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LAND ACQUISITION AND INFRASTRUCTURE DEVELOPMENT THROUGH LAND TRUST LAWS: A POLICY FRAMEWORK FOR ASIA

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Abstract

The "land question" has invigorated agrarian studies and economic history since Marx and early 20th century writers on agrarian questions. In countries that allow private land ownership, compulsory land acquisition is the right and action of the government to take property not owned by it for public use. In the long run, growth dividends from infrastructure development and industrialization are likely to be materialized, and acquisition of land to facilitate such process remains one of the main development challenges in many Asian countries. The recent political upheaval transgressing from the industrialization drive through forcible land-grab in many parts of Asia (India, Indonesia, Nepal, and the Philippines in particular) point to the need for a sustainable policy—a framework that results in a positive sum game, benefiting the landowners without hurting the growth prospects. Combining the tools from the fields of law and economics, we propose the land trust or land lease for the development of infrastructure investment and industrialization purposes. We argue that this is one of the best ways to increase the rate of return to invite private investors into infrastructure investment. Through evidence from the success stories of land trust initiatives in many Asian countries, including India, we aim to showcase the relevance of this alternate method.

Keywords: land acquisition, infrastructure development, land trust laws, Asia

JEL Classification: Q15, R14

Contents

1.	INTR	INTRODUCTION				
2.	A SIMPLE ANALYTICAL MODEL					
	2.1 2.2	Present Value Model with Rehabilitation CostsPresent Value Model with Rehabilitation Costs and Spillover Tax Revenue	3 4			
3.	LONG-TERM EFFECTS OF LAND DISPLACEMENT					
	3.1 3.2 3.3	NepalMalaysiaIndia	6			
4.	LAND TRUST LAW, JAPAN					
	4.1 4.2 4.3 4.4	Difference between Commercial Banks and Trust Banks Land Trust Structure Trust of Real Estate Trust of Agricultural Land	7 8			
5.	DEVELOPMENT EXPERIENCES AND LAND LAWS, INDIA					
	5.1 5.2 5.3 5.4 5.5	Land Laws in India Gujarat Rajasthan Jharkhand Telangana	. 12 . 12 . 13			
6.	EFFICIENCY GAINS FROM THE LAND TRUST POLICY					
7.	CONCLUSION1					
REF	ERENC	ES	. 16			

1. INTRODUCTION

Combining the fields of law and economics, this paper addresses the "land question," which has invigorated agrarian studies and economic history since Marx. Various transformative "moments" have inspired and revived debates around land control: the spread of colonialism, the rise of nation-states and nationalisms, the invention and triumphalism of global markets, collectivization, and privatizations. The "right" of sovereign on land has been a contested subject through history. Even in democracies, the exigencies of collective benefit vs. individual land rights have been at loggerheads. In the long run, growth dividends from infrastructure development and industrialization are likely to be materialized (Paul and Sarma 2017), and acquisition of land to facilitate such process remains one of the main development challenges in many Asian countries. Households are reluctant to sell their inherited land for infrastructure and industrialization purposes, since an optimum compensation does not guarantee a windfall in the long-term. As a result, the risks associated with investment in infrastructure and industrialization and change in the ownership of land is very high. The recent political upheaval transgressing from the industrialization drive through forcible land-grab in many parts of Asia (India, Indonesia, Nepal, and the Philippines in particular) exacerbates it further. All these factors point to the need for a sustainable policy—a framework that results in a positive sum game that benefits the landowners without hurting the growth prospects.

This paper addresses this concern. We first identify the long-term risks associated with land sale, as the construction period is very long in infrastructure investment. Second, we propose the land trust or land lease for the development of infrastructure investment and industrialization purposes. We argue that this is one of the best ways to increase the rate of return to invite private investors into infrastructure investment. Third, we showcase evidence from the success stories of land trust initiatives in many Asian countries, including India.

Apart from economic considerations, people attach significant social and cultural values to their land (Samanta 2015). Tribal societies especially have sacred geographies, which the economic perspective on land as a commodity fails to acknowledge. Local mythologies and rituals are deeply connected to land and its attributes.

In countries that allow private land ownership, compulsory land acquisition is the right and action of the government to take property not owned by it for public use. In the United States, this right is known as "eminent domain;" the action is known as "condemnation" (Eaton 1995). In Canada, the United Kingdom, and Australia, the right and action are known as "expropriation" (Boyce 1984), "compulsory purchase" (Denyer-Green 2014), and "compulsory acquisition or resumption" (Brown 1996), respectively. In each of these countries, compulsory acquisition of private property by the government is authorized by legislation.

Table 1 shows the huge infrastructure needs in Asia and the Pacific regions. More than 8.8% of the GDP is need to finance infrastructure-related projects in south Asia.

Table 1: Infrastructure Investment Needs in Asia and the Pacific (2016–2030)

	Baseline Total	% of GDP	Climate Adjusted	% of GDP
Central Asia	33	6.8	38	7.8
East Asia	919	4.5	1,071	5.2
South Asia	365	7.6	423	8.8
Southeast Asia	184	5.0	210	5.7
The Pacific	2.8	8.2	3.1	9.1
Asia and the Pacific	1,504	5.1	1,745	5.9

Note: \$ billion in 2015 prices (annual average).

Source: Meeting Asia's Infrastructure Needs, ADB (2017).

The paper is structured as follows. To fix ideas, we describe a simple analytical model based on present value of land prices in Section 2. Section 3 provides a snapshot of the long-term effects of land acquisition from some Asian countries. In Section 4, we introduce the Land Trust law. Section 5 summarizes the recent development experiences with land trust laws in India. We forward policy-oriented, concluding remarks in Section 6.

2. A SIMPLE ANALYTICAL MODEL

Studies on land market outcomes generally focus on the demand side partly because the aggregate supply of land is fixed. In this paper we propose an analytical framework to understand the role of land trust in long-term development. We consider a present value model (PVM) as it provides a way to relate the current price of land to the infinite streams of future earnings from holding the land. In the classical rent theory, Ricardo (1817) mentioned that land rent is the payment that the landowner receives "for the use [by himself or someone else] of the original and indestructible powers of the soil" (Ricardo 1817). Although this was put in the context of agricultural use, we will extend this notion to the use of land for non-agricultural purposes (infrastructure, industrialization, etc.).

We begin with a very simple PVM. Equation (1) shows the price of land rents in period t as the discounted sum of the expected future net returns to the land (to infinity).

$$P_t = \frac{E(R_{t+1})}{(1+\delta)} + \frac{E(R_{t+1})}{(1+\delta)^2} + \dots + \frac{E(R_{t+1})}{(1+\delta)^n} + \dots$$
 (1)

where P_t shows the price of land in period t, $E(R_t)$ is the expected land rent in period t, where E denotes the expectation regarding the future returns on land rent, and δ_t is the time-invariant discount rate for period t. If we assume that $E(R_t)$ grows at the rate of g in each period, and $\bar{R} = E(R_t)$, then equation (1) can be written as the capitalization formula, which describes the proportional relationship between the current land price and the expected land rent of the next period.

$$W_t = \frac{\bar{R}}{\delta - g}$$
; $g = \frac{\bar{\Delta}\bar{R}}{\bar{R}}$ (2)

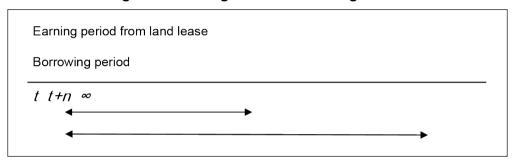
In the context of land trust organizations, each landholder expects to receive this land rent (W) in period t from such organizations, which considers the role of expectations and discounting factors.

2.1 Present Value Model with Rehabilitation Costs

For projects that are related to infrastructure (e.g., building roads or railways), it is often the case that the landowners lease their land out to the government or private organizations (who are responsible for the construction work with land trust as intermediaries) and then relocate to a new place. This process of rehabilitation involves a lump-sum cost that we now include in the model. We assume that landowner takes a bank loan and gets into an annuity plan (a series of periodic payments). If the present value of the lump-sum relocation cost is \aleph , then equation (3) shows the annuity payment for the landowner if the loan is taken over a period of n periods

$$C_t = \Re (1+r) \left\{ 1 - \left(\frac{1}{1+r} \right)^n \right\} \tag{3}$$

Figure 1: Earning versus Borrowing Period



The landowner borrows to cover his relocation expenses with an annuity plan that runs for n periods, it is shorter than the period through which he enjoys rental incomes (Figure 1). Combining equations (2) and (3), any land trust organization needs to offer the landowner a periodic rental income from his land that satisfies the following condition:

$$W_t - C_t = \frac{\bar{R}}{\delta - g} - \Re \left(1 + r \right) \left\{ 1 - \left(\frac{1}{1 + r} \right)^n \right\} > \theta, \text{ for the period from } t \text{ to } t + n \tag{4}$$

Or, Periodic earnings from land – borrowing cost for resettlement $> \theta$

where θ is the rental income that the landowner enjoyed before leasing his land out for the current infrastructure project. Based on equation (4), it becomes an acceptable (or binding) condition for a *rational* landowner to invest his land for an infrastructure project if his net income from the land exceeds his previous earnings from the land (this approach assumes that the landowner derives utility from the land purely in economic terms). If $W_t - C_t = \theta$, then the landowner becomes indifferent between whether to lease his land for the construction of infrastructure or use it for other purposes. This is because the net gain from leasing land becomes equal to his previous earnings from the land. Land trusts/ land leases play an integral role in providing assurance on the quantum and regularity of W_t . Since C_t is fixed and set by the commercial lender (assumed to be a commercial bank), the landowners face risk arising from fluctuations in or non-payment of W_t . Use of land trusts/ land leases may help reduce risk associated with W_t . Land trusts may also help reduce the disutility landowners experience from *losing* their land (emotional, cultural ties) by engaging the landowners as trustees who are integral parts of the development of communities.

2.2 Present Value Model with Rehabilitation Costs and Spillover Tax Revenue

Traditionally, infrastructure investors used to receive only user charges received from infrastructure investment. However, in this paper we propose the spillover tax revenue which can be captured into infrastructure investment. Yoshino, Helble, and Abidhadjaev (2018), in a recent book, argue that an infrastructure project can generate spillover effect though an increase in property tax, which can also be used as an incentive for private landholders. As demonstrated in Figure 2, the area highlighted in yellow gains from a newly built highway (as shown by the red line). This positive spillover effect is possible if this new highway generates more employment through an increase in private business and private investment along both sides of the highway.

Non-affected region (User charges)
(low rate of return)

Spillove effect
Non-affected region

Private in estment
SME development

Spillover effect
Increase of property tax revenue

Figure 2: Expansion of Infrastructure Investment: Capturing Spillover
Tax Revenues

Source: (Yoshino, Helble, and Abidhadjaev, 2018), ADBI.

We next consider this spillover tax benefit as part of the present value of land price calculation. As shown in equation (5), the price of land in period t is increased since $E(R_{t+1}) + E(T_{t+1}^{Spill}) > E(R_{t+1})$, and $E(T_{t+1}^{Spill})$ represents the expected additional private earnings from spillover tax revenue.

$$\widetilde{W}_{t} = \frac{E(R_{t+1}) + E(T_{t+1}Spill)}{(1+\delta)} + \frac{E(R_{t+1}) + E(T_{t+1}Spill)}{(1+\delta)^{2}} + \dots + \frac{E(R_{t+1}) + E(T_{t+1}Spill)}{(1+\delta)^{n}} + \dots$$
 (5)

If T_t^{Spill} grows at the rate of k in each period, and $\overline{T^{Spill}} = E(T_t^{Spill})$, then we have a new capitalization formula like equation (6) as

$$\widetilde{W}_t = \frac{\bar{R} + \overline{T^{Spill}}}{\delta - g - k}.$$
 (6)

Combing the value of land in period t with spillover tax revenue and rehabilitation costs, we then get a new expression for the periodic rental income offer from the land trust organization to the landowner as shown in equation (7).

$$\widetilde{W}_t - C_t = \frac{\overline{R} + \overline{T^{Spill}}}{\delta - g - k} - \Re \left(1 + r \right) \left\{ 1 - \left(\frac{1}{1+r} \right)^n \right\} > \theta, \text{ for the period from } t \text{ to } t + n. \quad (7)$$

where θ is the rental income that the landowner enjoyed before leasing his land out for the current infrastructure project. The condition in equation (7) becomes less binding because $\widetilde{W}_t > W_t$. In other words, with spillover tax revenue the rental income goes up, which makes the landowner more willing to accept the offer from the land trust organization.

The analytical framework preened in this section provides a simple way to compare and analyze different ways to incentivize the landowners for a more productive use of their land through land trust organizations. In the next section, we elaborate on the land trust laws.

3. LONG-TERM EFFECTS OF LAND DISPLACEMENT

Since the late 1980s, human displacement as a conservation strategy has been commonly practiced, particularly in developing countries despite the increasing criticism by social scientists that this represents a severe human rights violation. They argue that protected areas have most often been created in regions where the most socially, economically and politically vulnerable groups reside (Agrawal and Redford 2009). In other words, conservation-induced displacement may seriously damage the traditional yet powerless social groups. Scholars point out that fundamental features of displacement involve not just loss of place and material assets, but also losses of social ties, identity, and meaning (Scudder 2005; de Wet 2006; Downing and Garcia-Downing 2009).

3.1 Nepal

Many studies show that since the 1950s, Nepal has experienced a rapid transformation in landownership from the indigenous economically marginalized groups who had the weakest political standing to the more powerful immigrant groups (Caplan 2015; Guneratne 2002). It also closely corresponds to the local socio-economic context, particularly after the large number of immigrants led to disruptive social conflicts between indigenous and migrant groups. The backdrop of this socio-economic upheaval involved a displaced indigenous group, the Rana Tharus (hereafter referred as Ranas) in the western-most districts of Kanchanpur. They experienced a large-scale displacement due to the expansion of the Shuklaphanta Wildlife Reserve (hereafter referred to as the Park) in 2001. The Nepalese government carried out a land-based resettlement scheme. It was designed on the principle that all displaced families should be given cultivable land, which they lost previously due to the extension of the wildlife reserve (Bhattarai 2007: 270).

While the quantitative evidence suggests that by and large the land-based compensation policy has failed to prevent impoverishment in Rana society, it does not provide much evidence for the social injustice that Ranas faced over a long time. The Ranas, like many traditional societies, failed to perceive the modern concept of landownership as an exercise in land registration documents. For them, the concept of landownership was more about the actual land use practices. Guneratne (2002) explains that the concept of obtaining the legal land documents to secure ownership does not exist among many tribal or ethnic communities, particularly those from the lowland Tarai region of Kanchanpur.

3.2 Malaysia

In recent years, concerns over the property rights, displacement, and welfare of indigenous communities have centered on political and media landscapes—including in Malaysia.

For instance, the Sungai Selangor Dam project has displaced indigenous Orang Asli communities in Malaysia. An estimated 76 Temuan families were displaced from their homes and ancestral lands around Sungai Selangor and Sungai Gerachi. Of these, 37 families (160 persons) were located in Kg. Gerachi near Sungai Gerachi and 39 families (179 persons) in Kg. Pertak, 6 km upstream on Sungai Selangor.

Given the distance from the location of displacement and the difficult terrain that has to be endured most socioeconomic indicators from point to a relatively adverse scenario for Kg. Gerachi compared to Kg. Pertak. Land ownership was almost consistent across both village communities but those in Kg. Gerachi did not poses land titles for their property compared to about 72% of those in Kg. Pertak reporting having deeds for their land. Financial literacy was higher among residents in Kg. Pertak compared to those in Kg. Gerachi. The government compensation policies, in terms of providing agricultural land and trees to those in Kg. Gerachi and providing a fixed income to this in Kg. Pertak, have been successful in averting deprivation among communities in these resettled villages. However, the afflictive location of Kg. Gerachi relative to Kg. Pertak had made residents of Kg. Gerachi perform adversely across multiple socio-economic indicators, and this needs further attention in terms of policy and research; especially in comparison to other Temuan and non-Temuan Orang Asli groups who have been resettled.

3.3 India

Special economic zones have, over the past decade, become the epicenters of conflict between farmers and the industrial sector over land in India. The majority of the land is owned by small peasantry, often with unclear land titles. State sponsored "land grabs" have led to widespread social and political tensions in many parts of India. This has resulted in casualties and severe injuries to many protesters, and eventually leading to the cancellation of proposed Special Economic Zones, as witnessed in Nandigram and Singur in the state of West Bengal. The Falta Special Economic Zone, set up in 1984, has been a relatively successful SEZ in West Bengal. With regards to attitude toward relocation, it was found that while possession of property rights makes one more willing to transfer land, wealth and prior experience of land eviction dampens it. Positive attitude toward life and the presence of strong social capital also makes one refuse such an offer. However, positive association with compensation receipts in the past, favor another move out, with an optimum compensation package.

4. LAND TRUST LAW, JAPAN

In Japan, trust business can only be carried out by entities licensed under the Trust Business Act (Act No. 154 of 2004, as amended) and financial institutions licensed under the Act for Financial Institutions' Trust Business (Act No. 43 of 1943, as amended). Until the early 1990s, trust business was monopolized by eight financial institutions, of which seven were known as trust banks. Following the reform of the financial system in recent years, today over 200 financial institutions and entities are licensed to carry out trust business in Japan (Kanda 2016).

4.1 Difference between Commercial Banks and Trust Banks

Banks deal with deposits, lending affairs, and other many related businesses. On the other hand, trust banks, in a limited sense, receive trusts of money. They also receive trusts of movable property and real property other than the trusts of bonds and funds or money. In addition, they start taking a role in real estate brokerage or appraisals when they are entrusted with the trusts of real property. They may deal with inheritance affairs too.

Indeed, from a functional perspective, there are four distinctive types of commercial trusts in Japan, and applying the basic principles recognized under the Trust Act to any of these types would lead to unwarranted results. (1) Trusts similar to deposit taking and lending: e.g., loan trusts. (2) Trusts for asset management: e.g., money trusts and securities investment trusts. (3) Trusts for securitization: e.g., money claim trusts. (4) Trusts for business: e.g., land trust (Kanda 2016).

4.2 Land Trust Structure

There are three bodies in trust; entruster, entrustee, and beneficiary.

When an entruster has an asset that he wishes to leave for the beneficiary, but he does not want to give it right away, he may entrust the entrustee with the asset with certain conditions for the beneficiary to receive the profit. This method can be used for trust by will.

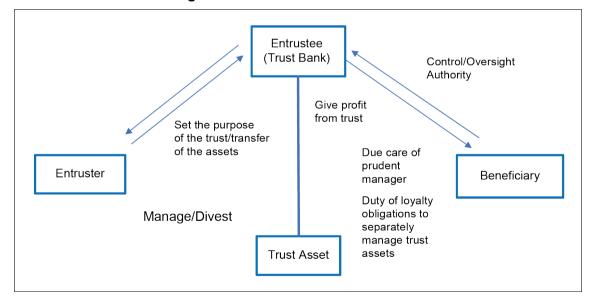


Figure 3: The Three Bodies of Trust

The entrustee must manage the trust asset by following the three rules stated below:

I. Due care of prudent manager

Entrustee must manage the trust asset with care of prudent manager.

II. Duty of loyalty

Entrustee must manage the trust asset for the beneficiary following the purpose of the trust. Entrustee must not use the trust asset for benefit of himself or the third party.

III. Obligation to separately manage trust assets

Entrustee must manage the trust asset apart from the beneficiary's property or any other properties.

4.3 Trust of Real Estate

In cities like Tokyo, individuals who live in small houses may increase the utility of their land by consolidating the land and building apartments or office buildings on it. To do so, those individuals will need help from a trust bank or trust company. The land owners entrust their land to the trust bank, and the trust bank builds a large building on the land to realize the effective utilization of the land. And those landowners can live in apartments within the building and receive part of the profit as dividends from the trust bank. Individual landowners can gain more profits by this method.

4.4 Trust of Agricultural Land

After World War II, the Japanese Agricultural Land Act was changed, and ownership of agricultural land was shifted to the tenant farmers from the major landowner. This realized the equality in agriculture in Japan. However, with the aging of those farmers, there is no one to inherit the land or business. It is getting more challenging to use the land effectively.

Thus, the idea of "Trust of agricultural land" was proposed. It posits that landowners entrust their agricultural land to a trust bank, and the trust bank manages the land. In this case, the trust bank aids the young farmers who wish to farm the large consolidated land to use it and increase the utility. The landowners will receive the part of the profit as dividends. The consolidation of land leads to higher profits for the landowners.

Presently, the landowners are obligated to give the land to the trust bank. But in the future, giving only the usage right of the land to the trust bank can be an option, and in that case, registration of the land will be necessary. This way, the landowners can maintain the ownership of the land and increase the profit by lending the land to the younger farmers through trust bank.

Another instance where the same method can be employed is in the case of ship owners or cowmen to increase the utility of their ships or cows. Individual farmers who own a small number of cows may consolidate their business with larger farmers by entrusting cows, which will help them to operate more effectively.

The method is to consolidate assets owned by individual, entrust them to a trust bank, and make a better use of the assets. This has a similar function to a trust of money. Consolidating money to operate more effectively is the same as consolidating assets owned by individuals who are not able to maximize the utility of their assets by themselves or do not have know-how, entrusting them to a trust bank and increasing the utility of the assets. The same kind of method can also be used to revive the local shopping streets with many closed small shops.

5. DEVELOPMENT EXPERIENCES AND LAND LAWS, INDIA

"Property and law are born together and die together. Before laws were made there was no property; take away law, and property ceases."

Rentham

India faces serious challenges in creating development processes that generate economic growth while being socially inclusive, ecologically sustainable, politically feasible, and in accordance with the Rule of Law.

Cities and towns are crucial to the economic wellbeing of India. For this, it is imperative that its cities and towns are transformed and pressures of new growth are dealt with so that they are more livable, efficient, and environmentally sustainable. Only then will the rapid pace of economic growth that India is undergoing be sustained and the targets of environmental sustainability of the world achieved. Land Readjustment is advocated as an important land management tool in developing countries like India, where rapid urban growth is making the need for large investments in public infrastructure more evident.

During the early stages of the British colonial rule, agrarian "Settlements," which were contracts between the state and the cultivators on property rights and revenue commitments, were drawn (Roy 2002). By the end, a number of measures were undertaken and laws were enacted that established the role of land acquisition in India. Indian planners then continued these after independence. In any social system that recognizes private property, the state restricts property rights in the exercise of powers inherent in the state's sovereignty. In countries that have a written constitution, much like India, these restrictions are often expressly embodied in the constitutional text. Broadly, these powers are classified as police powers, eminent domain, and taxation (Wahi 2016). The doctrine of eminent domain, simply put, states the power of sovereign to acquire land if it involves public purpose. It empowers the sovereign to acquire private land for public purpose, provided the public nature of the usages can be demonstrated beyond doubt. The doctrine is based on the following two Latin maxims: Salus populi suprema lex [welfare of people is the paramount law], Necessitas publica major est quam [public necessity is greater than private necessity].

The power of eminent domain was exercised over common property as well as private property. In the case of the former, the state simply had to notify it as state property and no claims or rights of those dependent on it would be recognized. In the case of the latter, under the Indian Expropriation Act, renamed the Land Acquisition Act (LAA) in 1894, the "owners" i.e., those (male) persons who held legal titles to the land, were entitled to monetary compensation. The principle of eminent domain ensured that consent was not required. However, land could be acquired under the Land Acquisition Act only for "public purpose." The concept of public purpose was introduced to balance the draconian principle of eminent domain. But the definition of what constituted public purpose was deliberately kept vague. The colonial government acquired land for what it considered to be public purpose—railways, roads, irrigation canals, and other public works—which in turn facilitated colonial rule and the extraction of revenues.

It is also believed that developed economies can also profit from Land Readjustment because it serves as an alternative to the traditional two ways of assembling land in an urban development: voluntary exchange and public expropriation. It was not until very recently, however, that the legislation was amended to recognize the emerging situation in India. This has resulted in chaotic and unplanned growth of cities and towns. Modern urban planning in India did not evolve from a preexisting ideology as it did in the West. There was a break in the process of city planning and design traditions with the introduction of British colonial rule (Ballaney 2008). Modern town planning emerged from the British intervention in Indian cities. These were modeled heavily on the prevailing ideologies and movements in town planning in England.

5.1 Land Laws in India

The Right of Property initially started as a fundamental right, under Article 31 of the Indian Constitution, but in 1978, with the 44th Amendment Act to the Constitution, it transformed from a fundamental to a constitutional right, Article 300A. The constitution created a federal political structure with a unitary bias. The Seventh Schedule to the Constitution distributed legislative powers between the Union and the states. while outlining the "concurrent" jurisdiction of both the Union and the states in certain cases. "Land" is a "state" subject, that is, it falls within the legislative domain of states within India's federal system (Wahi 2016). As a result, there exist widely differentiated legal regimes governing land rights of various categories of individuals and groups across states. However, the "acquisition and requisitioning of property" is a subject in the Concurrent List. In the 1930s, British planners transferred the German idea of Land Readjustment to India; this scheme was then widely implemented in the State of Bombay, which was divided into the States of Maharashtra and Gujarat after India gained independence from Britain in 1947. The Bombay Town Planning Act was introduced by the British in 1915 and then replaced in 1954 by a "new" Bombay Town Planning Act. Pursuant to the 1915 Act, local authorities were enabled to prepare town planning schemes to develop parts of the municipality.

Since independence, India has aimed to pursue economic development and social reconstruction by enacting more than a hundred land acquisition laws. A majority of these laws were enacted in the first decade post-independence and dealt with particular issues like zamindari abolition and agrarian reform, town planning, slum clearance and development, and resettlement of refugees (Wahi et al. 2017). These laws are enforced even today. Land Acquisition laws are not limited to those that dealt directly with acquisition of land, but also include multiple colonial and post-colonial central and state laws which contain provisions for land acquisition. The colonial laws included, for instance, the Telegraphs Act 1885, the Railways Act 1890, the Electricity Act 1910, and the Forest Act 1927. The Railways and Electricity Act have now been repealed and replaced by the Railways Act 1989 and Electricity Act 2003, both of which contain provisions for land acquisition. Post-Independence, both the Union and the states made several amendments to the Land Acquisition Act, with the last major amendment occurring in 1984. Following the 1991 economic reforms involving liberalization of foreign investment laws and the inflow of foreign capital, there has been a surge in land acquisition by the state (Ghatak and Ghosh 2011). In 1999, a Disinvestment Ministry was created and specifically charged with the privatization of state-owned industries. Finally, with the enactment of the Special Economic Zones Act, 2005, the acquisition of land by the government for private industry, which had happened in an ad hoc manner in previous decades, became official government policy. Since the late 1990s, massive public outrage and civil society movements over the increasing visibility and severity of the land conflicts have translated into legislative efforts, first in 2007, for a comprehensive amendment of the Land Acquisition Act, followed by attempts since 2011 to repeal and replace this Act by what eventually became the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (hereinafter the "LARR Act"). The reasons for amending the Land Acquisition Act included lack of standing for the people displaced, lack of people's participation in the government decision to take over their land, inadequate compensation, and insufficient coverage of those affected by the acquisition, procedural delays, and inequities, and governmental non-use of the land acquired (Wahi 2016). The LARR Act sought to redress to a greater or lesser extent, all of these problems.

However, within a year of its coming into force, there was an attempt to amend the LARR Act by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Amendment) Ordinance, 2014 (hereinafter the "LARR Ordinance"). The Ordinance was the central government's response to the vehement critique of the LARR Act by state governments and industry that the Act would stall all land acquisition by making the cost of acquisition prohibitive and the procedures cumbersome (Prusty and Das 2014). The Ordinance was re-promulgated on 3 April 2015. Ten days later, the LARR Ordinance, was challenged before the Supreme Court as constituting an "abuse of power" on part of the government. Given extensive opposition to this Ordinance in Parliament, no law was passed to replace the Ordinance in two successive sessions of Parliament. The LARR Ordinance was promulgated a third time on 30 May 2015. A bill to replace the ordinance was referred to a joint parliamentary committee ("The LARR Amendment Bill, 2015") consisted of legislators across party lines in June 2015. On 28 August 2015, at the close of the monsoon session of Parliament, the Ordinance lapsed (Hebbar 2015). Following this lapse, in September 2015, the Supreme Court dismissed the challenge to the LARR Ordinance as infructuous.

However, in the absence of parliamentary consensus, state governments were advised to go ahead with state amendments to the 2013 law.

Gujarat, Rajasthan, Maharashtra, Jharkhand, and Telangana have enacted new laws using Article 254(2) of the constitution by seeking presidential assent. Barring Telangana, all are BJP-ruled states. Their laws replicate or reflect the key amendments proposed in the 2014 ordinance. Gujarat and Telangana exempt a long list of projects from social impact assessment (SIA) and mandatory consent of landowners. These include projects of national security, defense, rural infrastructure, affordable housing, industrial corridors, and other infrastructural projects, including projects under public-private partnerships (PPPs). In Maharashtra, PPP projects have been fully exempted from the SIA and consent clauses. SIA and consent were considered two progressive pillars of the 2013 law necessary to uphold democratic decision-making. Seeking consent of 70% (for PPP) and 80% (for private projects) of the landowners before acquiring their land was included in the law to address the serious injustice in the earlier practice where the state could take away an individual's home, farm, or occupational right by merely issuing a notice. SIA is the only mechanism today to address the impacts of acquisition on the livelihoods of all those who do not own land but are dependent on it. This is a pre-requisite to formulate inclusive rehabilitation packages. The SIA, coupled with public hearings at the *gram sabha*, was to ensure that all affected people would have a right to compensation and rehabilitation.

Several state level rules have diluted the central Act. Telangana, Uttar Pradesh, and Andhra Pradesh have all reduced the notice period for public hearings under SIA from three weeks to one week. In Jharkhand, for instance, the quorum for seeking consent from the gram sabha has been reduced from half to one-third.

5.2 Gujarat

Post-independence, efforts were made for the entire Guajarati-speaking population to be integrated under one administrative body, and on 1 May 1960 the Bombay state split into Maharashtra and Gujarat. The Bombay Town Planning Act, 1915, was the first legislation to provide the legal framework for the use of LPR in India. The Act enabled the use of Town Planning schemes (TP Schemes) in the erstwhile Bombay Presidency and later became the basis for the Gujarat's TP Scheme-enabling act, the Gujarat Town Planning and Urban Development Act (GTPUDA) of 1976. The Bombay Town Planning Act of 1954 was transformed into the Maharashtra Regional and Town Planning Act of 1966.

While the use of TP Schemes declined in Maharashtra, they found a favorable legislative environment in Gujarat, especially after the 1999 amendments to the GTPUDA (Mathur 2013a). For example, only 18 TP Schemes (2,300 ha) were prepared in the city of Ahmedabad in the 20 years before the 1999 amendment. In contrast, 50 TP Schemes (5,028 ha) have been completed since then, and an additional 47 (4,890 ha) are under preparation. These post-1999 TP Schemes serve 1.5 million people, or almost the entire increase in the city's population (Mathur 2013b). The key amendment that has quickened the pace of TP Scheme preparation allows the local governments to appropriate land for road construction and other "priority" infrastructure within the road right-of-way (such as water and sewer pipe lines, and electric poles) soon after the state government approves a draft TP Scheme. This approval usually occurs within 15 months after the publication of a "Declaration of Intent" to prepare a TP Scheme (Mathur 2013a).

It is noteworthy that in the entire TP Scheme preparation and implementation process, the land ownership remains with the original landowner except for the transfer of ownership of the piece of land ceded by the landowner to the local government. In cases where the final plot is not in the same location as the original plot, the ownership is transferred from the original plot to the final plot after the government approval of the Preliminary TP Scheme. At this stage, the ownership of the plots reserved for sale and for the provision of facilities, such as, parks and community centers, vests with the local government (Mathur 2013a).

The major reasons for the success of TP Schemes in Gujarat include the timely development of roads, the transfer of disputes to the newly reconstituted plots, manageable scheme size, a high degree of landowner satisfaction, and the self-financing nature of the TP Scheme mechanism, which increases its political acceptability (Mathur 2013b). The constant legal evolution of the Town Planning scheme has immensely benefited Gujarat with amendments involving matters of jurisdiction, post-natural disaster development, and grievance redressal.

5.3 Rajasthan

The Rajasthan government managed to pass the Rajasthan Urban Land (Certification of Titles) Bills 2016 in the state assembly. This means that state residents living in urban areas, which are governed by the municipalities or state development authorities, can seek a certificate of ownership of their lands by paying a nominal fee to the state government. The state government will set up an authority, akin to transport authorities which issue driving license and fitness certificates. The authority will be headed by an Indian Administrative Service Officer. It will seek all the documents from the landowners, and will verify it against records held by the state.

Through the Bill the state government has given itself the power to enter into any property or premise for the purpose of survey by giving its owner prior notice.

Experts believe that this Bill will give a clear title to the owner and will reduce litigation in the courts. This is seen as one of the key steps toward land reforms and Rajasthan has become the first state in the country to introduce it.

5.4 Jharkhand

The state government has amended three sections and abolished one sub-section of the Chotanagpur Tenancy Act (CNT), while one section of Santhal Pargana Tenancy Act (SPT) has been amended.

Section 21 bars tribal land uses other than agriculture, construction of ponds, wells, and brick making. It has been amended, thus empowering government to make rules for non-agriculture use of the agriculture land. For non-agriculture use of the land, a tax has to be paid that would be decided by the revenue officers.

Section 49 (1) has been amended to empower government to transfer tribal land for social welfare projects like hospitals, schools, *anganwadis* (day care centers), and linear projects like pipelines, roads, etc. The cost of the transferred land shall not be less than the compensation fixed under the federal Land Acquisition Act. Transfer of land Section 49 (2) has been added to ensure that transferred tribal land shall be used only for the purpose mentioned during the time of the transfer of land. If there is any change in the purpose or nature of the project, the land should be returned to the landowner. It also sets a deadline of five years for completion of the project. If the project in not completed within five years then the land would be returned to its lawful owner and land compensation money will not be returned. Section 71 (A) sub-section (2) that deals with tribal land transfer after compensation has been abolished. In Jharkhand there are around 64,000 cases pending under Schedule V. Schedule Area Regulation (SAR) courts have been set up in the state to deal with such cases.

Section 13 of SPT Act has been amended to align with the motives CNT Act amendments. Section 13 has been amended to allow the government to use the tribal land for purposes other than agriculture.

5.5 Telangana

The Telangana Legislative Assembly and Council passed amendments to the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Telangana) Bill 2016. The State Assembly had passed the Bill in December 2016 and sent it to the Center for review. The Department of Legal Affairs of the Union Ministry of Law and Justice suggested a few procedural and terminology-related amendments to make the Bill immune to litigation and eligible for presidential assent.

6. EFFICIENCY GAINS FROM THE LAND TRUST POLICY

In Section 2 we used a simple analytical framework to discuss the possibilities of income gain for landholders through a land-lease arrangement organized by a land trust bank. And we showcased the long-term welfare effects of forcible land acquisition in different countries in Asia. Then in Sections 4 and 5, we elaborated on the laws and recent development experiences with land trust bank in various countries. This section provides a holistic framework by combining all these features into a single framework as shown in Figure 4.



Figure 4: Gains from Land Trust Bank

Figure 4 showcases two scenarios. In the top panel, we show an infrastructure project that takes about four years to acquire land through various negotiations and then after a construction period of five years, landowners start enjoying the spillover benefit from an increase in tax collection. It is feasible to expedite this process using a land trust bank, as shown in the bottom panel. In the case of the land trust bank, land acquisition is handled in a much more peaceful and coordinated manner, where the land owners are relocated to a new place with some positive net earnings from the land (as shown in Section 2). As a result, the benefits from tax spillover can take place earlier than nine years as in the previous scenario; the construction time is also reduced due to less uncertainty about the land acquisition. The recent political upheaval transgressing from the industrialization drive through forcible land-grabs in many parts of Asia (India, Indonesia, Nepal, and the Philippines in particular) point to the need for a sustainable policy—a framework that results in a positive sum game, benefiting the land owners without hurting the growth prospects. We propose the land trust or land lease for the development of infrastructure investment and industrialization purposes.

7. CONCLUSION

Many developing countries face a shortage of public funds to meet their huge infrastructure needs. In order to narrow the gap between investment needs and actual government allocations, private funds have to be injected into infrastructure investment. It is quite important to attract private investors into infrastructure by increasing the rate of return on infrastructure investment. The spillover effects of infrastructure investment will increase revenues from corporate, income, sales, and property taxes. Use of a land trust for infrastructure supplements this by creating a similar regulated method for better investment opportunities, along with creating a space for ensuring human security by creating more profit opportunity for the landowners. In the case of Bali, a highway was built over the ocean due to land owners not agreeing to give their ownership; this has led to an almost negligible, if any, spillover effect from such a high expenditure-incurring project. Land Trust is thus a way to mitigate obstacles that create disputes over land acquisition. The examples of India and Japan have strong potential to be applied to other Asian regions facing similar issues, which will contribute to the development of the infrastructure into the region, while sustaining the rate of return for land owners.

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