Infrastructure Advisory

CRISIL
An S&P Global Company

Report on land value capture tools applicability (Revised)

Development of land value capture and private investment options

The World Bank

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Abbreviations

Abbreviation	Expanded Form
ACCA	Asian Coalition for Community Action program
ACHR	Asian Coalition for Housing Rights
AMC	Ahmedabad Municipal Corporation
ARV	Annual Rental Value
AUDA	Ahmedabad Urban Development Authority
BOT	Build Operate Transfer
BT	Build-Transfer
CAGR	Compounded Annual Growth Rate
CAMA	Computer Assisted Mass Appraisal
CBD	Central Business District
CDF	City Development Fund
CEPACs	Certificados de Potencial Adicional de Construção/ Certificates of Additional Construction Potential
CRET	Comprehensive Real Estate Tax
CTUDRP	Can Tho Urban Development and Resilience Project
DOC	Department of Construction
DOF	Department of Finance
DOJ	Department of Justice
DONRE	Department of Natural Resources and Environment
DPI	Department of Planning and Investment
FAR	Floor Area Ratio
FSI	Floor Space Index
GDP	Gross Domestic Product
GIS	Geographic Information System
GoAP	Government of Andhra Pradesh
GTPUD	Gujarat Town Planning and Urban Development Act
HCMC	Ho Chi Minh City
HMDA	Hyderabad Metropolitan Development Authority
HUDA	Hyderabad Urban Development Authority
IAAO	International Association of Assessing Officers

Abbreviation	Expanded Form
IT	Information Technology
ITES	Information Technology Enabled Services
LAC	Latin America and Caribbean
LAT	Land Appreciation Tax
LBFT	Land Based Fiscal Tool
LDFC	Land Development Fund Center
LTF	Land Transfer Fees
LUR	Land Use Rights
LRO	Land Registration Office
LVC	Land Value Capture
MCH	Municipal Corporation of Hyderabad
MMR	Mumbai Metropolitan Region
MOC	Ministry of Construction
MOF	Ministry of Finance
MONRE	Ministry of Natural Resources and Environment
NA	Non-Agricultural
NMG	Nanchang Municipal Government
NRTG	Nanchang Railway Transit Group Co. Ltd.
ODA	Official Development Assistance
ORR	Outer Ring Road
PASLP	Public Announcement System of Land Price
PMU	Project Monitoring Unit
PPC	Provincial-level People's Committee
PPP	Public Private Partnership
PRC	People's Republic of China
RICS	Royal Institution of Chartered Surveyors
RMB	Renminbi
SECO	Swiss State Secretariat for Economic Affairs
SPE	Special Purpose Entity
TDR	Transfer of Development Rights
TIF	Tax Increment Financing
TPS	Town Planning Scheme

Abbreviation	Expanded Form
ULB	Urban Local Body
USD	United States Dollars
VAT	Value Added Tax
VND	Vietnamese Dong
VUUP	Vietnam Urban Upgrading Project
WTO	World Trade Organisation
Y-O-Y	Year-on-year

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1. Introduction

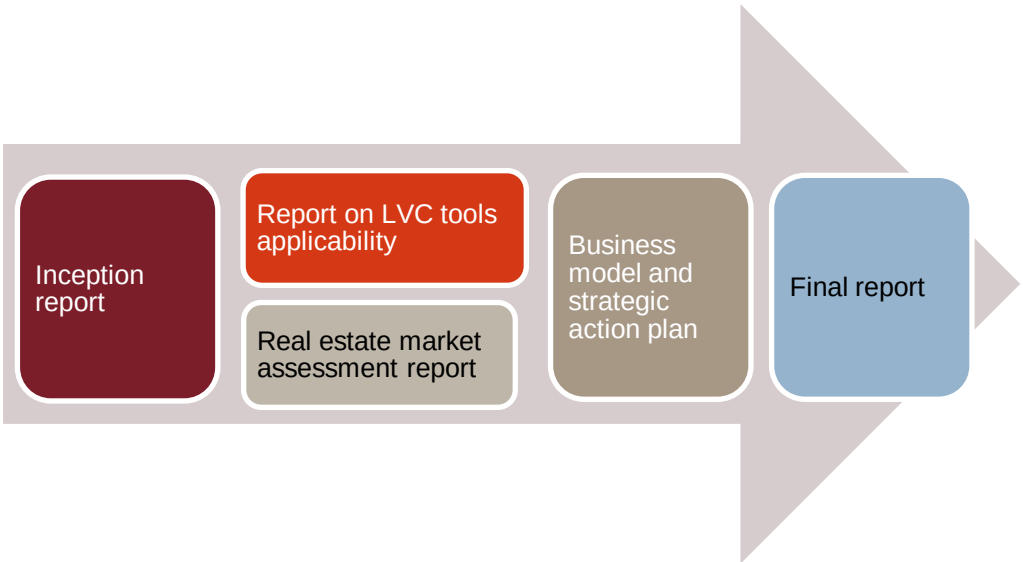
1.1 Background

The World Bank funded Can Tho Urban Development and Resilience Project (CTUDRP) is designed to increase the City's physical, financial and social resilience to adverse hydro-meteorological events, by financing infrastructure to protect the urban core from flooding and guiding the development in higher land. The project will support the construction of an embankment along the river Can Tho and also the improvement of local tidal management and drainage systems. It will also help increase intra-city connectivity by constructing two road projects and encourage new urban development in the less flood-prone area of Cai Rang, on the opposite bank of Can Tho river. The total investment planned is USD 322 million with the World Bank funding of USD 250 million, Swiss State Secretariat for Economic Affairs (SECO) funding of USD 10 million and the city government funding of USD 62 million.

It is estimated that the public investment will create private economic value, creating opportunities for the government to capture the value and recover some of the anticipated/ already incurred cost. The objective of this assignment is to develop land value capture strategy and private investment options for Can Tho city. However, to be able to capture the land value increase, the necessary legal framework and administrative capacities need to exist. Also the real estate market trends need to be assessed in order to decide upon the appropriate land value capture instruments. The assignment takes into consideration, the socio-economic context, real estate market trends, governance framework and the legal and administrative context and synthesises the strategic direction for land value capture in Can Tho. The strategy is aimed to define most implementable land value capture instruments in the short term, medium term and long term and to demonstrate the business case for these tools.

The assignment has five stages:

Figure 1-1 Assignment stages



The inception report gave an overview of all the stages of the assignment, presented preliminary understanding of the legal and institutional framework, and also identified the data requirements for the assignment.

Real estate market assessment report provided the insights of demographic and economic trends along with the real estate market profile and its growth cycle. It thus gave an overall understanding of how Can Tho can be expected to grow in short and long term.

The current report is the third deliverable of the assignment. The report aims at defining the land value capture strategy for Can Tho taking a broader view of land-based fiscal tools (LBFT). It differentiates the land value capture tools from the general land-based fiscal tools and also identifies the conditions under which the real estate market can effectively support the land value capture policies. Considering the macro-economic, demographic and real estate market conditions of Can Tho, the report presents the critical reforms for Can Tho that need to be implemented in the short term and also defines the land-based fiscal tools that Can Tho may implement in the future.

The upcoming deliverable, 'business model and strategic action plan' will present the business case for the identified land-based fiscal tools in Can Tho by taking into consideration the development potential of the city. It will demonstrate the revenue potential from the sources considering their applicability in the project influence area. It will also provide inputs to the zoning exercise in the project influence area.

The final report will provide the land value capture strategy for the Can Tho City considering all the findings from the assignment and incorporating inputs from the city and the World Bank.

1.2 About the report

The report is structured intro six chapters.

The first chapter gave the background to the assignment and set the context of assignment progress.

The second chapter introduces the concept of land value capture financing and in the broader context, the land-based fiscal tools. It introduces various land-based fiscal tools explaining more details such as the objectives, incidence, timing and frequency of implementing the tools.

The third chapter presents the current legal framework for land-based fiscal tools in Vietnam and also presents the revenue trends from the land-based fiscal tools in Can Tho.

The fourth chapter presents various case studies for the land-based fiscal tools and also describes the learnings for Vietnam in regards to each of the land-based fiscal tools.

The fifth chapter takes proper cognizance of the findings from the real estate market assessment report and the case studies and presents the approach Can Tho may take towards implementing the land-based fiscal tools.

The sixth chapter presents the way forward for Can Tho city in regards to land-based fiscal tools and also presents broad level estimates of land-based fiscal tools.

2. Introduction to land-based fiscal tools and land value capture financing

2.1 Introduction

Land-based fiscal tools (LBFT) consist of a range of instruments by which governments generate revenues that will help them realize their service delivery, infrastructure development and maintenance goals. Given that land is a finite and immobile asset, better administration of land can result in enhanced revenues for the local governments.

There are various types of land-based fiscal tools having distinct objectives. Broadly the tools can be categorized under four separate heads based on the nature of the tool:

- Tax-based instruments which are levied to meet general expenditure requirements
- Fee-based instruments which are levied for a specific end use
- Lease of land which is an instrument for the Government to generate revenue from its owned land
- Planning tools include instruments which essentially enable better area planning at the same time generating revenue or offsetting cost for the Government

These tools also differ from each other in terms of the 'timing' of levying the instrument and the frequency of levy and also the incidence of the tax or fee, i.e. ultimately who bears the tax burden. The table below describes various land-based fiscal tools along with their objectives, timing and frequency and the incidence of levy.

Table 2-1 Land-based fiscal tools

INSTRUMENT	OBJECTIVE	TIMING AND FREQUENCY	INITIAL INCIDENCE	HOW LAND VALUE INCREASE IS CAPTURED
TAX BASED INSTRUMENTS				
PROPERTY TAX TAX INCREMENT FINANCING	• To provide recurring revenue stream to the local governments • To meet general expenditure requirements • To earmark revenue from property tax to recover cost of upgradation of infrastructure in a particular area	Assessed annually, can be collected in instalments	Either the land-owner or the occupant	If property tax is linked to the market prices of properties, then property tax revenues increases with the market prices. Any increase in land prices on account of public investments thus also gets reflected in property tax revenue. However if the tax is not linked to the market price, the tool does not act as land value capture tool.
FEE BASED INSTRUMENTS				

INSTRUMENT	OBJECTIVE	TIMING AND FREQUENCY	INITIAL INCIDENCE	HOW LAND VALUE INCREASE IS CAPTURED
BETTERMENT LEVIES	• An instrument that aims to capture private land value increase on account of public investment • Betterment levy is also used as a cost recovery tool	Levied during project implementation or after the completion Payment may be collected all at once or in instalments	Existing land users whose land benefits from the public investments	When betterment levy is used as a cost recovery tool, the amount of levy is decided by distributing the cost of infrastructure on the beneficiaries in proportion with the area occupied. In this case, the tool is not used as a value capture tool. But in certain circumstances, the betterment levies are applied on any transaction taking place in the influenced area of a transport project and it is levied as a percentage of property value increase on account of the project. In this case it is used as a value capture tool.
DEVELOPMENT CHARGES AND IMPACT FEES	• To create funding for infrastructure creation	Collected once at the time of granting development permission	Land developer seeking building approval	Development charges are levied while granting building permission and are generally linked with the area of the property to be developed and the property rate in the area. Thus whenever there is an increase in the property prices, revenue from development charges also increases.
LEASE OF LAND				
LEASE OF PUBLIC LAND (INCLUDING LEASE PAYMENTS)	• To generate revenues and release public land in the market for real estate development	Collected once or in annual instalments (Lease payments may be collected once or in a recurring manner)	Purchaser of the land or leaseholder	Government may utilize the tool to capture additional value generated from public investments by timing the leasing process to

INSTRUMENT	OBJECTIVE	TIMING AND FREQUENCY	INITIAL INCIDENCE	HOW LAND VALUE INCREASE IS CAPTURED
				tap the increased land values.
PLANNING TOOLS				
DEVELOPER EXACTIONSLAND READJUSTMENT	To obtain land for infrastructure development from private land owners/ users and in return provide them	It is a contribution from the land owners at the time of project implementation.	Land owner	Land contribution in this case acts as a value capture in the influenced area of a transport project corridor.
SALE OF DEVELOPMENT RIGHTS	To create funds for infrastructure improvements in a specific area	Collected once at the time of granting development permission	Purchaser of the development right	It is the payment the developer makes against the benefits accrued on account of receiving rights to carry out additional development in the influenced area of a project, thereby allowing Government to capture value.

Source: CRIS Analysis

The results of implementing the land-based fiscal tools depend upon how the underlined land value changes. Hence it is important to understand in a little more depth the factors that influence the land value.

In a free market system, land is a commodity that is desired and can be exchanged; its value is commanded by the underlying perception of potential benefits that can be derived from it (Willy Verheye[1]). Land value is determined by a number of factors, including

- the location value reflecting original productivity of the land in case of agricultural land or the site's locational and natural qualities, its proximity to regional open space and recreational opportunities in case of urban land
- population growth and economic development; which increases the scarcity and hence demand for land
- changes in land use regulations; to allow for realisation of latent value, effected through rezoning and increase in development potential
- public investments in infrastructure and social services; reflecting the property's direct access to infrastructure and services such as public transport, roads, schools and hospitals
- private investments that increase land value; including buildings, landscaping and other facilities

After the intrinsic value, it is the economic and demographic growth that decides the real estate demand and the land value trends. The other factors, land regulations, infrastructure investments and site improvements cannot generate a large scale real estate demand if the economic and demographic growth is muted. It is only when a city enters the strong economic and demographic growth cycle that these factors can boost the real estate demand and impact land values remarkably provided land supply does not keep pace with the demand. The applicability of the land-based fiscal tools thus varies depending upon the economic and demographic phase of a city, availability of land and the regulations governing supply of land.

[1] *Source: https://pdfs.semanticscholar.org/19dc/19433d87975f02a12563eb1d42abaa8e466e.pdf*

2.2 Land value capture financing

The public investments and private investments can lead to an increase in the value of the land in terms of its utility. In the absence of major public investment for infrastructure creation, the value of land can be expected to increase steadily over time due to maintenance of infrastructure and urban services for which public expenditure is made on a regular basis. The value increase due to the public actions, i.e. public investment or a change in land regulations may turn into a windfall gain to the land user as the increase does not arise out of the land user's efforts. Hence this value increase should be captured and used further to finance public investments. The land value capture is based on the premise: public action should generate public benefit.

Land value capture financing is generating funds by capturing a part/ full value increase, arising due to the public actions, from the beneficiaries and using these funds to make more public investments.

Thus, land value capture financing takes place when the charges/ taxes are linked to the market prices thereby capturing the value increases. While all the land-based fiscal tools require authentic data records of land management activities, the sophistication of administrative processes required to record value increase due to public investments is of the highest degree. Recording the value increase becomes a critical task for the local governments to be able to implement value capture instruments.

The idea of land value capture was seeded by Henry George, an American political scientist in his book 'Progress and Poverty' in 1877 by saying that the land value increases by community efforts and hence must be recovered. According to Peterson (2009) "value capture" refers to techniques for capturing all or part of the increment in private land values caused by public investment. In this way, landowners who are direct beneficiaries of a project pay for part of project costs, rather than taxpayers at-large. According to Ingram and Hong (2011), land value is the result of both public and private investments and actions, and each entity is entitled to some portion of this value and public investment costs should be at least partially covered by the financial benefits that these investments generate.

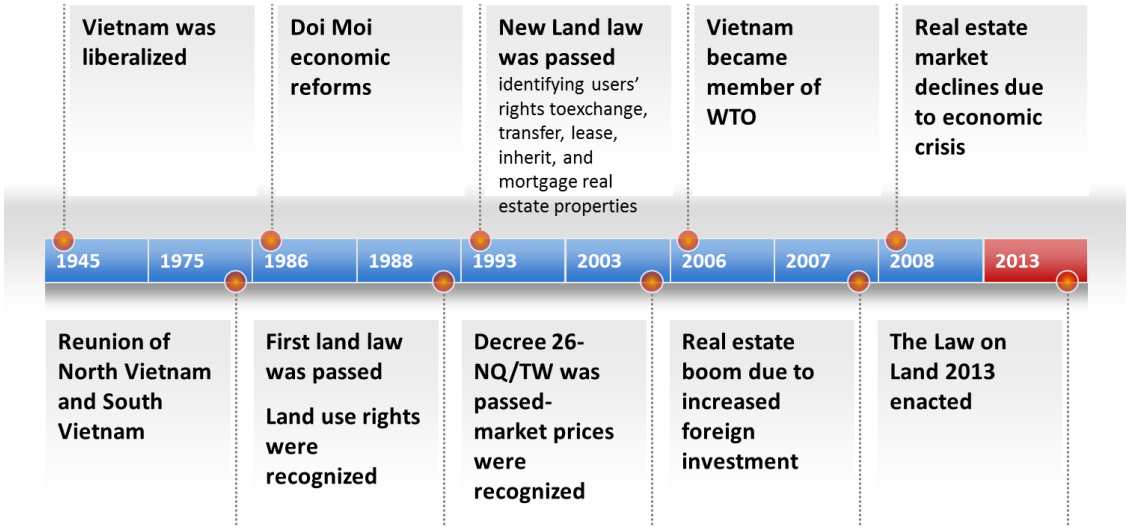
3. Overview of land-based fiscal tools in Vietnam

3.1 Evolution of land regulations in Vietnam

Vietnam liberalized in 1945 and thereafter, Vietnam's economy was centred on collective agricultural activities. The land that was owned by a few elite groups in pre-independence era was redistributed to peasants in North Vietnam. The majority of land was owned by farmers and they were encouraged to assist each other in peak labour demand. This led to a large increase in food output and government hence decided to accelerate agriculture collectivization in North Vietnam. The agricultural cooperatives were formed and farmers worked under the unified management of agricultural cooperatives. The collectivization movement achieved some success but it was short lived and the production started dipping over the years.

In 1975, which saw reunion of the country, the government enforced establishment of agricultural cooperatives in southern Vietnam. The land however was under the State's ownership and farmers were supposed to sell a quota of produce to the State at fixed prices which were inferior to the market prices. The policy resulted in sudden drop in production growth rate and the country had to import grains.

Figure 3-1 Vietnam - a brief timeline



Source: CRIS documentation

Evident failure of the economic policy led to a comprehensive economic reform in 1986, known as 'Doi Moi', with the objective of liberalising and deregulating the economy. The program abolished agricultural collectives, removed price controls on agricultural goods, and enabled farmers to sell their goods in the marketplace. The cornerstone of Doi Moi was to transform the centrally planned economy into a market-oriented system.

Doi Moi was followed with various reforms in land regulations, with the first 10 year scheme (1993-2003) which saw a great shift from centralization to decentralization of property rights. In 1988, first land law was passed that identified land use rights. After its implementation for 5 years, a new land law was passed in 1993. Land owners were given five fundamental rights to exchange, transfer, lease, inherit, and mortgage real estate properties, at prices stipulated by the government. During that period, two price systems co-existed: the market price, and the government-stipulated price.

In 2003, Decree 26-NQ/TW was passed, which pointed out that land was not only a precious national resource and special manufacturing material, but also the country's internal strength and key capital. Under the decree, real estate pricing was shifted from the dual-price mechanism to the one-price mechanism, market price being utilized.

Vietnam became the 150th member of the World Trade Organization (WTO) on November 7th, 2006, and in January 2007 it started to fulfil commitments to the WTO to gradually decrease or remove tariff and non-tariff barriers on foreign goods and services and improve legal and institutional settings for trading activities, etc. According to Ministry of Finance figures, FDI inflow for 2007 was approximately USD21 billion, double the figure for 2006 (approximately USD 10.5 billion). Year 2007 also saw an explosion of property fever in Vietnam.

Decree 181 was passed in 2004 which recognized real estate market and detailed out various activities in the real estate market. It also defined land use right certificates. The current version of the Land Law was passed in 2013.

From a state where land was owned by the government and there were no legal rights to the land users, to a state where the exchange of land is permitted, Vietnam has made a remarkable transition towards a market based land regime by recognizing the land user rights to exchange, transfer, lease and mortgage the land use rights in the Land Law 1993 and thereafter also recognizing the market prices in 2003.

3.2 Current regulatory framework for land-based fiscal tools (LBFT) in Vietnam

The constitution of Vietnam defines 'land' as a special and important resource of national development. Article 53 of the Constitution identifies 'land' as a 'public property' under the ownership of 'entire people', 'represented and uniformly managed' by the State. The organizations and individuals are entitled to land use rights[2], rights to own housing and also the right to exchange, transfer, lease, sublease, inherit, donate land use rights or land-attached assets; mortgage land use right or contribute it or a land-attached assets as capital. Article 179 of the Land Law 2013 also provides for the right of land-users to invest in land by their own or to lease land use rights to the investor or to contribute land use rights as capital to the investor for project implementation.

Thus, all land transactions are essentially the transactions of commoditized land use rights and may involve houses and land-attached assets.

The Constitution also empowers the Government to recover the land used by organizations and individuals in imperative cases provided by the law for the purposes of national defence, national security, and socio-economic developments for national and public interests. Article 62 of the Land Law 2013 defines various projects for which the Government may recover land such as: projects approved by National Assembly, the Prime Minister and the Provincial People's Council such as: projects on construction of industrial parks, export processing zones, hi-tech zones, economic zones, new urban centers; investment projects funded with official development assistance (ODA) capital, projects of construction of administrative offices, historic structures, construction projects of technical infrastructure such as water supply, transport, irrigation, electricity, communication, oil and gas pipelines, warehouses etc. Land recovery must be based upon the annual district plans approved the competent state agencies.

As per Article 19 of the Land Law 2013, the State has the responsibility to decide the revenue collection and spending on land. It also has the responsibility to prescribe the added value from land which does not originate from land user's investment through tax policies, land use levy, land rental, investments in infrastructure, and support policies for those whose land is recovered. This is the most crucial article of the Land Law as it recognises and provides a legal

[2] *Article 166 of the Land Law provides list of land use rights. They are listed in Annexure 2.*

basis for land value capture in Vietnam. It also establishes the condition that all the policy and regulatory changes can only be implemented through the approval of the Central Government[3].

The current legal framework defines broadly six[4] land-based fiscal tools. These are:

1. **Lease/ allocation of public land (Land use levy/ rental**)– is linked to the provision of a land use right by the government to individuals or organizations. As per clause 21 of article 3 of the Land Law 2013, land use levy is the amount of money that a land user shall pay to the State when being allocated land with land use levy by the State, for permission to change the land use purpose, or having land use rights recognized by the State. As per article 107 of the Land Law 2013, land rental is collected when the State leases out land use rights. While this is a general revenue to the government whenever there is allocation or leasing of land, government also uses this tool to generate funds for capital investment.

   Article 62 of the Law on Urban Planning (2009) allows the government agencies to acquire land along both sides of a road development project and put the land on auction. Land use levy/ rental thus becomes an important revenue for funding capital investment in Vietnam.

2. **Registration charge** – is charged for granting certificate of land use right/ ownership of houses. The registration charges are levied when a land user needs to register the land use right, which could be either when government grants a land use right or when there is a transfer of a land use right. Legal provisions for registration charges are laid down in Circular 301/2016/TT-BTC.

3. **Non-agricultural land use tax** – is a recurring tax to be paid by the land users. As per the Law on Non-Agricultural Land Use Tax 2010, this land use tax is levied on the land users of residential land (rural or urban) and non-agricultural land, irrespective of whether the land use right is registered or not. This is the only recurring form of land value capture for the government. Furthermore, land use tax is only levied on land, and not on built-up structures or land-attached assets.

4. **Planning license fees and construction permit fees** – are charged to allow construction activities on a land parcel. Provisions for planning license fees are laid down in the Law on Urban Planning 2009 whereas legal provisions for construction permit fees is laid down in the Law on Construction 2014.

5. **Exaction from developer in lieu of development rights** – Developer exaction exist in three forms as per Vietnamese law – offering developers additional development rights in return for reconstruction of old apartment buildings (Decree 1010/2015/ND-CP on building residential houses), development of social housing as a part of commercial housing projects (Decree 188/2013/ND-CP on social housing), and lastly developing infrastructure in exchange for land use rights (Decree 15/2015/ND-CP on PPPs).

6. **Income tax on real estate property** – Law on Personal Income Tax, 2007 and the Law on Enterprise Income Tax, 2008 provide for levy of an income tax on the income earned from transfer of a real estate property. The rate for income tax on transfer of real estate property is a 25%.

The following sections provide more details for each of these land-based fiscal tools.

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[3] Decree No. No. 54/2017 / QH14 provides Ho Chi Minh City's council a power to send suggestions to the Central Government on increases of tax rates for some goods subject to special consumption tax and tax on environmental protection for consideration of the Standing Committee of National Assembly. The rates so proposed shall not exceed 25% than the prevailing rates. This is the only exception where the city can propose tax rates for Central Government's approval. City is not empowered to decide the rates on its own.

[4] There is also an income tax levied when there is a transfer of land use rights from one entity/ individual to the other, which is levied on the amount of profit generated through the transaction.

3.2.1 Land use levy/ rental

3.2.1.1 Introduction

The land use levy/ rental essentially is the price paid to the government for a particular land use right on a particular land parcel. The land use levy is applicable when government is allocating land[5], while the rental is applicable when the land is leased. While granting a land use right, government also defines the land use term which could either be a stable term or a limited term. The land is allocated or leased depending upon the proposals of annual district level land use plans[6] and land use demands as indicated in investment project documents or in applications for land allocation or lease or change in land use purpose. Detailed process of granting the land use right is elaborated in Annexure 4: Process of granting a land use right.

Land use levy is received by the government in the following cases:

- Residential land
- Investment projects for construction of houses for sale or sale and lease both

As the land use term is stable[7] both for the residential land and also for the buyers of residential land in the investment project for construction of houses, land use levy is essentially a one- time revenue for the government.

The rental is received in the following cases:

- Investment projects on houses for lease
- Land for trading, production, construction of public facilities for commercial purpose, Office facilities
- Investment projects for non-agricultural businesses
- Land for agriculture, aquaculture, forests outside the set quota

As the lease is always granted for a defined limited term, the lease rental becomes a recurring type of revenue for the government. Also government provides the land users the choice of paying the rental annually[8] or full rental value at the time of grant of land use right. If it is paid annually, the government is entitled to receive smaller amounts each year for the entire period of the lease. However, if full rental is paid at the grant of right, government receives a bulk of payment at the start of lease period. This not only provides the government the time value advantage but also absolves it from administrative hassles of collections for the entire lease period.

The government also charges land use levy/ rental when there is a change in land use or land use right or land use term. According to article 57 of Land Law 2013, the land use changes which require government permission include:

- Change of land from one type of agricultural land to other type of agricultural land
- From agricultural land to non-agricultural land
- Non-agricultural land allocated without land use levy to non-agricultural land allocated with land use levy or leased land
- From non-residential to residential land

In case the land use purpose is changed, the new land use term shall be calculated from the time of the decision on approval. The land use terms in case of change in land use is defined in article 127 of the land Law as below.

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[5] There are certain land allocations that happen without land use levy as well. Details are given in Annexure 3. As per Article 173 of the Land Law 2013, the organizations which are allocated land without land use levy are not entitled to exchange, transfer, donate or lease land use rights, neither are they entitled to receive any compensation from the Government in the situation of land recovery.

[6] Land use master plan and land use plans are described in detail in Annexure 5.

[7] Stable / long term refers to a land use term that is permanent unless revoked.

[8] If it is annual rental payment, the land user is not entitled to transfer the land use rights. Thus, the land leased with annual rental payment is in effect ceased from entering into the market. Such users can only sub-lease the land. (Article 175 and Article 179 of Land Law 2013)

Table 3-1 Land use change and applicable land use term

LAND USE CHANGE	LAND USE TERM APPLICABLE
FROM AGRICULTURAL PURPOSE TO NON-AGRICULTURAL PURPOSE	shall be determined on the basis of the land type of the new purpose
FROM NA LAND WITH STABLE TERM TO NA LAND WITH LIMITED TERM **OR** **NA LAND WITH LIMITED TERM TO NA LAND WITH STABLE TERM**	Shall be stable term
IN CASE OF TRANSFER OF LAND USE RIGHTS WITH LIMITED LAND USE TERM	The remaining period of the term
IN CASE OF TRANSFER OF LAND USE RIGHTS WITH STABLE LAND USE TERM	Stable term

The financial obligations of the land users in case of change in land use or land use right or land use term are defined in article 109 of the Land Law 2013.

- Payment of land use levy or the full one-off rental payment for the entire lease period is the difference between the land use levy or land rental after and before the change of the land use purpose
- Payment of annual rental payment based on the type of land after the change of the land use purpose
- For an extension of land use term, either allocation or lease, the land user shall pay the applicable land use fees i.e. either land use levy or land rental.

As the lease is always granted for a defined limited term, the lease rental becomes a recurring type of revenue for the government. Also government provides the land users the choice of paying the rental annually or full rental value at the time of grant of land use right. If it is paid annually, the government is entitled to receive smaller amounts each year for the entire period of the lease and the land user is restricted from selling the land-use right in the market. However, if full rental is paid at the grant of right, government receives a bulk of payment at the start of lease period. This not only provides the government the time value advantage but also absolves it from administrative hassles of collections for the entire lease period.

The detailed methodologies of calculating the land use levy and rental are provided in Annexure 5: Calculation of land use levy/ rental.

3.2.1.2 Process followed for sale of public land

Article 62 of the Law on Urban Planning (2009) allows the government agencies to acquire land along both sides of a road development project and put the land on auction. However the law does not provide any definition of how much land can be acquired and leaves it to the discretion of the government to decide the land area.

The government has been using this method to create land bank and sell the land to generate funds for infrastructure creation. The government thus uses its eminent domain to acquire land not only for the project area but also for monetization. The steps taken by the government in this process are explained below.

Step 1: Acquisition of land

As per Article 74 of the Land Law, 2013, the land users whose land is being acquired, are to be compensated by allocating new land with the same land use purpose as that of the acquired land. If there is no land available, the land users are entitled to receive compensation in cash calculated according to the specific land price of the type of recovered land decided by the Provincial People's Committee.

Step 2: Change of land use

Once the land is acquired, the government changes the land use of the acquired land in accordance with the land use master plans.

Step 3: Auctioning of land

As per Article 43 of the Law on Management and Use of Public Property 2017 (Law No. 15/2017/QH14), all public property shall be sold in the form of an auction. Thus the acquired land will be put to auction. Detailed auction process has been described in Annexure 8: Auction process .

When the land is auctioned, the land use levy/ rental is first calculated as the reserve price, but the payment of land use levy/ rental is based upon the actual winning bid price. The reserve price shall be based on actual market prices, and must under no circumstances be lower than the land price published by the Provincial People's Committee.

3.2.1.3 Land valuation

Article 18 of the Land Law empowers the State to prescribe the principles and methods for land valuation. It also tasks the State with promulgating land price brackets and tables, and deciding on specific land prices.

Article 113 of the Land Law states that the Government shall promulgate land price frames once every 5 years for each region and land type. During this land price frame period, if the market price increases by 20% or more over the maximum price or reduces by 20% or more below the minimum price prescribed in the land price frames, the Government shall adjust the land price frames accordingly. The land price frames provide the highest and lowest land price by land use category for each province of each region in Vietnam. Thus, land price frames provide the guiding framework for all provincial level People's Committees for promulgating the land prices for their respective provinces through land price tables or specific land prices.

Land price tables are also prepared once in 5 years by the provincial-level People's Committee. These land price tables are based on the land price frames promulgated by the Government. In case of any change in the popular market price or in case of adjustment in the land price frames, land price tables are adjusted accordingly by the provincial-level People's Committee.

Specific land prices are the prices decided by the provincial-level People's Committee for a specific land parcel at a specific time.

There are valuation methods defined in the Land Law 2013 and Decree no. 44/2014/ND-CP for deciding the prices. Detailed description of these methods is provided in Annexure 9: Land valuation process.

3.2.2 Registration charges

The Land Law (2013) defines the 'registration of land, houses and other land-attached assets' as *the declaration and acknowledgement of the legal status of land use rights, ownership of houses and land-attached assets, and the right to manage a certain land parcel, in the cadastral records*. While granting the land use right certificate, government charges a fee called registration charge.

Registration charges are levied at a rate of 0.5% of the base price of the real estate property, which is calculated according to the official price tables published by the Provincial People's Committee. This is one charge made applicable to both the land and buildings.

Land registration is compulsory for all land users. Registration of houses and other land-attached assets is carried out at the request of the owner at the respective land registration office. Land registration is compulsory in first time registration when Government is transferring the land user rights or in case of a change registration when there is a transfer of land use right or there is a change in land use right. For buildings, the base price is calculated by considering the construction price of a newly constructed building according to the building's grade and rank and the ratio of the building's remaining quality.

It is the responsibility of Land Registration Office to calculate and levy the registration charges.

Circular no. 301/2016/TT-BTC published by the Ministry of Finance on November 15, 2016 lays down the guidelines for the calculation of registration charge. Details of land registration process are given in Annexure 10: Land registration process.

3.2.3 Land use tax

Land use tax is levied in accordance with the Law on Non-Agricultural Land Use Tax 2010[9] on all the land properties but not on building properties.

The non-agricultural land use tax is levied on

- Residential land in rural and urban areas
- Non-agricultural production and business land
- Non-agricultural land used for commercial purposes

The taxpayers are the land users with or without land use right certificates or certificate for land attached assets. The tax rates are defined are given in the table below.

Table 3-2 Non-agricultural land use tax rates

TAXABLE LAND AREA (SQ. M.)	TAX RATE (IN %)
AREA WITHIN THE SET QUOTA INCLUDING RESIDENTIAL LAND OF MULTI -STORY BUILDINGS WITH MANY HOUSEHOLDS, CONDOMINIUMS OR UNDERGROUND CONSTRUCTION WORKS LAND WITH PHASED INVESTMENT PROJECT ALREADY APPROVED	0.03
NON-AGRICULTURAL PRODUCTION AND BUSINESS LAND	0.05
AREA IN EXCESS OF UP TO 3 TIMES THE SET QUOTA	0.07
AREA IN EXCESS OF OVER 3 TIMES THE SET QUOTA AND LAND USED FOR IMPROPER PURPOSES AND NOT AS PER THE REGULATIONS	0.15
ENCROACHED/ APPROPRIATED LAND	0.2

Source: The Law on Non-Agricultural Land Use Tax, 2010

The tax is levied on the price of land according to the land price tables published by the Provincial People's Committee. The detailed process of levying land use tax is provided in the Annexure 11: Process of levying the non-agricultural land use tax.

3.2.4 Fees for planning licenses and construction permit

For allowing construction on a land parcel, government charges two types of fees: for issuing planning licenses and for issuing construction permits.

3.2.4.1 Planning licenses fees

Organizations and individuals shall pay fees for the grant of planning licenses. According to the approved urban plans, the organizations and individuals are liable to get planning certificates. Urban planning management agencies at all levels grant planning certificates upon request. A planning certificate contains information on boundary of the plot, red-line boundary, land use function, construction density, construction markers, land use coefficient, standard construction ground floor level, maximum and minimum heights, infrastructure systems etc.

[9] *Since 2016, the Agriculture Land Use Tax has been fully exempted.*

Urban planning management agencies introduce construction investment sites to investors. Investors are provided with planning licenses which serve as basis for investors to prepare detailed plans for the investment projects and also as a basis for competent state agencies to approve the investment projects. Provincial People's Committees shall grant the planning licenses.

As per Circular 171/2016/TT-BTC of Ministry of Finance, the developer has to pay VND 2 million as planning license fee.

3.2.4.2 Construction permit fees

Construction permit fees are levied on organisations and individuals and project owners in order to procure construction permits. Before starting construction of works, project owners shall obtain construction permits granted by competent state agencies.

Construction permits consists of:

- Name of the work under the project.
- Name and address of project owner.
- Location and position for the work construction; the work construction line, for works built in lines.
- Type and grade of the work.
- Work construction level.
- Red-line and construction boundaries.
- Construction density (if any).
- Land use coefficient (if any).
- For civil works, industrial works and separate houses, their construction permits must contain contents on total construction area, construction area of the first (ground) floor, number of stories (including basement, attic, technical story and staircase roof), and maximum elevation of the entire work.
- The deadline for construction commencement, which must be within 12 months from the date of grant of the construction permit

As per Regulation Number: 03/2017 / NQ-HDND, the construction permit fee for individual housing is VND 50,000 VND and that for other types of buildings is VND 100,000.

These fees however are not linked to the land prices or the construction density being allowed. Fees are charged at flat rates. There is no differentiation of types of properties for charging the fees.

3.2.5 Exaction from developer in lieu of development rights

There are different options in the legal framework that enable the city government to implement development projects via exaction route. These options also enable the government to recover the cost of infrastructure from developers by granting them a land use right. There are mainly three such options, first is for redevelopment of old apartment buildings, second is for social housing development and the third is the general Build-Transfer transaction where government may demand from the developer construction of certain infrastructure for an area. These are elaborated below.

3.2.5.1 Redevelopment of old apartment buildings

Decree 101/2015/ ND-CP provides the framework for demolition and redevelopment of old apartment buildings. The decree provides for two mechanisms of redevelopment. The first mechanism is that the owners of the condominiums appoint an investor who will contribute capital for the redevelopment project. The developer in this case is allowed to

sell, rent or lease houses after making arrangements for resettlement. The decree remains silent on whether the developer gets any incentive FAR or land to carry out these works.

The second mechanism is when the state invests in renovating and rebuilding condominiums through government budget/ bonds, ODA, concessional loans etc. or the state can also form construction contracts with private agencies in the form of Build – Transfer contracts and provide to the developer land use rights of a land parcel.

3.2.5.2 Social housing development

Decree 188/2013/ND-CP which is the decree on social housing provides for development, management and use of social housing that are bought, rented, or lease purchased. The decree stipulates three methods of social housing development:

- The first is where the state makes investments in social housing with government budget (central or local budget), buys apartments from commercial housing projects, or receives commercial apartments from commercial housing projects transferred by investors under BT contracts to build up the fund of state-owned social housing for lease or lease purchase.
- The second is where companies that make investments in projects of social housing for sale or for lease from non-public capital.
- The third is where households and persons that make separate investments in building houses that are sold or leased to the entities.

In addition to the three methods described above, social housing may also form part of commercial housing projects in new urban areas. As per Article 6 of the decree on social housing, allocation of land for social housing in commercial housing projects in a new urban area for class 3 cities and above, may be carried out as follows:

- If the project for commercial housing or new urban area is greater than 10 ha (including BT and BOT projects), 20% of the land area or floor area must be put aside for social housing. If the investor does not wish to develop social housing, then this 20% land area shall be handed over to the People's Committee.
- If the project for commercial housing or new urban area is less than 10 ha, the investor may transfer number of houses whose value is equivalent to 20% of the land according to the prevalent land price table, or pay an amount equivalent to the same to the People's Committee which shall be used to build up the social housing fund.

Several incentives are provided for social housing development projects. These incentives have been defined in Article 12 of Decree 188/2013/ND-CP. Some of the key incentives for social housing development projects supported by the State include:

- Area of land approved for the project (including commercial component) is exempt from land levies and land rent
- Eligible for preferential VAT rates
- Eligible for exemption / reduction of corporate income tax
- Support and preferential loans from credit institutions
- Investment in infrastructure beyond the perimeter (traffic, electricity supply, water supply and drainage) is reimbursed by the government; expenditure on compensation, land clearance, technical and social infrastructure within the project are covered, either in whole or in part depending on local conditions
- Fundamental design assessment may be omitted if typical designs provided by competent authorities are used
- If a manufacturer in an industrial park invests in or buys housing for its workers without collecting rents, or with a rent not exceeding the limit on rents for social housing imposed by the People's Committee of the province, or rents houses for its workers, then the expenditure on construction, purchase of houses, or rents are considered reasonable expenditures in the producing cost when calculating corporate income tax

- Future housing and construction within the social housing project may be used as collateral for the loan on such a project
- The investor may put aside 20% of the area of land allocated to invest in commercial constructions. If the area of land for commercial works is not mentioned in the detailed plan approved by competent authorities, then 20% of the floor area of a project may be sold or leased at market prices.

Additional incentives applicable for social housing projects funded by non-public capital include:

- Entire investment in technical and social infrastructure for the project is covered from the local budget of the provincial-level People's Committee
- After 5 years from the beginning of the lease period, the investor may sell the social housing to the tenant (if demanded) at the prevailing social housing prices.

In addition to these incentives, Article 7 of the decree also states that if the social housing funded by non-public capital is apartment buildings, the area of each apartment must be 30 sq. m to 70 sq. m. The number of storeys is not restricted, but it must comply with the construction planning approved by competent authorities. The investor may increase the density of construction up to 1.5 times the current standard established by competent authorities.

3.2.5.3 Density bonus for social infrastructure and for redevelopment of old apartment buildings

Decision No.02/2003/QD-UBND and Document No.1595/UBND-DTMT empowered Ho Chi Minh City to exact from developer funding for creation of social infrastructure against density bonus to the developer.

Decree No. 101/2015/ND-CP allows for redevelopment of old apartment buildings by allowing the developer to recover the cost of construction through sale of additional floor area.

3.2.5.4 Build-Transfer projects

Build-Transfer contract is a type of contract to build an infrastructure project between a regulatory agency and an investor or special purpose entity (if any); after completion of works, the investor or special purpose entity shall transfer it to the regulatory agency, and then the investor will be allotted a land parcel, headquarters, infrastructure or right to operate the works or services used for carrying out other projects.

The land use right, head offices, or infrastructure planned to be compensated for the investor is determined and approved in the feasibility study report, forming the basis for selection of preferred investor.

Scope and period of concession of right to operate works or services to the investor shall be determined according to the balance of interests between the state and the investor.

As per Article 155 of the Land Law 2013, the State shall allocate land to investors for management to implement BT projects and allocate or lease land to investors to implement BOT projects and other forms.

As per Article 44 of the Law on Management and Use of Public Property 2017, the payments to the investor under BT contract shall comply with principle of equal value; the value of public property shall be determined according to the market price from the day on which the payment is made.

3.2.6 Income tax on real estate property

Personal income tax on transfer of real estate property is levied on the land assets as well as building assets. Law on Personal Income Tax, 2007 defines the levy of this tax. It is levied at a rate of 25% and the taxable income is decided considering the price at which the real property was transferred less the purchase price and the relevant expenses such as cost of building houses, improving land surface etc. If the purchase price and expenses cannot be defined, the taxable income is the transfer price and the tax rate is 2%.

The Law on Enterprise Income Tax, provides for levy of income tax on enterprises' income from transfer of real estate property. The tax is levied at the rate of 25%.

3.2.7 Property tax

Property tax is under consideration in Vietnam and the draft Law on Property Tax is prepared. The Law provides for levy of property tax on non-agricultural land including housing land, land for non-agricultural production and businesses; on the houses and construction works on land, such as housing units, construction works for trading, and service purposes; and also on aircrafts, yachts and cars.

The tax is proposed to be calculated considering the official price tables for land properties and the construction price of houses after considering rank of the building and the remaining quality. The tax rates are proposed as follows.

Table 3-3 Proposed rates under draft property tax law

PROPERTY TYPE	TAX RATE
FOR HOUSING LAND	0.4%
FOR HOUSES: → PART OF TAXABLE HOUSE PRICE WORTH 700 MILLION VND OR LESS → PART OF TAXABLE HOUSE PRICE WORTH MORE THAN 700 MILLION VND	 0.0% 0.4%
LAND FOR CONSTRUCTION OF RESTAURANTS	0.52%
OTHER NON-AGRICULTURAL LAND EXCEPT THAT FOR COMMERCIAL PURPOSES	0.3%
NON-AGRICULTURAL LAND USED FOR COMMERCIAL PURPOSES	0.3%
LAND AND HOUSES NOT IN USE	1%
LAND AND HOUSES WHICH ARE ENCROACHMENTS	2%
FOR AIRCRAFTS, YACHTS, CARS WORTH 1.5 BILLION VND OR MORE	0.4%

Source: Draft Law on Property Tax, Vietnam

More details on the proposed framework for property tax are provided in Annexure 12: Draft Law on Property Tax.

3.3 Revenue generation from land based fiscal tools in Can Tho

Revenue from the land-based fiscal tools (LBFT) is accounted under the 'domestic revenue' head which in turn falls under the larger budget balancing revenue head.

The total revenue from LBFT increased from VND 723 billion in 2014 to VND 1280 billion in 2017, thus showing a CAGR of 24%. LBFT revenues have been steadily growing as a proportion of own source revenue (from 13% in 2014 to 20% in 2017), as a proportion of national transfers and grants (from 7% in 2014 to 10% in 2017) and also as a proportion of total revenues (from 4% in 2014 to 8% in 2017).

Table 3-4 LBFT revenues (In VND billion)

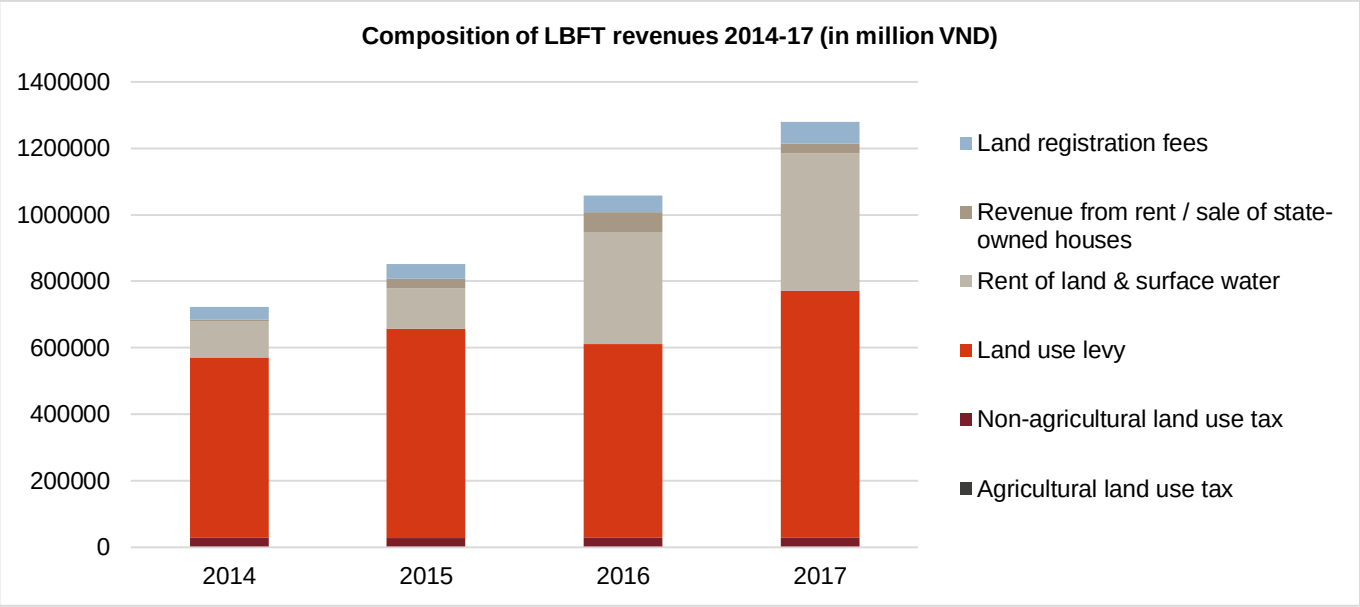
Particular	2014	2015	2016	2017
Land based fiscal tool revenues	723	851	1058	1280
Own source revenues	5485	5385	6163	6441
Land based fiscal tools as a percentage of own source revenues	13%	16%	17%	20%
National transfers and shared taxes	10267	11550	11514	12503
Land based fiscal tools as a percentage of national transfers and grants	7%	7%	9%	10%
Total revenues	16475	17786	18735	20224

Particular	2014	2015	2016	2017
Land based fiscal tools as a percentage of total revenues	4%	5%	6%	8%

Source: Data from Department of Finance

The revenue from land based fiscal tools is composed of land use levy, land and surface water rental, land registration fees, agricultural land use tax, non-agricultural land use tax, revenue received from sale or rental of state-owned houses[10]. The figure below provides the figures of how these revenues have changed over last four years.

Figure 3-2 Trend and composition of LBFT revenues in Can Tho city (2014-17)



Source: Department of Tax, Can Tho City; CRIS Analysis

It may be observed that land use levy and land rental are the two major sources of land-based revenues. Together, land use levy and land rental have been contributing nearly 90% to LBFT revenues each year from 2014 to 2017, thereby indicating over dependence on the sale of land use rights.

Land use levy increased from VND 541.9 billion in 2014 to VND 741.3 billion in 2017, showing a CAGR of 18%. Land use levy constituted 75% of total LBFT revenue in 2014, however this dropped to 58% in 2017. Land use levy as a percentage of total revenue has increased from 3% in 2014 to 4% in 2017.

Revenues from land rental increased from VND 109.4 billion in 2014 to VND 415.2 billion in 2017 at a CAGR of 40%. Land rental constituted 15% of the total LBFT revenues in 2014, further increasing to 32% in 2017. Land rentals as a percentage of total revenue has increased from 1% in 2014 to 2% in 2017. The increasing contribution of land rental indicates that there has been faster growth in number of lease transactions which refers to transactions for non-agricultural businesses such as trading, production, construction of houses for leasing, etc.

Revenue from land registration fees has also shown a steady growth from VND 37.7 billion in 2014 to VND 66.5 billion in 2017, demonstrating a CAGR of 15%. However, the percentage share of land registration fee in LBFT revenues has remained constant at 5% each year between 2014 and 2017.

[10] *The other land-based fiscal tools, i.e. planning license fee, construction permit fee and income tax on real estate property are not accounted as land-based revenues in the books. The planning license fee and the construction permit fee are accounted as a part of overall fees and charges and the income tax on real estate property as a part of overall income tax revenue.*

Revenue from non-agricultural land use tax has stagnated over past four years at an average of VND 28.3 billion each year, thus resulting in decreased contribution to the overall land-based revenues.

Revenue from agricultural land use tax was negligible (0.04%) and has been reducing on account of the number of reductions and exemptions that have been provided on this tax in recent years.

Revenue from rent and sale of state-owned houses was also negligible at an average of 2.9% of LBFT revenues in the last four years. Revenue from rent and sale of state-owned houses amounted to VND 4.2 billion in 2014 and increased to VND 28.4 billion in 2017.

4. Applications of land-based fiscal tools – best practices

There are many variations of the application of land-based fiscal tools (LBFT) around the world and it is essential to recognize that instruments that work effectively in one context may require substantial adaptation to be useful in other contexts. There are four over-arching factors that must be carefully weighed in making such adaptations:

- Legal framework
- Pre-conditions
- Process followed in levying the instrument
- Outcomes

In this chapter various case studies of land-based fiscal tools have been presented from the countries of India, Latin America, China, South Korea and Vietnam.

4.1 Property tax

4.1.1 Definition

Property tax is one of the oldest and a very fundamental form of land-based fiscal tools. It is a recurring tax that is levied on land, and very often, on immovable structures that are attached to land. This tax is usually levied annually towards funding the local body's cost of basic service provision. In most cases the tax is applicable on property owners, provided they can be readily identified.

Since it is a tax based tool, all the property-owners or property-users in a city are subject to payment of property tax.

Property tax is a function of the area of a property, the property value and the property tax rate. Methods for calculation of property tax vary such as capital market value, annual rental value, unit area value method etc.

- Capital market value method: Capital value based assessment is applied on the 'current market price' of a property
- Annual rental value method: The annual rental value method assumes gross annual rent of land and buildings at which they may reasonably be expected to be let
- Unit area value method: Unit area value method implies classification of homogeneous land-value zones in a city, and taxing land and buildings in terms of factors such as location, land use, type of construction and age of building

Property tax if calculated based on the market price, i.e. capital value, it can capture the changes in market prices. If there is an increase in real estate market prices on account of a transport project, the property tax in the influenced area will increase automatically.

In such cases, this additional tax can be earmarked for creating fund for future public investments. This practice is called Tax Increment Financing in which such an area is demarcated and a base value called Equalized Assessed Valuation (EAV) is fixed and further growth in the property tax is ring-fenced and assigned to create and maintain infrastructure in the same area.

4.1.2 Pre-conditions

Some of the necessary preconditions required for the introduction and implementation of property tax are:

- The enabling legal framework needs to establish clearly the modalities of levying the property tax. The legal framework should establish that the tax is calculated as per the capital value method, thereby linking the tax with market prices.
- The legal framework also needs to define a property very clearly in order to fix the taxable entity without any ambiguity.
- A reliable and comprehensive database of properties is another requirement in order to ensure that the tax base is comprehensive.
- Another very important requirement is to have updated data on market prices so as to generate tax revenues in line with the real estate market trends
- To be able to implement property tax effectively, the necessary administrative capacity to assess tax demand, distribute bills, ensure collection, and settle disputes also needs to be established.

4.1.3 Property tax in India

4.1.3.1 Legal framework

As per Article 243-X of the Indian Constitution, state governments are authorized to devolve the power to levy taxes, duties, fees, tolls according to limits set and procedures laid down by the legislature of the state government.

Accordingly, in India, the power to levy and collect property tax is devolved to local governments by the respective state governments. The revenue generated from property tax is used by municipal authorities to maintain and provide various civic services such as water supply, sewerage, roads, street lighting, etc. Property tax in India is levied on 'real property' i.e. on land and on improvements made on such land. The tax is levied on usable area of a property, i.e. the usable built-up area and open land area. Property tax consists of a general tax, water and sewerage taxes, street tax and may include education cess.

While the tax rates and manner of valuation are decided by the local government, the respective state government may indicate upper and lower limits of such rates. Tax rates vary according to the types of properties such as residential property, commercial property, and industrial property. The rates are lower in case of residential properties as compared to the commercial and industrial properties. However the rate is not progressive in terms of size of properties. Some municipal corporations provide exemptions from payment of property tax based on a variety of factors such as type of property, location, net income of individual, etc.

4.1.3.2 Process followed

The value of the properties for calculating the property tax is calculated by annual rental value method or area based standardization method or capital value method.

In case of annual rental value method, the value of the property is decided based on the annual rent the property fetches. However in practice, the rental values are not updated depending upon the market rents. This practice is prevalent in most parts of the country.

The second practice is area based standardization which basically is a presumptive taxation of holdings in terms of their zonal and structural characteristics. It is a method that uses classification of homogeneous land-value zones in a city, and taxing land and buildings in terms of factors such as location, land use, type of construction and age of building.

The third practice is to calculate the property value considering the capital value of the property, which considers the market rates, the age of the building, quality of construction, facilities inside the building and the locality. Capital value system of property taxation has been implemented by the Municipal Corporation of Greater Mumbai (MCGM) only and the value calculated is based on the Ready Reckoner rates which are the official rates of properties published

by the State Government of Maharashtra every year. As per 2018-19 budget estimates, property tax constituted 22% of total municipal revenues for the Municipal Corporation of Greater Mumbai.

Increasing tax rates becomes a challenging activity due to political resistance. Hence cities are focusing more on ensuring that the database is covering all the properties in the city. In recent time, several cities are making efforts towards digitizing the property database by carrying out one-time survey and creating a land management information system on a GIS platform. In MCGM, property database is digitized and the bills generation and payment collection is carried out through the capital value system.

4.1.3.3 Outcomes

When MCGM shifted from Annual Rental Value to Capital Value system, property tax payable increased significantly for several properties. However, for very old properties the tax payable was retained at the same levels by the corporation and rates were adjusted accordingly. In result, in the year 1, the tax demand estimation was lesser than the demand generated by using ARV. However, over the years, the tax collection has shown a higher compounded annual growth rate after MCGM has switched to capital value system. MCGM's property tax revenue increased from Rs 586 Crore in 2007-08 to Rs 854 Crore in 2012-13 with a CAGR of 8%. In 2012-13 the capital value system was operationalized and since then the revenue has increased to Rs 1397 Crore in 2018-18, thus showing a CAGR of 10%.

With several mass rapid transit projects being implemented in Mumbai, the property tax framework in Mumbai will be able to capture the additional value being created.

Property tax is a very localized subject and per capita revenue collection varies significantly from city to city in India. The Fourteenth Finance Commission report states that the per capita tax collection in urban areas ranged from Rs. 42 to Rs 1,677 in 2012-13. The property taxes formed 0.48% of annual GDP of the country as per the data of 2009-10.

4.1.4 Property tax in Latin American and Caribbean countries

4.1.4.1 Legal framework

Barring Cuba, El Salvador and Haiti, property tax has been introduced in most of the Latin American countries in some form or the other (De Cesare, Overview of real estate property tax in Latin America, 2010). However the manner in which it is structured and administered varies greatly across jurisdictions (Lincoln Institute of Land Policy, n.d.).

In Argentina, the national tax law and tax code (*Código Fiscal, Derecho Tributario*) permit the levy of a real estate tax called *impuesto inmobiliario*. Based on this fundamental legislation, each province or municipality levies some form of property tax through the enactment of various local level legislation. A tax called *tasa por servicios generals* is imposed by several municipalities such as La Matanza, Moron, Tigre, etc. Legislation for the same is enacted at the municipal level. In other provinces such as Mendoza, Neuquén, Río Negro, Salta, and Santa Fe, a tax known as *impuesto inmobiliario* (translates to real estate tax) is imposed by the provincial government.

At the national level in Bolivia, various laws and regulations provide for the legal framework for the imposition of real estate tax. These include the State Constitution, Law 843/86, Law 1,606 / 94, Supreme Decree 24.204 / 95, Regulation on Property Tax on Real Property, Law 2.434 / 02, Housing Promotion Unit Law, Law 31/10, Framework Law on Autonomies and Decentralization, Supreme Resolution 7.133 / 11, and Law 154/11, classification and definition of taxes. A tax called *impuesto a la propiedad de bienes inmuebles* (or property tax on real estate) is levied by municipalities such as Tarija, Cobija, Achocalla, El Alto, Mecapaca, Nuestra Señora de La Paz, Viacha, Cotoca, La Guardia, Montero and Warnes based on a local level legislation called *Ordenanzas Municipales de Aprobación de Tablas de Referencias*.

In Brazil, an urban property tax called *imposto sobre a propriedade predial e territorial urbana* (IPTU for short) can be levied by municipalities. In addition to local decrees and codes that permit the levy of such a property tax, Law 5,172 / 66, National Tax Code, Law 6,766 / 79, and Law 10,406 / 02 of the Federal Constitution of 1988 permit the levy of such a tax by municipalities.

In Colombia, national level legislation permits the levy of a unified property tax or what is locally known as *impuesto predial unificado.* Based on this national level legislation, each municipality has enacted local level legislation in the form of decrees and agreements that enable these municipalities to levy the tax.

In most of the Latin American countries, the property tax is levied and collected by the municipal governments. In most cases, municipalities are also given some authority to change tax rates, at times within legislated limits. In terms of assigning the responsibility for billing and collections there is a large variety of practices with these functions at times exclusively assigned to the central or municipal governments and other times these functions are shared by different levels of government. The predominant approach to the assessment of properties is market valuation.

4.1.4.2 Process followed

Conventionally, the responsibility of real estate taxation lies with the subnational government - usually the municipal governments. However, the institutional framework relating to property taxation powers varies greatly across Latin American countries. For instance, a total degree of centralization of the tax is observed in Chile where legal provisions are established at the national level. The Internal Revenue Service is responsible for administration (cadaster preparation, real estate valuation, and tax assessment), and the *Tesorería General de la Republica* is responsible for tax collection. The revenue generated through property tax however are allocated to the municipalities. A similar degree of centralization may be observed in the Dominican Republic.

In contrast, there is considerable decentralisation of powers w.r.t to urban real estate tax in Brazil and Venezuela. In Brazil, the basis for calculation and the definition of taxpayer of the IPTU are defined in the National Tax Code, and are therefore uniform across the country. However, in both Brazil and Venezuela, municipalities have full autonomy in the exercise of functions relating to the administration of this tax i.e. registration, valuation, inspection and collection.

In Bolivia, although property tax is administered by the municipalities, the rules for the same are established at the national level. The inspection and collection functions are carried out by the Ministry of Finance in collaboration with the municipal governments.

In Colombia, barring large municipalities, the cadaster is generally established by the Agustín Codazzi Geographic Institute (IGAC). The rest of the competencies are attributed to the municipal governments.

The inclusion of the value of land and buildings in the basis of tax calculation is one of the rare absolute consensus among the jurisdictions examined.

In Bolivia, Chile, Peru, Paraguay, Costa Rica and Guatemala, the rate of property taxation is decided at the national level. In Colombia, Honduras and Ecuador, rates are established by the municipalities, however minimum and maximum limits for these rates are laid down at the national level, and must be adhered to by the municipalities. In Colombia, the rate should be set between 0.10% and 1.6%. The national legislation also dictates that the rates must be selective and progressive depending on factors such as socio-economic considerations, land use, degree of updating of the cadastre, etc. The rates applied to non-urbanised and non-built up areas can be 3.3%. In Ecuador, the rates must be set between 0.025% and 0.50%. Additional taxes may be levied on undeveloped land, the value of which can be anywhere between 0.10% and 0.20%. In Honduras, for urban real estate, the rates may be set between 0.15% and 0.50%, while for rural properties it may range from 0.15% to 0.25%.

Across most Latin American countries, property tax exemptions were provided to government buildings, embassies, educational institutions and religious institutions.

4.1.4.3 Outcome

Property tax collection in Latin America is often inefficient with municipalities collecting only 67% of the tax assessed in the 2000s. As per De Cesare, a survey of 64 municipalities in Latin America revealed that property tax accounted for an average of 24% of local government tax revenues (United Nations ESCAP, 2017). For all Brazilian municipalities, the property tax collection (IPTU) accounted for 19.4% of total own-source tax revenue in 2014 (Afonso et al. 2016). However, a few cities collected more than 90% of the total property tax, including Bogotá, Buenos Aires, and Belo Horizonte and São Paulo. Recovery of unpaid taxes involved identification of debtors, distribution of debt notices, and negotiation of tax debts.

In terms of revenue collected from property tax as a percentage of GDP in the municipality, a sample of 63 municipalities across various Latin American countries revealed a mean percentage contribution of 0.40% of the municipality's GDP, with the highest being 1.06% in Florianópolis, Brazil in 2005 and Goiânia, Brazil in 2009; and the least being 0.01% in Bela Vista de Minas, Brazil in 2013 (Lincoln Institute of Land Policy, n.d.).

Recent experience shows that cadaster modernization can generate significant increments in revenue from the real estate property and transfer taxes.

The government of Mexico City began a far-reaching cadaster modernization program in 2008 (CDMX, 2010). This effort increased the cadaster's coverage, updated cadastral values, and improved tax billing and collection. As a result, revenues from the real estate property and transfer taxes increased by 68.3% during 2009/2017 to USD 1.1 billion).

Cadaster modernization enabled Xalapa, the capital city of the Mexican state of Veracruz, to increase its total revenue from the real estate property tax (impuesto predial) by slightly more than USD 1.0 million (or 25.6%) for the 2014/2015 period, while cutting the tax rate by half to only 0.052% (Blanco et al. 2016).

Cadaster modernization project helped Municipality of Campo Grande, the capital and largest city of the Brazilian state of Mato Grosso do Sul to more than double the revenue from real estate property and transfer taxes. Over the 2006/2011 period, the increment in the revenue from the real estate property and transfer taxes (IPTU and ITBI) helped Campo Grande to boost its annual fixed capital investment. A program funded by IDB and Brazil's BNDES financed the modernization.

4.1.5 Property tax in China

4.1.5.1 Legal framework

According to Article 10 of the PRC Constitution, "land of the city belongs to the state", and "land in the rural and urban suburbs is collectively owned except for those owned by the state as stipulated by law; homesteads, self-retained land, and self-retained mountains are also collectively owned".

According to the Article 117 of the Property Rights Law, promulgated by the National People's Congress on March 16, 2007, effective October 1, 2007, the land-use right is a "usufructuary right" that allows the right-holder, the usufructuary, to legally possess, use, and benefit from property owned by another.

While individuals may not enjoy private ownership rights over land itself, they may privately own houses and apartments, i.e. buildings and structures situated on the land. The right to private ownership of such immovable and movable property situated on the land is provided for under Article 64 of the Property Rights Law, 2007.

However, there is no established system of real property tax in China. Property tax has been on the anvil for several years in China, however it is yet to be implemented at a national scale, with the exception of two limited pilots that were launched in Shanghai and Chongqing in 2011.

The current tax sharing system was established in 1994, under which the central government determines what to tax, the tax rates, and the shares of tax revenues between central and local governments. Local governments

essentially possess no tax power and tax autonomy. In place of property tax, there are three taxes in China: urban and township land use tax, real estate tax and the arable land occupancy tax.

4.1.5.2 Process followed

The urban and township land use tax is imposed on urban land in use. An organization or individual using land in cities, county towns, administrative towns, and industrial and mining districts shall be a payer of urban land use tax. The annual tax rates for urban and township land use tax vary for big cities, medium sized cities, small cities, towns and industrial and mining districts.

The arable land occupancy tax is imposed on entities and individuals who use arable land to build houses or for other non-agricultural construction purposes, on the basis of actually occupied area of arable land. Differentiated tax rates are adopted for different locations.

The real estate tax[11] is imposed on owners of houses within cities, county towns, administrative towns, and industrial and mining districts. According to the tax regulation, the real estate tax for self-occupied houses is calculated with a tax rate of 1.2% on 70%-90% of the original value of the property (i.e. the book value). The real estate tax for rented houses is calculated on the basis of the rental income, and the applicable tax rate is 12%. The real estate tax regime is being reviewed by the Government the tax base may soon shift from book value to assessed market value.

So far, this tax is only imposed on houses for commercial use, not on private residential houses. The government plans to implement a tax on the ownership of private residential properties.

4.1.5.3 Outcome

These three taxes together formed on an average 10% of total local tax revenues. Though the tax rates are decided by the Central Government, these taxes are collected and retained by the provincial governments. With changing the tax based from book value to market value, the rea estate tax revenue is expected to increase in the short term.

Table 4.1 Property tax estimates, 2013-15, China

Type of tax / Year	2015	2014	2013
Urban and township land use tax (in billion RMB)	205.1	185.2	158.2
Arable land occupancy tax (in billion RMB)	214.2	199.3	171.8
Real estate tax (in billion RMB)	209.7	205.9	182.8
Total of three taxes	**629**	**590.4**	**512.8**
Local tax revenues (in billion RMB)	6266.2	5906.0	5399.1
National GDP (in billion RMB)	67,670.80	65,809.50	58,361.90
Percentage of local tax revenues	**10%**	**10%**	**9.5%**
Percentage of national GDP	**1%**	**1%**	**1%**

Source: Adapted from (Liu, 2018)

[11] *On January 1, 2009, China abolished the Interim Regulations on Urban Real Estate Tax. Under those regulations, the Urban Real Estate Tax had been levied on real property purchased in China by: 1) Chinese enterprises with foreign investments; 2) foreign enterprises; or 3) foreign individuals (all three collectively referred to below as "Foreign Investors"). As a result of this change, Foreign Investors who purchase real property after January 1, 2009, are subject to China's Interim Regulations on Real Property Tax (i.e., the same regime applicable to domestic Chinese owners of real estate).*

4.1.6 Property tax in South Korea

4.1.6.1 Legal framework

Property tax in South Korea includes a general property tax and a special tax called Comprehensive Real Estate Holding Tax (CREHT) on real estate properties. While property tax is a local tax, and comes under the purview of city governments, the CREHT is a national level tax.

The CREHT is provided for by the Law on Comprehensive Real Estate Holding Tax, as well as the Presidential and Ministerial Enforcement Decrees on Comprehensive Real Estate Holding Tax.

4.1.6.2 Process followed

A company or an individual owning land, buildings, ships or aircrafts, is subject to a property tax on these assets. The tax base for land and houses is calculated by multiplying the current standard value with 60% of for houses and 70% for land. For buildings, the current standard value is multiplied by 70%.

The tax rates generally range from 0.24% to 0.6% (including the education surtax) depending upon the type of property. However, buildings for golf courses, luxury amusement and villas are taxed at 4%. Exemptions to this tax include properties of the state, local autonomous bodies, or foreign governments, and properties used directly by non-profit organisations to furnish religious or educational services.

A company or an individual owning real estate such as land or buildings may be subject to the CREHT which is a tax levied on the owner of residential building and attached land with an aggregated public announced value exceeding KRW 600 million over and above the property tax.

The objective of the CREHT is to promote tax equality and stability of the real estate market by dis-incentivizing excessive property possession. The CREHT is calculated by adding up the CRET for land and the CREHT for residential buildings. Tax rates increase with the aggregate value of the property held, from 0.5% to 2%. The tax is applied on apartments exceeding KRW 900 million for owners of single properties and KRW 600 million for owners of multiple properties. The taxed amount is 80 percent of the government assessed value of the property. For land, the tax rate is between 0.75 and 2 percent, and for commercial properties it is between 0.5 and 0.7 percent.

4.1.6.3 Outcome

Property tax generated WON 10000 billion in 2017 through the property tax which formed 2.3% of the total tax revenue. Revenue from CREHT generated WON 1600 billion in 2017 forming 0.4% of total tax revenue.

4.1.6.4 Property tax in Vietnam

As discussed in the Chapter 3, currently there is no property tax in Vietnam. The land use tax is levied only on the land properties and not on the built properties and it is levied on the official price of the properties which are not reflective of the market prices.

The proposed law on property tax will establish a tax on all land assets and buildings assets, but it is proposed to be calculated based on the official prices published by the government every five years.

4.1.7 Learnings

Property tax is the most fundamental land-based fiscal tool to the municipal governments worldwide. In Vietnam, the legal framework for levy of property tax is absent. Having a land use tax only on land properties results in a significant loss of potential revenue for the city governments. It is hence important to enact the Law on Property Tax and introduce the most fundamental land-based fiscal tool in Vietnam.

Various countries have adopted various methodologies to decide the base value to apply the property tax rates. These include annual rental value, capital value, original value of property etc. However, if the property tax is linked to the market value of properties, then the revenues to the municipal body get augmented as the market prices increase. It is the most effective way to capture land value changes on account of public investments. In Vietnam, the proposed law needs to ensure that the property tax is levied based on the market values and not on officials values which are updated once in five years. Hence it is important to update the price tables each year in line with the market prices.

Property tax can effectively work if the data on property prices are tracked and updated by the local body. Deciding the base values as per the market prices requires proper cadastre database and the administrative capacities to update the database regularly.

The World Bank funded Improved Land Governance and Database (VILG) Project for Vietnam aims at improving the efficiency and transparency of land administration services in the Project Provinces, through the development and implementation of the national Multipurpose Land Information System (MPLIS). The first component aims at strengthening quality of land service delivery by strengthening business processes at Land Registration Offices and carrying out training activities; and development of multi-purpose land information system which will integrate land database, land use right records, cadastre data, land price data, land use plan data and land statistics. This will set practice of establishing land records in Vietnam. Having established the property tax, the municipal authority can also explore the possibility of introducing tax increment financing in certain demarcated areas.

4.2 Stamp duty and transfer taxes

4.2.1 Definition

Stamp duties or transfer taxes are levied when the property rights associated with land and buildings are transferred to another party. These rights may reflect a statutory ownership title, a leasehold interest or any other legally recognized and recorded form of land rights. The stamp duties are expressed as a percentage of the value of the real estate property being transferred.

The most straightforward objective of the stamp duty is to fund the property registration system. Second purpose pursued is as a general revenue source. The third objective could be to restrain the overheated real estate markets by increasing the cost of transactions.

4.2.2 Pre-conditions

Stamp duty and registration charges have direct dependence on the real estate market momentum. The revenue realization is impacted by both the volume of transactions as well as the price trends. The key to optimization of revenues is the correct records of transaction values and administrative processes and data systems which will restrict under-reporting of transaction values. Legal framework may also provide for special taxation rates for influence areas of a project.

4.2.3 Stamp duty in India

4.2.3.1 Legal framework

Contracts and registration of deeds and transfer of property (other than agricultural property) being in the concurrent list of the Constitution of India, both the Central Government and the respective State Governments formulate the laws governing the payment of stamp duties.

In Maharashtra, the Maharashtra Stamp Act, 1958 defines the stamp duties for various transactions. The stamp duty is a general revenue source for the State Government of Maharashtra. Currently, the stamp duty payable on conveyance, gift and usufructuary mortgage of immovable property is as follows:

- **Conveyance of immovable properties:** For Municipal Corporations: 5% of market value of property; All other area in MMR: 4% of market value of property
- **Gift:** If transfer to immediate family then 2%; else same as conveyance
- **Usufructuary** Mortgage**:** Same as conveyance for amount secured by the deed

4.2.3.2 Process of levying stamp duty as a value capture tool in Mumbai Metropolitan Region

To use this revenue instrument as one of the funding sources for infrastructure creation, the State Government of Maharashtra amended the Maharashtra Municipal Corporations Act in 2015 to allow for a 1% surcharge on the above types of transactions taking place in municipal corporations where the State has notified urban transport projects of vital importance. The funds collected from this surcharge will be transferred as grants-in-aid by the State to the agencies/ULBs undertaking the notified projects.

Accordingly, for the implementation of metro projects in the municipal areas of Greater Mumbai and Thane, this 1% surcharge is applied and the fund so collected is to be transferred to the Mumbai Metropolitan Region Development Authority, the implementation agency for the metro projects.

4.2.3.3 Outcome

MMRDA has a potential of generating nearly Rs 450 crore as 1% additional stamp duty in the region. Since all the transaction data is maintained by the State Government of Maharashtra, and since the stamp duty is levied on the transaction value, it presents significant potential of value capture.

4.2.4 Deed tax and stamp duty in China

4.2.4.1 Legal framework

- **Deed tax**

  Deed tax is a one-time tax levied at the time of purchasing property. It is essentially a property transaction tax which is levied on the transaction price of land and/or buildings and the tax payers could be individual, households, enterprises, household businesses or units.

  As per the PRC deed tax regulations issued by the State Council on July 7, 1997, deed tax is payable by the transferee upon transfer of landed property. Transfer of landed property may take place in the following ways:

  – Acquisition of land use rights from the State,

  – Transfer of land use right including transfer by sale, by exchange, or gift,

  – Purchase and sale of real property situated on lands.

  The deed tax in China used to be pegged anywhere from 3% to 5% of the purchase price, however in recent years it has been reduced to 1 – 1.5% in most cities with the exception of first-tier cities like Beijing, Shanghai and Shenzhen.

- **Stamp duty**

  As per the stamp duty tariff table provided in the provisional rules of the PRC on stamp duty promulgated by the State Council on August 6, 1988, “documents of transfer of property rights, including documents of transfer of property titles……..shall be subject to stamp duty of 0.05% of the stated value” and is to be paid by the party that

initiated the contract. Property leasing contracts in the other hand are subject to a stamp duty of 0.1% of the leasing fee, to be paid by the parties to the contract.

4.2.4.2 Process followed

- **Deed tax**

  As per the interim regulations on deed tax (1997), the basis for calculation of deed tax are:

  - Transacted prices in leasing of rights to use State-owned lands, sales of land use rights and house tradings;
  - Prices set by the tax authorities according to the market prices of sales of land use rights and house tradings in donation of land use rights or houses;
  - Prices imparities during exchanges of land use rights or houses.

  The deed tax is calculated by multiplying the basis for tax calculation (as described above) by the applicable tax rate.

- **Stamp duty**

As per Article 5 of the provisional rules on stamp duty promulgated by the State Council on August 6, 1988, stamp duty shall be implemented through the tax payer's voluntary calculation of the payable amount in accordance with the regulations and affix the required number of duty stamps, and where such amount is too large, the tax payer may use a payment slip instead of affixing duty stamps.

Taxation authorities are responsible for administering the levy of stamp duty.

4.2.4.3 Outcome

Stamp duty in China is estimated to generated revenue of RMB 106 billion in 2017 as per Ministry of Finance estimates, which is estimated to grow to RMB 235 billion in 2018.

Deed tax generated nearly RMB 500 billion in 2017 as per the estimates of Ministry f Finance, PRC. It is estimated to grow to RMB 525 billion in 2018.

4.2.5 Stamp duty in South Korea

4.2.5.1 Legal framework

As per Article 1 of the Stamp Tax Act (most recently amended by Act no. 15331, Dec 30, 2017), a person who prepares a contract for the creation, transfer, or change of a right, etc. to an asset or any other documents certifying such transaction in the Republic of Korea is obligated to pay the stamp tax on the documents when he/she prepares the documents. Where two or more persons jointly prepare a document, the persons preparing the document are jointly obligated to pay the stamp tax on the document.

As per Article 3 of the same Act, a certificate of transfer of ownership of real estate may attract the following amount of stamp tax depending on the value of the asset:

Value	Amount of Tax
If the stated amount exceeds 10 million won but does not exceed 30 million won	20,000 won
If the stated amount exceeds 30 million won but does not exceed 50 million won	40,000 won
If the stated amount exceeds 50 million won but does not exceed 100 million won	70,000 won
If the stated amount exceeds 100 million won but does not exceed one billion won	150,000 won
If the stated amount exceeds one billion won	350,000 won

However, Article 6 of the Stamp Tax Act classifies “a certificate of transfer of ownership of a residential house with a stated amount of not more than 100 million won” as a non-taxable document.

4.2.5.2 Process followed

The stamp tax is paid by affixing electronic revenue stamps for paper documents. The electronic revenue stamps may be substituted by paying an amount equivalent to the appropriate amount of stamp tax and indicating on the taxable document that the stamp tax has been paid.

If a taxpayer obligated to pay the stamp tax fails to pay it or the amount so paid is less than the amount payable, the head of the competent tax office or the commissioner of the competent regional tax office shall make a decision to determine or correct the amount of tax not paid of the amount of shortfall in tax paid.

4.2.5.3 Outcome

In 2015, 2016 and 2017, Korea generated around WON 900 billion which was 0.2% of the total tax revenue. This includes stamp duty collection from all the transactions.

4.2.6 Registration charges in Vietnam

The registration charges in Vietnam are at a flat rate of 0.5% and are payable on all the land and building transactions. There is no differentiation among the rates for various types of properties. Registration charges is the only tool where charges are levied on the transaction value thereby generating records for the market values.

4.2.7 Learnings

The level of registration charges in Vietnam are very low at 0.5% as compared to other examples. Hence, revising the rates can improve the revenues for the cities. In Can Tho, the revision can happen in the long term and gradually considering the sensitivity of the land prices and muted demand. Registration charges may also be increased with an objective of funding cost of certain infrastructure projects.

4.3 Betterment levies

4.3.1 Definition

Betterment levies are defined as one-time upfront charge on the land value gain caused by public infrastructure investment. However, establishing the correlation between value gain and infrastructure investment is administratively difficult. Hence, sometimes in practice, the betterment levy is used as cost recovery tool, as one-time charges assessed in connection with specific infrastructure improvements.

4.3.2 Pre-conditions

Betterment levy needs the real estate market to be such that an infrastructure investment creates much larger value than the extent of investment. This value gain is then captured through the betterment levy on occurrence of a land transaction. Larger the pressure on the real estate supply, greater is the potential from betterment levy revenue.

Betterment levy can only be levied if the correlation between the value increase and infrastructure creation can be established. This requires continuous tracking of market prices at local level in the influential area of a project. This requires very sophisticated cadaster and fiscal information.

As this process is administratively difficult, betterment levy is also used as a cost recovery tool. In such case the administration procedure to distribute the cost of infrastructure on the land users need to be established by the legal framework.

4.3.3 Betterment levy in India

4.3.3.1 Legal framework

In India, as land is the state subject, various states have specific regulations for land management. In Maharashtra and Gujarat, the respective Regional and Town Planning acts provide framework for levying betterment levy as a part of Town Planning Scheme.

In Maharashtra, betterment levy has also been identified as one of the revenue sources of Mumbai metropolitan Region Development Authority under the MMRDA Act.

4.3.3.2 Process followed

Betterment levy is collected as a part of town planning scheme in Gujarat and Maharashtra. Town planning scheme is a mechanism in which a designated area is planned to develop as a greenfield project with all the required infrastructure and plotting of land lots. In the process as the land value of the individual land plots increases, they are charged a betterment levy in addition to the land contribution made by them for the infrastructure. The difficulties of assessing land value increments and then recovering betterment contributions have been overcome through practical approach. Instead of calculating the market value of individual final plot, a uniform rate (per square meter) is charged that can recover the cost of the scheme. Consequently it loses the character of being a land value capture tool and remains a tool of cost recovery. Moreover this is charged at the time of granting development permission with a facility to pay the contribution over a period of ten years. (Ballaney S. 2008, 2009, CGG 2010, Kopardekar and Keskar 1987) (Phatak, 2013).

Betterment levy is also one of the revenue sources defined for the Mumbai Metropolitan Region Development Authority (MMRDA). MMRDA is entitled to levy a betterment charge half the land value appreciation resulting from an MMRDA project or scheme. The charge is to be collected on or post deemed completion of a project or a scheme. However uptil now, in spite of the legal provisions, the charge is not being levied. Charging betterment levy in MMR is methodologically difficult as it is challenging to accrue the land value increase to a particular project especially in MMR where there are multi-directional forces impacting the land prices and any attempt of deciding such price increase may face legal hurdles, in turn elongating the process of revenue realization.

4.3.3.3 Outcome

As mentioned above, betterment levy under various town planning schemes are for generating funding for infrastructure cost in the scheme. Thus the funds generated are generally a share of infrastructure cost.

4.3.4 Betterment levy in Latin America

Betterment levy has been a consistently used tool in Latin American countries.

4.3.4.1 Legal framework

Almost all Latin American countries have national laws that permit some version of a valorization fee or charge to enable the public sector to capture the increments of land value directly associated with public investments (Manon and Macon 1977).

4.3.4.2 Process followed

Colombia has had specific legislation for this instrument since 1921 (Blanco et al. 2016). Borrero (2012) provides a review of the methodologies for estimating valorization and defining impact areas in Colombian cities. The variables used to define the impact area include site characteristics, such as its size, socioeconomic strata, land use, and level of economic activity, along with proximity, accessibility and level of benefits received, etc. As Colombia has been

using betterment levies intensively for nearly a century, its municipalities have developed elaborate methodologies for estimating valorization.

Municipality of Manizales, a city with a population of about 400,000 financed four major road and urban development projects with the betterment levies. Colombian law stipulates three parameters used to calculate the betterment levy: (1) the cost of the construction project; (2) the value added to properties that can be attributed to the project; and (3) the affordability of the levy (i.e., the capacity of the property owners to pay)." Borrero (2011). Most municipalities set the upper bound of the levy at the lowest value among these three parameters.

Manizales applies the dual appraisal method to measure benefits. The initial appraisal is intended to create a map of land prices (iso-prices map) before construction, and the second appraisal determines the added value hypothetically generated by the new infrastructure project in the area. The steps of this method are:

1. Define the area of influence. This area is based on the improved mobility enabled by the road or infrastructure project.
2. Calculate the benefit and generate an isoprices map based on a sample of properties. The criteria to measure distances and road networks are established within an initial zone defined as broadly as possible.
3. Estimate the benefit. An interdisciplinary team of experienced professionals estimates the benefits generated by the project.
4. Allocate the benefit. Allocate the benefits based on factors assigned weights, such as change to a land use of higher value, improved access to higher value areas or commercial areas, savings in commuting time, and reduction in pollution or traffic congestion.
5. Establish the level of benefit (focal point). "The lot or area where the "maximum added value" occurs (known as the "focal point") is analyzed in detail to calculate the maximum percentage increase in value."
6. Distribute the levy. The amount of the levy is distributed based on the level of benefits received.
7. Determine affordability. The levy is assessed based on capacity to pay as measured by household income, other utilities paid by the property owner or similar indicators.
8. Set the collection period. In Manizales, the collection period generally coincides with project execution. However, the period can legally extend up to five years, but usually does not go beyond the four-year term of the mayor.

4.3.4.3 Outcomes

Manizales generated a total of US$24.6 million through betterment levies for the four projects mentioned above. Borrero (2011) reports that "Bogotá currently has about $1 billion worth of investment in public works from this levy, and eight other smaller cities combined have another $1 billion.

However the case is not the same across Latin America. In spite of the betterment levy's apparent universality, it still plays a negligible role in most jurisdictions' finances, as it typically accounts for much less than 1 percent of own local revenues. In Mexico, for example, it represents no more than 0.42% of municipal revenues (Pérez Torres and Acosta Peña 2012); in Brazil in 2011 it represented 0.25 percent of all fiscal revenues and 6.8 percent of all property-related tributes (Afonso et al. 2010); and in Rosario, Argentina, it accounted for 0.30 percent of own revenues (Alvarez 2009).

4.3.5 Land appreciation tax in China

The land appreciation tax is levied on the incremental value received by the entities and individuals who transfer the right to use state-owned land, above-ground structures and their attached facilities and attain income from such transfer. The land appreciation tax (LAT) has been in effect since 1994.

4.3.5.1 Legal framework

Land appreciation tax is levied as per Decree No.138 of 1994.

4.3.5.2 Process followed

The appreciation amount shall be the balance of proceeds received by the taxpayer on the transfer of real estate, after deducting the sum of deductible items, which are:

- The sum paid for the acquisition of land use rights;
- Costs and expenses for the development of land;
- Costs and expenses for the construction of new buildings and facilities, or the assessed value for used properties and buildings;
- The taxes related to the transfer of real estate;
- Other deductible items as stipulated by the Ministry of Finance.

Land appreciation tax sets progressive rate levels depending upon the amount of appreciation. The rates levied vary between 30 percent and 60 percent on profits from real estate sales.

Table 4-2 Tax rate range for land appreciation tax

PROFIT BAND	LAT RATE
ON THE PORTION OF PROFIT NOT EXCEEDING 50% OF DEDUCTIBLE ITEMS	30%
FOR THE PORTION OVER 50%, BUT NOT EXCEEDING 100%	40%
FOR THE PORTION OVER 100%, BUT NOT EXCEEDING 200%	50%
FOR THE PORTION EXCEEDING 200%	60%

Source: Regulation 138, (http://www.asianlii.org/cn/legis/cen/laws/prolat480/)

Costs deductible for the calculation of profits include:

- Original cost of Land Use Rights,
- Land development costs,
- Construction costs in case of new buildings and appraised value in case of old buildings,
- Taxes related to the assignment of real property,
- Other deductions as determined by the Ministry of Finance

Owner-occupiers who have used a property for at least five years are exempted from this tax.

4.3.5.3 Outcomes

The land appreciation formed 6% of the total municipal revenues in 2015 (Source: Liu, Zhi. (2018). Land-Based Finance and Property Tax in China. Area Development and Policy)

4.3.6 Betterment levy in Vietnam

4.3.6.1 Betterment contribution for alleyway expansion and improvement in An Phu ward, Can Tho City

During the last two decades, in many municipalities in Vietnam such as Hanoi, Ho Chi Minh City, Can Tho City, Binh Duong province and Vinh Long province, under the principle of “state and people working together”, affected households and local authorities (normally of wards or districts) jointly contribute towards projects for widening of their respective alleyways. Depending on the local context and discussion among stakeholders, the contribution from local community differs from case to case:

- In most cases, the households contribute a part of their land plot for the expansion of alleyway (for example an original alleyway of 1.5m width to be expanded to a width of 4m)

- Normally, households have to pay for the re-construction of their buildings and structures, if needed
- In many cases, the community contributes a certain amount for the improvement of their alleyways (i.e. construction cost). The ratio of their contribution in each cases differs.
- In a majority of cases, households will pay for the cost of connection to the new (underground) drainage network and water supply network, if needed

The following is the case of An Phu ward, Ninh Kieu district, Can Tho City, implemented during the second phase of Vietnam Urban Upgrading Project (VUUP) funded by the World Bank. One main component of the project is to improve the living conditions of urban poor community living in the small alleys in central areas of Can Tho. In An Phu ward, there were 344 affected households with 1,303 people (i.e. an average size of 3.8 members per household) living in selected alleys.

Figure 4-1 Location of An Phu Ward

Source: CRIS documentation using Google Maps

The project would be successful only if 100% of affected households in the community participated in the project and agreed with the solutions.

Following the planning method with community participation, all affected households were consulted from the very initial phase of information collection of the project. Majority of them then took part in the preparation process by attending community meetings (93.5%), to discuss development orientation (75%), household contribution (72.8%), and technical design solutions (15.3%). These households subsequently also participated in the project construction. Subsequent to project completion, these households have been proactively involved in the maintenance of their new alleyways. (PMU report, 2015).

The communities particularly played an important role during the decision-making process on the size of the alley expansion, the route of the new alley and the amount of contribution that each household should pay which could be in the form of land contribution and/or cash.

Although there were some proposals to expand the original alleys up to 6 meters width, the facilitator successfully convinced the whole community that 4 meter width would be a better option, sufficient for cars and also enough for fire-fighting services in emergency cases. Besides, it would also require a more reasonable contribution from every affected household.

It was decided that total contribution by cash would be used to cover 10% of the construction cost (the remaining 90% was to be covered by World Bank fund, while counterpart-budget from the city covered compensation and

resettlement cost if needed). It is worth to note that the construction costs differed from one alley to another one, depending on the size of the expansion, therefore the necessary contribution from community differed as well.

The actual cash contribution by each household was different, depending mainly on two variables:

- The front width of the land plot of the household: the larger the dimension, the higher the contribution
- The household's income status: the whole community discussed and voted that households with specific conditions (poor households or household with disabled people and invalids) could be treated differently and their contribution could be reduced or even exempted

According to the final project report from the ODA PMU in 2013, after two phases of implementation, 247 alleyways in Ninh Kieu and Binh Thuy districts were successfully expanded (up to 4m-width) with improved infrastructure and living conditions, of which 173 alleys were in the initial proposal and 74 others were directly added during the implementation phase following requirement from communities.

The most significant success is that the project convinced local communities to contribute land and cash for the expansion and improvement of their lanes. The total equivalent value of land and cash contributed on the whole reached VND 69 billion, a significant level compared to the financial status of affected communities. In An Phu ward, the total contribution from 177 affected households (not all affected households) was VND 740 million (average VND 560,000 per person). It is worth noting that the average income of the affected households in An Phu ward is VND 770, 000 per capita per month.

The project was successful due to the following factors:

- The community was engaged in all phases of the project regarding their alleys. Their voice was respected.
- There was a high level of transparency during the preparation, negotiation and implementation of projects.
- Special consideration was given for vulnerable households.
- There was availability of funding from state budget and WB project for the implementation of project. The most critical aspect i.e. financing, was ensured. Similar situation can be found in other cases in other municipalities, where there should at least be sufficient funding from authorities to catalyze the implementation of such projects.

The (original) price of land was not so high and households clearly recognized that they would benefit from the contribution of land towards the expansion of their alleys.

4.3.7 Learnings

There have not been a lot of successful examples of betterment levy on account of obvious difficulties in measuring the value increase that takes place because of the infrastructure creation. It requires extensive investment and policy support in database creation and maintenance. In India, the tool is used as a part of town planning scheme implementation. In this case, the betterment levy is used more as a cost recovery tool preempting the land value increase in serviced plots to the extent of infrastructure investment cost. It is levied at the time of giving building permission. The legal provision for betterment levy outside the town planning scheme (which is present in case of Mumbai Metropolitan Region Development Authority) is not yet implemented due to the difficulties in estimating the value increases.

For Vietnam, where land readjustment process is a recently introduced phenomenon, betterment levy can be introduced formally by amending the legal provisions for land readjustment. IN this case, it will be used as a cost recovery tool. That will be a better way to introduce the betterment levy in Vietnam than linking it with value increases. Its applicability in Can Tho may be a long term possibility.

4.4 Developer exactions (including development charges and impact fees)

4.4.1 Definition

Developer exactions generally take one of three forms explained below.

- Required on-site improvements, such as roads, public pavements, water distribution and wastewater collection lines, and public spaces that must be constructed within the boundaries of the development project and then transferred to the local government
- Payments required to offset the impact of the new project on off-site city infrastructure and services, also named as the 'impact fees'. Impact fees are one time fees charged at the time of building approval.
- Payments required as the developer's contribution to improvements within the city but not tied directly to the development project, also named as the 'development charges'. Development charges are one time charges, levied at the time of building approval.

4.4.2 Pre-conditions

Developer exactions are defined as cost recovery tools and are recovered at the time of building permission from the developer. Hence, the real estate demand decides the magnitude of revenue potential. A city which is experiencing demand pressure for real estate, tends to generate large funds from developer exactions on account of large real estate demand. Where, the land supply is restricted, and the demand-supply imbalance occurs, the developer exaction revenues will grow significantly. This is because of two reasons, first on account of the growth in construction activity and second on account of growing land prices due to demand-supply imbalance.

However, in the cities with low real estate demand, the land prices tend to be stagnant and hence, the upside to the revenue potential from developer exaction is limited. However, since the exactions are towards the recovery of infrastructure cost, which helps improve people' lifestyle, exaction becomes a rational tool with less probability of resistance from locals.

4.4.3 Developer exactions in India

4.4.3.1 Development charges

Legal framework

In India, the municipalities are entitled to levy development charges on developers to be able to finance creation of infrastructure. The charges are levied on change in land use or any construction activity all across the city limits. In most states, the development charges are prescribed in absolute values (Rs per sq. m.). The state of Maharashtra changed this method to a method charging development charges as a percentage of ready reckoner land rates (the official real estate prices published annually by the State Government) in 2010 by amending the Maharashtra Regional and Town Planning Act, 1966. Currently in Maharashtra, the development charges are levied at a rate of 2% for residential, 4% for commercial and 3% for the industrial properties. The State Government of Maharashtra has also made a provision empowering the municipal corporations to increase the prevalent rates by 100% in order to create funding for vital urban transport projects.

Process followed

To levy the development charges, the municipalities use the official land prices which are updated annually by the state government. Thus a regularly updated database on land prices is an essential requirement to levy development charges. With fixed charges, the municipality is not able to capture revenue increase on account f increase in ladn prices.

Outcome

Through the development charges, municipal corporations in Mumbai Metropolitan Region are able to generate significant size of revenues.

All figures in Crore	2014-15	2015-16	2016-17
Thane Municipal Corporation	50	168	198
Municipal Corporation of Greater Mumbai	537	831	844
Kalyan Dombivali Municipal Corporation	12	13	26

Source: Data from the websites of the respective municipal corporations

In the Mumbai Metropolitan Region, where the real estate demand is high due to large economic activity, the development charges are seen to be growing rapidly.

4.4.3.2 Impact fees

Legal framework

Impact fees, generally, are **levied on new constructions** in an area where a large new public investment has been announced. They are levied to recover at least a share of the investment made. It is a one-time fee and collected when the landowner applies for new construction permission in the defined area. In India, Impact fees are levied in Hyderabad, in the erstwhile state of Andhra Pradesh (now in Telangana).

The Government of Andhra Pradesh (GoAP), vide Government Order 171, issued revised common building rules which are applicable to areas under the Municipal Corporation of Hyderabad (MCH) and Hyderabad Urban Development Authority (HUDA). The revised rules allow the levy of an impact fee towards city-level infrastructure on buildings above 15 m in height (excluding stilt parking floor) at Rs 100 - Rs 5000 per sq. m. depending on the nature of the building, height, and location. The amount collected is to be escrowed at 50% for infrastructure development in the same area, and the rest for city-level capital infrastructure improvement. The said fund is utilized according to an infrastructure plan and action plan required to be undertaken by the competent authority.

Process followed

Impact fees are levied in a particular area in the city. Necessary legislation to identify and define such area and to introduce impact fee needs to be present. Also it is important to set the process to establish connect between the growth in population in the area and the need for additional infrastructure.

Outcome

Hyderabad Metropolitan Development Authority (HMDA) is planning to collect the impact fee from owners and developers taking up projects on nine radial roads to get nearly Rs 180 crore. Impact fees are designed to recover a defined percentage of the cost of infrastructure provided in the area. In case of HMDA, the impact fees are supposed to recover nearly 5% of the project cost.

4.4.3.3 Developer exaction through developer's contribution for social housing

Legal framework

Mumbai has a long history of developer exaction projects. Developer exactions are used for rehabilitation of slums through slum rehabilitation schemes. The development control regulations of MCGM provide the framework for this process. The scheme requires the developer to provide free houses to the slum dwellers of prescribed sizes (300 sq. ft.) and allows the developer to construct upto an FSI of 3. The FSI of 3 needs to consume the cost of construction for rehabilitation component. The remaining construction could be sold in the market to recover the cost and earn profit. Generally the ratio of rehabilitation component to the sale component is 1: 1 in suburbs and 1: 0.75 in south part of the city.

Similar scheme of redevelopment is also applied to the cessed buildings which are very old buildings (chawls etc), notified by the government and requiring redevelopment.

The slum rehabilitation scheme is implemented by Slum Rehabilitation Authority specially formed to look after the slum rehabilitation schemes. The scheme for redevelopment of cessed buildings is under the purview of Mumbai Building Repairs and Reconstruction Board.

Process followed

To implement these schemes, all the rules and regulations regarding the land ownership transfers, compensation rules for the land owners, size of free houses, amenity specification for free houses, rules for formation of housing societies, rules for consent of the slum-dwellers etc need to be clearly defined. Even after this, the scheme is bound to face various execution challenges such as lack of consent from defined percentage of slum-dwellers, complications in regards to land ownership and also lack of local real estate demand to consume the cost of subsidization and new construction. In these cases, slums in the areas where the land prices are set to grow, which seem attractive to the developers are cherry-picked. Also this kind of scheme can only be successful when overall real estate demand is very high and the prices are growing exponentially.

Outcome

In Mumbai the scheme was able to rehabilitate 1.5 lakh households, which is still a small number as compared to the total slum population of 50 lakh. The model thus can achieve limited success depending upon the capacity of the real estate market to cross-subsidize the activity. Also depending upon real estate market cycle, the scheme's success may get impacted.

4.4.4 Developer exactions in Latin America

4.4.4.1 Developer exaction through developer's contribution for infrastructure creation

According to Smolka (2013), developer exactions are quite common in LAC, where government often requires developers to provide between 15% and 35% of the project's area for provision of public services such as schools, and parks.

Example 1: Guatemala

Legal framework

When a large private development project is submitted for a license in Guatemala, a road traffic study evaluates its impacts on the surrounding community. An infrastructure plan is then designed to mitigate any negative impacts, together with a calculation of the share of the cost the developer should cover. The instrument is known as Impacto Vital where the responsibility for road improvements is shifted to private developers for investments that otherwise would be borne by the public Smolka (2013).

Process followed

The work itself is executed by the developer under municipal supervision. If the cost of mitigating works is more than the developer's estimated share then several other funding streams are directed towards the mitigation work such as the license fee, earmarked funds etc. Smolka (2013).

For large projects with strong negative traffic impacts the mitigating works must be concluded before the inauguration of the development.

Revenue potential

Since 2006 this instrument has funded nearly all the road construction, totaling more than US$20 million (Municipalidad de Guatemala 2013) Smolka (2013).

Example 2: Argentina

Legal framework

Argentina does not yet have national legislation to support specific means for capturing land value increments, but certain municipalities have some autonomy granted by Article 123 of the National Constitution and have enacted legislation to that effect Smolka (2013).

Process followed

It is documented that though there is no defined legal provision for exactions, municipalities authorize developments within the legal framework with existing land use norms fulfilled and then by soliciting, negotiating, or demanding from them some infrastructure works or improvements in the area of the city where the authorized development takes place.

For example as cited by Blanco et al. (2016), in the project of rehabilitation of Puerto Norte in Rosario where the port was shifted to free up more than 100 hectares, this land was developed through negotiations with by private sector stakeholders using an instrument called 'urban development agreements'. These agreements included the setting aside of land for construction of roadways, as well as for streets and utility networks. Furthermore, 15% of the land surface was set aside for public uses and facilities in return for the right to develop at the density levels defined by the plan.

Outcome

As an outcome of the urban development agreement, the municipality was able to obtain 42 hectares of public space, 0.63 hectares of social housing in situ, 4.30 hectares of social housing outside the project area, and 2.54 hectares for community facilities.

4.4.5 Developer exactions in Vietnam

4.4.5.1 Legal framework

Section 3.2.5 of this report elaborates on the legal framework for developer exactions.

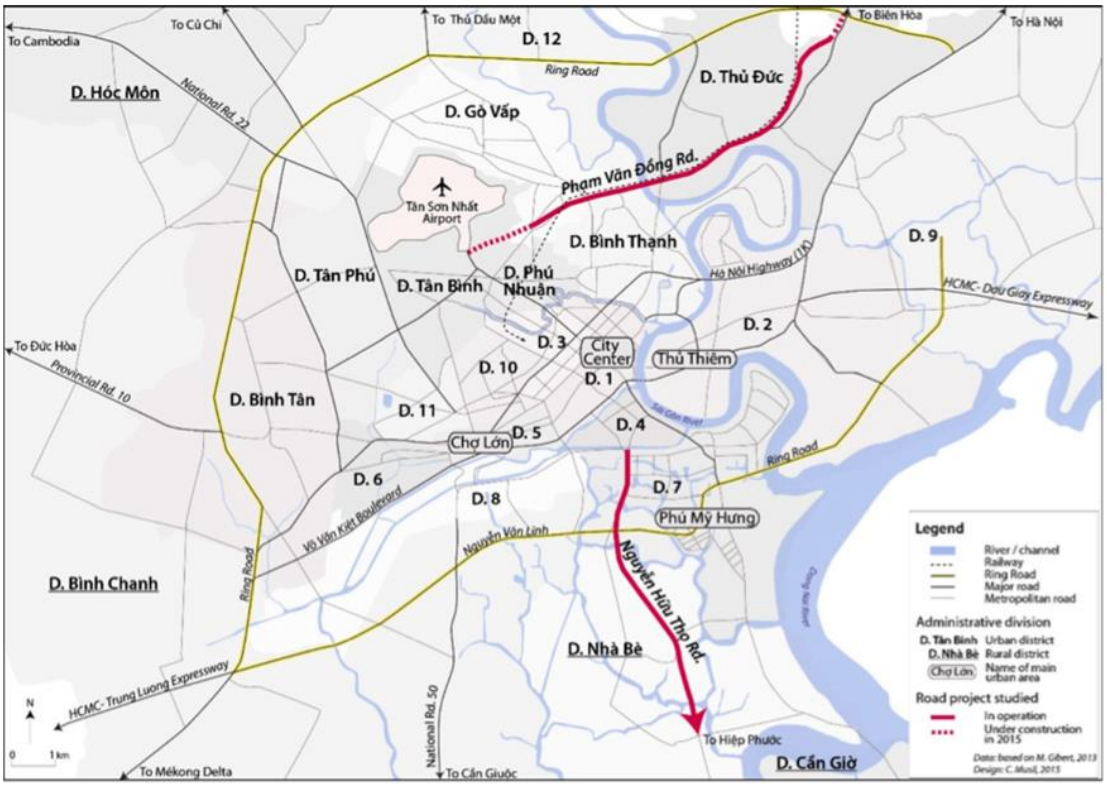
4.4.5.2 Process followed

4.4.5.2.1 Land for infrastructure (Build – Transfer) projects

Land for infrastructure model has been implemented by Da Nang extensively and also Ho Chi Minh City. A case from Ho Chi Minh City has been elaborated below.

Pham Van Dong road project is considered as a significant project for HCMC's development, as it facilitated further regional expansion. In this case, HCMC decided to make use of available public land in areas away from the infrastructure project location to provide to the developer.

Figure 4-2 Location of Pham Van Dong Road in HCMC

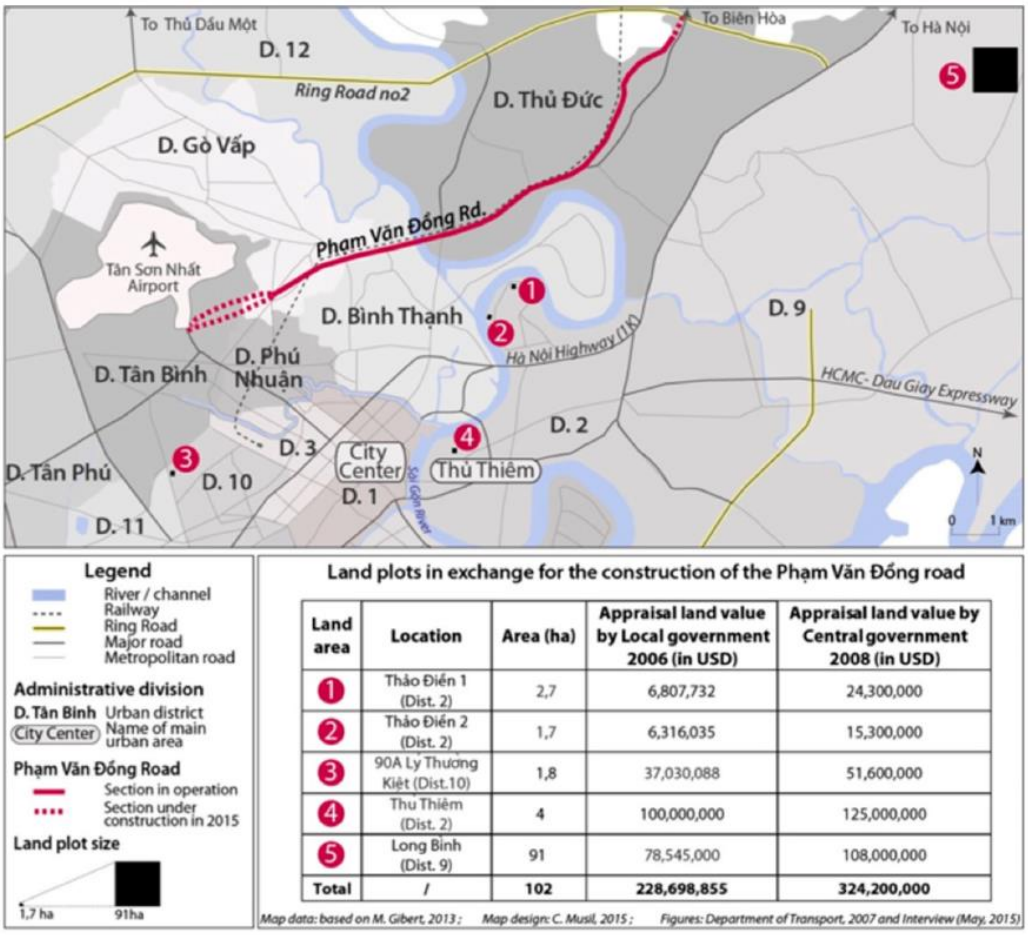


Source: CRIS documentation from Thanh Bao Nguyen et al. (2018)

The road project, known as the Tan Son Nhat – Binh Loi transit axis, linking the airport to the ring road No 2 of the city was started in 1997, At the end of the 1998, the Central government approved an investment by a Malaysian company (the Multi-Usage Holdings Berhad) to build the road through a BOT contract. However, because of the 1998 Asian financial crisis, the project was withdrawn. In 2004, the HCMC municipality invited GS E&C, a South South Korean Chaebol, to bid on the project. To attract this potential investor, the City proposed to switch from a BOT to a BT contract. The original design of this thoroughfare included a six-lane roadway combined with an average 60 m buffer zone on each side along the road, allowing new commercial and residential developments. This plan would have required, however, a costly resettlement and compensation of thousands of households due to the highly dense areas along the road project. This excessive eviction imposed the City to reconsider its plan and to skip the buffer zone.

After three years of negotiation, the Contractor finally signed in 2007 a BT contract for a total value of USD 340 million. This cost included the civil engineering works (a 13.7 km road section plus a bridge over the Saigon River), a short period of maintenance of the infrastructure, as well as a USD 120 million package to support the land clearing process (more than 500 hectares to acquire), compensating the affected nearly 4,000 households. In exchange, GS E&C obtained from the city in total 102 hectares of land to develop – divided into five plots located in different parts of the city, and with a plot size range from 1.7 to 91 hectares.

Figure 4-3 Location of 5 land plots allotted in exchange for the construction of Pham Van Dong Road



Land plots in exchange for the construction of the Phạm Văn Đồng road

Land area	Location	Area (ha)	Appraisal land value by Local government 2006 (in USD)	Appraisal land value by Central government 2008 (in USD)
1	Thảo Điền 1 (Dist. 2)	2,7	6,807,732	24,300,000
2	Thảo Điền 2 (Dist. 2)	1,7	6,316,035	15,300,000
3	90A Ly Thường Kiệt (Dist.10)	1,8	37,030,088	51,600,000
4	Thu Thiêm (Dist. 2)	4	100,000,000	125,000,000
5	Long Bình (Dist. 9)	91	78,545,000	108,000,000
Total	/	**102**	**228,698,855**	**324,200,000**

Map data: based on M. Gibert, 2013 ; Map design: C. Musil, 2015 ; Figures: Department of Transport, 2007 and Interview (May, 2015)

Figure 3. Pham Van Dong 'land for infrastructure' project (Source: Musil C.).

When the city started the first land acquisition procedure for this project, the BT model came under the scanner regarding the land value appraisal that the foreign contractor received. The central government blamed the City of valuing the exchanged land at a price below its real market value. After conducting a second land appraisal led by the Central Government, the value of the land was almost US$ 100 million more than the value that was anticipated in the contract.

Figure 4-4 Pham Van Dong Road

Source: CRIS documentation from Thanh Bao Nguyen et al. (2018)

In 2017, the State Audit carried out the auditing for 17 BT projects in many provinces and cities and pointed out the following shortcomings and loopholes that cause considerable losses of State budget of this BT form:

- BT projects are projects using state budget and resource, but in many cases these projects are not really necessary.
- These projects mainly borrow (up to 85% of the capital) with high interest rate. As a consequence, BT projects do not reduce the burden on the State budget. In many cases, the cost estimation for infrastructure investment is much higher than the necessary cost, causing a loss of state budget at the end of the day.
- Most of projects used the method of direct contracting, which lacks competitiveness and transparency and there is a risk that the selected developer does not have enough technical competences and financial capacity.
- As the land plots exchanged are directly allocated to developer, the regulation of organizing land auction is not strictly followed here and there is big financial risk of losing capital for state budget.
- The current regulation does not have any provision to capture the potential increase in the land prices.

Because of the above shortcoming and the lack of regulation, at the beginning of 2018, MOF issued a Document No. 3515/BTC-QLCS on 28/3/2018 indicating that municipalities have to wait for the issuance of Decree guiding for the use of public asset as an exchange for infrastructure investors. Therefore, all expected projects under this form are currently on hold in the whole country.

4.4.5.2.2 Negotiated exaction and density bonus in District 2, Ho Chi Minh City

District 2 is one of 24 districts in Ho Chi Minh City and is the district attracting investment from many real estate developers. In 2012, the Vice Chairman in charge of Urban Development of Ho Chi Minh City signed a document

(document No. 1595/UBDN-DTMT dated on 12 April 2012) allowing District 2 and Binh Tan district to have pilot implementation to mobilize financial contribution from housing developers. The purpose of this mobilization is to have additional financial resource to invest for social infrastructure (healthcare and education) that will serve the future inhabitants living within the project and surrounding area. District 2 has been using this document as official basis to calculate the contribution from developers when they submit proposal to have higher density than the predefined density approved in zoning plan.

The document is a concrete action for a policy discussed since 2003 of Ho Chi Minh City (demonstrated by a content of Decision No.02/2003/QD-UBND on the Development Orientation Plan on Education System of HCMC "The city should issue policy regarding the contribution from commercial housing project developers for public purpose in order to build new school and class). Within the Document No.1595/UBND-DTMT, it is clearly mentioned that only District 2 and Binh Tan district can implement this tool, and assigned Institute of Development Studies of the city the responsibility to follow closely the progress of implementation and report to HCMC PC and investigate if the city can use the same approach (i) for investment of park and green space or (ii) with developers for other types of development such as hotel, office, services, commerce. Besides, DOF was required to follow closely the implementation together with DOC and DONRE to officially propose to PC the method of calculation for necessary contribution relating to land and construction.

Based on the document, immediately in 2012, People Committee of District 2 proposed clearly in the Direction No. 07/2012/CT-UBND active mobilization of financial contribution from housing development projects in the district according approval policy of the city. Since 2013, the district started implementing this policy, especially with the projects having proposal to increase density.

With the case of G-Home project in Thao Dien ward (whose land was allocated to developer in 2017), the original population approved for the area in 2004 within the zoning plan was only 237 people, however, the estimated population staying is 937. To accommodate this increased density, the developer was allowed to develop with higher density than what was proposed in the zoning plan and against this, the developer was required to contribute 13.94 billion VND to the district budget. The fund will be used for the construction of social infrastructure later.

Similar approach was applied for projects nearby G-Home buildings such as the case of Mastery project (with a contribution of 20 billion VND) and the Descon project (with a contribution of 11.39 billion).

It has been observed that though developer exaction model has been implemented in Vietnam, the process takes time. It is also to be noted that the mechanism can be applied for projects located in high-demand area such as in District 2 and Binh Tan district.

4.4.5.2.3 Redevelopment of old apartment buildings in Dong Da district, Ha Noi

In large cities in Vietnam, the city authorities have to deal with the problems regarding the old collective apartment buildings with 3-5 floors built during the 1955-1974 period as they have degraded and pose dangerous living conditions for the inhabitants. To redevelop these areas, the city authority calls for investment and support from private sector, who will negotiate with all the households to get their agreement, prepare the plan of redevelopment and execute the construction of new high-rise buildings. The developer (i) should allocate certain housing units or housing floor areas to original apartment owners for on-site resettlement purpose and (ii) can sell the remaining housing units at market price to earn profit.

B4 and B14 area in Kim Lien ward, Dong Da district can be considered as the first project for the Collective Building Redevelopment Programme of Hanoi. There were 130 households living within the two old buildings and it was expected that there would be four new high-rise buildings of 14-21 floors with 500 housing units. To implement the redevelopment project, Hanoi's authorities selected Incomex, a private sector company having experience in the area of construction and real estate development, following the approach of socialization.

The project started in 2005 and was completed in 2014. The actual time for construction was only from 2010 to 2013, but the preparation process, including plan preparation, site clearance and compensation (including negotiation with individual apartment owners) took more than 5 years, from 2005 to 2010. Especially, the developer had to deal with challenges coming from the resistance from the owners of original ground floor apartments, as all of those households had their own high-profit business using ground floor (service, parking, etc.). According to the approved plan, from the original 4-floor buildings with apartment ranging from 24 to 30 sq. m, two 14-floors buildings, one 17-floor building and one 21-floor building were constructed. The new apartments have much larger area, of which apartments for on-site resettlement range from 53 to 65 sq. m per unit, and commercial units with much larger area.

The principles for on-site resettlement are as following:

- Households living in first, second, third and fourth floor will have the right to resettle in new apartment of the same floor level. However, only the floor area that is equivalent to that of their old building is free, the additional areas should be bought at discounted price (6-9 million per sq. m)
- Households living in the ground floor will have a commercial kiosk (24-30 sq. m) at the new building and the right to buy a new apartment at 5-floor at market price (10.5 million per sq. m)

The process was transparent, as information was communicated during community meetings as well as sent directly to all affected households. However, the process was delayed for a long time, especially because of the negotiation process with households living at ground-floor.

The developer was finally able to start their construction in 2010 and finalize the construction after 3 years. All apartments were handed over to original owners and new buyers.

Based on experience from this project as well as from some other projects in other cities, the Government of Vietnam issued Decree No. 101/2015/ND-CP on the redevelopment of collective apartment building that would be serve as the main regulation document and guidance for the implementation of future projects. However, the implementation of new project still has to face many challenges because of the negotiation process with all original apartment owners and the high financial risks in case that the project location is not attractive enough for the developer.

4.4.5.3 Outcome

It is observed that the developer exaction model has mainly worked in larger cities where real estate demand is high allowing the developer to recover the cost and earn profits.

4.4.6 Learnings

In Vietnam, developer exaction is present only in developer's contribution model and not in the form of a fee such as development charges or impact fee. Developer's contribution model is likely to work in major cities with real estate demand is very high and not in city like Can Tho where demand is easily balanced by the supply and the picture may not change in immediate future. For such cases, developer exaction may be implemented through fee mdoel of levying development charges or impact fees which are levied in order to create funding for infrastructure cost and at the same time allow the Government to capture the land value changes. This could be a tool which may be looked at by the Government for an immediate implementation.

4.5 Lease of public land

4.5.1 Definition

Lease of public land basically involves the exchange of land for monetary price to the private sector (UN Habitat, 2016). Since in the sale of land, the government loses the land title, governments generally prefer to give out land

parcels on long leases. This way, the bidder gets sufficiently long period to monetize the property at the same time the Government retains its land title.

The government leases the land to the lessee, and collects rent either in the form of a one-time upfront lease premium, or as recurring lease payments over the term of the lease period. When lease payments are made on a recurring basis (say annually), the amount to be paid is usually reviewed and updated periodically.

On expiry of the lease period, the land (and any improvements made on it) revert back to the government, unless the lease is renewed. When the government leases out land, lease periods are typically long term, varying from country to country, and even city to city, or even as per the authority's norms.

Lease of public land is essentially used to generate public revenues, and / or contribute to the land market for real estate development.

Whenever a Government chooses to lease out land parcels along a transit corridor, it tends to maximize monetary benefits from the transaction as proximity to a transit corridor tends to increase prices locally in the influence area. This way, Government captures increase in land value on account of public investments on the plots under its own control.

4.5.2 Pre-conditions

- The public authority that seeks to raise revenues, must be in possession of land, i.e. it should hold a clear title on the land parcel. This indicates the necessity for having efficient processes to conclude any legal battles on the land titles.
- The second condition is to know the objective of leasing a land parcel. It could be either to promote local development or to maximize revenues from leasing out the land. Depending upon the objective, the criteria to evaluate offers will vary.
- The third and the most important condition is that the authority leasing out the land should have the capacity to carry out the feasibility analysis to select plots having highest development potential and also be able to decide the minimum price for the land parcel. For doing this analysis, the authority must have good quality data on real estate market trends, price trends and official prices information. It also needs to have information on similar transactions in the area to benchmark the transaction.
- Needless to say, the legal framework must be such that governments are permitted to either sell or lease public land, or both. Procedures for doing the same must also be clearly spelt out in both cases, so that there is minimum ambiguity with respect to executing such tools of raising revenue.
- The procedure for such sale or lease of land should be transparent, executed either through tendering or auction process. This not only builds public confidence, but also ensures fair market prices for such transactions, thereby representing a gain for the public exchequer. If there is a need to discount the asking price or rent for public land, then the manner and reason for discounting the rate should also be made transparent.

4.5.3 Lease of public land in India

The auction of public land, usually for long term lease, has been an important source of revenue for urban development authorities (UDAs) in India. Revenues accruing from public land lease, have now become the most significant component of the own source revenues of various UDAs in prominent metropolitan areas of the country. One such successful case of lease of public land is that carried out by the Mumbai Metropolitan Regional Development Authority (MMRDA) in Bandra Kurla Complex, Mumbai.

Having a population of over 20 million and spanning an area of over 4,355 sq. km, the Mumbai Metropolitan Region is one of the most populous metropolitan regions in the world. The region consists of 8 municipal corporations, 9 municipal councils and over a 1000 villages. The Mumbai Metropolitan Region Development Authority (MMRDA) was established in 1974 to carry out long term planning, promotion of growth centres, implementation of strategic projects

and finance infrastructure development in the region. MMRDA was assigned the reclaimed land of Bandra-Kurla Complex (BKC) to MMRDA.

MMRDA was designated the special planning authority for the planning and development of BKC way back in 1977, and work on the project commenced in the early '80s. In an attempt to decongest south Mumbai, BKC was planned to be Mumbai's new CBD – the city's hub for corporate and commercial activities. The complex today provides about 200,000 jobs, and offers almost 117,000 sq. m of commercial office space (Ministry of Urban Development, Government of India, 2017).

Given the large investment requirement in the region, coupled with the limited budget of the authority, MMRDA turned to monetizing its land assets to finance infrastructure investments.

4.5.3.1 Legal framework

According to the seventh schedule of the Constitution of India, land is a state subject i.e. state governments are empowered to legislate on matters related to "land, that is to say, rights in or over land, land tenures including the relation of landlord and tenant, and the collection of rents; transfer and alienation of agricultural land; land improvement and agricultural loans; colonization".

MMRDA has been declared as the Special Planning Authority for the area of Bandra-Kurla Complex (BKC) under the Maharashtra Regional and Town Planning (MRTP) Act, 1966. MMRDA draws its power to dispose land vesting with it in BKC from MRTP Act. It can lease the land with prior permission of the State Government for maximum upto 99 years for the purpose of securing development of the area.

4.5.3.2 Process followed

MMRDA began to monetize land parcels in BKC with the objective of making BKC as an important commercial centre in Mumbai. The objective of leasing the land was to initiate development in the area. MMRDA started giving out the land parcels on lease to private developers. As per this model, it would be the developers' responsibility to develop the plot as per MMRDA's use restrictions along with all the required on-site infrastructure. Furthermore, this mode of development would enable MMRDA to raise significant up front revenues to finance various infrastructure projects in the region. It has been leasing out BKC lad plots snice inception.

Typically, MMRDA gives out land leases through bidding process. IN initial days, MMRDA used to conduct open auctions for the land plots as the objective of the bidding process was to initiate development of the area. However over the years, MMRDA switched from open auction method of bidding to minimum price method. For the bidding process, the minimum price is decided by surveying the current market price in the area for sale transactions. If the bids received are not in line with the expectations, the bidding process is carried out again when the real estate market conditions are more suitable.

Accordingly, in initial years, MMRDA was able to create large revenues from leases as BKC was a real estate hotspot at that time with limited options available for commercial real estate in other areas of suburbs of Mumbai. However, in recent years, the response to the auctions has not been so good and in result, MMRDA had to open certain land parcels for a very long lease period. This might be because of development of several other commercial areas in other parts of MMR.

One more point to note here is that MMRDA being the Special Planning Authority for BKC was able to decide upon the development control regulations on BKC land parcels while carrying out the bidding process.

4.5.3.3 Outcome

MRMDA began to monetize the land in BKC in the time when Mumbai's real estate market was showing very high growth trend with exponentially increasing land prices. MMRDA successfully raised Rs. 51 billion from just 13 hectares of land in two auctions conducted in 2006 and 2007. This amount was almost equivalent to ten times the

capital spending of MMRDA in 2005-06, and five times the city municipal corporation's budget for infrastructure development in 2004-05 (Peterson, 2006). However, in recent years, MMRDA has been given the responsibility to implement the major transport infrastructure projects in MMR including various metro lines, MTHL Multi-modal corridor and so on. It has a total capital expenditure plan of Rs. 1,04,190 crore by 2050. However, since MMRDA's land assets left for leasing out are limited, the lease revenue will no more be sufficient to fulfil the financing requirements of MMRDA. Hence MMRDA has created an Urban Transport Fund by identifying alternate revenue sources to fund the capital expenditure.

Lease of land was an effective revenue tool for MMRDA because of the following reasons:

- Mumbai's real estate market is buoyant and MMRDA was allotted the BKC land by the State Government and hence did not have to incur any acquisition cost. Due to these reasons, the BKC leases turned out very profitable for MRMDA.
- MMRDA was empowered to decide the development regulations being the Special Planning Authority and thus could create attractive offers for the bidders.
- MRMDA over the years was able to build the necessary institutional capacity to understand the real estate market potential and value the land parcels correctly. It also has an advantage of availability of data on real estate market trends and updated government prices with Maharashtra State Government's ready reckoner rate system.
- MMRDA changes its land disposal strategy depending upon the real estate market conditions, interms of deciding when to lease, the lease term and also the price.

4.5.4 Lease of public land in China

Land leasing in China involves the upfront sale of long-term occupancy and development rights. The 1990s in China was not only characterized by rapid industrialization, but also by fiscal reforms that centralized the power to collect budgetary revenues. Worried by the dropping share of central government revenues as a percentage of total GDP, the central government introduced fiscal reforms that led to an increase in its share of tax revenues, at the expense of local and provincial governments' share. However, provision of basic services and economic development of cities continued to be the responsibility of local governments. As a result, local governments found themselves short of a significant share of their revenue, while responsibilities of service provision and urban development continued to mount.

Given this context, land based financing tools, the long-term lease of land in particular, became critical sources of revenue for local governments in China. Ever since, this tool has been used extensively to fund urban infrastructure development in Chinese cities. Land transfer fees (LTFs) are a lump sum payment made by developers to obtain such long-term lease of land use rights. The maximum term for lease depends on the use for which it is leased – 70 years for residential purposes, 50 years for industrial use, and 40 years for commercial use. Since the 1990s, local governments have grown increasingly dependent on LTFs to finance infrastructure development.

Acquisition of rural land at production value prices, and its subsequent conversion to urban use and lease to developers at market value has been the most popular means of realizing maximum revenue through land transfer fees in recent years.

4.5.4.1 Legal framework

There is no private ownership of land in China. Since all land in China belongs to the state, individuals and corporate entities cannot enjoy ownership rights over land, however they may own the property or improvements made over the land. Accordingly, the legal framework governing land in China includes legislation regulating land use rights as well as legislation regulating ownership of buildings and structures over the land. The Land Administration Law, 1999 is the fundamental law governing land matters in the People's Republic of China.

According to the Chinese Constitution of 1982, all land in urban areas is state-owned land, and all agricultural land, and homesteads in suburban and rural areas are owned by rural collectives, and called collective land.

Chinese law prohibits the sale and transfer of ownership of state-owned land. However, as per the law, the Chinese government has the right to grant, lease or allocate the right to use state-owned land.

The Urban Land Regulations of 1990, and the Urban Real Estate Law of 1994, authorize local bureaus at the municipal and county level to grant long term land use rights for state-owned land to local as well as foreign land users (Habitat International Coalition, n.d.).

4.5.4.2 Process followed

In order to obtain land use rights for any state-owned land, the land user must enter into a contract with the local land bureau through a competitive mechanism i.e. either through auction, bidding or a listing process, or through a process of negotiation. In fact, many of these land-use rights contracts used to be entered into through a negotiated process (Lin & Ho, 2005).

However, on July 1, 2002, regulations in the form of the 'Decision on Leasing State Land Use Rights through Auctions and Tenders (known as "Document 11") were published by the Ministry of Land Resources. As per this decision, the central government demanded that local officials lease land through more transparent processes rather than through negotiations. As a result of these regulations, the proportion of leases through competitive means increased, however, agreements through negotiations still persisted. Subsequent to this, in September 2006, the Ministry of Land Resources issued another regulation requiring all state-owned land to be leased through auction, public tender or listing (Tao, Su, Liu, & Cao, 2010).

The land use rights contract specifies the land use right for which the land is being leased out, and the user must adhere with this purpose during the lease period. Besides the security of tenure, the land user enjoys the right of marketability i.e. the land use right may be transferred, leased, or mortgaged in accordance with the law and terms of the contract.

The Land Law also specifically requires project owners to attach the local land bureau's preliminary examination report when they submit the project feasibility study for approval. Moreover, the proposed use as per the project must be in line with the land use specified in the master plan and in the annual land use plan.

4.5.4.3 Outcome

Practice of leasing the acquired land when the demand is high has helped the government optimize the lease revenues. Government data reveals that from 2001 to 2003, LTF revenues amounted to RMB 91 million, representing 35% of local government revenues with an average value of just over RMB 30 million per year. In 2004, this figure rose to RMB 60 million. In 2009, LTF revenues further rose to RMB 1.5 trillion, accounting for 46% of municipal revenues on average (Cole, 2010) and in 2017, LTF revenues hit a high of RMB 5.2 trillion (Kai, 2018).

Two landmark leases in Shanghai, one in 2005 and the other in 2006, demonstrate the sheer volume of revenue raised through the sale of such long-term leases of public land. The sale of these two plots located in downtown Shanghai generated more than RMB 6.5 billion. In fact, in the third quarter of 2003 alone, the city had leased on auction nearly 805 hectares of land in the Pudong area (Peterson, 2006).

- ***Strategic land leasing in Xintiandi, Shanghai***

Xintiandi is located in the Taipingqiao residential district, which primarily consisted of a cluster of dilapidated Shikumen houses. In the 1990s, the Taipingqiao area occupied 52 hectares of land and consisted of 23 residential neighborhoods. The Xintiandi area, admeasuring 3.6 ha, consisted of two blocks old Shikumen housing, which due to rapid population growth and poor maintenance, had fallen into a state of disrepair.

Beginning in 1999 and adopting the principle of adaptive reuse, the municipal and district governments collaborated with private developers and international architectural firms to rehabilitate and transform Xintiandi into a quarter of coffee shops, restaurants, and nightclubs.

Since its opening in 2001, Xintiandi has become one of the top entertainment and tourist destinations in Shanghai. Xintiandi's success has led to a significant rise in property values in the area, transforming the neighbourhood into one of the most expensive real estate in the city.

Given the dilapidated conditions yet strategic location of Taipingqiao area, the Luwan district government initiated the project to redevelop area in 1997. The district government approached several private developers to solicit their interest in taking up the project. However, given the high relocation costs and complicated nature of ownership of the buildings in the neighbourhood, most developers were reluctant to participate in this project.

At this point of time, Shui On Group was one of the few reputed developers to enter the Chinese property market, and had already developed large projects such as a City Hotel and a high-rise office building in Shanghai, thereby gaining a level of trust with the Luwan district government (Amirtahmasebi, Orloff, Wahba, & Altman, 2016). Thus, the Luwan district government directly approached Shui On Group with the idea of developing a plan for the revitalisation of the Taipingqiao neighbourhood. Accordingly, Hong Kong developer Shui On Group eventually signed a 50 years lease with the Luwan district government committing US$ 3 billion of investment for the purpose of developing this neighbourhood.

The developer's role was to provide scapital for redevelopment, while the local government's role was to provide subsidies for carrying out relocation of original residents. The agreement between the developer and the district government provided the Shui On Group with the development rights for the entire Taipingqiao neighborhood, however the lease title for each land parcel within the neighborhood would be individually negotiated and transferred over a 10-15 year time frame. Thus, it was planned that every two to three blocks would be leased out and redeveloped based on negotiated land prices. The lease period of 50 years would commence from the date when each individual leasing contract is signed.

A detailed master plan for the area was approved by the Shanghai Municipal City Planning Administration which included permissions related to location, land use, built form and construction for each block in a sequential manner. Through this flexibility in the lease contract, the municipal and district government maintained a certain degree of autonomy in their partnership with the developer (The World Bank, n.d.).

A fall in demand for office space post the Asian Financial Crisis, prompted an adjustment in the project phasing, giving priority to the development of amenity spaces such as the landscaped park and an artificial lake. Accordingly, in 2001, the Taipingqiao Park was completed. Construction of 'Corporate Avenue', an office complex was initiated and construction of 'Lakeville', a luxury residential building was commenced.

On the whole, the redevelopment process followed the logic of block location, market demand and relocation costs.

In order to facilitate successful implementation of this marquee project, the Shanghai Urban Planning Administration Bureau eased several review and approval processes, primarily through decentralising these to the district level. For instance, an endorsement was required from the Transport and Construction Committee at the municipal level in order for the Shanghai Urban Planning Administration Bureau to provide building permits. In this case, approval of building permits was devolved to the district level Transport and Construction Committee. Other measures adopted by the municipal and district level governments included assisting with relocation, allowing for reduced and deferred payment land lease prices (for commercial housing), and offering financial subsidies.

The commercial success of Xintiandi, has led to several other cities to replicate this model of redevelopment (He & Wu, 2005). Similar projects include the Xintiandi project in Hangzhou (also developed by the Shui On Group) and the completed project of SOHO Commercial Street (known popularly as Beijing's Xintiandi) at outer Jianguomen as part of Beijing CBD. The initiative of Xintiandi project was to redevelop the area into a commercial and entertainment

hub through private investment. This is a classic example of how development was fueled by the government by attracting private developers at the same time generating revenues for the government.

4.5.5 Learnings for Vietnam

It is a common learning from both India and China cases that the success of the lease/ sale of public land depends upon the overall economic and real estate market conditions of the city. Both the cases of MMRDA and Xintiandi are in such cities where the overall economic growth is very high and real estate market is very buoyant. In spite of that, several refinements or changes were made to the bidding process to make the offers attractive to the developers. In Vietnam, the entire land is owned by the people represented by the Government and hence it is the most common practice to lease public land. However, there are certain learnings from the case studies in terms of legal framework and administrative processes that may applied in Vietnam, and particularly in Can Tho.

Specific learnings for Vietnam against the parameters of objectives, development trend and land market situation, legal framework and administrative capacity have been elaborated below.

- Objective for leasing land

It is very important to know the objective for leasing out a land parcel. As in the case of Xintiandi or during the initial phases of BKC's development, Government's objective was to initiate development in the area. Hence the bidding terms were framed to attract bidders. MMRDA used to conduct open auctions. Even in case of Xintiandi, the bidding conditions were framed in order to retain the interest of the private developer. Thus, to initiate development of certain area, the government may give preference to getting a good private developer and getting the project implemented within the envisaged timelines over the monetary gains through the deal. However, if the objective is to maximize revenues of the Government, it needs to take a more aggressive approach by asking for a certain minimum price that is decided through market surveys and by benchmarking with the recent transaction values.

However it is also important to note that while using public lease of land as a tool to initiate development, it is important to assess overall economic situation and demand for real estate development in the area.

- Development trend and land market situation

For Can Tho, where the economic growth is slow, it may not be the right time to lease land parcels as the price realization by the government may be much lower than the optimum price. In fact in such scenario, it may also not be advisable for the Government to acquire very large land parcels in the city only with the objective of monetization as it further increases the financial risk on the Government.

- Legal framework

The current legal framework in Can Tho allows for leasing of land, however it does not ensure that the government receives the rational price for the land as the reserve prices are decided based upon the official prices which are not updated in line with the market changes. In Can Tho, all the final auction prices were observed to be much lower than the market prices. Mandating the updation of official land prices each year to reflect the market prices is the major legal reform Government needs to make in Vietnam. This is also because there is no private ownership of land in Vietnam, the availability of information on land transactions is only available with the Government and hence Government needs to maintain updated data on real estate transactions and price trends.

- Administrative capacity

Leasing of land is a process that requires a judicious assessment of market conditions and calibration of the offer according to the market trend. This requires reliable and latest data on real estate market and the capacity in the Government to value the land appropriately. Introducing the administrative reforms of data management and valuation will be the key in order to enable the city government to open up land parcels for leasing at an opportune time.

Can Tho city government hence must adopt a phased, market responsive land disposal strategy. Can Tho must graduate to a state where land auctions are determined by market demand conditions (ideally when market demand is strong) rather than the need to cover budget deficits. This approach to leasing of land will also ensure optimal revenue generation for the city government.

4.6 Land readjustment

4.6.1 Definition

Land readjustment is a mechanism by which land is reallocated to the existing land users along with better infrastructure and in return a part of land is received from the land users for infrastructure creation. Land readjustment provides the existing land users better serviced plots and to the government it provides land for infrastructure at no cost. The result of land readjustment is properly planned layouts with good infrastructure without the requirement of land acquisition expenditure for the government. Land readjustment is a development planning and control tool aimed at generating land for infrastructure creation. There have been some successful examples of land readjustment in South Korea and India.

4.6.2 Pre-conditions

- Land readjustment projects should be self-financing to the extent possible (including infrastructure and construction cost)
- Transparency and certainty in the sharing of project costs and benefits is essential to gaining landowners confidence in LR.
- Land readjustment is usually successful on the urban fringes (for greenfield development). Moreover, adequate infrastructure and financial planning must be undertaken in order to ensure that land use in the LR scheme is in line with the city's master plan and infrastructure provision is carried out in a timely manner.
- Participation of landowners and other stakeholders is very important in achieving success of land readjustment scheme.
- Staff skilled in project management, technical expertise and strong negotiation skills are required to build consensus among landowners for participation in the LR scheme.
- Good quality cadastral maps that reflect actual boundaries, land use, and occupancy characteristics are essential in order to avoid disputes and delays in the LR process.
- A favourable real estate market is a prerequisite to the success of a land readjustment scheme. In the absence of high and rising real estate prices, land owners have little incentive to contribute part of their land holding for the scheme as the promise of net gain is limited.

4.6.3 Land readjustment in India

A very successful model of land readjustment is through the town planning schemes (TPS) which has been implemented in the state of Gujarat, India. The main purpose of TPS is to (a) convert farmland into planned layouts for town expansion (b) secure land for public purposes and (c) generate funds for the infrastructure.

The TPS has been strategically and extensively used to shape the urban sprawl and expansion in the cities. Through identification of fringe areas within the TPS limits, the fringe development is controlled in a planned manner. This has allowed the cities to rebalance their spatial structures and allow for development. This strategy of targeting the yet to be developed urban fringe and developing it through TPS has been observed to yield following benefits:

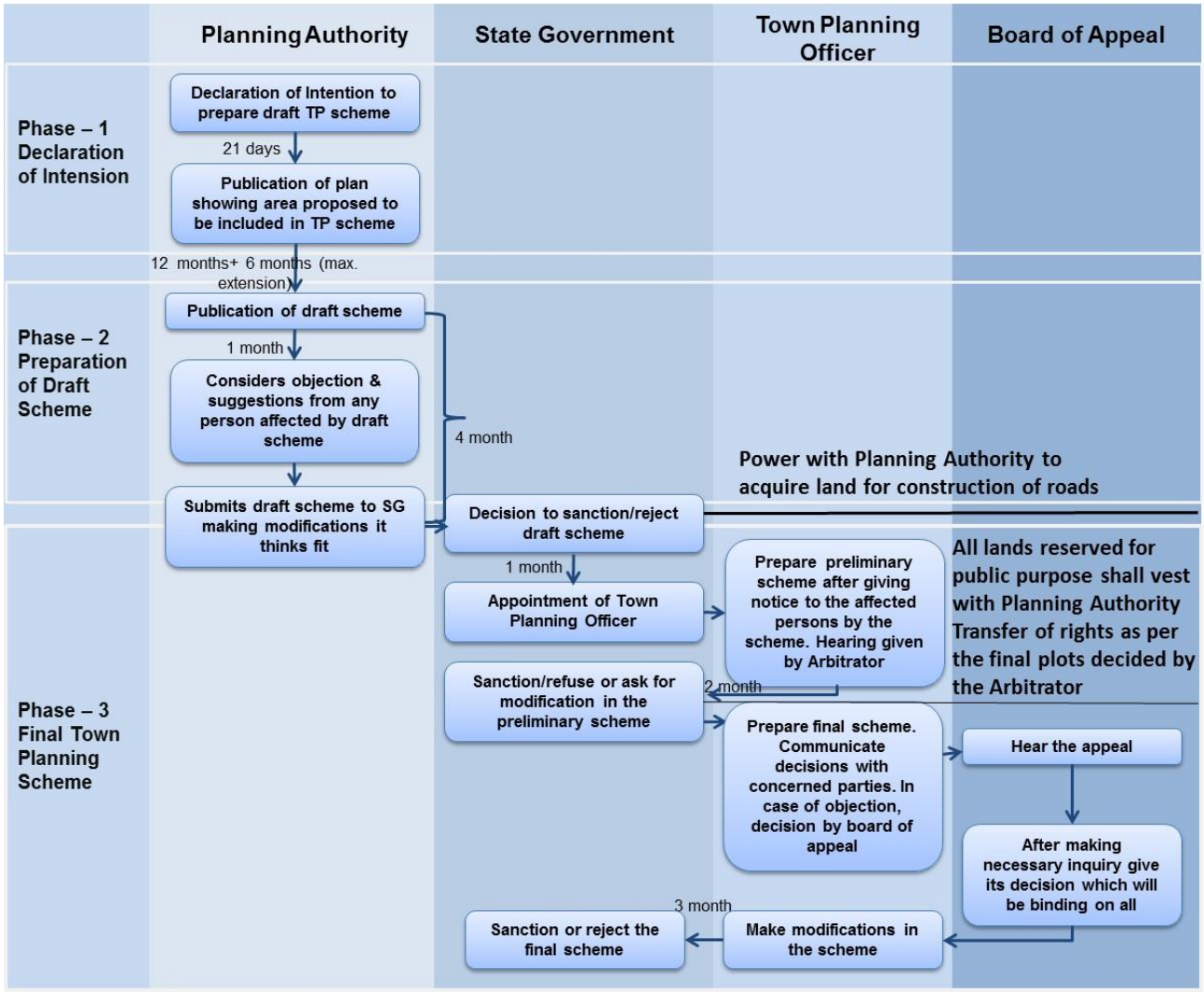
1. Opening up significantly large area for development of housing and other amenities;

2. Employing TPS, the planning authority has been able build a substantial land bank to enable future provision of amenities; and
3. The potential increase in the values and the resultant larger "value capture" enables provision of most of the infrastructure amenities within the TPS. Thus making the TPS financially self-sufficient.

4.6.3.1 Legal framework

In Gujarat, town planning schemes have been very successful for the implementation of development plans. The Ahmedabad Urban Development Authority (AUDA) has prepared over 109 schemes and the Ahmedabad Municipal Corporation (AMC) has developed over 61 schemes in the past four decades in Ahmedabad. The broad framework given by the Gujarat Town Planning and Urban Development Act, 1976 for the preparation of TPS is presented below.

Figure 4-5 Town planning scheme preparation under the Gujarat Town Planning and Urban Development Act, 1976



Source: Adaptation from Gujarat Town Planning and Urban Development Act, 1976

The GTPUD Act mandates the preparation of draft, preliminary and final schemes. The draft scheme contains the details of area, ownership and tenure of each plot, general indications of land uses, extent of boundary alterations, transfer of ownership, and final plots after reconstitution.

The preliminary scheme demarcates the land allotted for public purpose, ownership of final plots, transfer of rights for final plots and the duration within which the scheme has to be implemented. The final plots are demarcated and allotted with the consultation of the affected people.

The final scheme consists of details regarding the compensation to be paid, increment/decline of value of the final plot as compared to the original plot, contribution to be levied on the final plot, plots wholly or partly benefited from public purpose plots and draw the final scheme in accordance with the draft scheme. Any objection to the final scheme is contested in the Court of Appeal and the decision of the Court of Appeal is final.

Section 40 of the GTPUD Act allots specific percentages of land for specific purposes in the scheme as follows:

1. 15% for roads
2. 5% for social infrastructure
3. 15% for sale by appropriate authority for residential, commercial or industrial use. The proceeds from these sales of land is used for providing infrastructure facilities.

The law also makes it mandatory for the Planning Authority to reserve 10% of the land for the housing of socially and economically weaker sections.

4.6.3.2 Process followed

The Sardar Patel Ring Road was planned as a 76.3 km long ring road around the developing areas of Ahmedabad in order to strengthen the existing road network of the city. One of the successful strategies adopted by the Ahmedabad Urban Development Authority (AUDA) was to use the Town Planning Scheme in combination with land acquisition, in order to ensure speedy implementation of the project.

The ring road was divided into 46 town planning schemes. TPS was used to acquire nearly 83% of the land required for the ring road. The original landowners were compensated with smaller rectangular land plots at the end or near the ROW of the ring road. Thus, these plots, though smaller, enjoyed a higher price valuation due to the presence of the ring road.

The remaining 17% of the land that was zoned for agricultural use had to be acquired, since as per the state law, this land could not be included in the TPS.

The first of the 46 TPS was implemented in 2004. Each area consisted of around 100 to 150 landowners.

A key feature that enhanced the viability of the project was that AUDA did not immediately sell the serviced land. Instead, they waited for land values to appreciate before selling it, thereby realizing a much higher quantum of land value increment as a result of the construction of the ring road.

4.6.3.3 Outcome

AUDA reassembled approximately 1 km wide belt adjacent to the ring road. Out of the total land acquired for the project, 60% was returned to the original land owners. About 20-30% was used for the development of amenities such as schools, roads, and gardens. The rest were sold as separate serviced plots. Due to the appreciated value of the serviced plots, AUDA was able to raise about INR 600 crores through the sale of these plots.

4.6.4 Land readjustment in South Korea

4.6.4.1 Legal framework

The Land Readjustment Act enacted in 1966 served as the legal basis for new town development in South South Korea in the 1960s and 1970s. It was a means by which land owners could pool their land for development and receive in return, either serviced land or money in proportion to the value of the land they contributed to the project.

4.6.4.2 Process followed

As per this model, the city government would subdivide and develop land after obtaining the land-owners' consent. The land is divided into 3 parts – compensation land, public land and returned land (Lim, 1994). The compensation land is retained by the city government. The city government, through the sale of this land, raises funds to bear the infrastructure development costs. The city government retains ownership of the public land and develops public amenities such as roads, schools, parks, etc. The remaining part of the land is returned to the original land owners according to a predetermined schedule. Usually, about 50% of the land is replotted and returned to the original owners, 30% of the land serve as sites for infrastructure development, and 20% is used to finance the cost of development (Lee, You, & Kwon, 2015).

The initiating entity for a land readjustment project may be either private landowners, an association of landowners, the municipal or provincial government, or the Ministry of Construction. Participation of land owners is compulsory when land readjustment is publicly initiated[12], however, when privately initiated, at least two-thirds of the land owners and lessees (by area and number) must provide consent to the program. Further, deficits anticipated for the implementation of the project may be covered by the general municipal budget.

4.6.4.3 Outcome

In the initial days, the Land Readjustment Program was a suitable scheme for city development and infrastructure development, when financing was insufficient. By the end of the 1960s, the program was implemented across Gangnam, dispersing the population away from Gangbuk.

Between the 1960s and the 1980s, the number of districts in which the program was implemented decreased, average percentage of public lots increased and average land reduction rate increased (from 31.6% in the 1960s to 55% in the 1980s). This was done in order to pay for the program and secure public lots without financial assistance.

The Land Readjustment Program in Korea offered replotting as a compensation to original land owners. However, this led to a proliferation of detached houses, thereby creating low-rise and low density development. Thus the program was unable to meet the growing housing demand arising out of rapid urbanisation. The LR program eventually transitioned into the Housing Site Development Program by the end of the 1980s.

4.6.5 Land readjustment in Vietnam

4.6.5.1 Legal framework

In the Land Law 2013 and all Decrees on Guiding the Land Law implementation issued before 2017, the Land Pooling/Readjustment (LP/R) mechanism was not stipulated. In Decree No. 01/2017/ND-CP of 06 January 2017, Article 49a on application of the LP/R mechanism was amended as follows.

"1. The following requirements for application of the land use right pooling/readjustment to implementation of investment projects are:

- *a) In the circumstance defined in Item i, Clause 1, Article 179 of the Land Law;*
- *b) The implementation of the investment project has to accord with the land use planning, construction planning, urban planning, housing development programs and plans, rural residential planning, new rural commune development plans approved by competent government authorities;*
- *c) The plan(s) for land use right pooling/readjustment must be made available, be accepted by the user(s) of the land parcels on which the project is expected to occur and be approved by the relevant provincial People's Committee;*

[12] *Both the Land Expropriation Act and the Special Compensation Act serve as legal basis for exercising eminent domain. Both of these laws have now been merged into the Land Acquisition and Compensation Act, 2002.*

d) The rights of land users in the project's vicinity must be maintained.

2. Provincial People's Committees shall promulgate regulations on the land use right pooling/readjustment for investment projects".

The Article 49a however, is not detailed sufficiently to apply the land readjustment mechanism at a wider scale country-wide. It just introduces the mechanism but lacks in the process that needs to be followed in land readjustment and also the reallocation mechanisms.

As a result of this, the article 49a has not seen a wide application. However, there have been some examples of readjustment projects.

4.6.5.2 Process followed

4.6.5.2.1 Land readjustment pilot project in Tra Vinh City, Tra Vinh province[13]

During 2015-2016, the World Bank supported the implementation of Land Readjustment pilot project in the suburban area of Tra Vinh City, Tra Vinh province. The project, with an area of approximate 20 ha, is located in a low-lying area that frequently suffers from flooding and has poor level of connectivity with few access roads. Internal alleys only occupy 2% of the area. It consists of 138 land parcels, including 2 publicly-owned parcels and 136 parcels owned by 92 private land users. About half of the land area is residential and the other half is agricultural. Average private land parcel size is about 200 sq. m, with about half of the parcels less than 100 sq. m. Most of the residential parcels already have built-up structures but majority of the structures are semi-permanent and temporary in nature.

Figure 4-6 Map of the readjustment area within Tra Vinh city

Source: CRIS documentation using Google Maps

Based on the city's master plan, a detailed plan of the overall 24 ha was prepared. The plan proposed a road network of 12-meter-wide secondary roads and 4-meter-wide alleys, to provide access to every land plot and avoid demolition of existing structures to the extent possible.

Two scenarios for the road network were proposed to receive comments from the community and then the community opted for one preferred scenario. It was calculated that an additional area of about 6,000 sq. m. is needed for the road network. The investment cost was estimated to be approximately VND 25 billion, and the city planned to cover

[13] *Most of information of this case study come from Chen and Pham (2017).*

70-80% of the total investment cost from its budget in order to reduce land contribution from the land users. The remaining 20-30% of the total cost was to be covered by sale of surplus land. This translated to nearly 1,000 sq. m based on the projected market price of residential land in this area. This meant that a total area of about 7,000 sq. m. was needed through land contribution from the community. Recognizing the importance of community engagement for the successful implementation of project, the team developed the project based on following principles:

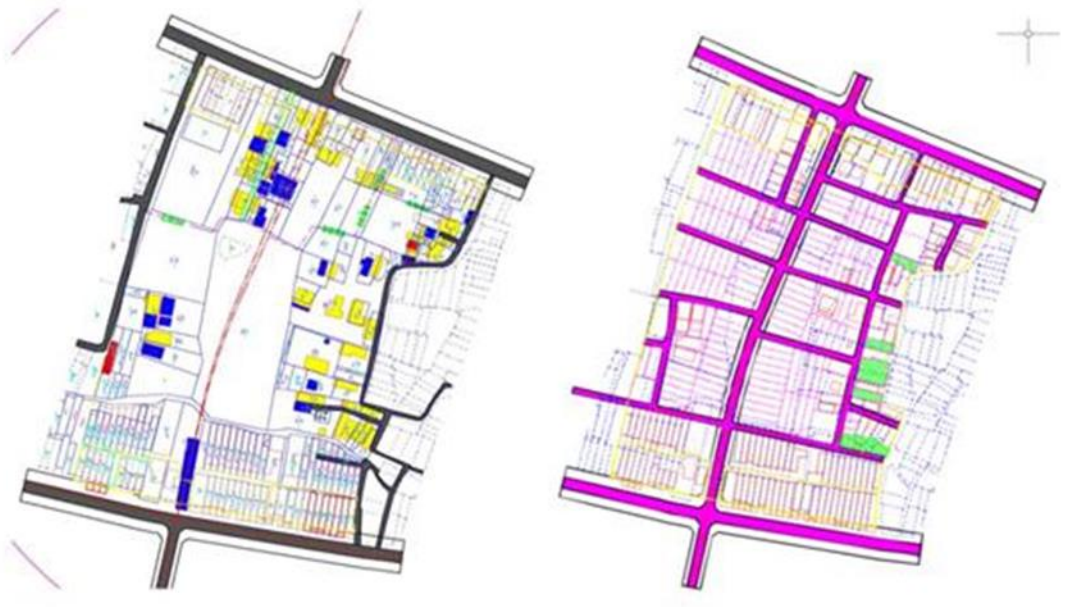
- careful calculation for the land contribution ratio
- contribution from households in form of cash or land, or a combination of both
- minimization of demolition of existing structures
- final plots to be planned at the original location, or as close as possible

The land readjustment project would get approval only if at least two-thirds of the total households and the users of two-thirds of the total land area agree to the project. For households who finally decide not to participate, the city will have to use compulsory land acquisition as the last resort to acquire their land in accordance with the relevant legal framework.

The city decided to mobilize city budget to cover the financing gap because auctioning land would require approval from the provincial government. Public private partnership option (land for infrastructure) was discarded because of the time taken in approval processes.

Based on the above principles, the working team prepared a replotting plan for the whole area, with special attention to accessibility to all final land plots, ensuring minimum requirement of area for each plot (36 sq. m.), minimum demolition, authenticity of data of surplus land for sale to cover a part of infrastructure financing.

Figure 4-7 Proposed replotting plan



Source: Pilot project base map and replotting plan as of October 2016, Tra Vinh City.

Notes: Left image -- existing plots; right image -- replotting plan.

Source: (Chen & Hoa, 2017)

The project received technical support from the World Bank team, however, it is not yet completed due to delays because of the change in the political context.

The pilot project has had to cope with big challenges, including:

- Lack of legal regulation and detailed guidance for land readjustment in the context of Vietnam
- Low level of awareness of the city authorities and local community and limited technical capacity of the project management team and local consultants
- Delays due to time taken in community engagement process
- Lack of funding sources for infrastructure investment to catalyze the process

4.6.6 Learnings

There have been some examples from South Korea and India where land readjustment has been implemented to carry out systematic greenfield development of peri-urban areas. Through this mechanism, the landowners get serviced land plots thereby benefitting from better services and increased land prices and the government receives land and also funds to create infrastructure through betterment levy. Land readjustment is thus a self-financing planning tool.

It is however also to be understood that land readjustment assumes the real estate demand sufficient to make the existing land owners interested to participate in readjustment process. If this demand pull is absent, the readjustment process is unlikely to bear fruits.

In Vietnam, land readjustment has been introduced very recently and the regulations do not provide detailed process for implementing the readjustment process for cities to have a wider application of the tool. It is also equally important to introduce in the legal framework the concept of betterment levy in order to generate funds to create the infrastructure for the scheme area.

4.7 Sale of additional development rights

4.7.1 Definition

Sale of additional development rights are essentially the charges levied in exchange for permission to develop or redevelop land at a higher density or for changed land use (UN Habitat, 2016). These additional development rights may be auctioned off, or may be sold at a fixed price. The rights may be transferable to other locations, and also may be resold, thereby creating a secondary market for these rights.

The main purpose of the tool is to generate revenue to fund infrastructure in a particular area, and / or to direct and regulate development in particular areas.

The tool is commonly used to promote affordable housing, and as a part of the transit oriented development policy framework, where higher density of construction is allowed in the influence area of a transport corridor.

4.7.2 Pre-conditions

Transit oriented development can only be made possible where the city's development supports sale of additional development rights near the transit corridor. Real estate market conditions need to be such that there is a demand pressure near the transit corridors due to requirement of large travel distances to reach city's commercial centre. In such scenario, in the influential areas of transit corridors, a very high value can be generated.

4.7.3 Premium FSI in India

In 1991, Mumbai decided to exclude certain areas of a building from FSI computation such as those of staircases, lifts and related passages, balconies etc. However such exemptions were available by paying premium that was related to prevailing 'Ready Reckoner' rates. In 2008, Government in its budget proposed to allow additional FSI of 0.33 in the suburbs of Mumbai by charging 'premium' linked to 'Ready Reckoner' rates. The revenues were to be shared in equal proportion between the state government and the Municipal Corporation of Grater Mumbai (Phatak, 2013).

4.7.3.1 Legal framework

The MRTP Act, 1966, under section 14 allows imposition of fees for granting additional FSI. The clause states, *"imposition of fees, charges and premium, at such rate as may be fixed by the State Government or the Planning Authority, from time to time, for grant of an additional Floor Space Index or for the special permissions or for the use of discretionary powers under the relevant Development Control Regulations."*

Municipal Corporation of Greater Mumbai has been implementing this tool to allow for additional FSI of 0.33 over and above the base FSI. The premium is charged at 60% of the ready reckoner rate (official prices). Premium FSI has also been now proposed as a revenue generating tool for funding the proposed metro projects in Mumbai Metropolitan Region. This premium has been proposed to be levied within 500 meters area along the metro corridors.

4.7.3.2 Process followed

To implement the premium FSI tool, the planning authority first needs to define the area in which such additional FSI will be allowed. Post that, it needs to introduce an amendment to its development control regulations to make changes in FSI and to decide upon the rate at which the premium will be charged. Further it needs to request the State Government to introduce a Government Resolution to approve such provision and publish the date from which such regulation will be applicable.

In practice, the premium FSI is levied at the time of building permission process and collected as one of the building permission fees. However, in Mumbai, 50% of the amount collected through the premium FSI needs to be shared with the State Government.

4.7.3.3 Outcome

Because of Mumbai's real estate situation, the premium FSI has turned out as a successful land value capture tool. However, beyond a limit this cannot be used considering the load the added development creates on infrastructure.

4.7.4 Sale of development rights in Latin America

In order to address the problem of growing housing shortage and the proliferation of *favelas* in cities such as Sao Paulo, the government introduced CEPACs (*Certificados de Potencial Adicional de Construção* / Certificates of Additional Construction Potential) in 1995. These certificates represent building rights that are available for purchase for a given area. These certificates are sold on the stock market exchange. The CEPACs purchased by the developers, enables them to build with additional density in a particular area.

Usually one CEPAC is equivalent to one square meter of building rights. However, depending on the quality and desirability of the neighbourhoods or zones within a particular area, adjustments may be made within a range of 0.5 sq. m to 3 sq. m (Sandroni, 2010).

Selling CEPACs at public auction on the stock exchange resolves the problem that inhibited the sale of development rights for years by providing a regulated, transparent and reasonable way of determining their value. CEPACs are listed on the stock exchange in a manner similar to stocks, bonds and mutual funds[14].

On one hand, CEPACs work like a special assessment in that they seek to recover at least the full cost of public improvements by setting the minimum initial value. On the other hand, CEPACs work like valorization fees in that they can be sold at a premium at periodic auctions, so that their prices can capture valorization of the area due to the public intervention. The municipal entity determines the number of CEPACs to be issued at each auction to maximize its returns, while assuring that there will not be a shortage.

4.7.4.1 Legal framework

Though introduced in 1995, the first CEPACs auction was held in 2004, and since then has been successfully used to fund infrastructure development in the city of Sao Paulo.

When introduced in 1995, CEPACs were not immediately approved by the city council due to doubts about whether it would increase municipal indebtedness. Since municipal debt was already at its maximum, the issue was a federal and constitutional matter. However, in 2001, approval was granted by *Estatuto da Cidade* (Statute of the City), for CEPACs to be used as an instrument in all Brazilian territory.

In addition to this, the total amount of CEPACs that can be issued for a particular area is capped by law and depends on the total additional built-up area an urban operation (UO) is able to support. CEPACs constitute an ingenious market-based instrument for capturing the value generated by a development program in an Urban Revitalization Area (*área consorciada urbana*[15]).

4.7.4.2 Process followed

Two such urban revitalization areas in the Municipality of São Paulo are Água Espraiada and Faria Lima. In Faria Lima, these bonds were created to finance the widening of a main avenue. Developers who bought the CEPACs were entitled to additional development rights in the area.

Before issuing CEPACs, the city of Sao Paulo first needed to establish urban operation (UO) areas. UO areas are specific areas in the city that are identified by city administration for development and improvement. Development rights in the forms of CEPACs are auctioned off for these areas, and the money raised is utilized to fund improvements in the UO area that have been previously identified.

For each UO, the city administration must determine current buildable area, maximum buildable area, and net additional development rights that can be auctioned off. This maximum buildable area is determined by architects, engineers, and other experts in consultation with the city government. Accordingly, the CEPACs equivalent to this permissible additional buildable area is prepared and auctioned in electronic form on the Sao Paulo stock exchange.

CEPACs are issued by the city hall agency EMURB (*Empresa Municipal de Urbanização*) and are auctioned by the Banco do Brasil, a federal bank.

Each CEPAC issued contains the following information:

- The UO where the CEPACs can be used
- Total value of the issue
- Minimum price for each CEPAC

[14] *B3 - Brazil, Stock Exchange and Over-the-Counter Market, formerly BM&FBOVESPA: http://www.b3.com.br/pt_br/produtos-e-servicos/negociacao/renda-variavel/cepac.htm*
[15] *For a concise review of the Faria Lima project see Biderman, Sandroni, and Smolka (2006). Biderman and Sandroni provide a more detailed analysis (2005).*

- Total amount issued
- The coefficient of conversion in case CEPACs are used for changes in use rather than for additional building area
- The intervention for which the revenues from the CEPACs will be used

The first CEPAC auction was held in July 2004 for UO Agua Espraiada, where a total of 100,000 CEPACs were issued at a minimum price of USD 150 for each CEPAC. At the end of the auction, all 100,000 CEPACs were sold, thus generating a revenue of USD 15 million for the city. This amount was used to fund the construction of a cable-stayed bridge over the river Pinheiros, and 600 affordable housing units for a favela in the neighbourhood.

In December 2004, the first CEPAC auction was held for UO Faria Lima. A total of 90,000 CEPACs were issued at a minimum price of USD 550 each. However, only about one-tenth of these CEPACs i.e. 9091, were sold, resulting in a revenue of about USD 5 million. This auction was a failure for a couple of reasons. First, the minimum price set for the CEPAC was significantly higher than the price as per the earlier rule which was set at 50% of the incremental value. Since the minimum price would increase during bidding, the new system represented an increase in cost for developers. Second, since developers knew in the beginning of 2004 that the CEPAC law was going to be approved for UO Faria Lima, many developers obtained licenses based on the former method of compensation. Thus, when the first auction for CEPACs for UO Faria Lima were held, most of the developers had already obtained the required licenses through the former route, and did not need to participate in the auction. Moreover, given the cheaper pricing of the CEPACs for UO Agua Espraiada, it is possible that developers invested in CEPACs for this UO, over Faria Lima. One more major reason for the failure of this first auction has been attributed to the recession in the real estate business cycle during this period.

4.7.4.2.1 Outcome

One of the key benefits of CEPACs, is that the city receives upfront revenue, even before development takes place. The city government can then use this revenue to fund infrastructure development, without raising municipal debt. The benefit to developers is that there is no time limit for the utilisation of the CEPACs. They can use these for their projects based on market conditions.

However, one major risk that developers face is that prices of the CEPACs may fluctuate depending on the condition of the real estate market and general financial markets as well. Further, CEPACs do not constitute credit against the city administration. Thus, in case, for whatever reason, the buyer of the CEPACs is unable to develop the project, the CEPACs cannot be returned to the city in exchange for money.

From 2004 to 2009 the total income collected from selling CEPACs in Faria Lima and Agua Espraiada, São Paulo, amounted to R$1.62 billion i.e. approximately USD 812 million (Sandroni, 2010).

4.7.5 Learnings

Sale of additional development rights has worked successfully in cities like Mumbai where there is land scarcity and the real estate demand is price inelastic. The sale of additional development rights works when there is a significant perceived reduction in travel time due to proximity to a transport corridor.

In a city like Can Tho, where land is available in abundance and economic and demographic growth is low, the response to regulations for additional development rights will be muted as the overall demand will decide the consumption of floor area. Also the reduction in travel time will not hold as much value as it will in larger cities.

5. Approach for Can Tho for land value capture and other land-based fiscal tools

The objective of this study is to define the land value capture instruments in the short-term and long-term that the city of Can Tho can implement with the aim to generate additional resources for infrastructure funding. Each of the land-based revenue sources have a specific role to play and may not be substituted for the other.

5.1 About Land Value Capture

Land value capture financing is generating funds by capturing a part / full value increase arisen due to the public investments or through change in land use regulations by the government from the direct private beneficiaries and use these funds to make more public investments.

It is expected that investments in transport infrastructure unlock land for development and that creates land value benefits for the land users which are not on account of their own actions but due to public actions. The increase in the value of land is over and above the simple capitalisation of user benefits. As the increases in land values are not affected by the actions of the landowner, the government can be a legitimate beneficiary of such increases in values. These uplifts can be captured to fund the project that caused it.

Land values increase with improvements in infrastructure and providing access to urban services. A land-based fiscal tool attempting to recover the value of the public investment made can be categorised to be a cost recovery mechanism. However if it is linked to market prices, the increase in market value drives the revenue realization from the tool. In certain circumstances, it could be even higher than the cost of infrastructure. In such cases, the land based fiscal tools are construed as land value capture tools.

There are ways to undertake land value capture: either by owning or acquiring the land and leasing it out to developers, or by taxing or charging the land owners or users or by allowing development on land parcels and against that receiving contribution from the developers. The ownership of land by the government potentially allows it to maximise the gains from land value capture from new developments. Taxation methods are better suited to extracting some of the uplift realised by the existing stock of land and property. Planning tools ensure the area gets developed as per the development plan at the same time not distancing the land users from their right on the land. .

In Can Tho, there is a large amount of public-owned land. There could be significant opportunities should there be large value increment on account of public investments. If the land is not owned by the government, then there exists a mechanism in the legal framework for the government to acquire land more than required for a road project. In Vietnam, there are no fiscal tools to tax increase in land values other than compulsory acquisition of land.

5.1.1 Factors impacting the outcome of land value capture tools

The factors that result in increase in land values, leading to potential for land value capture, can be categorised into two categories: the nature of public investment, and the level of development.

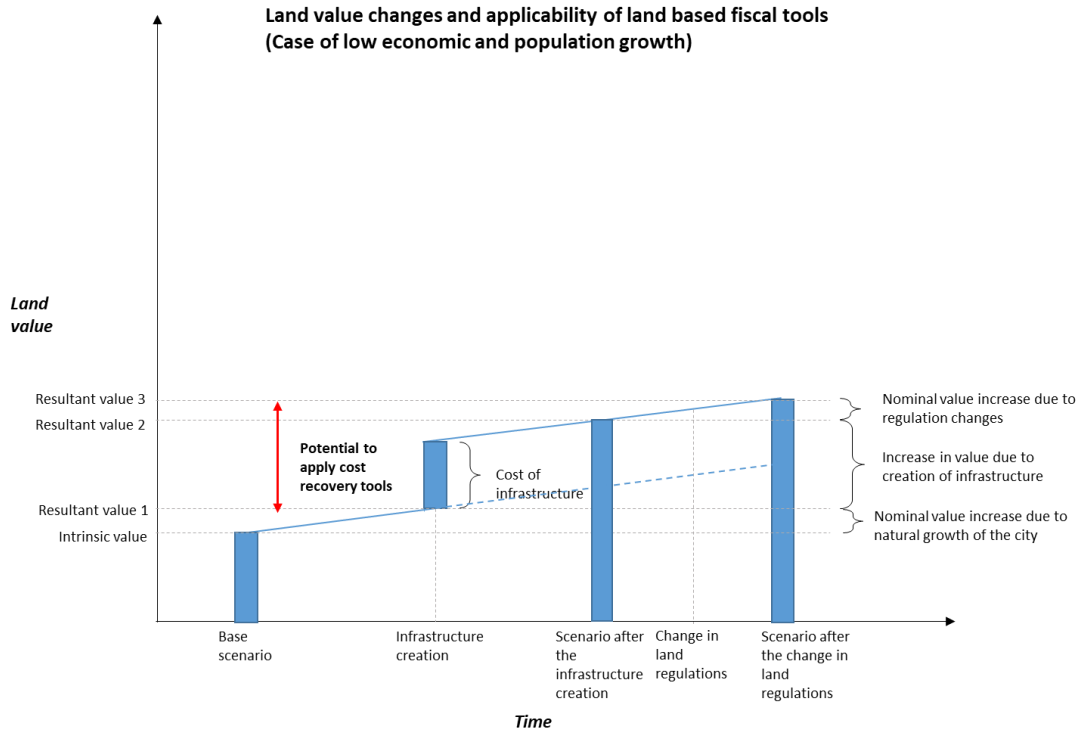
Land value uplifts are more prominent for impacts on account of rail-based projects rather than road projects. Land value uplifts are higher where public transport is highly valued with high market share of passenger journeys. Land value therefore is affected both by what alternative modes of transport are available to commuters in a city as well as the general culture of using public versus private transport (Transport for London, February 2017).

The magnitude of land value depends on level of economic development of the city, the economic value the transport project generates and demand-supply situation for real estate in the city. The demand needs to be price inelastic. If

the real estate market is price elastic then an initial increase in house prices prompts a rapid expansion in supply of real estate, leading to a check on prices.

In practice, the same quantum and form of public investment in two different cities will not result in the same level of land value increases. The differentiating factor which influences the increases in land values is the level of economic development, the demographic pressure on the land, the demand and supply situation in that city and the economic benefit that the project generates for its residents.

Figure 5-1 Land value changes (Case of low economic and population growth)

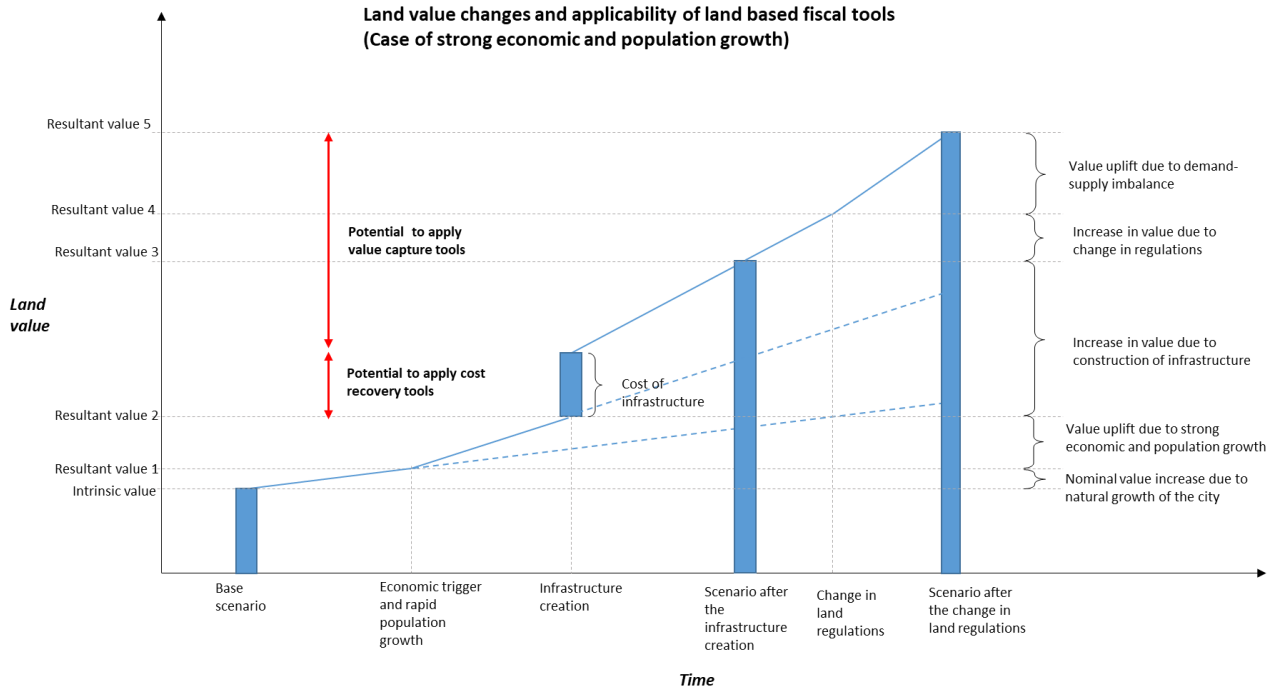


Source: CRIS analysis

The first graph depicts a state of a city which is experiencing low economic and demographic growth and the real estate demand and supply are not creating an imbalance for the prices to increase. The land prices first grow nominally on account of natural growth of the city in the absence of any major infrastructure project by the government. When a large infrastructure project is implemented, the land prices can be expected to increase to the extent of the cost of infrastructure. As there is no economic trigger in the city, the population growth is very limited leading to weak real estate demand. In this situation, if the land is available in abundance, it keeps the prices in check. In the absence of economic growth and population growth, even changes in land regulations are unlikely to result in any significant increase in prices.

In such cases, only the cost of infrastructure can be loaded on the beneficiaries to achieve recovery and hence the resultant increase in land prices on account of infrastructure investment can only be to the extent of cost of infrastructure. As there is no windfall gain to the land owners, there cannot be any additional revenue over and above the cost to the Government. In this case the applicability of land-based fiscal tools is limited to the cost recovery tools.

Figure 5-2 Land value changes (Case of strong economic and population growth)



Source: CRIS analysis

The second graph depicts a state of a city with very strong economic and population growth experiencing very high real estate demand and relatively low supply. In this case, the land prices start seeing an uplift on account of city's attractiveness as economic center leading to population growth and rapidly growing real estate demand. On account of high real estate prices, city expands and travel distances increase. In such a scenario, when a large infrastructure project is implemented, there is a significant reduction in travel time and this leads to a large jump in real estate prices. This increase is much more than the cost of infrastructure. In this case, if the land regulations are restrictive of land supply, land prices experience a further uplift, eventually making the land prices unaffordable for a large section of the population. These enormously high prices are capable of absorbing costs of social housing and further infrastructure investment, as the demand is price inelastic due to strong economic conditions.

Thus, in this scenario, the resultant land price is much more than the cost of infrastructure, thus leading to windfall gains to the land owners. It is in this scenario, land value capture tools will generate much larger revenues to the Government than the cost of infrastructure. This additional revenue can be used to fund further public investments.

5.1.2 Can Tho's current economic and demographic landscape does not lend it to the immediate application of land value capture strategies

The level of economic development and demographic situation along with the nature of public investments will determine the applicability of the LVC tools. The following assessment along these lines does suggest that it may not an opportune time, until sometime in the distant future for the land value capture tools to generate maximum revenues in Can Tho.

Can Tho is one of the six centrally administered cities in Vietnam. It has been granted this status in 2004. But this status has not had any material impact on its economic fortunes. Can Tho as per the 2017 Provincial Competitiveness Index (PCI), ranked 10th among 63 provinces in Vietnam. The provinces like Da Nang, Dong Thap and Quang Ninh have consistently managed to emerge among the top 5 ranks over the years. Can Tho's rank on the other hand, has

fluctuated, having reached its highest rank so far (9th position) in 2013. So far, Can Tho has not yet managed to reach the top 5 position in the country's competitiveness ranking.

The economic growth engines in Vietnam are the two large cities of Hanoi and HCMC. The other economic growth drivers are the two cities of Bach Ninh and Binh Duong which are benefiting from the spillover growth of Hanoi and HCMC respectively. Da Nang does not have geographical locational advantages like Bach Ninh and Binh Duong but makes up by being ranked first in the Provincial Competitiveness Index for four consecutive years 2013-2016 and ranked 2nd in 2017. Da Nang has reported a registered FDI capital of $4.675 billion against that in Can Tho at $644 million. Can Tho on the other hand has a geographical disadvantage and is not ranked high enough on the PCI.

There have been a few major infrastructure projects such as the Can Tho Bridge (opened in 2010) and the Can Tho International Airport (opened 2011). It may be a coincidence that net residential supply also peaked in 2010 around the same time when these infrastructure projects were completed. However, subsequent decline in the net addition of residential supply, indicates that there has not been any long lasting impact of infrastructure projects on Can Tho's real estate market.

Can Tho suffers from weak demographics and has no near term triggers to change the economic growth profile and trajectory. Can Tho is steadily facing negative migration rates and the current economic activities lack in scale and quality to boost economic growth and sustain high growth rates in population. On the whole, the macroeconomic and demographic data for the city seems to suggest that Can Tho could potentially be witnessing a slow growth period.

As a result, as also observed in the Real Estate Market Assessment Report, the on-ground development is much lesser than what was envisaged in the master plan. Out of the 11 nodes considered for analysis along the project corridors, only 3 nodes (incidentally all three along the embankment) exhibited utilization of density and building height which was closer to that permitted in the regulations. Commercial real estate in Can Tho has also not shown any signs of momentum. Abundant availability of land within the city limits (only 7.5% land is under residential use) does not create any pressure on land supply. Without the pressure on land, prices are bound to remain in check thus not allowing the Government to draw maximum revenues from land value capture tools.

Can Tho city requires a fresh wave of investments in economic activities which will lead to faster economic growth and to higher population growth. It needs a credible economic development strategy which will dictate the requirements in infrastructure investments. Can Tho can be said to be at a stage where it needs economic triggers and demographic pressure on land which can create a supply-demand imbalance, which in turn can be the driver for real estate prices in the market. The level of economic development needs to be transformative with higher-value adding economic activities to sustain the high land prices.

Can Tho today has land values which are relatively cheaper, and can thus attract investments, which can lead to higher paying jobs and attract migrant workers to the city. This will create need for infrastructure development which will have a positive impact on land values. Any premature application of LVC tool can potentially inhibit growth and expansion of the real estate market.

Can Tho is a classic example of the first case in the illustration above where, the real estate demand is price elastic and there are no economic triggers and demographic trends which will change the situation. In such a scenario, land-based fiscal tools serve the objective of cost-recovery only and do not provide potential for generating substantial surplus for undertaking more capital investments.

5.1.3 Sustainable urban financing framework

Can Tho's revenue profile is as given below:

Table 5-1 Can Tho city's revenue profile

in Billion VND	2014	2015	2016	2017
Own-sourced revenues	54,84,893	53,85,151	61,62,688	64,41,063
-of which land-based revenues	7,22,660	8,51,136	10,57,921	12,80,242
National Transfers	57,06,991	62,79,581	66,61,938	69,38,767
Shared revenues	45,60,287	52,70,283	48,52,065	55,63,854
Total	**1,57,52,171**	**1,69,35,015**	**1,76,76,691**	**1,89,43,683**
Percentage shares	**2014**	**2015**	**2016**	**2017**
Own-sourced revenues	35%	34%	33%	32%
National Transfers	29%	31%	27%	29%
Shared revenues	35%	32%	35%	34%
Land-based revenues as % of total revenues	**4.6%**	**5.0%**	**6.0%**	**6.8%**
Land-based revenues as % of own-sourced revenues	**13.2%**	**15.8%**	**17.2%**	**19.9%**

Source: CRIS analysis

The shared revenues includes sharing of VAT revenues (excluding VAT on imports), excise (except excise on imports) and enterprise income tax and personal income tax and some sharing of enterprise profits. These represent revenues that are linked to city's economic activities.This constitutes about one third of the revenues of Can Tho government. For the stability period 2016-2020, Can Tho is expected to share 9% of the revenues collected with the Central Government. Thus Can Tho will be able to retain 91% of these revenues. This ratio for Hanoi was 42%, HCMC at 23%, Danang at 85% and Binh Duong at 40% for the stability period 2011-15. Incidentally for Can Tho this ratio was 96% for the period 2007-10. (Source: The World Bank, Making the Whole Greater Than the Sum of the Parts: A Review of Fiscal Decentralisation in Vietnam, 2015).

The high levels of economic activity in cities like Hanoi and HCMC allows the Central Government to take a greater share of the tax revenues linked to consumption and income and transfer it to regions of lesser levels of economic activities. However, Can Tho's revenues indicate the level of economic activity and economic prosperity. The efforts to boost economic prosperity will thus boost the revenues of the Can Tho government.

A sustainable urban financing framework requires a good mix of consumption-based, income-based and land-based sources of income. For Can Tho, maximizing economic activities and consumption should prevail over increasing land prices in order to increase its revenue base. The increased land prices will be an outcome of growth; increased land prices in the absence of growth will inhibit economic activities and as consequence hurt the long-term revenue base of the city.

5.2 Can Tho city government as master developer carries considerable risk

The positive fallout of the real estate market situation in Can Tho is that the land values tend to be relatively cheaper and afford possible windfall gains for the land-acquirer should the economic activity take-off on a sustained basis leading to higher population growth driven by in-migration. Though in Vietnam, there is no private ownership of land, when the Government needs to bring land under its control from private land users, it needs to pay compensation in terms of land with the same land use somewhere else in the city or if land is not available, then the land user is entitled to receive cash compensation as per the specific land price. In result, even though the Government is the owner, it needs to invest on acquisition before it can monetize the land. However, this model can only be profitable if the real estate prices are increasing exponentially.

Can Tho city government by acquiring land on either sides of the transportation corridor and providing for alternate accommodation implies that it incurs a cost upfront in excess of the project requirements. This allows it to have complete control over the development along the transportation corridor plus the opportunity to realize wind-fall gains should there be higher level of economic activity and consequent substantial demand for land and the associated improvements.

However, the prevailing scenario suggests that in the absence of economic triggers and limited demand for new land, infrastructure creation will only increase land values in a limited way. This poses a risk to the Can Tho city government as the increased values will at best recover their costs of land acquisition but with the associated risk that considerable time will elapse between the time of investment and the monetizing of land parcels. The Can Tho city government thus carries risks that developers usually carry.

Land value uplifts have been observed to be highest on rail projects vis-à-vis road projects and particularly true in cities with high population densities and where housing demand in price inelastic. None of these conditions prevail in Can Tho. The risk-reward pay-off is not favorably disposed towards Can Tho city government. The risks associated with Can Tho acting as a master developer can be mitigated should the direct link be established between the infrastructure planning and the economic development through new investments thereby triggering a demand. There is a more likelihood of success when there is a systematic attempt to link land value capture strategy to an overall economic development and promotion strategy.

The purpose of the planned transportation corridor is to improve connectivity between areas which are relatively less flood prone. The Real Estate Report has showcased that Can Tho has not utilized the land in industrial parks fully, in fact it has shown much lower occupancy rates as compared to other industrial parks such as Long An. The requirement today is that land needs to be offered for industrial activities / employment creation on a priority and land along the transportation corridor is not suitable for industrial investments. Thus, acquiring land on both sides of the road project which will be primarily used for residential purposes will have limited demand in the absence of economic triggers and demographic pressure on land. Can Tho today requires an economic development and promotion linked infrastructure development strategy and not the other way around.

6. Way ahead for Can Tho

The nature of the LVC tool is that its applicability is more in a certain context while in general the tools tend to function as cost recovery tools. Land and its improvements can be subject to a range of taxes and charges which are explicitly intended to capture value gain and specifically to fund infrastructure provision while others for general revenue raising and any value capture characteristic is incidental. While maximization of value capture in Can Tho appears to be a possibility in the distant future, there is considerable work to be done for optimising the revenues from land-based fiscal tools which are recurring in nature.

The linking of land-based levies to land values automatically creates a buoyant source of revenue. But land values need to be well-defined for the revenues to be optimised. But Government's experience in land valuation suffers from limitations in process and expertise which has resulted in lower revenue gains. This is not surprising as the development of an active land market in Vietnam and recognition of market prices has been a recent phenomenon. It was only through the Decree 181 what was passed in 2004 that the real estate market was recognised.

The second point is that the current framework for land-based fiscal tools at Can Tho is leaning towards one-time revenue gains and ignores potential revenue streams which are recurring in nature. A city government like Can Tho with an enabling legal framework can potentially have other land-based revenue sources which do not accrue to it currently. The current framework is resulting in loss in possible revenues for Can Tho city government. The legal framework needs to be reformed to augment the revenue base of Can Tho city government. For Can Tho, a sustainable financing framework will require a full suite of land-based fiscal tools including the possibility of deploying LVC tools at an opportune time.

The recurring nature of revenues besides the obvious benefit of providing additional fiscal resources builds administrative capacity continuously to know and document developments in the real estate market. This gradually builds expertise in understanding market valuations provided a transparent and competitive auction process is conducted. The build-up in administrative capacity needs to be enabled by a legal framework which allows the different revenue streams which can accrue to the city government.

Land value capture tools are successfully implemented where there is long tradition of land based fiscal tools and the necessary institutional capacities have been built over time. Currently, the legal framework for land based fiscal tools in Vietnam is weak only allowing for one time fiscal tools such as land-use levy and rental. Even the fundamental land based fiscal tools such as property tax is absent in Vietnam.

Before Vietnamese cities can add more complex land based fiscal tools such as betterment levy, they need to establish the legal framework and create necessary institutional capacities for implementation of land based fiscal tools. Vietnam will need to take a step by step approach in implementing the land based fiscal tools.

Thus the way ahead for Can Tho can be summarised as follows:

1. Improve the process of land valuation and reduce the gap between the official land prices and the real market prices; and
2. Reform the existing law to enable a full suite of land-based fiscal tools to be accessible for levy by the local government including the introduction of land value capture tools.

6.1 Improving land valuation process

The Land Law of 2013 recognises land use rights but not land ownership. The land use right gets transferred from the Government to an individual or firm through lease arrangements and allocation. The leasing of publicly owned land through one-time lease rentals being paid by the lessee creates a private leasehold interest that allows the individual or the firm to develop the land and sell the lease in the secondary market. Public land when leased with

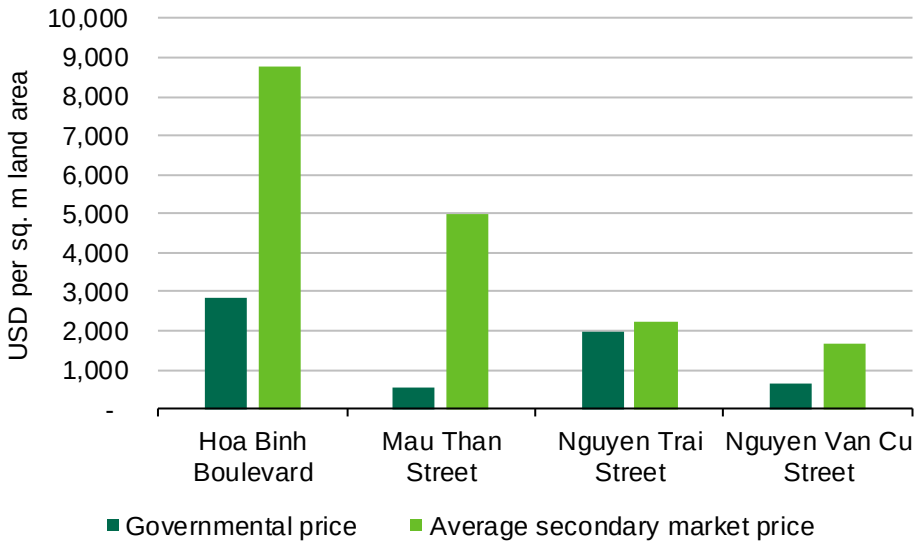
annual lease payments made by the lessor cannot enter the secondary market for transferring the lease as per the current Land Law 2013. The lessor can only sub-let.

The leasing of land generates public revenues and the land contributes to the market for real estate development. If managed strategically, this revenue can fund one or more long-term, priority capital projects through a large upfront payment or through ongoing payments to service a loan. The land should be sold through a transparent process, such as an auction, in order to ensure that full market value is obtained. In Can Tho, it has been observed the land leases have been offered at prices at significant discount to the real market prices.

An exercise was undertaken to compare if the official land prices reflect the market prices, and what is the difference between the market prices and the reserve prices and the final prices at which the land parcels are auctioned.

The figure 6.1 below shows a comparison of official prices and market prices at various locations of Ninh Kieu district. It shows that the official land prices published by City People's Committee are significantly lower than average market prices. This is because of the gap between the timeframe in which the official prices are decided (in 2014) vis-à-vis that when the market prices are recorded (in 2018). Also there is a large variation in the market prices within the district.

Figure 6-1 Comparison of official land prices with market prices in Ninh Kieu district



Source: CBRE Vietnam, Can Tho's People Committee

Note: Governmental land price is according to Decision No. 22/2014/QĐ-UBND dated 26th December 2014 of Can Tho People's Committee.

It can be seen that at Hoa Binh Boulevard, the average secondary market price at USD 8,900 per sq. m. is three times higher than the official price at USD 2,900 per sq. m At Mau Than Street, the average secondary market price is USD 5,000 per sq. m. against the official price of only USD 500 per sq. m. At Nguyen Van Cu Street, the average secondary market price is at USD 1,600 per sq. m against the official price of USD 600 per sq. m. Only in case of Nguyen Trai Street, the differential in the market price and official price is less, where the market price is USD 2,100 per sq. m. against the official price of USD 1,900 per sq. m.

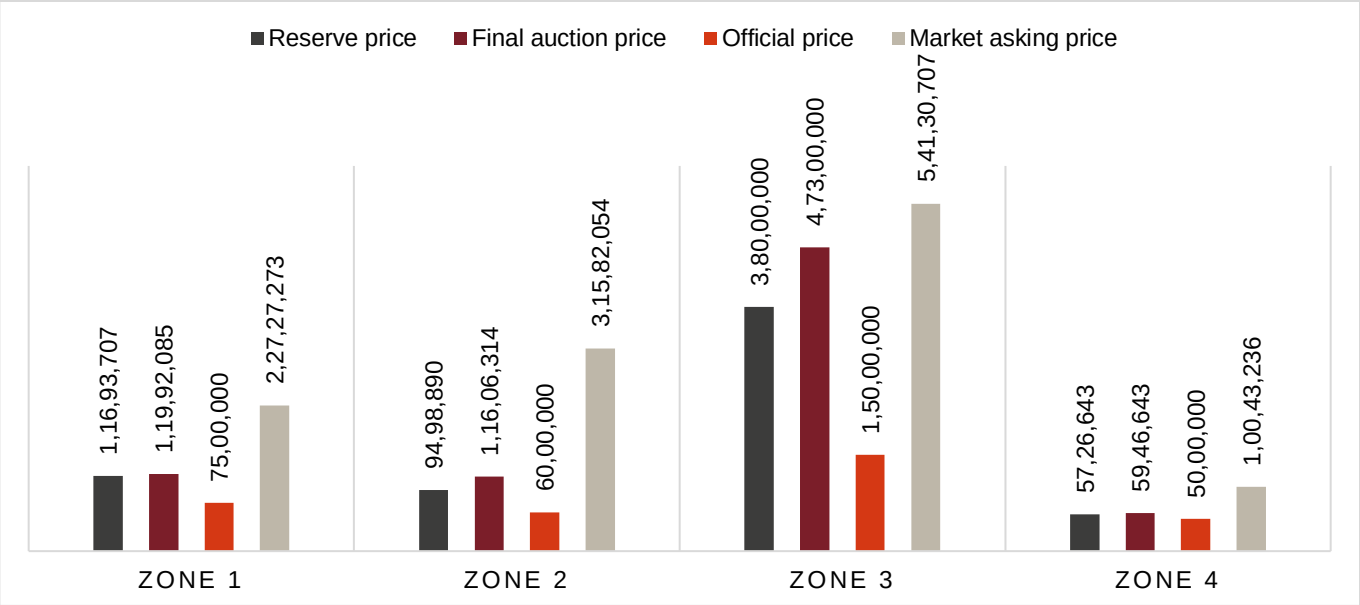
Secondly, the data on land auction transactions provided by the Land Development Fund Center of Can Tho city was also analysed (all plots auctioned were located in Ninh Kieu district). Most of the transactions were for residential freehold land plots (with plot areas ranging from 98 to 145 sq. m) located in urban areas along the sides of Nguyen

Van Cu Street. Some of the transactions, in the CBD area such as Phan Dinh Phung and other areas like the Ring Road, were auctioned for land leasing rights with a 50 year leasing term.

For the auction of land plots, the city government is required to carry out a valuation exercise to determine specific land prices of the lots under auction. Thus, the land auction exercise represents an opportunity for the city government to determine, with reasonable accuracy, the prevalent market prices for the plots under auction. The official prices for the areas where the plots are located are to be used as a guide, and under no circumstances must the reserve price be lower than the official land price for that particular area.

The analysis of the auction data reveals that the gap between the reserve price and the final auction price was negligible in most cases. Reserve prices were found to be higher than the official land prices in all the auction cases across 4 zones. However, reserve prices, and the final auction prices were significantly lower than the average market prices. In zone 1, the average market asking price was 94% higher than the reserve price. In zone 2, the average market price was 232% higher than the reserve price, while in zone 3 it was 42% higher and in zone 4 it was 75% higher than the reserve price.

Figure 6-2 Reserve price, auction price, official price and market price, Can Tho (in VND)



Source: CBRE Vietnam

The huge difference in the official prices (including reserve prices) and the market prices was primarily because official land prices are published only once in five years and thus do not keep up with market fluctuations. Where land prices are escalating, this represents a loss for the government.

Even though specific land prices are expected to be closer to market value, the reserve prices were all found to be lower than average market prices. This could be because of the following reasons:

- land transaction values used as references when determining specific land prices are underreported or,
- specific land prices are close to market value, but the reserve price decided by the city is kept lower than these prices in order to elicit competition or,
- there is a technical flaw in the method of determination of specific land prices which needs improvement.

Thus, the first area of reform is reducing the price difference between the market price and the price realised by the government. The benefit from the reforms in the land valuation is not limited to the leasing of land but will be a

recurring gain as land enters the market on multiple occasions and each time the transaction value can earn potentially more revenues.

6.1.1 Reforming the land valuation process

There is a need to build administrative capacity to manage land and optimise the value of land. The local administration needs to have a very good understanding of the overall real estate market and including the local micro-markets. A vigilant land administration is required. But the current legal framework does not warrant an active monitoring of real estate markets. Till, 2014, there was a practice to come out with real estate price tables every year. But after 2014, it is only done once in five years. Can Tho and cities in Vietnam unlike its global peers do not have recurring land-based fiscal tools like property tax.

Article 113 of the Land Law 2013[16] states that the Government shall promulgate land price frames once every 5 years for each region and land type. During this land price frame period, if the market price increases by 20% or more over the maximum price or reduces by 20% or more below the minimum price prescribed in the land price frames, the Government shall adjust the land price frames accordingly.

The land price tables published by the provincial People's Committees are in line with the land price frames and also published once in five years. Land price tables are used:

- for calculating land use levy/ rental for land within quota,
- for calculating land use tax
- for calculating registration charges.

However, in certain cases, government does not use land price tables but calculates specific land prices for the particular case by using either direct comparison method or surplus method or co-efficient method. The specific land prices are used:

- for calculating land use levy/ rental for land outside the defined quota,
- for calculating reserve prices in case of auction of land use rights by the government
- for calculating compensation

The specific land prices are thus calculated at the time of deciding the payment towards the land use levy or rental. However, the specific land prices are not published as the land price tables.

As the interval period between the two consecutive publications of official prices is long, it allows the government to have discretion in deciding the land prices. The revision and publication of all the official prices every year will create an official record of land prices in Can Tho on a regular basis and that can reduce the gap in the timeframes between the market prices and the official prices. As a result, the revenues earned by the government will be reflective of market prices to the extent practically possible as the latitude for exercising discretion will considerably reduce.

6.1.1.1 Bridge the valuation gap as land price tables come for review in 2019

The land price tables are revised every five years. The current year is in which the land price tables will be revised. This is an opportunity for Can Tho city government to correct the price mismatches between the government market prices and the real market prices. The law does not prohibit the city government to record price tables for internal purposes on an annual basis. They should take advantage of the law which allows the price tables to be revised in the intervening five-year period between two price tables revisions should the market price increase by 20% from the stated price in the price tables. This revision is not possible without having track of the market prices on a regular

[16] *Land law 2003 mandated the government to promulgate land price frames every year. This was changed in the Land law 2013.*

basis. This correction in mismatch will be lead to better price yields for Can Tho city government and every single revenue recurring or non-recurring which is linked to land values.

6.2 Reforming the legal framework to enable a full suite of land-based fiscal tools and to optimise revenue from the existing land-based fiscal tools

As explained in the chapter 5, Can Tho may be able to use the land value capture tools as cost recovery tools in the short term as investment in infrastructure may not result into very large increase in land prices, thus not enabling maximization of value capture.

The revenues from existing land-based fiscal tools can be optimized by changing the way it is assessed and levied and/or by increasing its rate. The revenue base can be augmented by adding new sources.

Can Tho city government has the following land-based revenue sources. Each of the revenue source is assessed if it is capturing value increases and every revenue source is analysed in how it is levied and what is the rate at which it is levied.

Table 6.1 Land-based fiscal tools in Can Tho

SR. NO.	LAND-BASED FISCAL TOOLS IN CAN THO	REMARKS
1	Land use levy/ rental on sale of land use rights by the government on first time allocation/ lease or on change in land use	The tool presents an opportunity for the Government to capture value increase, however, the land use levy/ rental is paid based on the official prices and not the market prices. As official prices are not regularly updated, the tool cannot capture value changes. However, when Government provides approval on change in land use, it does allow the Government to capture value increase. However, it still may not capture the maximum value since the rental will also not be calculated according to the market prices.
2	Registration charges for grant of land use certificate	This revenue source captures changes in land values but is linked to official prices and hence in practice is not capable of capturing value changes.
3	Land use tax which is a recurring tax levied only on land	This revenue source captures changes in land values but is linked to official prices and hence in practice is not capable of capturing value changes.
4	Planning license fee which is a nominal fixed fee levied for allowing a developer to carry out urban planning of a certain land area	Planning license fee is not linked to the land values and hence cannot be construed as a form of land value capture tools.
5	Construction permit fee which is a fixed fee for allowing construction activity on a land plot	Construction permit fee is not linked to the land values and hence cannot be construed as a form of land value capture tools.
6	Exactions from developers – through i) Build-Transfer transaction ii) social housing development iii) redevelopment of apartment buildings	Exactions represent an opportunity to capture value from the developer. However, there needs to be a mechanism to have a rationale to decide the percentage of value capture which is left to the city officials' discretion in current legal framework.

Source: CRIS analysis

As explained in the table above, the current lgeal framework does not allow the Government to capture value increases. While land use levy/ rental, registration charges, land-use tax and exactions do present an opportunity to capture value, since the levy is based on official prices, which are not updated in line with the market prices, none of these tools acts as a value capture tool.

The table below provides the revenue data of all the land-based fiscal tools (LBFT) to Can Tho city government from 2014 to 2017.

Table 6-2 Land-based fiscal tools revenues – Can Tho (All figures in VND billion)

YEAR	AGRICULTURAL LAND USE TAX	NON-AGRICULTURAL LAND USE TAX	LAND USE LEVY	RENT FROM LAND, SURFACE WATER	COLLECTION OF RENT, SALE OF HOUSES	REGISTRATION CHARGES	TOTAL LAND-BASED REVENUE
2013	0.3	28.9	377.7	88.6	12.4	34.8	542.7
2014	0.6	28.7	541.9	109.5	4.3	37.7	722.7
2015	0.3	27.7	628.9	121.9	27.9	44.5	851.1
2016	0.4	28.2	582.9	336.5	59.6	50.4	1057.9
2017	0.2	28.6	741.3	415.2	28.4	66.5	1280.2
AVERAGE PERCENTAGE SHARE (2014-2017)	0.0%	3.2%	64.5%	24.1%	3.0%	5.2%	100.0%

Source: Tax Department, Can Tho PPC and CRIS analysis

The following observations can be made from the existing LBFT revenues of Can Tho city government:

1. The revenue from land use levy forms on an average 64.5% of the LBFT revenues and the rental forms 24.1% of the total LBFT revenues for Can Tho city government. It is to be noted that this is a one-time revenue for the Government from a user.
2. The recurring sources of revenues form the remaining 11.4% of the land-based revenues, thus a very small quantum.
3. Registration fees is the only revenue source linked not only to the land values but also to the construction values of the property built on the land.

Given this situation in Vietnam, following reforms are being suggested.

6.2.1 Local governments need to be empowered to regulate the rates

Revenue generation through land-based charges is a function of land value and the rates of taxation. It is important to highlight that all the current and proposed land-based revenue tools are totally regulated by the Central Government by fixing the rates of charges in the respective acts. As real estate market behaves differently depending upon the local economic conditions, provincial governments may be empowered to carry out revisions in the rates as per the local economic conditions. Also as the local governments are able to retain 100% of the land-based revenues, giving it the power to determine the rates will be a logical extension of this empowerment.

6.2.2 Reforms to the process of levying registration charges can result in increased land-based revenues

The Registration certificate is the legal proof of the land use right or ownership of land attached assets, and land registration office has the most authentic and comprehensive official record of real estate market transactions and property rights. This record makes the most logical basis for charging land-based fiscal tools. The rate of land registration charges in Vietnam is relatively lower than countries in the region, and other countries as well. Currently a flat rate of 0.5% is applied on all kinds of properties.

A sample of 10 countries given in the table below reveals that rates vary from 1% in Laos to as high as 8.5% in Hong Kong. Even neighbouring countries in the region such as Thailand and Cambodia have higher rates of 2% and 4% respectively. Additionally, some countries such as UK have varying rates based on property use (residential, commercial, etc.).

Table 6-3 Registration charges across countries

SR. NO.	COUNTRY	RATE OF REGISTRATION CHARGE	COLLOQUIAL NOMENCLATURE
1	Vietnam	Flat rate of 0.5% for all land-based transactions	Registration charge
2	India	• Mumbai: 6% • Andhra Pradesh: 4% + 1.5% surcharge	Stamp duty
3	Australia	• New South Wales: Varies slab-wise based on property value; usually a fixed fee + a percentage of dutiable value ranging from 1.25% to 7% • Victoria: Varies slab-wise based on property value; usually a fixed fee + a percentage of dutiable value ranging from 1.4% to 6%	Land transfer duty
4	Hong Kong	• Progressive rates ranging from 1.5% to 8.5% depending on property value • For instruments of residential property executed after 5th November 2016, a flat rate of 15% is applied.	Stamp duty
5	Sweden	1.5%	Stamp duty
6	UK	• Residential properties: ranges from 0% to 12% depending on value of property (progressive slab-wise rates) • Buy-to-let second homes: Additional 3% on each slab, increasing the rate range from 3% to 15% • Commercial properties: 0 – 5% depending on value of property (progressive slab-wise rates)	Stamp duty land tax
7	Cambodia	4%	Transfer tax
8	Thailand	2%	Transfer fee
9	Laos PDR	1%	Transfer fee
10	China	• Tier-I cities like Beijing, Shanghai & Shenzhen: 3% - 5% • Other cities: 1% - 1.5%	Deed tax
11	South Korea	• 4.6% including local surtax • Flexibility of tripling the rate for larger cities like Seoul	Acquisition tax

Source: CRIS analysis

Due to very low rate of registration charges, its contribution to the total LBFT revenues is very low at an average of 5% annually. The increasing rates of registration charges and defining varying rates for different kinds of properties can be explored to increase the total revenues from registration charges.

6.2.3 Introduction of new land value capture tools

Article 62 of the Law on Urban Planning (2009) allows the government agencies to acquire land along both sides of a road development project and put the land on auction. It says:

“When implementing projects to develop roads under approved planning, competent state agencies shall concurrently organize recovery of land along both sides of roads according to planning and hold auctions or bidding to select investors under law.”

This practice aims to monetize the public land alongside of a road project by selling the land use rights post project completion.

As per the Article 74 of the Land Law 2013, the land users whose land is acquired, are compensated by providing land with the same land use elsewhere and if land is not available, then they are compensated by in the form cash. Compensation amount is calculated based on the specific land price calculated at the time of land acquisition and also for the investment made on the land.

The article has been reproduced below.

"Article 74: Principles of compensation upon land recovery by the State

2. The compensation must be made in the form of allocating new land with the same land use purpose with the recovered land. If there is no land available for compensation, the land users shall receive compensation in money calculated according to the specific land price of the type of recovered land which is decided by the provincial-level People's Committee at the time of the recovery decision.

3. The compensation upon land recovery by the State must be made in a democratic, impartial, equal, public, timely and lawful manner".

Acquisition of land in this manner however entails certain challenges:

- Finding land for compensation may not be always possible. As the city develops, possibility of finding vacant land may become less and this will leave the government with the option of compensating in cash.
- Acquisition of land requires government to incur upfront expenditure on compensation. Unavailability of funds can delay the process of acquisition and it may result in increase of land prices due to speculation. As a result, government may face a large financial burden before it could acquire land.
- Acquiring land for project construction, i.e. for public use justifies the eminent domain of the government, however practice of acquiring more land than what is required for the project tends to face resistance from the users, which should be overcome.

Acquiring land along the road projects and selling the land use rights deprives users from receiving benefits from the infrastructure being created. As Vietnam makes a transition to a market based economy, government's eminent domain will be restricted and it will need to find ways to capture the value increases accruing to the land users resulting due to public investment.

Land pooling or land readjustment is one such alternative tool that provides a better alternative to the practice of acquisition and sale of land use rights along road projects. It not only makes land available for infrastructure but can also create funds to meet the cost of infrastructure through betterment levies on existing land users. It restricts the acquisition to the project requirement and minimises the relocation of land users. The process provides serviced plots to the existing land users.

Decree No. 01/2007/ND-CP of 6 January, 2017 (Item 34 Article 2 to supplement the Article 49 a) of the Land Law 2013) has made a provision for land pooling/ readjustment.

"*1. The mechanism of the land use right pooling and readjustment shall be applied to an investment project if the following conditions are met:*

a) In the circumstance defined in Point i, Section 1, Article 179 of the Land Law[17];

b) The implementation of the investment project is in accordance with the land use planning, construction planning, urban planning, housing development programs and plans, rural residential plans, new rural development plans which are approved by competent government authorities;

c) The plan of the land use right pooling and readjustment must be accepted by the users of the land parcels on which the project is expected to cover and be approved by the relevant provincial People's Committee;

d) The rights and benefits of land users in the project's area must be ensured.

2. Provincial People's Committees shall promulgate regulations on the land use rights pooling and readjustment for investment projects."

[17] *In case the land is subject to acquisition for project implementation, land users are entitled to invest on land by their own or to lease land use rights to the investor or to contribute land use rights as capital to the investor for project implementation in accordance with the Government's regulations.*

Amending this provision by introducing a betterment levy to be paid by the land users can create an avenue for the government to capture the land value increments without relocating the land users. Betterment levy can introduce land value capture financing policy in Can Tho.

6.2.4 Introduction of property tax can pave the way for land value capture financing in a recurring manner

Property tax captures the changes in land value on a regular basis if the valuation is linked to the market prices. The proposed Law on Property Tax will establish such a tax on all land assets and buildings assets. The proposed Law on Property Tax uses land price tables to calculate the unit prices of a land property. However, as explained earlier, revising the land price tables every year will be essential to capture the value increases through property tax.

This opens up the possibility to introduce tax increment financing tool which demarcates an area where infrastructure is being upgraded which leads to valuation increase of the properties and hence growth in property tax. A base value called Equalized Assessed Valuation (EAV) is fixed and further growth in the property tax is ring-fenced and assigned to create and maintain infrastructure in the same area.

6.2.5 Introduction of development charge can create an opportunity to generate dedicated funding for infrastructure creation

Currently LBFT revenues are majorly from land use levy and rental and recurring revenues are very limited. There are no dedicated revenue sources mandatorily generate revenues for infrastructure projects. Introducing development charges can help create such revenue source. While, it reflects the market prices, it is essentially a cost recovery tool and as it is levied as a part of the building permission process, the implementation can be relatively easy.

6.2.6 Summary of intervention to optimise and augment the LBFT revenues

To summarize, Can Tho's LBFT revenues are centered on the land use levy and rental as these two tools account for about 90% of revenues on average annually.

Can Tho may optimize the LBFT revenues by carrying out the following reforms:

- Giving more autonomy to the provincial governments can help in designing land-based fiscal tools considering the local socio-economic conditions rather than 'one size fits all' approach followed in the current regulations. It is to be understood that the land market reacts to the local socio-economic conditions.
- The most important reform to optimize the LBFT revenues will be to revise and publish the official land prices every year so that the revenues generated will reflect the market values to the extent possible. Similarly, land and buildings both should be valued considering the market values.
- Registration fee is very low at 0.5% of the value of the transaction, and can be gradually increased over a period of time.

Can Tho may also introduce new LBFT revenues such as:

- Charging betterment levy through land readjustment process is a better alternative to acquiring more land than what is required for a project and selling land use rights. This is because as Vietnam moves to market based economy, its eminent domain will be restricted and it will need to find ways to capture value increases due to public investments.
- Property tax is the most rudimentary tool capturing changes in land values and a property tax regime that is linked to the market values should be introduced in Can Tho. This will also open doors to introduce tax increment financing in the areas where investments are being made to upgrade infrastructure.
- Development charge can be a useful tool to create dedicated funding for infrastructure creation

The tools being proposed for Can Tho are property tax, development charges and betterment levy. These are proposed as cost recovery tools.

Revenue from property tax is used to by the Government to meet general expenditure requirements on infrastructure maintenance in the city. Thus, through the tax payment, the land users are entitled to receive better living conditions.

Similarly the betterment levy and the development charges generate funds to create infrastructure to service the land plots for which these are charged. Thus as a result, land users are going to get benefitted by making these payments from future investments in infrastructure.

Also the additional cost to the buyer will be of recurring nature which is not going to put large financial burden on the buyer at once but the payment will be made over time in installments. Recurring payments will have more acceptability in tax-payers.

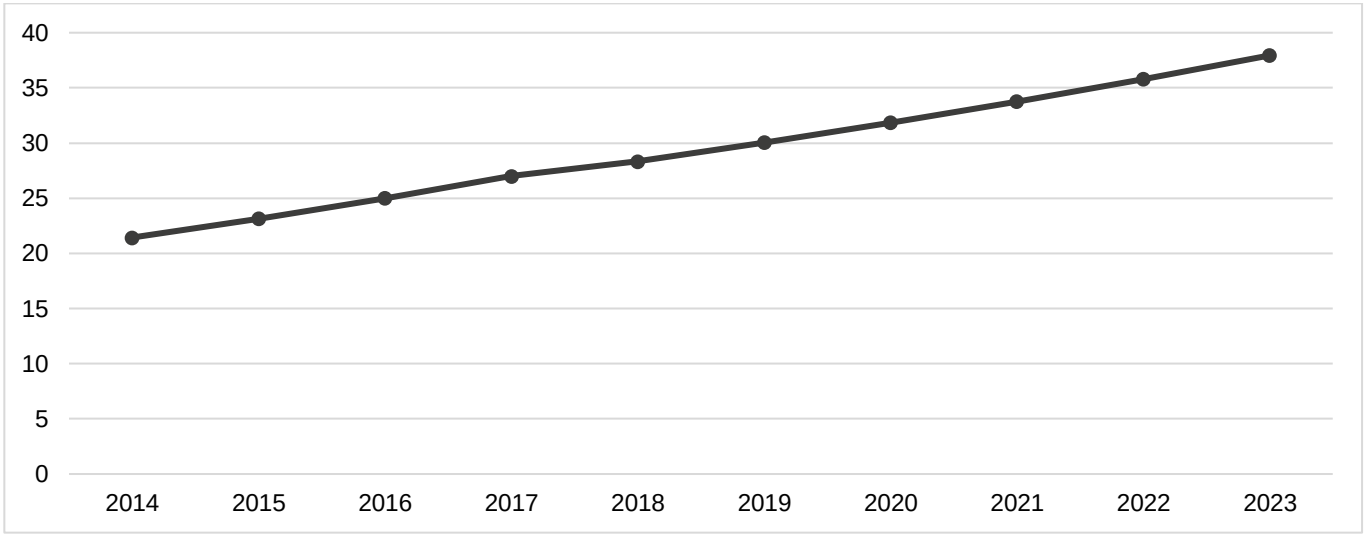
Hence, introduction of new taxes is unlikely to result in any adverse impact on the local demand.

6.3 Broad estimates of revenues from land-based fiscal tools

This section presents broad estimates of revenue in the case Can Tho city decides to reform the land regulations. The estimates have been made for the 'business as usual' scenario and the 'reformed' scenario for the period 2019 to 2023. For the projections the past trends of revenue from various land based fiscal tools have been taken into consideration. Data used for past trends is for the period 2014 to 2017. The projections have been made for the land use levy, land rental, registration charges and the non-agricultural land use tax.This excludes the revenue from agricultural land-use tax as it has been abolished in 2016 and the revenue from sale of houses as it depends on the inventory of houses available with the government for sale.

The first step was to project the average market prices. The average annual growth rate of market prices in Can Tho was observed to be 8% over the period 2010-2018. For the projections, the market prices have been assumed to grow at 6% annual growth rate. Thus, the average per sq. m. market price will grow from VND 28 million in 2018 to VND 38 million in 2023.

Figure 6-3 Average market price (In VND million per sq.m.)



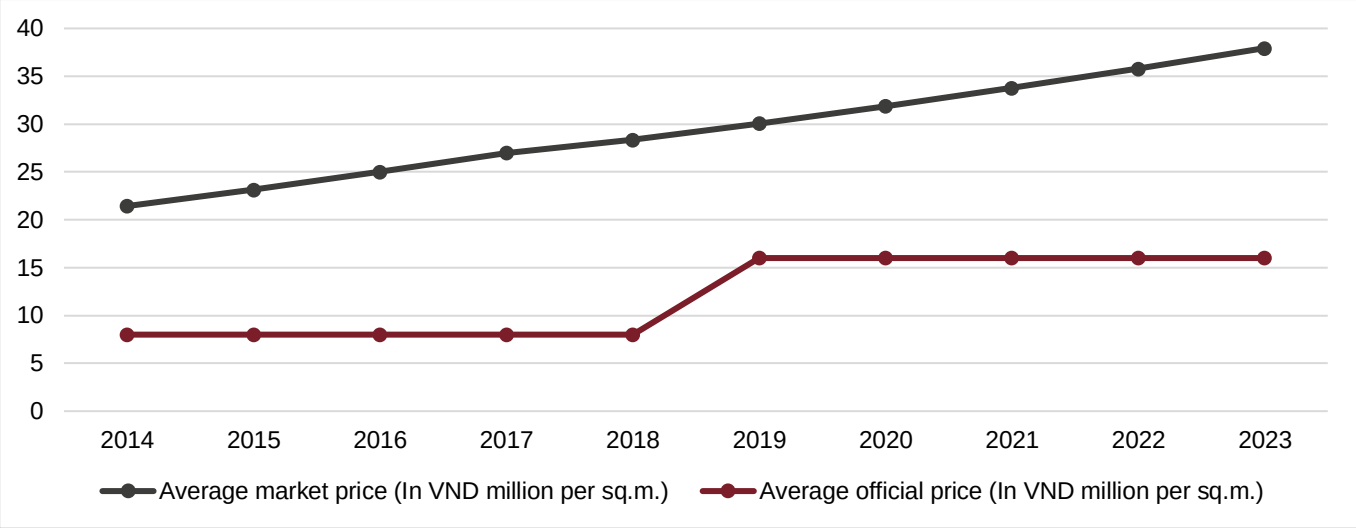
Source: CRIS analysis

Also on account of the correction in the official prices in 2019, the annual growth rate of real estate demand in Can Tho has been assumed to halve from 2019 onwards.

6.3.1 Business as usual scenario

The current levels of official prices is at VND 8 million per sq. m, thus showing a large difference (275%) from the average market prices which are at VND 28 million per sq. m. Since 2019 will be the year for publishing the official prices, it is expected that there will be a certain level of price correction in the official prices to reduce the gap between the official prices and the market prices. The official prices in business as usual scenario are assumed to be revised by 100% in 2019.

Figure 6-4 Average official price versus average market price (In VND million per sq.m.) – Business as usual scenario

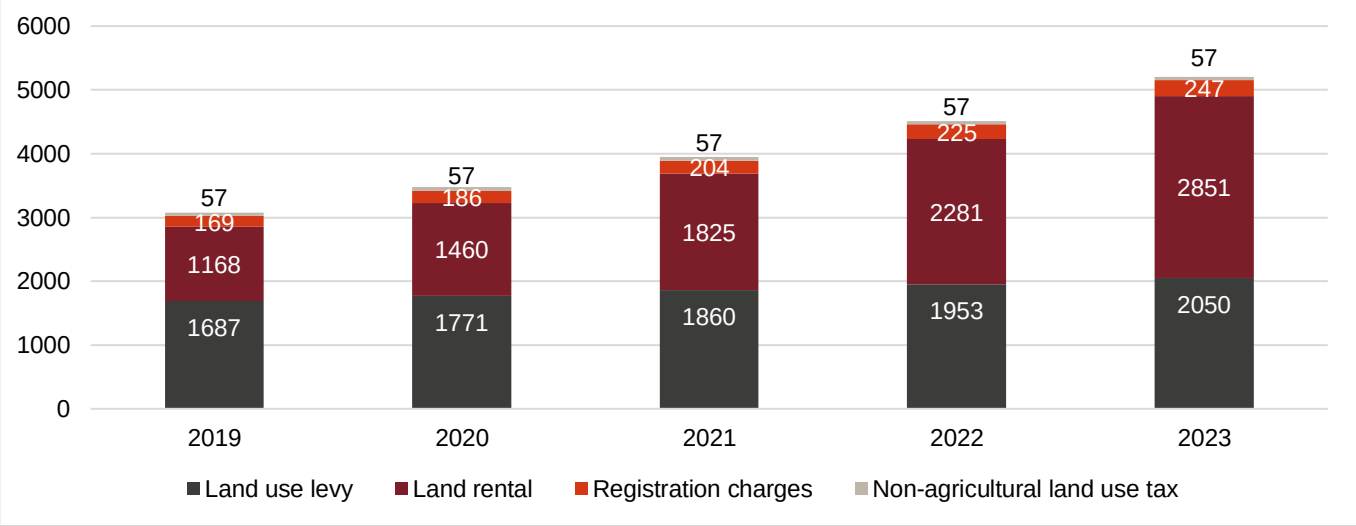


Source: CRIS analysis

Thus the average official price which is at VND 8 million per sq. m will increase to VND 16 million per sq. m. in 2019. Post that the prices will remain same till revised again in 2024. This correction will result in a significant increase in the LBFT revenues in 2019.

Specific assumptions for individual land-based fiscal tool are given below.

Figure 6-5 LBFT revenues - business as usual scenario (VND in billions)



Source: CRIS analysis

Land use levy grew from VND 542 billion in 2014 to VND 741 billion in 2017, at a CAGR of 11%. It is is assumed to grow at a CAGR of 5% from 2019 to 2023.Thus it will grow from VND 823 billion in 2018 to 1,687 billion in 2019 and further grow to VND 2,050 billion in 2023. The cumulative revenue from land use levy from 2019 to 2023 will be VND 9,321 billion in absolute value terms and VND 7,002 billion in present value terms.

Land rental grew at a CAGR of 56% from VND 109 billion in 2014 to VND 415 billion in 2017.It is assumed to grow at a CAGR of 25% from 2019 to 2023. Land rental revenue will grow from VND 519 billion in 2018 to VND 1,168 billion in 2019 and further grow to VND 2,851 billion in 2023. The cumulative revenue from land rental from 2019 to 2023 will be VND 9,583 billion in absolute value terms and VND 6,966 billion in present value terms.

Registration charges grew at a CAGR of 21% from VND 37 billion in 2014 to VND 66 billion in 2017. It is assumed to grow from VND 80 billion in 2018 to VND 168 billion in 2019 and further grow to VND 247 billion in 2023, at a CAGR of 10%. The cumulative revenue from the registration charges from 2019 to 2023 will be VND 1,029 billion in absolute value terms and VND 766 billion in present value terms.

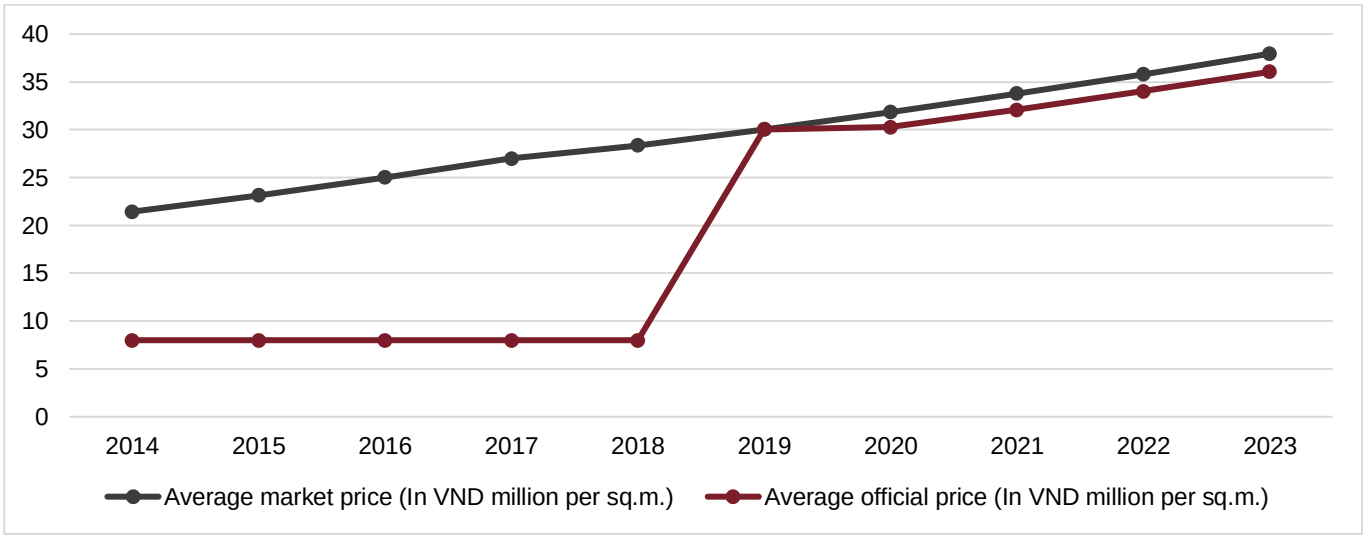
The non-agricultural land use tax has been constant from 2014 to 2017 at VND 28 billion. It is assumed to grow to VND 57 billion in 2019 and then remain constant till 2023. The cumulative revenue from the non-agricultural land use tax from 2019 to 2023 will be VND 286 billion in absolute value terms and VND 217 billion in present value terms.

The LBFT revenue for Can Tho which is VND 1.2 trillion in 2017, is estimated to grow to VND 3 trillion in 2019 and further grow to VND 5 trillion in 2023 in the business as usual scenario. The cumulative revenue for the period 2019 to 2023 will be VND 20 trillion in absolute value terms and VND 15 trillion in present value terms.

6.3.2 Reformed scenario

In the reformed scenario, the official prices are assumed to get corrected to match the market pries in 2019. This means a large increase in the official prices. Average official prices are assumed to increase from VND 8 million per sq.m. in 2018 to VND 30 million per sq.m. in 2019. Further to that, it is assumed that the official prices will be revised every year from 2019 onwards. The official prices are assumed to follow the market prices closely. The average official prices are assumed to increase from VND 30 million per sq. m in 2019 to VND 36 million per sq.m. 2023, thus keeping a differential of 5% with the average market prices.

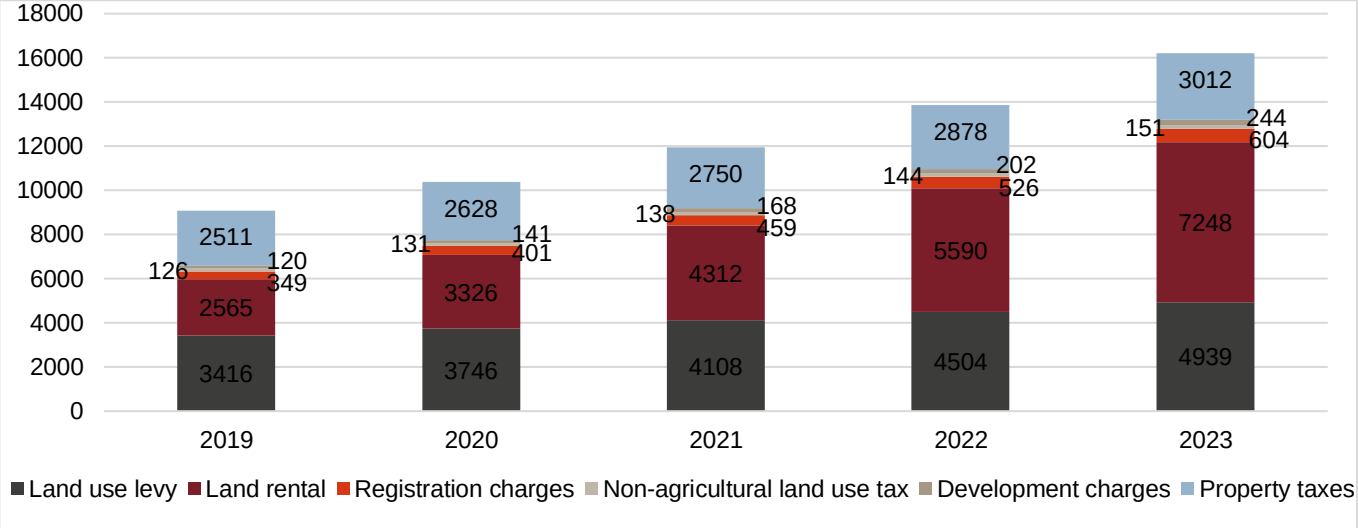
Figure 6-6 Average official price versus average market price (In VND million per sq.m.) – Reformed scenario



Source: CRIS analysis

Specific assumptions for individual land-based fiscal tool are given below.

Figure 6-7 LBFT revenues - reformed scenario (VND in billions)



Source: CRIS analysis

In reformed scenario, the land use levy is estimated to grow from VND 823 billion in 2018 to VND 3,416 billion in 2019 and further grow to VND 4,938 billion in 2023. Thus cumulatively for the period 2019-2023, the land use levy in the reformed scenario will generate a revenue of VND 20 trillion in absolute value terms and VND 15 trillion in present value terms. This is 2.2 times higher than the estimated revenue potential of land use levy under business as usual scenario. In fact, it is equivalent to the total LBFT revenue potential as per the business as usual scenario.

The land rental is estimated to grow from VND 519 billion in 2018 to VND 2,565 billion in 2019 and further grow to VND 7,248 billion in 2023. Cumulatively for the period 2019-2023, the land rental revenue in the reformed scenario will be VND 23 trillion in absolute terms and VND 16 trillion in present value terms. This is almost 2.4 times the land rental revenue potential in the business as usual scenario.

The registration charges are estimated to grow from VND 80 billion in 2019 to VND 349 billion in 2019 and further grow to VND 603 billion in 2023. Cumulatively for the period 2019-2023, the revenue potential from the registration charges is estimated to be VND 2.3 trillion in absolute terms and VND 1.7 trillion in present value terms. This is 2.3 times the estimated potential as per the business as usual scenario.

The non-agricultural land use tax is estimated to grow from VND 28 billion in 2018 to VND 126 billion in 2019 and further grow to VND 151 billion in 2023. Cumulatively, it will generate a revenue of VND 689 billion in absolute value terms in VND 518 billion in present value terms. This is 2.4 times higher than the estimates as per the business as usual scenario.

In the reformed scenario, two new land based fiscal tools are assumed to be introduced, the development charges and the property tax.

The development charges are assumed at 2% of the property value. Development charges will generate a revenue of VND 120 billion in 2019 which will grow to VND 244 billion in 2023. Cumulatively, development charges will generate a revenue of VND 875 billion in absolute value terms and VND 641 billion in present value terms.

The property taxes are assumed at the rate of 0.4% for land and 0.2% for built properties. Property taxes will generate a revenue of VND 2.5 trillion in 2019 which will grow to VND 3 trillion in 2023. Cumulatively, property taxes will generate a revenue of VND 13.7 trillion in absolute value terms and VND 10.3 trillion in present value terms.

The LBFT revenue for Can Tho under the reformed scenario is estimated to grow to VND 9 trillion in 2019 and further grow to VND 16 trillion in 2023. The cumulative revenue over the period 2019-2023 is estimated to be VND 61 trillion under the reformed scenario as against VND 20 trillion under the business as usual scenario – in absolute terms. This translates to VND 45 trillion under the reformed scenario as against VND 15 trillion under the business as usual scenario – in present value terms.

The revenue potential on account of reforms is three times higher than that under the business as usual scenario, thereby justifying the implementation strategy for the reforms.

Detailed projections have been provided in the Annexure 13: Broad estimates of LBFT revenues (In VND million).

7. Annexures

7.1 Annexure 1: List of Vietnamese legal documents referred

SR. NO.	REFERENCE NO.	NAME OF DOCUMENT	DATE OF PROMULGATION
LAWS			
1	45/2013/QH13	Land law	December 9, 2013
2	15/2017/QH14	Law on management and use of public property	June 21, 2017
3	30/2009/QH12	Law on urban planning	June 17, 2009
4	49/2014/QH13	Law on public investment	June 18, 2014
5	50/2014/QH13	Construction law	June 18, 2014
6	97/2015/QH13	Law on fees and charges	November 25, 2015
7	21/2017/QH14	Law on planning	November 24, 2017
8	65/2014/QH13	Law on housing	November 25, 2014
9	43/2013/QH13	Law on bidding	November 26, 2013
10	67/2014/QH13	Law on investment	November 26, 2014
11	01/2016/QH14	Law on property auction	November 17, 2016
12	48/2010/QH12	Law on non-agricultural land use tax	June 28, 2010
13	20/2017/QH14	Law on public debt management	November 23, 2017
14	83/2015/QH13	Law on state budget	July 9, 2015
DECREES			
15	01/2017/ND-CP	On amendments to the decrees on the implementation of the Land Law	January 6, 2017
16	11/2013/ND-CP	On investment management of urban development	January 14, 2013
17	43/2014/ND-CP	Detailing a number of articles of the Land Law	May 15, 2014
18	44/2014/ND-CP	Provisions on land prices	May 15, 2014
19	45/2014/ND-CP	Providing for the collection of land use levy	May 15, 2014
20	46/2014/ND-CP	Regulations on collection of land rent and water surface rent	May 15, 2014
21	63/2018/ND-CP	On investment in the form of Public-Private Partnership	May 4, 2018
22	123/2017/ND-CP	Amendments and supplements to a number of articles of the provisions of regulations on the collection of land use levy, land rental and water surface rent	November 14, 2017
23	167/2017/ND-CP	On disposition of public property	December 31, 2017
24	188/2013/ND-CP	Development and management of social housing	November 20, 2013
25	37/2010/ND-CP	On the formulation, evaluation, approval and management of urban planning	May 23, 2011
26	103/2018/ND-CP	Providing certain policies for investment, finance, budget and delegation of powers tailored for Can Tho City	August 7, 2018

SR. NO.	REFERENCE NO.	NAME OF DOCUMENT	DATE OF PROMULGATION
27	*101/2015/ND-CP*	*On creating and building residential houses*	*October 20, 2015*
28	*167/2017/ND-CP*	*Requirements for retirement and handling of public property*	*December 31, 2017*
29	*15/2015/ND-CP*	*On Public-Private Partnership Investment Form*	*February 14, 2015*
DECISIONS			
30	*68/QD-TTg*	*Approval for revision of the planning for construction of the Mekong Delta Region by 2030 with vision towards 2050*	*January 15, 2018*
31	*445/QD-TTg*	*Approving modification of the Master Plan for development of Vietnam's urban system by 2025 with vision to 2050*	*April 17, 2009*
32	*1515/QD-TTg*	*On the approval of the project on adjustment of the Master Plan of Can Tho City till 2030 and with a vision to 2050*	*August 28, 2013*
CIRCULARS			
33	*76/2014/TT-BTC*	*On providing guidance on decree no. 45/2014/ND-CP dated May 15, 2014 of the Government on collection of land use levies*	*June 16, 2014*
34	*77/2014/TT-BTC*	*Providing guidance on a number of articles of the Government's decree no. 46/2014/ND-CP dated May 15, 2014 defining collection of land rents and water surface rents*	*June 16, 2014*
35	*250/2016/TT-BTC*	*Providing guidance on fees and charges within the jurisdiction of the People's Council of centrally-affiliated city and province*	*November 11, 2016*
36	*301/2016/TT-BTC*	*Guidelines for the registration charge*	*November 15, 2016*
37	*36/2014/TT-BTNMT*	*Detailing the methods of determination of land price, development and adjustment of land prices; determination specific land prices; and consultancy for determination of land prices*	*June 30, 2014*

Source: CRIS analysis

7.2 Annexure 2: List of land use rights

Article 166 of the Land Law defines the general rights of a land user as follows.

- To be granted the certificate of land use rights, houses and other land related assets ownership
- To enjoy the results of the labor and investment on land
- To enjoy the benefits derived from facilities constructed by the State for protecting and improving agricultural land
- To receive the State's guidance and assistance in the improvement and fertilization of agricultural land
- To be protected by the State against others' infringements of their lawful rights and benefits related to land
- To receive compensation when land is recovered by the State in accordance with this Law
- To complain about, denounce or file lawsuits over violations of their lawful land use rights and other violations of the land law
- **To exchange, transfer, lease, sublease, inherit, donate land use rights or land-attached assets; mortgage or contribute as capital land use rights or land-attached assets**

Land use rights can also be shared by a group of land users including economic organizations and individuals; in such a case, the right is split equally among the users in the group or an authorized representative is appointed to exercise the right.

7.3 Annexure 3: Land use rights regulations

LAND USE	LAND IS ALLOCATED/ LEASED	LAND USE TERM	LAND USE LEVY/ RENTAL
LAND FOR AGRICULTURE, AQUACULTURE, FORESTS WITHIN THE SET QUOTA[18]	Land is allocated	Limited land use term Defined at maximum of 50 years but may be subject to an extension	Exempted from land use levy
LAND FOR INVESTMENT PROJECTS OF CEMETERIES AND GRAVEYARDS	Land is allocated	Long and stable term	Exempted from land use levy
LAND FOR AGRICULTURE, AQUACULTURE, FORESTS OUTSIDE THE SET QUOTA	Land is leased	Limited land use term Defined at maximum of 50 years but may be subject to an extension	Land rental
RESIDENTIAL LAND	Land is allocated	Long and stable term	Land use levy
INVESTMENT PROJECTS FOR CONSTRUCTION OF HOUSES FOR SALE OR SALE AND LEASE BOTH **BUYERS OF HOUSES AND ASSOCIATED LAND USE RIGHTS**	Land is allocated	Limited land use term Defined at maximum of 50 years Long and stable term	Land use levy
LAND FOR CONSTRUCTION OF HOUSES FOR RESETTLEMENT UNDER THE GOVERNMENT PROJECTS	Land is allocated	Long and stable term	Exempted from land use levy
LAND FOR RELIGIOUS INSTITUTIONS	Land is allocated	Long and stable term	Exempted from land use levy
LAND FOR NON-BUSINESS ORGANIZATIONS WHICH ARE NOT SELF-FINANCED	Land is allocated	Long and stable term	Exempted from land use levy
INVESTMENT PROJECTS ON HOUSES FOR LEASE	Land is leased	Limited land use term Defined in accordance with the duration of project	Land rental
LAND FOR TRADING, PRODUCTION, CONSTRUCTION OF PUBLIC FACILITIES FOR COMMERCIAL PURPOSE, OFFICE FACILITIES **OFFICE CONSTRUCTION OF FOREIGN ORGANIZATIONS WITH DIPLOMATIC FUNCTIONS**	Land is leased	Limited land use term Defined at maximum of 50 years Defined at maximum of 99 years	Land rental
INVESTMENT PROJECTS FOR NON-AGRICULTURAL BUSINESSES	Land is leased	Limited land use term Defined at maximum of 50 years	Land rental
INVESTMENT PROJECTS WITH SLOW RECOVERY OF CAPITAL, IN AREAS WITH DIFFICULT SOCIO-ECONOMIC CONDITIONS	Land is leased	Limited land use term Defined at maximum of 70 years	Land rental

Source: CRIS analysis

[18] *The description of land use quotas in given in annexure 3.*

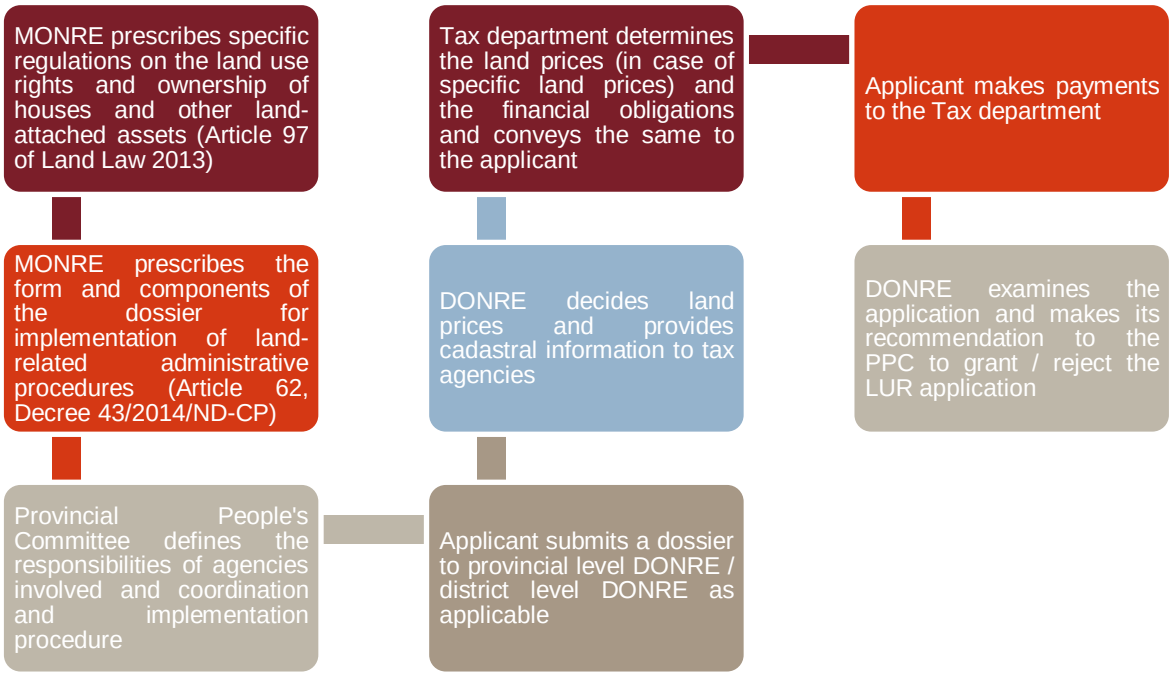
7.4 Annexure 4: Process of granting a land use right

Land users who have land use rights and the ownership of houses and other land-attached assets, are granted a certificate of land use rights and ownership of houses and other land attached assets. The State grants a certificate of land use rights and ownership of houses and other land-attached assets for the following cases:

- → Current land users who are eligible to be granted a certificate of land use rights and ownership of houses and other land-attached assets
- → People who are allocated land or leased land by the State
- → People who are allowed to exchange, acquire, inherit, receive land use rights as a donation, or receive land use rights contributed as capital, or to receive land use rights upon settlement of contracts on mortgage with land use rights to recover debts
- → People who are entitled to use land as a result of the successful conciliation of land disputes
- → People who win an auction of land use rights
- → People who use land in industrial parks, industrial parks, export processing zones, hi-tech zones or economic zones
- → People who buy houses and other land-attached assets
- → People who buy houses attached to residential land liquidated by the State or buy state-owned houses
- → People who use split or consolidated land parcels
- → Land users who request change or re-grant of a lost certificate

The levy or rental is paid at the time of granting of land use right certificate. Article 62 and 63 of the decree No. 43/2014/ND-CP dated May 15 2014 explains the procedure of granting land use right as given in the diagram below.

Figure 7.1 Process of granting land use right



Source: CRIS analysis

The applicant needs to submit dossiers to the DONRE as per the procedures prescribed by MONRE. DONRE decides land prices and provides cadastral information to the tax agencies. The Tax Department calculates the financial

obligations and conveys to the applicant. On payment of the fees, the DONRE examines the application and grants the land use right.

7.5 Annexure 5: Calculation of land use levy/ rental

Calculation of land use levy

Article 108 of the Land Law as well as Article 3 of the Decree no. 45/2014/ND-CP prescribe the basis for calculation of land use levy. The bases for calculation of land use levy include:

- Area of land which is allocated, permitted for change of land use purpose, or for which land use rights are recognized
- Land use purpose
- Land price

When the land is auctioned, the land use levy is first calculated as the reserve price, but the payment of land use levy is based upon the actual winning bid price. The reserve price shall be based on actual market prices, and must under no circumstances be lower than the land price published by the Provincial People's Committee.

- The land price on the Land Price Table prescribed by the People's Committee is applicable in case households or individuals having land use rights within-quota areas of residential land
- The specific land price determined by the method of direct comparison, deduction, income or surplus prescribed in the Government's Decree on land prices shall be applied in the following cases
  - Determining the reserve price when state allocates land through auction
  - In the following cases

SR. NO.	TYPE OF CITY/PROVINCE	VALUE OF AREA (CALCULATED AT THE LAND PRICE IN THE LAND PRICE TABLE)
1	Central-affiliated cities	≥ 30 billion VND
2	Mountainous areas and highlands	≥ 10 billion VND
3	Rest of provinces	≥ 20 billion VND

Source: Land Law(2013) and Decree no. 45/2014/ND-CP

  - Land price (as per land price list issued by PPC) x land price adjustment coefficients[19]

SR. NO.	TYPE OF CITY/PROVINCE	VALUE OF AREA (CALCULATED AT THE LAND PRICE IN THE LAND PRICE TABLE)
1	Central-affiliated cities	< 30 billion VND
2	Mountainous areas and highlands	< 10 billion VND
3	Rest of provinces	< 20 billion VND

Source: Land Law(2013) and Decree no. 45/2014/ND-CP

Calculation of land rental

[19] *land price adjustment coefficients are provided annually by the provincial People's Committee*

Article 108 of the Land Law as well as Article 3 of the Decree no. 46/2014/ND-CP prescribe the basis for calculation of land rental.

The bases for calculation of land rental include:

- Area of leased land
- Term of land lease
- Unit price of land lease
- Type of land lease i.e. annual rental payment or one-off rental payment for entire lease period

When the land is auctioned, the lease rental is first calculated as the reserve price, but the payment of rental is based upon the actual winning bid price.

On the whole, annual land rent is calculated by multiplying the area liable to land rent with the unit price for annual land rent. Lump sum land rent is calculated by multiplying the area liable to land rent with the unit price for lump sum land rent. Decree no. 46/2014/ND-CP and circular no. 77/2014/TT-BTC lay down the mechanism for determination of land rent unit prices for 4 scenarios:

- Annual land rental not through auction
- Lump sum land rental not through auction
- Annual land rental through auction
- Lump sum land rental through auction

1. Annual land rental not through auction

The unit price of annual land rent is calculated by multiplying the percentage rate by the land rent price.

The rate to calculate unit prices is usually 1% of the land price except for urban areas, commercial centres, traffic hubs and residential areas that are highly profitable to build business premises. In these cases, the rate can be up to 3%. These rates shall be decided by the provincial-level People's Committee based on land area and land use, and shall be published during implementation.

On the other hand, for land in remote areas, mountainous areas, islands, regions facing socio-economic difficulties, land used for agricultural production, forestry, aquaculture, salt making; land used as production and business premises of the projects on investment promotions and special investment promotions, the rate to determine unit prices can be reduced to a minimum of 0.5%. The table below gives cases for which the specific land prices or land price adjustment coefficients are used to calculate the unit price of rental.

SR. NO.	TYPE OF CITY/PROVINCE	VALUE OF AREA	LAND PRICE FOR DETERMINING LAND RENT
1	Central-affiliated cities	≥ 30 billion VND	Specific land price decided by the provincial People's Committee Method for determination of such land price: direct comparison / deduction / income / surplus
2	Mountainous areas and highlands	≥ 10 billion VND	
3	Rest of provinces	≥ 20 billion VND	
4	Central-affiliated cities	< 30 billion VND	Land price as per rented land use purpose (prescribed by PPC in the price list) X land price adjustment coefficients
5	Mountainous areas and highlands	< 10 billion VND	
6	Rest of provinces	< 20 billion VND	

Source: Land Law(2013) and Decree no. 45/2014/ND-CP

- Lump sum land rental not through auction

The land rent unit price paid in lump sum for the entire lease period is the land price determined by the land use term corresponding to the land rent time. In case the land rent term is less than the term of the land types given in the land price list, the land price used for determining the unit price shall be calculated using the following formula:

$$\text{Land price of the land rent term} = \frac{\text{Land price in the land price List}}{\text{Term of land types in land price List}} \times \text{Land rent term}$$

- Annual land rental through auction

In case of annual land rental payments to be made where land was leased through auction, the unit price of the leased land is equal to the successful bid for one year. However, for calculation of reserve price, the formula given below is used.

Reserve price for annual land rent through auction	=	Land price as per land use purpose corresponding to the land rent term specified in the land price list	X	Land price adjustment coefficients	X	Percentage rate to determine the unit price of land rent prescribed by PPC

It is essentially the same formula used for calculating the annual land rental not through auction.

The successful bid shall be stable for ten years, after which the unit price of leased land shall be adjusted. However the adjusted price must not exceed 30% of the land rent of the previous period.

- Lump sum land rental through auction

In case of land auction whose land rent is paid in lump sum, the unit price of the leased land is the successful bid for the land lease term. The reserve price of the land that is under auction for lump sum rental is determined using direct comparison, deduction, income or surplus method.

7.6 Annexure 6: Land use master plan and land use plans

Land use master plan defines the distribution and zoning of land by use space to serve the objectives of socio-economic development, national defence, security, environmental protection and climate change adaptation based on the land potential and land use demands of all sectors and fields, for each socio-economic region or administrative unit in a given period of time.

Land use master plan is divided in **land use plans** prepared for smaller durations across the overall timeline of the master plan.

Chapter IV of the Land Law 2013 describes various aspects of land use master plans. Land use master plans are prepared at national level, provincial level and also at district level. Master plans are also supplemented with land use plans. While the land use master plan is prepared every 10 years, the land use plans are prepared at every five years in case of national and provincial level plans and annually in case of district level plans. The table below differentiates amongst the three levels of land use master plans and plans.

Table 7-1 Land use master plans and plans – responsibility framework

LEVE OF GOVERNMENT	LAND USE MASTER PLAN	LAND USE PLAN	RESPONSIBILITY
NATIONAL LEVEL	• Prepared for 10 years • Determines land use targets for various land uses • Determines areas for each land use type for each province/ socio-economic region • Formulated based upon national socio-economic conditions, land use demand for all sectors	• Prepared every five years • Evaluates implementation of prior term's plan • Determines areas for each land use type for each province/ socio-economic region • Includes five year land use plans for each province • Provides solutions for implementation	Preparation of plan: Ministry of Natural Resources and Environment Prime Minister may establish an appraisal board for appraisal of master plans, while MONRE assists the board in appraisal process
PROVINCIAL LEVEL	• Prepared every 10 years • Formulated based on land use demand, land use quotas, current land use status and land potential and socio-economic status of the province • Determines of areas for land types for each district level administrative unit • Determines land use zones • Provides solutions for implementation • Is linked to national level land use master plan	• Prepared every five years • Assesses implementations of prior term land use plan and ability to invest and mobilize resources • Determines of areas for land types for each district level administrative unit • Determines the areas and locations of national and provincial-level construction works and projects which use land • Determines locations and areas of recovered land adjacent to the project areas of infrastructure, construction and improvement of urban and rural residential areas – in order to put land use rights up for auction	Preparation of plan: Provincial level People's Committee MONRE may establish an appraisal board, and land administration agencies at central level shall assist the board in appraisal process
DISTRICT LEVEL	• Is prepared for 10 years • Is linked to provincial level land use master plan • Considers land use demand, land use quotas, current land use status and land potential and results of previous district level land use master plan • Determines areas for land types in accordance with the land use demands for districts and communes • Determines land use zones by land use function for each commune	• Is prepared annually • Provides analysis of implementation of previous year's land use plan • Determines land use areas of the district and commune in the planning year • Identifies locations and land areas to be recovered for projects and construction activities • Determines locations and areas of recovered land adjacent to the project areas of infrastructure, construction and improvement of urban and rural residential areas – in order to put land use rights up for auction	Preparation of plan: District level People's Committee The chairperson of a provincial-level People's Committee may establish an appraisal board Land administration agencies at provincial and district levels shall assist the board in appraisal process

Source: Land Law (2013)

7.7 Annexure 7: Land use quota

Article 129 and 130 Land Law 2013 define the land use quotas. The Government prescribes land use right quotas for allocation for agricultural land, allocation for residential land, recognition quotas for residential land use rights, and

acquisition quotas for agricultural land. As the table 3 mentions, the land management regulations are relaxed for the land parcels within the land use right quotas. The land parcels within the quota also have lower land use tax rates, which is explained in section 2.2.3.

Land use quotas are defined for agricultural and non-agricultural land separately.

- For agricultural land

Table 7-2 Land use right quota – agricultural land

LAND TYPE	ALLOCATION QUOTA
FOR LAND FOR ANNUAL CROPS, AQUACULTURE AND SALT PRODUCTION FOR EACH HOUSEHOLD OR INDIVIDUAL DIRECTLY ENGAGED IN AGRICULTURAL PRODUCTION	• Not exceeding 3 hectares for each type of land in provinces and centrally run cities in the southeast region and Mekong Delta region • Not exceeding 2 hectares for each type of land in other provinces and centrally run cities
• **LAND FOR PERENNIAL CROPS FOR EACH HOUSEHOLD OR INDIVIDUAL IN A DELTA COMMUNE, WARD OR TOWNSHIP** • **LAND FOR PERENNIAL CROPS FOR EACH HOUSEHOLD OR INDIVIDUAL IN A MIDLAND OR MOUNTAINOUS COMMUNE, WARD OR TOWNSHIP**	• Must not exceed 10 hectares • Must not exceed 30 hectares
• **LAND FOR PROTECTION FOREST** • **LAND FOR PRODUCTION FOREST**	• Land allocation quota for each household or individual does not exceed 30 hectares
HOUSEHOLD OR INDIVIDUAL ALLOCATED LAND OF DIFFERENT CATEGORIES	Total land quota must not exceed 5 hectares
ALLOCATION QUOTA FOR EMPTY LAND	Provincial People's Committee to prescribe
AGRICULTURAL LAND OF HOUSEHOLDS OR INDIVIDUALS, WHICH IS ACQUIRED THROUGH THE TRANSFER, LEASE, SUBLEASE, INHERITANCE OR DONATION OF LAND USE RIGHTS, THE RECEIPT OF LAND USE RIGHTS CONTRIBUTED AS CAPITAL OR IS CONTRACTED FROM OTHER SUBJECTS OR LEASED FROM THE STATE	• Must not exceed 10 times of the allocation quota for agricultural land for households or individuals applicable to each type of land • Government shall prescribe quotas for acquisition of land use rights of households and individuals in accordance with specific conditions of each locality and in each period

Source: Land Law (2013)

- For non-agricultural land

Table 7-3 Land use right quota – non-agricultural land

LAND TYPE	ALLOCATION QUOTA
RURAL RESIDENTIAL LAND	Provincial-level People's Committees shall determine the land allocation quota to each household or individual for housing construction in rural areas and the minimum area for the division of a residential land parcel in accordance with local conditions and customs
URBAN RESIDENTIAL LAND	Provincial-level People's Committees shall, based on the land use master plans, urban construction master plans and the local land fund, determine the allocation quota of residential land to each household or individual for their own housing construction in case they are not eligible to be allocated land in an investment project on housing construction; and prescribe the minimum area for the division of a residential land parcel.

Source: Land Law (2013)

7.8 Annexure 8: Auction process

As per the Article 43 of the Law on Management and Use of Public Property 2017 (Law No. 15/2017/QH14), all the public property shall be sold in the form of an auction, excluding the cases of selling public property with low value when the price listing is made public or assigned sale as prescribed in regulations of the Government. Also it is the

responsibility of the government to issue detailed regulations in regards to the disposal of public property in case of unsuccessful auctions. However, cases of selling property with "low value" is not defined in the law, and is left up to the discretion of the government. This could be a potential loophole for avoiding auction.

As per Article 52 of the Law on Property Auction 2016, the following cases shall be considered as failed auctions:

- No one registers for participation in the auction though the time limit for registration has expired;
- During the auction, no one offers a bid or no one accepts the set price;
- The highest bid made is lower than the reserve price, in case such price is not publicized and an ascending-price auction is conducted;
- The winning bidder refuses to sign the auction minutes;
- The person who has offered a bid withdraws such bid, or the person who has accepted the set price withdraws such price and no one else offers another bid;
- The case of rejection of the bid winning results prescribed in Article 5120 of the Law on Property Auction 2016;

Article 118 states the cases which are subject to auction of land use rights (LUR) and those that are not subject to auction of LUR. Auction shall be applicable in the following cases of allocation with land use levy or land lease:

- Investment in construction of housing for sale / lease / lease-purchase
- Investment in infrastructure for transfer or lease
- Use of land fund to create capital for infrastructure construction
- Use of land for trading / services / non-agricultural production establishments
- Lease of land from agricultural land fund for public purposes for agriculture, forestry, aquaculture or salt production
- Allocation or lease of land recovered by the State through rearrangement and handling of working offices, non-business establishments, or production or business establishments of which the land-attached assets are owned by the State
- Allocation of urban and rural residential land to households or individuals
- Cases of land allocation / lease which are eligible for land use levy or land rental reduction

Auction shall not be applicable for the following cases of land allocation or lease:

- Land allocation without land use levy
- Land for which land use levy or land rental is exempted
- Households and individuals that require land in excess of the allocated quotas
- Land for foreign organisations with diplomatic functions
- Land for armed forces to use for agriculture, forestry, aquaculture, salt-production and national defence
- Land for mining activities
- Land used for projects for construction of resettlement, social housing or public housing
- Land allocated to public employees / civil servants who change offices based on transfer decisions

[20] *In case of an ascending-price auction, if the successful bidder rejects bid results, the next highest bidder shall be considered as the successful bidder provided that such bidder agrees to buy the auctioned property and that such bidder's bid price plus the advance payment at least equals the bid offered by the original successful bidder. If the next highest bid plus the advance payment is less than the bid offered by the original successful bidder or if the next highest bidder does not accept to buy the auctioned property, the auction is considered failed.*

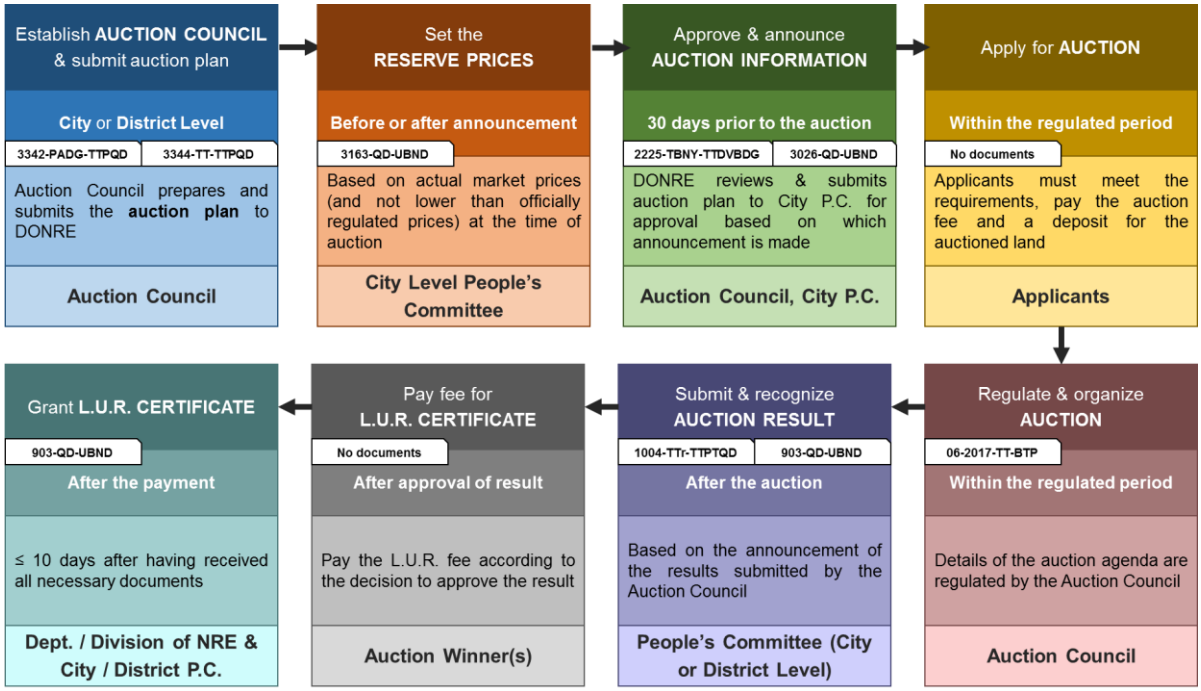
In case of a descending-price auction, if the successful bidder rejects the bid results, the auction still proceeds with the offering of bids starting again from the bid offered by the original successful bidder. If no one continues to offer a bid, the auction fails.

- Allocation of land to households or individuals who have permanent residence book either in a commune or townships with difficult or especially socio-economic conditions, but no actual residential land has been allocated to them
- In case there are no participants during a land auction process or only a single party participates during the auction process or the auction process fails two consecutive times
- For cases decided by the Prime Minister

Thus broadly, for most of the cases where land use levy or land lease rental is paid, the state has to conduct auction for granting land use rights.

Decision no. 17/2009/QD-UBND lays down the procedure for land auction in Can Tho City. The same has been depicted in the figure given below:

Figure 7-2 Process flow for auction of land use rights



Source: CRIS analysis

- Step 1: Establish auction council and submit auction plan

The first step in the auction process is to establish the 'auction council'. Depending on the size of the land plots(s) to be auctioned, either the city or the district may conduct the auction process.

At the city/provincial level, the auction council is composed of the heads of DOF, DONRE, DPI, DOC, LDFC and the Centre for Property Auction Services[21] (which is a unit under DOJ). The head of DOF also acts as the chairman of the auction council.

At the district level, the auction council is composed of the heads of the division of finance, division of natural resources and environment, division of planning and investment and division of construction. The chairman of the

[21] *Property auction service centers are established under the decision of a provincial-level People's Committee. Property auction service centers are public non-business units of the provincial-level Justice Department, and have their own offices, seal and bank account. Directors of property auction centers are auctioneers.*

district People's Committee acts as the chairman for the auction council at the district level. It is the responsibility of the auction council to prepare the auction plan and submit it to the city/provincial level People's Committee for approval.

- Step 2: Approve and announce auction information

Thirty days prior to the auction date, the auction council / property auction service centre shall make a public announcement of the land lot(s) for auction at least twice on mass media such as local radio, TV stations, newspapers, and other media channels. The auction announcement also needs to be posted at the place of auction and the headquarters of the District People's Committee where the land is located.

Furthermore, Article 57 of the Law on Property Auction also states that for the auction of immovable property, the property auction organisation shall disclose information at least twice on a central- or provincial-level printed newspaper or television of the locality where the auctioned property is located and on the specialized auction website; the interval between times of publicizing this information must be at least 2 working days. The notice of auction shall include information on the location, area, boundaries, current land use purpose, zoning details, duration of lease, reserve price, place of registration, time of auction, etc. of the land lot(s).

Strikingly, in special cases however (depending on the size, characteristics and requirement of the land plot), the competent level of the People's Committee shall decide whether to publicize or not to publicize the reserve price of the land plot.

- Step 3: Apply for auction

Participants interested and capable of applying for the auction - the eligibility criteria[22] for which is decided by the auction council - must register and submit their auction participation dossier to the auction council. At the time of registration, bidders are required to pay an auction fee and a deposit fee. The auction fee is a flat non-refundable fee equivalent to a processing charge which is decided by the People's Council as per the prevailing law on charges and fees. The deposit fee on the other hand, is a refundable fee and is linked to the reserve price of the plot under auction. The deposit fee shall be decided by the People's Committee and shall not exceed 5% of the reserve price of the plot under auction. The successful bidder shall be entitled to deduct the deposit from the payable land use levy or rent.

- Step 4: Regulate and organize the auction

On the stipulated day of the auction, the auction moderator commences the auction by introducing the members present, the auction information and the auction regulations. The auction process is conducted. In special cases where the reserve price of the land lot under auction is not disclosed during the announcement period, the auction council announces it at the start of the auction.

In case the bid winner refuses to receive the land use right or withdraws the bid price, the next lowest bidder shall be considered for approval by the auction council. However this is subject to the condition that the price bid of the next lowest bidder is not lower than the reserve price of the last round of auction, and the difference between the highest bidder's price bid and the next lowest bidder's price bid is not more than 5% of the reserve price.

If the next lowest bidder also refuses to receive the land use right, the auction council shall issue a written cancellation of the auction result and may consider holding the auction again at another time.

- Step 5: Submit and recognize the auction result

[22] Bidding organizations must meet the stipulated financial and technical capability criteria for implementing the project or investment plan. Households and individuals who bid must only meet financial capacity criteria to implement projects or investment plans. However, in the case for auction of divided land plots for dwelling houses of households or individuals, households and individuals participating in such auctions need not meet these conditions.

At the city level, the auction council / property auction service centre shall submit its written report to DOF for appraisal and submission to the People's Committee who is empowered to approve the auction result. At the district level, the auction council submit the auction results report to the president of the District People's Committee for approval.

- Step 6: Pay the land use levy/ rental for LUR certificate

The successful bidder shall have to pay the land use levy or land rental, as applicable, as per the decision approving the auction result.

- Step 7: Grant the LUR certificate

The land use rights certificate shall be granted either by DONRE (if auction is conducted at provincial/city level) or the division of natural resources and environment (if auction is conducted at district level) to the successful bidder within 10 days of having received all the necessary payments and documents.

7.9 Annexure 9: Land valuation process

7.9.1.1 Introduction

Land valuation is the most fundamental process in any land value capture activity, as all the LVC tools are linked to the land prices. Article 18 of the Land Law empowers the State to prescribe the principles and methods for land valuation. It also tasks the State with promulgating land price brackets and tables, and deciding on specific land prices.

Land Law defines different frameworks for calculating land prices for different categories of land use rights. Section 2 of the Land Law titled as 'Land Price' contains provisions for principles and methods of land valuation, land price frames, land price tables, specific land prices.

7.9.1.2 Principles for land valuation

Article 112 of the Land Law lays down the principles for land valuation. These are:

- Based on lawful land use purpose at the time of valuation
- Based on land use term
- Should correspond with popular market prices of transferred land with same land use purpose, or winning price in auction of land use rights or income earned from land use
- Prices should be similar to that of adjacent land parcels having same land use purpose, profitability and income from land use

7.9.1.3 Land price frames

Article 113 of the Land Law states that the Government shall promulgate land price frames once every 5 years for each region and land type. During this land price frame period, if the market price increases by 20% or more over the maximum price or reduces by 20% or more below the minimum price prescribed in the land price frames, the Government shall adjust the land price frames accordingly. The land price frames provide the highest and lowest land price by land use category for each province of each region in Vietnam. Thus, land price frames provide the guiding framework for all provincial level People's Committees for promulgating the land prices for their respective provinces through land price tables or specific land prices.

7.9.1.4 Land price tables

Land price tables are also prepared once in 5 years by the provincial-level People's Committee. These land price tables are based on the land price frames promulgated by the Government. In case of any change in the popular

market price or in case of adjustment in the land price frames, land price tables are adjusted accordingly by the provincial-level People's Committee.

Land price tables shall be used as a basis in the following cases:

- Calculation of land use levy when the State recognizes land use rights of households and individuals for land areas within land use quotas, or permits change of land use purpose from agricultural land or non-agricultural land which is nonresidential land to residential land for land areas within land allocation quotas applied to households and individuals
- Calculation of land use tax
- Calculation of charges and fees for land management and use
- Calculation of fines for land related administrative violations
- Calculation for indemnification paid to the State for damage caused in land management and use
- Valuation of land use rights paid to the people who voluntarily return land to the State in case the returned land is allocated with land use levy, recognized of land use rights with land use levy, or leased land with full one-off rental payment for the entire lease period by the State

7.9.1.5 Specific land price

Specific land prices are also decided by the provincial-level People's Committee with help from the provincial level land administration agency i.e. DONRE. Specific land prices shall be used as a basis in the following cases:

- Calculation of land use levy when the State recognizes land use rights of households and individuals for land areas in excess of land use quotas, or permits change of land use purpose from agricultural land or non-agricultural non-residential land to residential land, for land areas in excess of land allocation quotas applied to households and individuals; and determination of land rental for agricultural land areas in excess of land allocation quotas or quotas for recipient of transferred agricultural land use rights of households and individuals.
- Calculation of land use levy when the State allocates land with land use levy not through auction of land use rights, recognizes land use rights, or permits change of land use purpose for organizations that shall pay land use levy
- Calculation of land rental when the State leases land not through auction of land use rights
- Valuation of land use rights upon equitization of state enterprises that are allocated land with land use levy, leased land with one-off rental payment; and calculation of land rental in case equitized state enterprises are leased land by the State with annual rental payment
- Calculation of compensation amount upon land recovery by the State.
- Determining the reserve price when state allocates land through auction

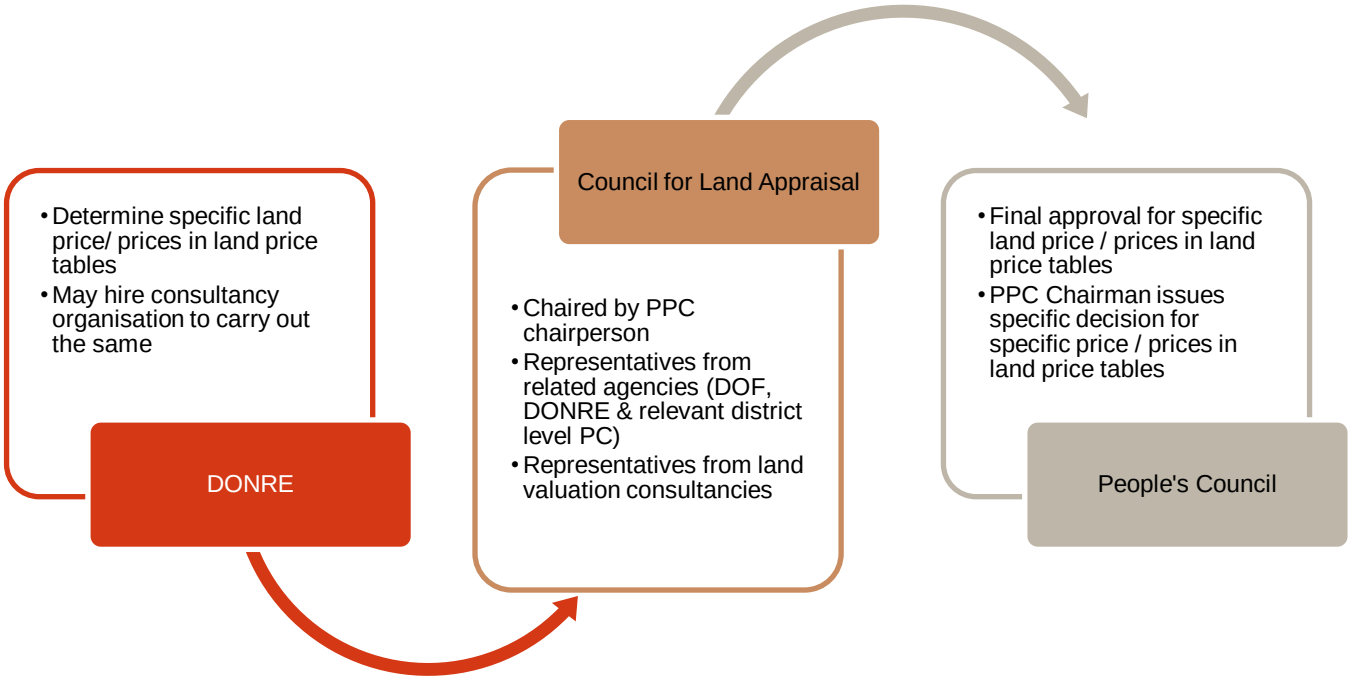
7.9.1.6 Process of land valuation

Clause 3 of Article 114 of the Land Law states that DONRE *'may hire organisations having consultancy functions for advising on the determination of specific land prices'.* Article 115 of the Land Law lays down the cases where determination of land prices by a consultancy may be necessary. These are:

a. Development or adjustment of land price frames; development or adjustment of land price tables and determination of specific land prices at the request of competent state agencies;
b. Settlement of complaints about land price at the request of competent state agencies or related parties;
c. Performance of civil transactions related to specific land prices at the request by parties.

The diagram below explains the process of land valuation.

Figure 7-3 Process for determining specific land price



Source: CRIS analysis

Subsequent to determining the specific land prices or prices in the land price tables, DONRE shall submit these land prices to the *council for land appraisal*, before submitting to the People's Council of the same level for approval. The council for land price appraisal comprises the chairperson of the provincial-level People's Committee as the chairperson, and representatives of related agencies and organizations and the organization with the function of consultancy on land price determination.

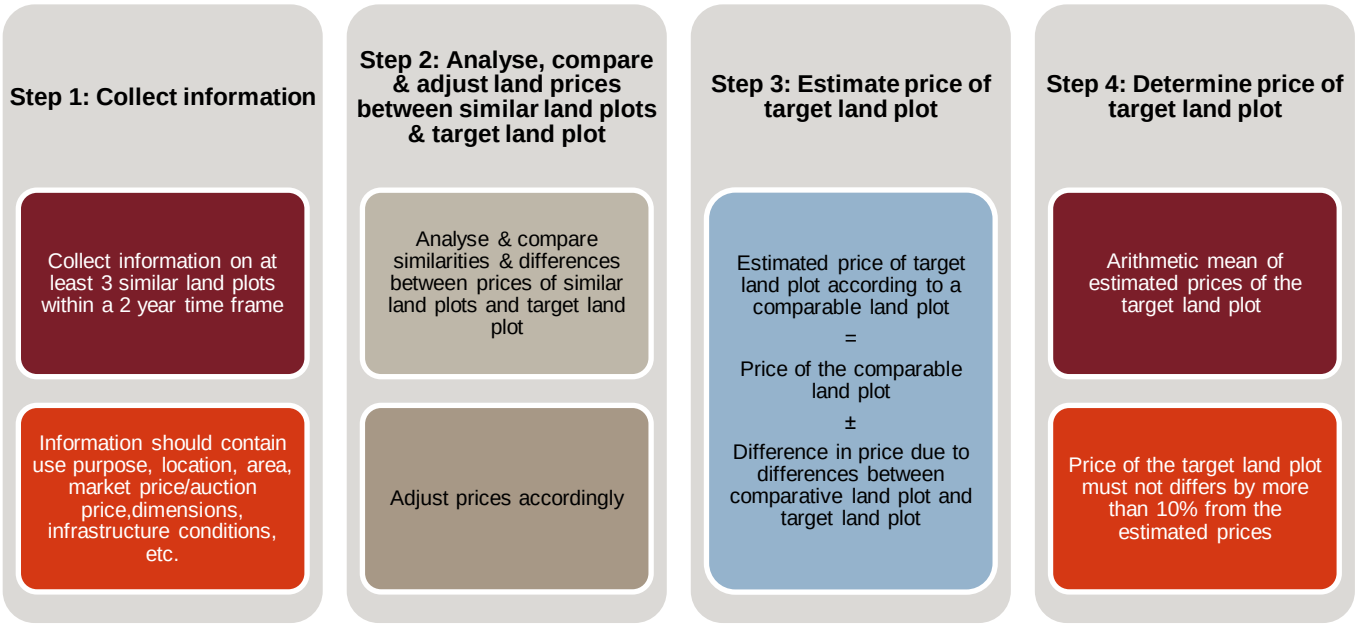
7.9.1.7 Methods of land valuation

Decree no. 44/2014/ND-CP spells out 5 methods that can be used for land valuation. These methods have been discussed below in detail.

1. Direct comparison method

This method analyses price levels of similar land parcels (land use purpose, location, profitability, infrastructure conditions, etc.) the land use rights of which have been transferred in the market or through auction, in order to determine land price of a particular plot.

Figure 7-4 Process of land valuation using direct comparison method

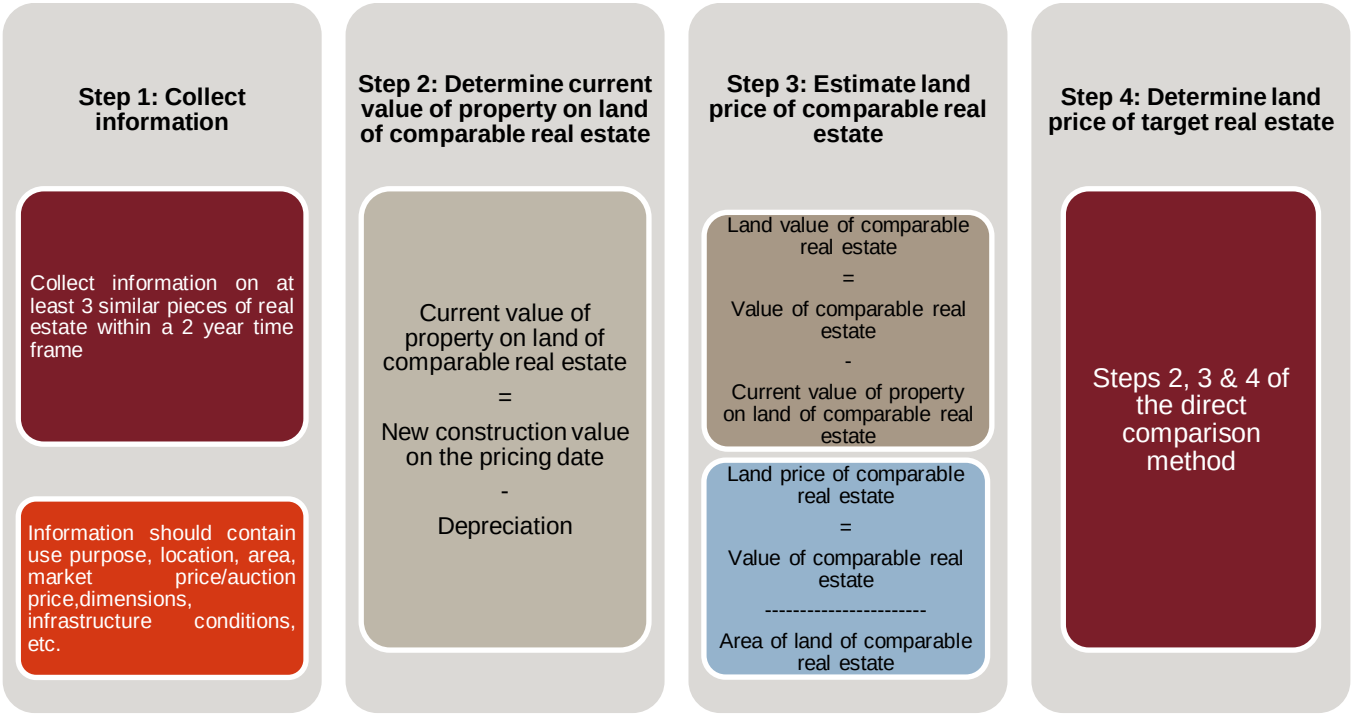


Source: CRIS analysis

2. Deduction method

This method of determining land prices is carried out for land plots with land-attached assets on it. The value of land is arrived at by deducting the value of the land attached assets from the total real estate value.

Figure 7-5 Process of land valuation using deduction method

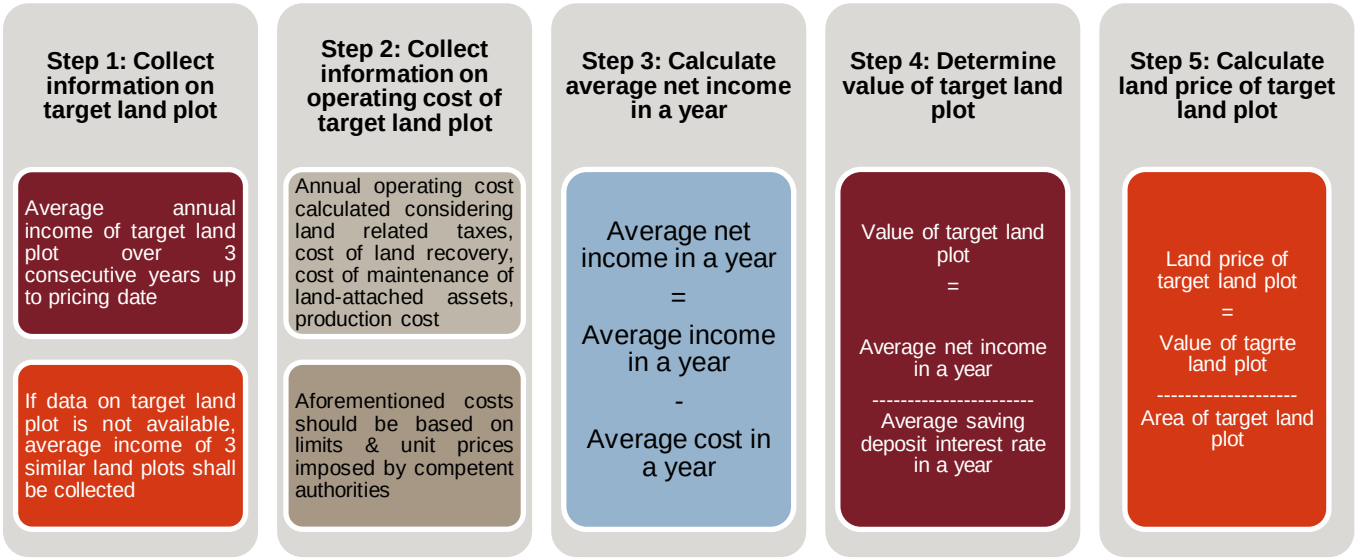


Source: CRIS analysis

3. Income-based method

Income method is the method of determining the land price in terms of the quotient of the average net income earned per unit of land area compared to the average annual savings rate up to the time Land valuation of 12-month VND deposit at state-owned commercial banks has the highest deposit interest rate in the provincial area.

Figure 7-6 Process of land valuation using income-based method

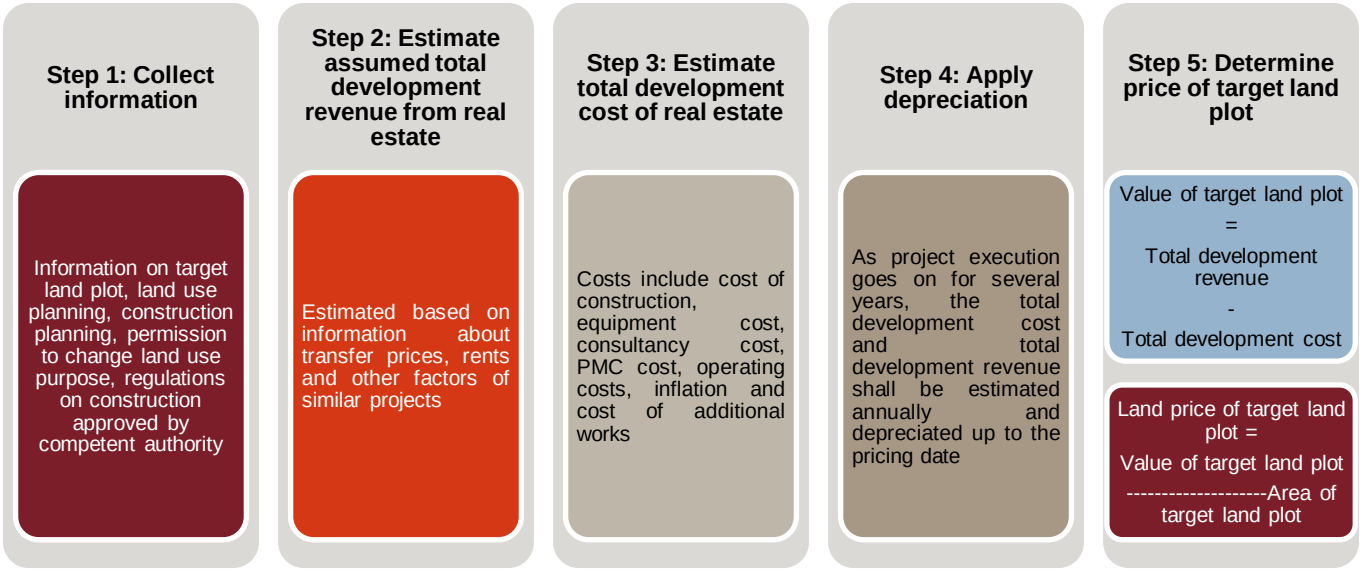


Source: CRIS analysis

4. Surplus method

This method of land valuation is applied for land plots with significant development potential that may arise out of land use planning, construction planning or changes in land use purpose to the most productive or profitable use. Land price using this method is determined by deducting the total development cost of the real estate from total estimated development revenue from the real estate.

Figure 7-7 Process of land valuation using surplus method



Source: CRIS analysis

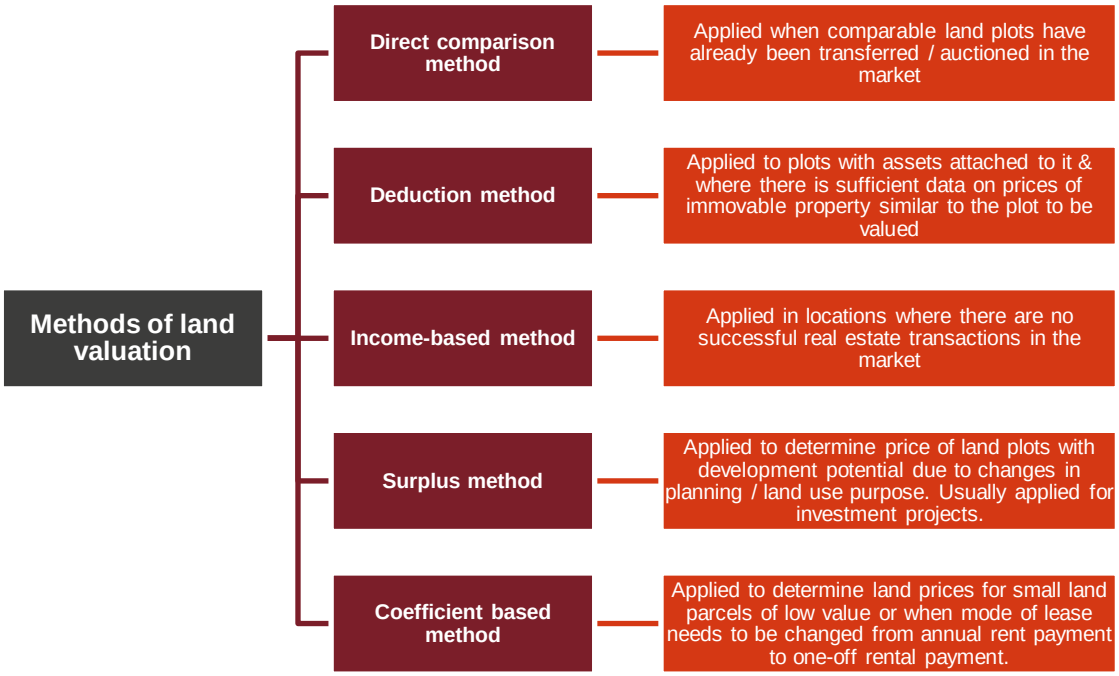
5. Coefficient based method

This method of land valuation determines land price by multiplying the coefficient of adjustment of land price by the price of land in the land price index issued by the provincial level People's Committee.

This method is applied to the cases of valuation of several small land parcels, in which the valuation of one representative land parcel has to be carried out in order to define the appropriate coefficient. This coefficient is then used to define the value of other land parcels. The accuracy of this method is significantly low and is usually applied to land areas with low land values.

Different methods are applied to determine prices for different cases. Regulations regarding this have been laid down in Article 5 of decree no. 44/2014/ND-CP on land prices. The cases for application of each of the valuation methods has been captured in the diagram given below:

Figure 7-8 Methods of land valuation and basis for application



Source: CRIS analysis

7.10 Annexure 10: Land registration process

Land registration is compulsory for all land users. Registration of houses and other land-attached assets is carried out at the request of the owner at the respective land registration office.

First registration is conducted in the following cases:

- → Land parcel is allocated or leased for use
- → Land parcel is in use but not registered yet
- → Land parcel is allocated for management but not registered yet
- → Houses and other land-attached assets are not registered yet

Change registration is carried out in the following cases:

- → Land user or owner of land-attached assets exercises the right to exchange, transfer, lease, sublease, inherit, donate land use rights or land-attached assets; mortgage or contribute as capital land use rights or land-attached assets
- → Change in name of land user or owner of land-attached assets
- → Change in the shape, dimension, area, number and address of the land parcel
- → Change in land-attached assets
- → Change in land use purpose
- → Change in land use term
- → Change in land lease from annual rental to one-off rental payment
- → Change from land allocation without land use levy to land lease
- → Change from land lease to land allocation with land use levy
- → Change in land use rights or ownership of land-attached assets from either husband or wife's name to joint names of both husband and wife and vice-versa
- → Change in land use rights or ownership of land-attached assets as a result of dispute settlement which is confirmed by the competent People's Committee, or as a result of a judgement or order from a People's Court, or as a result of an auction of land use rights
- → Limited use rights to the adjacent land parcel are established, changed or terminated
- → Change in the limitations of rights of land users

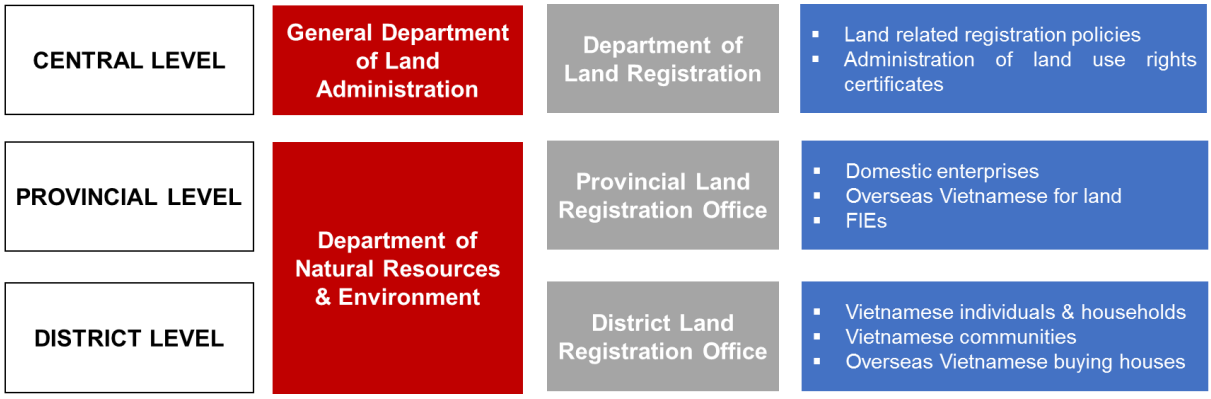
Thus any activity involving granting of land use rights or change in land use rights will result in payment of registration charges to the government.

Responsibility framework

At the central level, land registration is handled by the Department of Land Registration which is a state functional unit of General Department of Land Administration. This department focuses on land registration policies and land use rights certificates.

At the provincial level, each province has its own land registration office and a branch of that office in each district. The land registration office is a public service unit of the Department of Natural Resources and Environment.

Figure 7.9 Institutional structure for land registration



Source: Adapted from presentation by Luu Van Nang (Vietnam General Department of Land Administration) on 'Vietnam Land Administration and Land Registration', October 2015

Some of the key functions of the land registration office include:

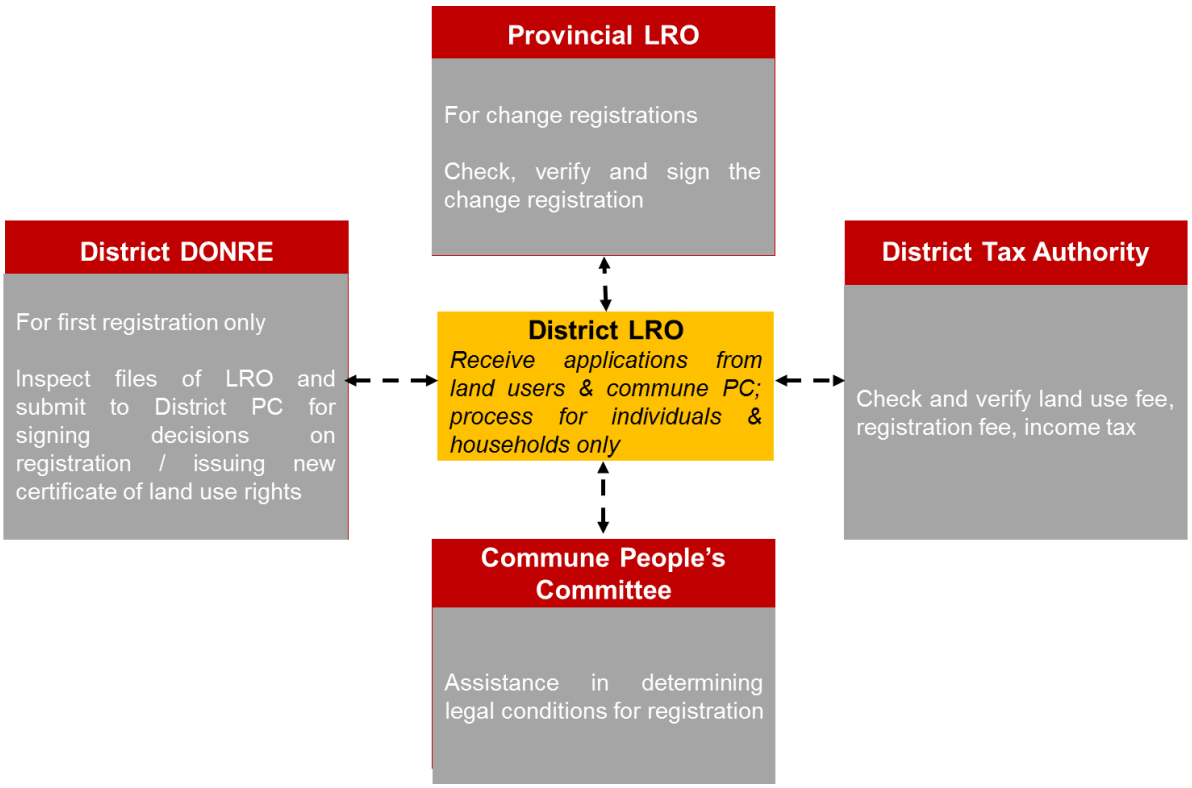
- To carry out first registration and change registration of land use rights certificate
- To renew, re-issue land use rights certificate
- To prepare revise, update, store, manage cadastral records and construction, management the land information system

- To prepare land inventory, land use map, revision of cadastral maps, and cadastral map extraction
- To provide records, maps, information on land, houses and other land-attached assets to organisations and individuals in accordance with the law

Land registration process

Article 95 of the Land Law lays down the provisions for registration of land, houses and other land-attached assets. The diagram below depicts a sample land registration process.

Figure 7.10 Sample process flow of land registration



Source: Adapted from presentation by Luu Van Nang (Vietnam General Department of Land Administration) on 'Vietnam Land Administration and Land Registration', October 2015

The land registration office (LRO) serves as the single point of contact for land and land-attached assets registration. It is the responsibility of the LRO to coordinate with other relevant departments and agencies such as the tax authority, People's Committee and DONRE to carry out its statutory compliance procedures before formalizing registration of land use rights and granting the relevant certificates.

On receipt of an application from an individual or household, the LRO may seek the assistance of the commune level People's Committee to determine the legal basis of the application. This include verifying details such as existing land use, origin and date of when the land use started and status of land disputes (if any).

The LRO certifies the application for registration or issues a land use rights certificate if all conditions for registration are satisfied. In case all conditions are not satisfied, the LRO provides its comments on the application.

Where the conditions are satisfied, the LRO is required to make an extract of the cadastral map or the cadastral measurements of the land parcel for areas where there is no cadastral map. This cadastral data then needs to be sent to the tax authority (of the same area) to determine any pending financial obligations of the land user. The tax authority checks and verifies the financial obligations for the applicant and sends it back to the LRO. It is the

responsibility of the tax authority to determine the amount of registration charge and notify the payers of the same. Thus the tax authority assesses the financial obligation, intimates LRO so that the LRO can send the tax notification received from the tax authority back to the applicant.

The LRO is also required to send copies of these files together with the extracts of the cadastral map and extracts of the cadastral files to the district level DONRE of the same area irrespective of whether the conditions are satisfied or not.

Calculation of registration charges

Circular no. 301/2016/TT-BTC published by the Ministry of Finance on November 15, 2016 lays down the guidelines for the calculation of registration charge.

Rate of registration charge: a rate of 0.5% of the base price applies to real property.

- Base price of land plot for calculation of registration charge

Base price of a land plot on which the registration charge is computed (VND)	=	Land area on which the registration charge is levied (m^2)	x	Price of a square meter of land (VND/m^2) defined in the land price table of the relevant provincial People's Committee

The land area on which the registration charge is to be levied is determined by the relevant land registration office. This information is communicated to the relevant tax authority via the 'Form of land information for determination of relevant financial obligations'.

In certain cases, the base price of the land plot to be registered may be specified. These cases are as follows:

Table 7-4 Cases of specific base prices for calculation of registration charges

S. NO.	CASE	BASE PRICE
1	Land plot on which a state-owned house exists and is sold to its current lessee as per the legislation on the sale of state-owned premises to renters	Actual selling price defined by the relevant provincial People's Committee
2	Land plot that the government allocates by auction	Actual winning price invoiced or defined in the written approval of the competent government authority
3	User of a land plot, for which land use rights certificate was issued without registration charge, obtains competent authority's permission to convert the use of such land plot to another one on which the registration charge is mandatorily levied	Land price as per the converted use in the land price list
4	Price of a resettlement land plot, as specified and approved by the competent government authority allocating such land, is balanced between the compensation price of the reacquired land and the land price in the resettlement area	Price specified and approved by the competent government authority
5	Land plot's price in the contract for transfer of land use right exceeds price prescribed by the relevant provincial People's Committee	Contract price
6	Land plot's price in the contract for transfer of land use right is less than price prescribed by the relevant provincial People's Committee	Price prescribed by the relevant provincial People's Committee

- Base price of buildings for calculation of registration charge

Base price of a building for calculation of registration charge (VND)	=	Floor space of the building on which the registration charge is levied (m^2)	x	Price per square meter (VND/m^2) of the building	x	Ratio (%) of the building's remaining quality[23] on which the registration charge is levied

The floor space of a building on which the registration charge is levied is the entire floor area under the legitimate ownership of the individual / organisation.

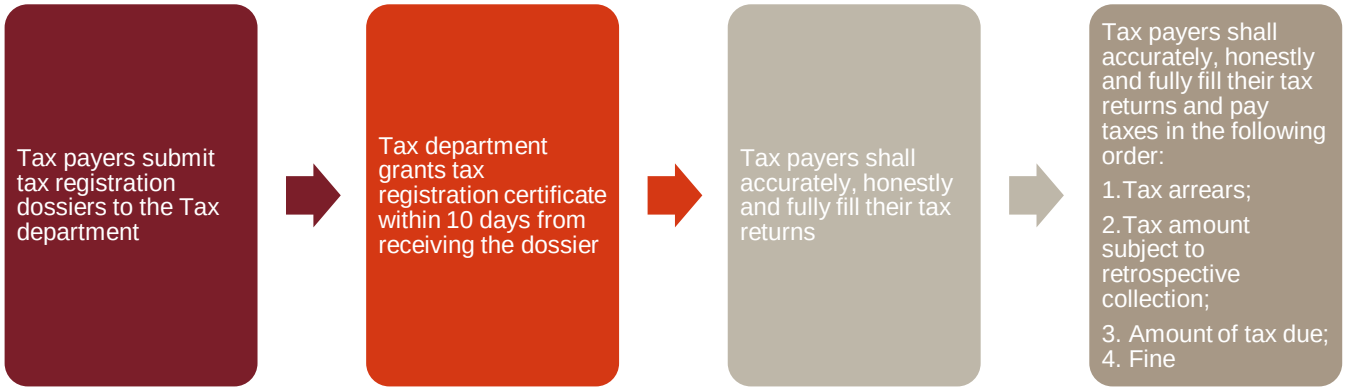
The price per square meter of the building is the actual price of one "newly" constructed square meter of the floor area according to the building's grade and rank, as defined by the relevant provincial People's Committee.

The ratio of the building's remaining quality on which the registration charge is levied shall be regulated by the provincial People's Committee as per the laws.

7.11 Annexure 11: Process of levying the non-agricultural land use tax

The Law on Tax Administration defines the process for tax collection as depicted in the diagram below.

Figure 7.11 NA land use tax payment process



The land users first need to register with the Tax Department. Taxpayers shall calculate by themselves payable tax amounts, except when the tax calculation is conducted by tax administration agencies according to the Government's regulations. It is the responsibility of the Tax Administration agencies to conduct tax examination and tax inspection, to assess tax liability and also to enforce compliance with tax-related administrative decisions. Tax administration agencies shall notify in writing taxpayers of reasons for tax assessment, basis for tax assessment, assessed tax amounts and the time limit for tax payment. The taxpayer first have to pay the arrears, then the amounts charged for retrospective collections, the current due amounts and then the fines.

[23] *The ratio (%) of the asset's remaining quality upon its registration is determined in the following manner:*
- *In new condition: 100%.*
- *It has been used for 1 year: 90%*
- *It has been used for more than 1 to 3 years: 70%*
- *It has been used for more than 3 to 6 years: 50%*
- *It has been used for more than 6 to 10 years: 30%*
- *It has been used for more than 10 years: 20%*

The period of use of a used asset shall span from the year of manufacture to the year of declaration of the registration charge.

7.11.1.1 Calculation of land use tax

The tax amount = taxable land area X per sq. m. price of land X tax rate

- Taxable land area is measured with respect to following rule:

Table 7-5 Taxable land area for non-agricultural land use tax

LAND USE CASE	TAXABLE LAND AREA
WHEN LAND USER HAS RIGHTS FOR MANY RESIDENTIAL LAND LOTS	Total area of taxable land plots
WHEN LAND IS ALLOCATED/ LEASED FOR CONSTRUCTION OF INDUSTRIAL PARK	Land area exclusive of land area used for the construction of infrastructure facilities under common use
FOR RESIDENTIAL LAND OF A MULTI-STOREY BUILDING WITH MANY USERS OR A CONDOMINIUM WITH AREAS FOR BOTH DWELLING AND COMMERCIAL PURPOSES	Allocation coefficient x the area of the apartment of each use Allocation coefficient is the land area for construction of a multi-storey building with many users or a condominium divided by the total area of apartments of users. If a multi-storey building with many users / condominium, has a basement, 50% of the basement area used by the organisations, households and individuals, shall be added to the total area of their apartments for calculating the allocation coefficient.

- Price per sq. m. of land: price of land based on its use purpose which is set by the provincial-level People's Committee for a 5-year stabilization period through the land price tables
- Tax rates:

Tax rates for residential land including the land for commercial purposes

Table 7-6 Non-agricultural land use tax rates

TAXABLE LAND AREA (SQ. M.)	TAX RATE (IN %)
AREA WITHIN THE SET QUOTA INCLUDING RESIDENTIAL LAND OF MULTI -STORY BUILDINGS WITH MANY HOUSEHOLDS, CONDOMINIUMS OR UNDERGROUND CONSTRUCTION WORKS LAND WITH PHASED INVESTMENT PROJECT ALREADY APPROVED	0.03
NON-AGRICULTURAL PRODUCTION AND BUSINESS LAND	0.05
AREA IN EXCESS OF UP TO 3 TIMES THE SET QUOTA	0.07
AREA IN EXCESS OF OVER 3 TIMES THE SET QUOTA AND LAND USED FOR IMPROPER PURPOSES AND NOT AS PER THE REGULATIONS	0.15
ENCROACHED/ APPROPRIATED LAND	0.2

The tax payment is linked to the official land prices and hence may see variation over five year period due to revision in land prices. However, there are no provisions in the act to revise the tax rates.

7.12 Annexure 12: Draft Law on Property Tax

There is a draft Law on Property Tax being considered by the government in Vietnam. The key provisions of the law are described below.

The law provides for levying a property tax on non-agricultural land including housing land, land for non-agricultural production and businesses; on the houses and construction works on land, such as housing units, construction works for trading, and service purposes; and also on aircrafts, yachts and cars.

The taxpayers are the organizations, households and individuals having the right to use these properties.

The tax is decided based on the taxable area, per unit price and the tax rates.

Taxable area

- The taxable area for land area should be considered as written on the certificate of Land use rights, ownership of houses and other assets attached to the land or as per the decision to lease land or the land area which is in actual use.
- For the land for construction of condominiums, the taxable area is apartment area actually used multiplied by the coefficient of determining taxable land area prescribed by the government.
- For houses, the taxable area is entire house area used regulated as per the Law on Construction and Law on Housing.

Taxable price

- The unit price in case of land area should be as per the land price tables promulgated by the provincial People's Committee at the time of taxation.
- The unit price of the newly built houses is identified based on the level of quality standard and the rank of house prescribed by the provincial People's Committee according to the Law on Construction at the time of taxation.
- The unit price for a used house is identified based on the price of a similar newly built house and the ratio (%) of remaining quality of the house prescribed by the Provincial People's Committee at the time of taxation.

For aircrafts, yachts and cars, worth 1.5 billion VND or more, the taxable price is identified as follows.

- For a new vehicle, the taxable price is the property price as prescribed by the provincial People's Committee
- For a used vehicle, the taxable price is the price of a new property multiplied by the ration (%) of the remaining quality of property considering its age as prescribed by the provincial People's Committee.

Taxable prices are set for a 5-year stabilization period.

The table below gives the proposed property tax rates in the Law.

Table 7-7 Proposed rates under draft property tax law

PROPERTY TYPE	TAX RATE
FOR HOUSING LAND	0.4%
FOR HOUSES: → PART OF TAXABLE HOUSE PRICE WORTH 700 MILLION VND OR LESS → PART OF TAXABLE HOUSE PRICE WORTH MORE THAN 700 MILLION VND OR LESS	 0.0% 0.4%
LAND FOR CONSTRUCTION OF RESTAURANTS	0.52%
OTHER NON-AGRICULTURAL LAND EXCEPT THAT FOR COMMERCIAL PURPOSES	0.3%
NON-AGRICULTURAL LAND USED FOR COMMERCIAL PURPOSES	0.3%
LAND AND HOUSES NO IN USE	1%
LAND AND HOUSES WHICH ARE ENCROACHMENTS	2%
FOR AIRCRAFTS, YACHTS, CARS WORTH 1.5 BILLION VND OR MORE	0.4%

Source: Draft Law on Property Tax, Vietnam

The law however does not provide for increase in tax rates after a defined period.

7.13 Annexure 13: Broad estimates of LBFT revenues (In VND million)

Component of projections	Assumptions	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Average market price (In VND million/ sq.m.)	Average market prices grew at a CAGR of 8% from 2014 to 2018. The prices have been assumed to grow at a lower CAGR of 6% from 2019 to 2023.	21	23	25	27	28	30	32	34	36	38
	Business as usual scenario										
Average official price (Business as usual scenario)	The average official prices in Can Tho were VND 8 million per sq.m. It is assumed that in 2019 price tables, the official prices will be corrected 100%. Post 2019, the official prices will remain constant till 2024 when the official prices will be again revised.	8	8	8	8	8	16	16	16	16	16
Land use levy	Land use levy grew at a CAGR of 11% from 2014 to 2017. Due to correction in official prices in 2019, the annual growth rate of real estate demand has been assumed to reduce by 50%. Hence, the land use levy is assumed to grow at a CAGR of 5%.	541,934	628,865	582,926	741,302	822,896	1,686,936	1,771,283	1,859,847	1,952,839	2,050,481
Land rental	Land rental grew at a CAGR of 56% from 2014 to 2017. Due to correction in official prices in 2019, the annual growth rate of real estate demand has been assumed to reduce by 50%. Hence, the land use levy is assumed to grow at a CAGR of 25%.	109,487	121,885	336,476	415,200	519,000	1,167,750	1,459,688	1,824,609	2,280,762	2,850,952
Registration fee	Land rental grew at a CAGR of 21% from 2014 to 2017. Due to correction in official prices in 2019, the annual growth rate of real estate demand has been assumed to reduce by 50%. Hence, the land use levy is assumed to grow at a CAGR of 10%.	37,676	44,524	50,356	66,471	80,320	168,671	185,538	204,092	224,501	246,951

Component of projections	Assumptions	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Non-agricultural land use tax	Non-agricultural land use tax remained almost constant from 2014 to 2017. Hence, apart from the correction in the official prices in 2019, the tax is assumed to be constant post 2019.	28,728	27,674	28,213	28,638	28,608	57,216	57,216	57,216	57,216	57,216
Total revenue potential		**717,825**	**822,948**	**997,971**	**1,251,611**	**1,450,823**	**3,080,573**	**3,473,725**	**3,945,765**	**4,515,318**	**5,205,601**
	Reformed scenario										
Average official price (Reformed scenario)	The average official prices in Can Tho were VND 8 million per sq.m. It is assumed that in 2019 price tables, the official prices will be corrected to match the market prices. Post 2019, the official prices are assumed 5% lower than the projected average market prices, with an assumption that price correction will happen every year.	8	8	8	8	8	30	30	32	34	36
Land use levy	Land use levy grew at a CAGR of 11% from 2014 to 2017. Due to correction in official prices in 2019, the annual growth rate of real estate demand has been assumed to reduce by 50%. Hence, the land use levy is assumed to grow at a CAGR of 5%.	541,934	628,865	582,926	741,302	822,896	3,416,484	3,746,154	4,107,636	4,503,999	4,938,608
Land rental	Land rental grew at a CAGR of 56% from 2014 to 2017. Due to correction in official prices in 2019, the annual growth rate of real estate demand has been assumed to reduce by 50%. Hence, the land use levy is assumed to grow at a CAGR of 25%.	109,487	121,885	336,476	415,200	519,000	2,565,209	3,325,778	4,311,851	5,590,289	7,247,777
Registration fee	Land rental grew at a CAGR of 21% from 2014 to 2017. Due to correction in official prices in 2019, the annual growth rate of real estate demand has been assumed to	37,676	44,524	50,356	66,471	80,320	349,349	400,526	459,201	526,471	603,596

Component of projections	Assumptions	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	reduce by 50%. Hence, the land use levy is assumed to grow at a CAGR of 10%.										
Non-agricultural land use tax	Non-agricultural land use tax remained almost constant from 2014 to 2017. Hence, apart from the correction in the official prices in 2019, the tax is assumed to be constant post 2019.	28,728	27,674	28,213	28,638	28,608	125,569	131,407	137,517	143,911	150,602
Development charge	Development charge rate of 2% has been assumed on all the land use rights allocation/ lease transaction.	NA	NA	NA	NA	NA	119,634	141,439	168,390	201,886	243,728
Property tax	In line with the Draft Law on Property Tax, 0.4% property tax rate is assumed on land plots and 0.2% property tax rate is assumed on houses.	NA	NA	NA	NA	NA	2,511,385	2,628,150	2,750,343	2,878,218	3,012,038
Total revenue potential		**717,825**	**822,948**	**997,971**	**1,251,611**	**1,450,823**	**9,087,630**	**10,373,455**	**11,934,939**	**13,844,774**	**16,196,349**

Source: CRIS analysis

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