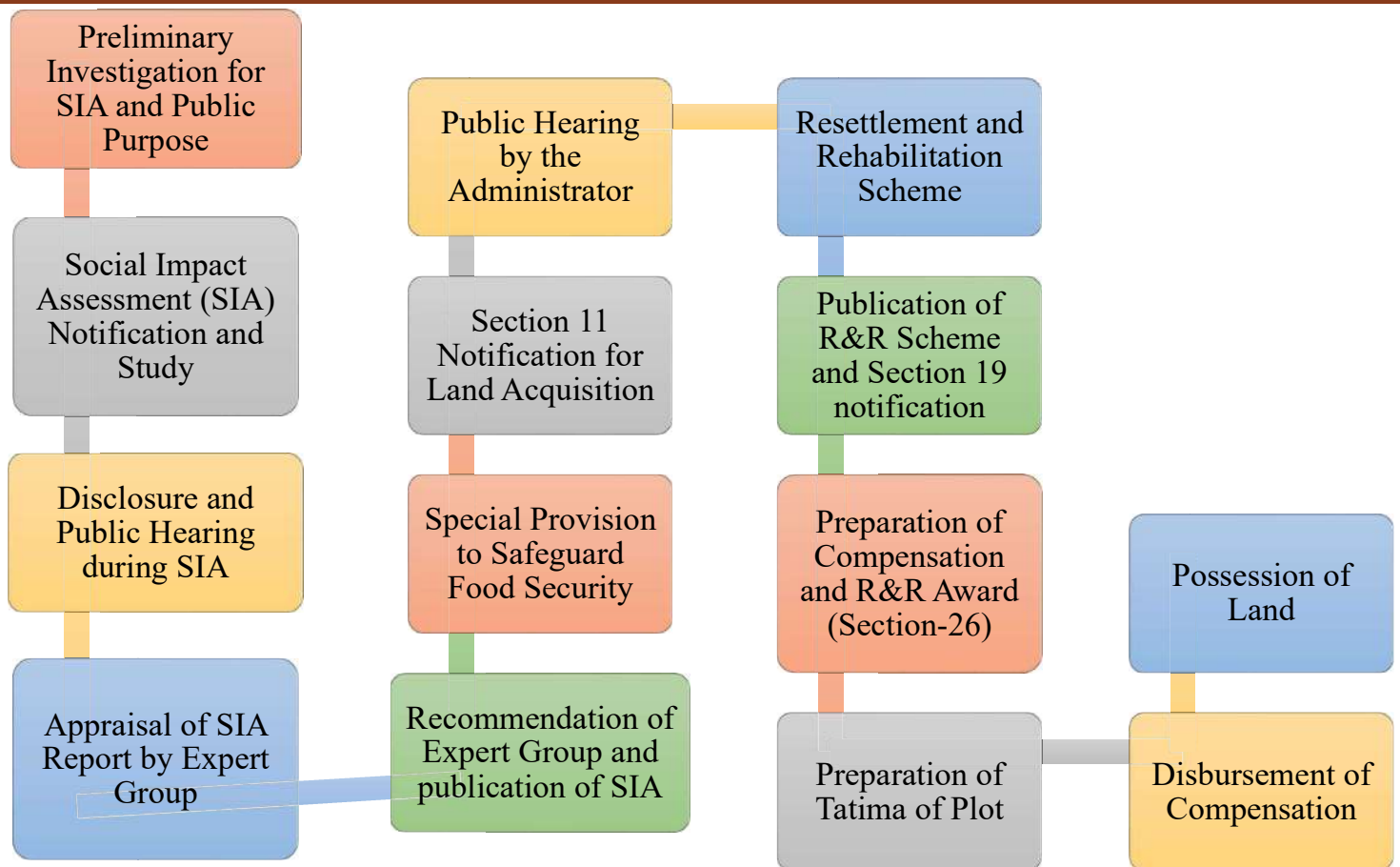
Land Pooling : Today's Agenda

Compulsory Land Acquisition often leads to interventions by courts, enhanced compensations and is time consuming. The alternative to land acquisition is land pooling which is an emerging and successful method of aggregation of land.

In this presentation, we shall exchange ideas about -

- Why Land Pooling scheme, in comparison to LARRA-2013
- (Farmers emotional attachment with the land and high compensation for land eg 2 cr. per acre)
- Concept of Land Pooling
- Strategies required to make land pooling successful
- Challenges in implementation of Land Pooling scheme

Land Acquisition Process under LARRA-2013



Land Pooling :The Concept

Land pooling is a process to aggregate land without paying cash compensation. It is a process of making land owners part of the planning and sharing developed land parcels with them.

Role of the Authority is that of a Facilitator, Regulator and a Planner.

Land pooling brings smooth and hassle-free development as land owners are partners with the Government (Acquiring Authority) and no local resentment is experienced.

Land is transferred to authorities through registered sale deeds and accordingly mutations are done.

Benefits of Land Pooling to Acquiring Authority

Land pooling is an option triggered with normal course of land acquisition under the provisions of the Land Acquisition Act

The acquiring authority does not require to raise loans for urban development

Smooth development of urban estate as land owners are partners

Return from land pooling is higher than computed compensation

Compensation paid to land owners is once for all and the acquiring authority shall not be burdened with the issues like enhancement

Option to go court or withholding acquisition by the Courts is restricted as the farmers themselves have opted for land pooling

No middleman is involved as the acquiring authority has direct interaction with the land owners

Land Pooling : Key benefits to the Land owners

- Share of developed land fetches good price and gives more returns to the land owners.
- Saleable area is given back to the land owners in the form of developed residential land along with industrial/commercial land as the case maybe.
- Land owners can sell their developed land or they can use it for their benefits.
- Share of commercial land is also at times given to the land owners so that they may regain their livelihood by adopting several business activities once the project gets executed.
- To maintain the livelihood of the land owners during planning and construction period, the authority pays land rent to the land owners which is equal to productivity of land. This cost is not too high and can be easily borne by the authority. Existence of such a provision in the Land Pooling Policy creates confidence in the mind of the land owners.

EXPERIENCES OF LAND POOLING IN PUNJAB

Sr. No.	Scheme	Year	Time Frame	Total Area acquired (in acres)	Land Pooling opted by farmers in acres
1	Aero-city	2010	14 Months	830	188 (22%)
2	IT City	2011	12 months	1693	416 (24%)
3	Sector 88-89	2011	10 months	668	614 (91%)
4	Eco city Phase-1	2011	19 Months	435	399 (91%)
5	Medi city Phase-1	2011	8 Months	97	84 (86%)
6	Eco city Phase -2 and extension	2013	7 Months	387	156 (40%)
7	Medi city phase-2	2013	7 Months	162	76 (46%)
8	Sector 90-91	2015	18 months	205	135(100%)
9	Aerotropolis	2021		1500	1460(98%)

EVOLUTION OF LAND POOLING POLICY IN PUDA/GMADA

Land pooling policy was introduced in 2008 and amended in 2013 and 2021

Policy of 2008 - Taking 1 Acre Land for Analysis

Out of 1 Acre of 4840 Sq. Yds. (4046.8 Sq.m) 50% land is available for sale & 50% for common services.

Distribution of 50% land for sale	Authority Share	Farmer's Share
Residential 1936 Sq. Yds (1619 Sq.m)	968 Sq. Yds (809.3 Sq.m)	968 Sq. Yds (809.3 Sq.m)
Commercial 242 Sq. Yds.(202 Sq.m)	121 Sq. Yds (101.17 Sq.m)	121 Sq. Yds (101.17 Sq.m)
Institutional 242 Sq. Yds (202 Sq. m)	242 Sq. Yds (202 Sq.m)	

INDIVIDUAL ENTITLEMENT AS PER LAND POOLING POLICY 2013

Land to be acquired	Developed Residential Area to be returned (in sq.yds)	Developed Commercial Area to be returned (in sq.yds)	Remarks
1 Kanal (605 Sq.Yds)	150	-	No commercial site given
2 Kanal (1210 Sq.Yds)	300	-	No commercial site given
3 Kanal (1815 Sq.Yds)	450	-	No commercial site given
4 Kanal (2420 Sq.Yds)	500	One shop 12ft x 45 ft-60 yards	For shop basement G+1 FAR 1:2 shall be permissible
8 Kanal (4840 Sq.Yds)	1000	SCO/SCS 121 sq yds Or 2 shops 12 ftx 45 ft - 60 yds	For shop basement G+1 FAR 1:3 shall be permissible and

INDIVIDUAL ENTITLEMENT AS PER LAND POOLING POLICY 2021

Breakup of Plot Sizes to be given to landowners opting for Land pooling,
(Co Ownership in a joint khewat can opt for joint allotment as per table below)

	Residential					Commercial			
	Plots					SCO (3 FAR)		Shop (2 Far)	Booth (1 Far)
	500	300	200	150	100	200	100	60	25
1 acre (8 Kanal)	1	1	1	X	X	1	X	X	X
0.5 acre (4 Kanal)	X	1	1	X	X	X	1	X	X
0.25 acre (2 Kanal)	X	X	X	1	1	X	X	1	X
0.125 acre (1 Kanal)	X	X	X	1	X	X	X	X	1

- The land owners shall be given subsistence allowance @ Rs. 25,000/- per acre per annum up to maximum 3 years or till the possession
- In respect of the acquired land of Land owner under the Land Pooling Policy, Sahuliyat Certificate shall be issued by the Land Acquisition Collector

AERO-CITY URBAN ESTATE PROJECT

For one acre of land acquired - 978 sq yds residential and 121 commercial shall be given proportionately

Aero City S. A. S Nagar	
Acquired land (in acres)	771
Land Pooling given (in acres)	151
Cash Compensation (in acres)	620
Rate (per acres)	2 Crores Approx
Date of award	2010

➤ SALIENT FEATURES

It was the first project in GMADA wherein Land Pooling was introduced

Formulation of Land Pooling

Procedure to convince land owners for land pooling

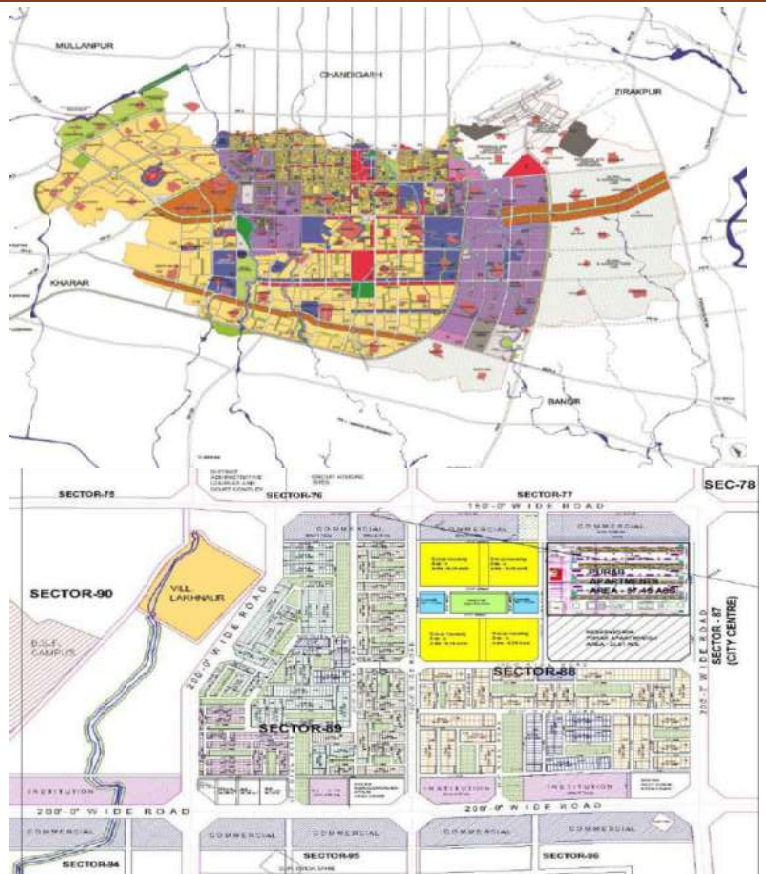
Finalization of Layout Plan took time

GMADA had little exposure to prepare land plan and notification

Shortage of Revenue staff

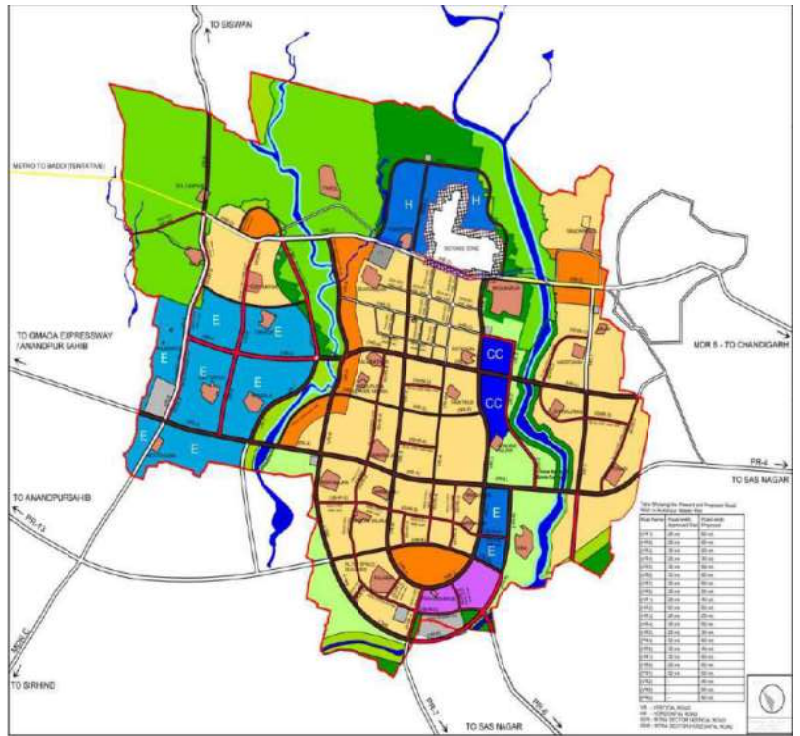
SUCCESSFUL LAND ACQUISITION UNDER LAND POOLING SCHEME

Sector 88-89, S. A. S Nagar	
Acquired land (in acres)	663.87
Land Pooling given (in acres)	561.70
Cash Compensation (in acres)	102.17
Rate (per acres)	1.79 Cr.
Date of award	15-11-2011



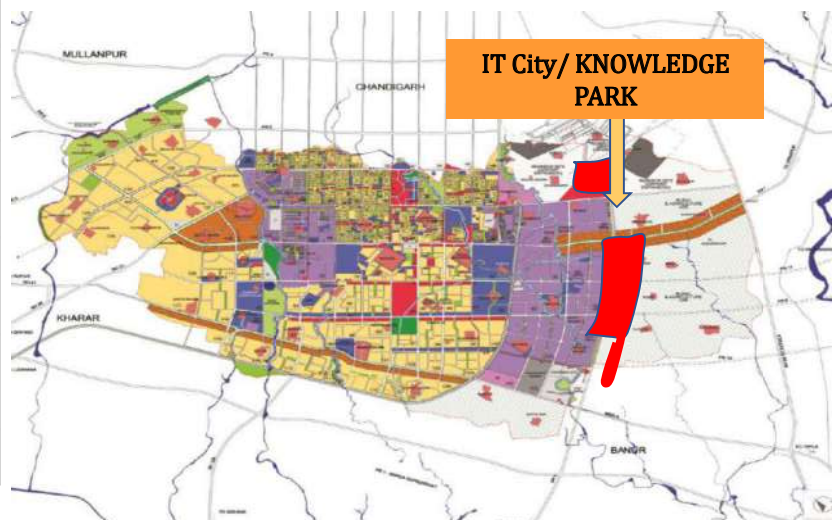
SUCCESSFUL LAND ACQUISITION UNDER LAND POOLING SCHEME (MEDI CITY)

Medi City, New Chandigarh	
Acquired land (in acres)	97.425
Land Pooling given (in acres)	76.69
Cash Compensation (in acres)	20.73
Rate (per acres)	1.50 Cr
Date of award	22-11-2012



SUCCESSFUL LAND ACQUISITION UNDER LAND POOLING SCHEME (IT CITY)

IT City/ Knowledge Park	
Acquired land (in acres)	1693.8124
Land Pooling given (in acres)	416.79
Cash Compensation (in acres)	1277.07
Rate (per acres)	1.69 Cr.
Date of award	13-12-2011



COST BENEFIT ANALYSIS

COST BENEFIT ANALYSIS FOR AUTHORITY (500 ACRES OF LAND)

Under Cash Compensation Scheme

Total Land Area :	500 Acres
Development Charges @50,00,000/- per Acre	Rs.2500000000/- =250 Crores
Total Cash Compensation@ 1 Cr. 50 Lakhs Per Acre	750 Crore
Interest charged for the Cash Compensation @15% per annum for 3 Years will also be the part of the expenditure	337.5 Crores
Total Expenditure	1337 Crores
Residential Area :	55 % of total land area =275 Acres =11,12,886 Sq. Yds
Commercial Area	5 % of Total Area = 25 Acres =101171.4 Sq. Yds
Selling Price of Residential Area @ Rs.20000/ Sq. Yds	1112886 x 20000 = Rs.22257720000/- = 2226 Crores
Selling Price of Commercial Area @ Rs.60000/ Sq. Yds	40671.4 x 60000 = Rs.6070260000/- = 607 Crores
Total Selling Price	2833 Crores
Benefit	2833 Cr.-1337 Cr. = 1496 Crores

Cost Benefit Analysis (500 Acres of Land)

Under Land Pooling Scheme

Total Land Area :	500 Acres =	24,20,000 Sq. Yds
Saleable Area :	300 Acres =	12,14,057 Sq. Yds
Total Area Under Land Pooling :	300 Acres	12,14,057 Sq. Yds
Residential Area :	55 % of total land area = 275 Acres	11,12,886 Sq. Yds
Commercial Area	5 % of Total Area = 25 Acres	101171.4 Sq. Yds
Land Pooling Given @ 1 Acre	1000 Sq Yds of Residential	121 Sq. Yds of Commercial
Total Area Under Land Pooling (Residential+ Commercial)	500000 Sq. Yds Residential	60500 Sq. Yds Commercial
Total Area Under Land Pooling	560500 Sq. Yds	
Balance Area after Land Pooling Under Residential	1112886-500000 =612886Sq.Yds	
Balance Area after Land Pooling Under Commercial	101171.4-60500 =40671.4 Sq.Yds	
Selling Price of Residential Area @ Rs.20000/ Sq. Yds	612886 x 20000 = Rs.12257720000/- = 1226 Crores	
Selling Price of Commercial Area @ Rs.60000/ Sq. Yds	40671.4 x 60000 = Rs.2440284000/- = 244 Crores	

COST BENEFIT ANALYSIS (500 ACRES OF LAND)

Total Amount for Saleable Area (Residential+ Commercial)	=	Rs.14698004000/- 1470 Crores
Total Expenditure • Development Charges @50,00,000/- per Acre	=	Rs.2500000000/- =250 Crores
Benefit		1470 Cr.-250Cr. = 1220 Crores

Cost benefit analysis for land owner /Farmer

Land Pooling Economics in GMADA for Residential Sectors

Usage	%	Permissible Saleable (Sq.yds.)	Rate (Rs/Sq. yds.)	Land Owner		GMADA			
				Area	Value (Rs. Cr.)	Area	Value (Rs. Cr.)		
Residential	40	1936	25000	1000	2.50	936	2.34		
EWS	5	242	0	0	0.00	242	0.00		
Commercial (with 3 FAR)	5	242	75000	200	1.50	42	0.32		
Amenities	5	242	0		0.00	242	0.00		
Public/Semi Public	4	194	6250	0	0.00	194	0.12		
Green	8	387			0.00		0.00		
Road + Parking	33	1597			0.00		0.00		
Total	100	4840							
EDC									-1.15
Internal Development									-0.40
Administrative Expenses (Chakota, Advertisement, etc.)									-0.15
Total				1200	4.00	1414	1.08		

Land Pooling Economics in GMADA for Industrial Sectors

Usage	%	Permissible Saleable (Sq.yds.)	Rate (Rs/Sq. yds.)	Land Owner		GMADA			
				Area	Value (Rs. Cr.)	Area	Value (Rs. Cr.)		
Industrial	46	2226	20000	1100	2.20	1126	2.25		
EWS	5	242	0	0	0.00	242	0.00		
Commercial (with 3 FAR)	5	242	60000	200	1.20	42	0.25		
Amenities	5	242	0		0.00	242	0.00		
Green	6	290			0.00		0.00		
Road + Parking	33	1597			0.00		0.00		
Total	100	4840							
EDC									-1.15
Internal Development									-0.40
Administrative Expenses (Chakota, Advertisement, etc.)									-0.15
Total				1300	3.40	1652	0.80		

Land Pooling –Lessons Learnt!

1. Land Pooling Policy should have flexible offers for giving developed land.
2. Land pooling should have a fixed time line and no extension should be given.
3. Massive communication strategies should be adopted which includes-
 - a) One to one canvassing & consultation in villages
 - b) Identification of key informants and educating them about land pooling
 - c) Monetary benefits of land pooling vis a vis cash compensation given to land owners needs to be highlighted
 - d) Education to land owners for utilization of benefits gained from land pooling
 - e) Educating the land owners about importance of their land pooling plots

Challenges in Land Pooling

1. Difficult for land owners to sell their plots in the market at their own due to inexperience.
2. Difficult to arrange finances for construction of their allotted plots.
3. Sometime developed plots are not given in committed time by the department.
4. After issuance LOI of plots, till the possession of developed plots land owner remained idle in the span of 3 to 4 years which created unemployment.
5. Subsistence allowance (Chakota) is financially insufficient to pull on his family.

