

SECURING LAND RIGHTS IN THE ERA OF URBANIZATION, COMMERCIALIZATION, AND CLIMATE CHANGE

10th Emerging Markets Finance Conference, Mumbai, India

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Why Is This Topic Important?

**Consider Four Interrelated Policy Issues
in India and the US**

Affordable Urban Housing

The Low-Income Housing Finance (LIHF) Project responded to the challenges of rapid urbanization and rural-urban migration in India. It addressed the challenge of access to finance for urban housing emanating from the “informal” nature of low-income households. This informality occurs because both undocumented incomes and the nature of property rights constrain the use of property as financing collateral.

World Bank 2019

IIMB Management Review (2015) 27, 129–140



available at www.sciencedirect.com

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journal homepage: www.elsevier.com/locate/iimb



ROUND TABLE

Affordable housing: Policy and practice in India



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IIMB-Century Real Estate Research Initiative, Indian Institute of Management Bangalore, Bangalore, Karnataka, India

Available online 19 May 2015

KEYWORDS

Affordable housing;
Public policy;
Stakeholder participation;
State subsidies;
Low-income housing;
India

Abstract Affordable housing is a problem that many countries are taking stock of, world over. In India, the problem is much more stark with an estimated shortage of around 18 million houses, with 99% of this in the economically weaker sections of society. This paper sets out the definitions of affordable housing in India and across the world; the issues with the various definitions of affordable housing; the institutions and agencies responsible for formulating and implementing affordable housing policies in the state; the opportunities and challenges in affordable housing as well as a discussion on learnings from international experience in this sector.

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Payments for Ecosystem Services

Last weekend, 10 Himalayan states in India voiced a unique demand — payment for the clean water that flows down from the hills to the plains, and for the forests that remain standing. The demand, made in the presence of Finance Minister Nirmala Sitharaman and Chairman of the 15th Finance Commission N.K. Singh at a meeting in Mussoorie, would mean that the financial relations between the federal and provincial governments must undergo a fundamental shift.

Joydeep Gupta, August 2, 2019

Payment for Ecosystem Services (PES) in Kodagu, Western Ghats of India- A Case Study



College of Forestry, Ponnampet – 571216, Kodagu,
University of Agricultural Sciences, Bangalore, India



Canadian Model Forest Network, Ontario, Canada

Commercial Real Estate Financing and Development

LATEST OBSESSIONS FEATURED

QUARTZ INDIA

EMAILS EDITIONS BECOME A MEMBER

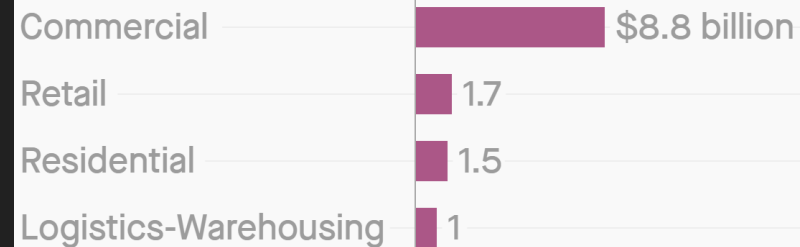
PREMIUM SPACE?

Foreign investors flock to commercial projects as India's residential market struggles

By [Sangeeta Tanwar](#) • November 18, 2019



Foreign PE funds inflow in Indian real estate since 2015

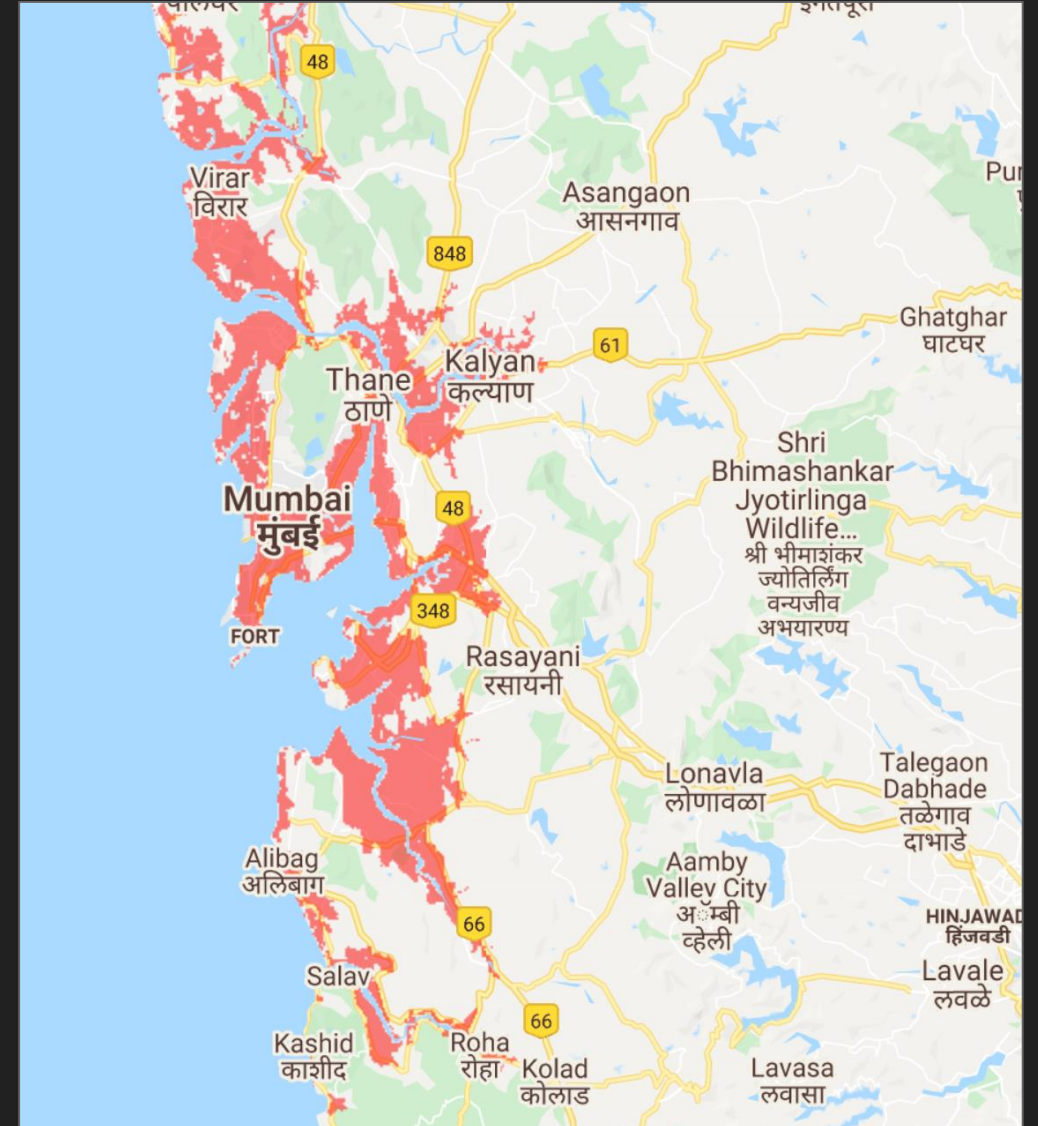


ATLAS | Data: Anarock

Land Below Annual Flood Level by 2050

Sea-Level Rise

- Securing Coastlines
- Moving Infrastructures
- Moving Agricultural Lands
- Disrupting Property Tax Revenue
- Destabilizing Urban Land Values



ONE COMMON THEME:

TO SUCCEED, THE POLICY RESPONSES WILL REQUIRE A SYSTEM FOR SECURING PROPERTY RIGHTS IN LAND THAT IS

- ACCURATE – matches land with records
- RELIABLE – updated and free of error
- TRUSTED – private sector has faith in the system
- EFFICIENT – not too costly for benefits derived
- PROTECTED BY GOVERNMENT – administration and dispute resolution mechanism

Progression of Land Markets

In her empirical study of over 50 nations, Claudia Williamson concludes secure property rights are strongly associated with an increase in development, access to credit, and gross capital formation. (Williamson 2010)

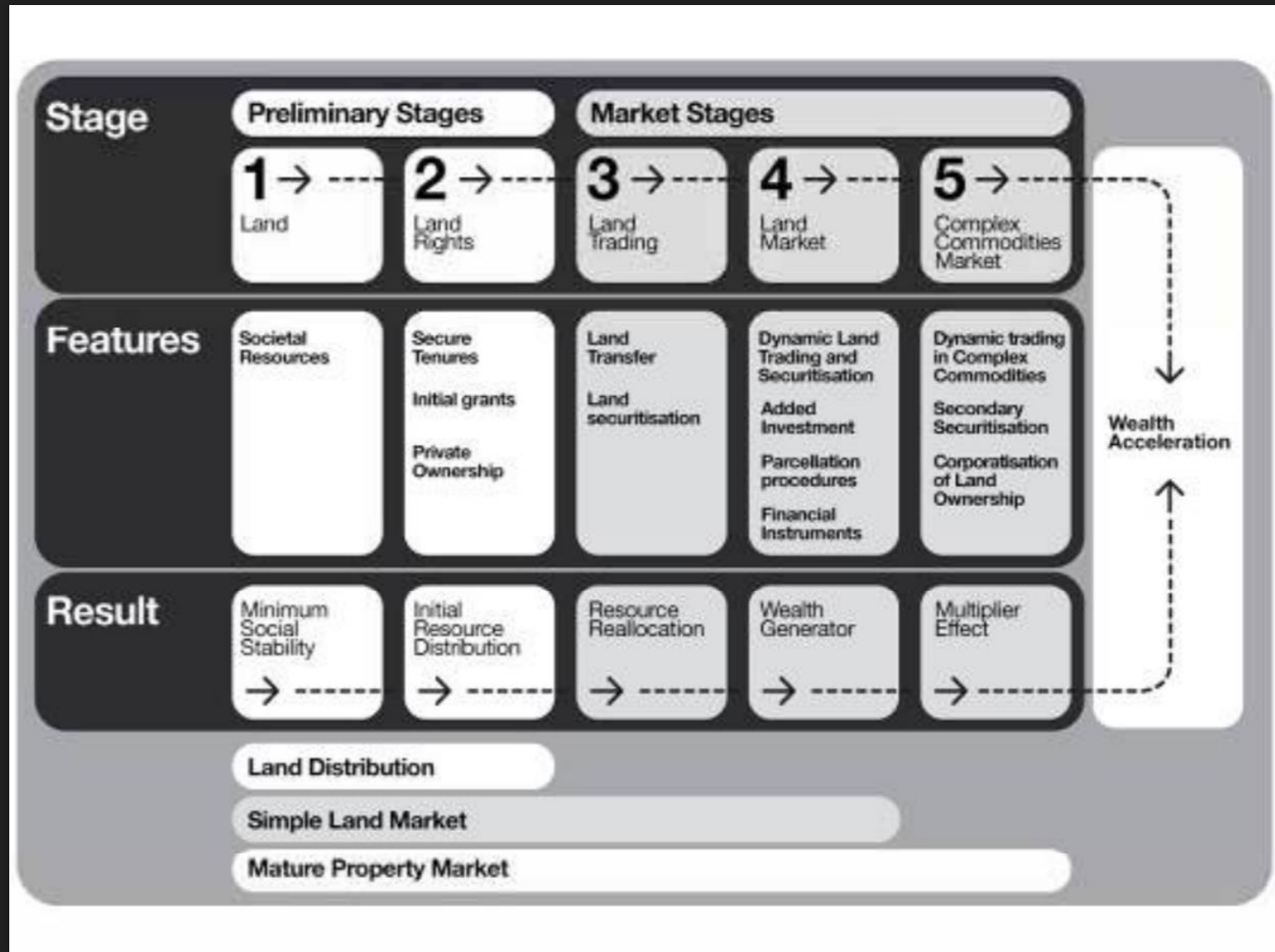


Figure 1

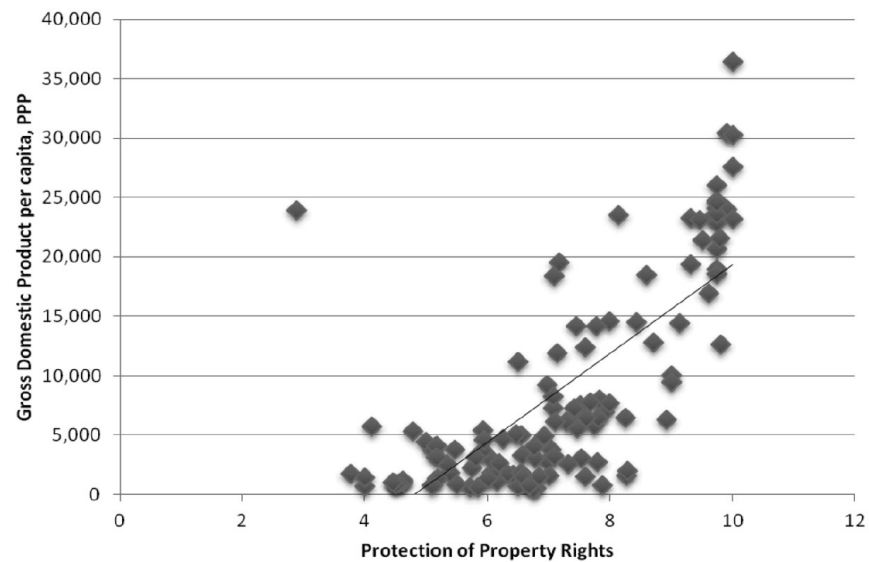


Figure 2

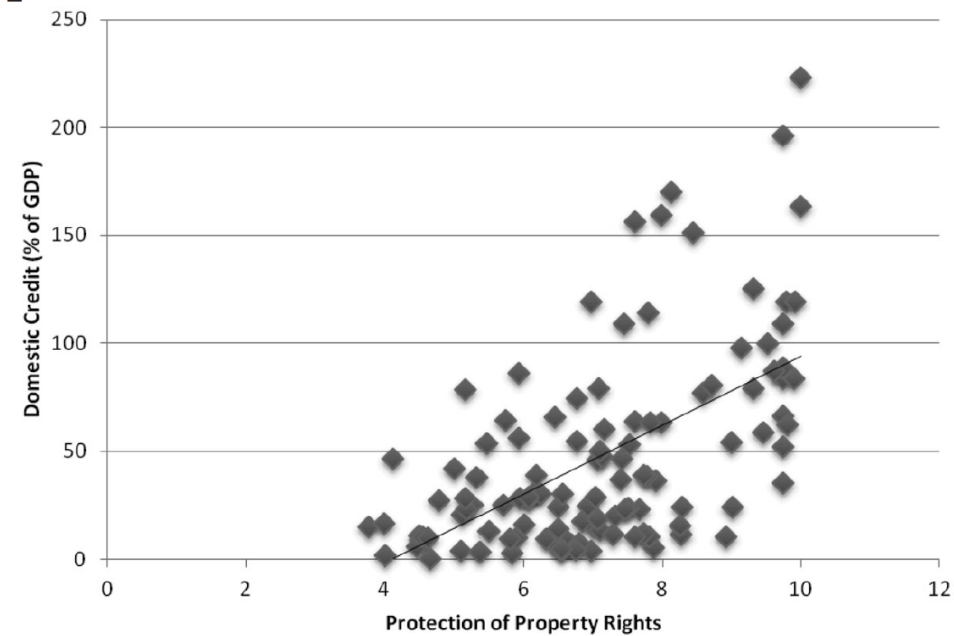
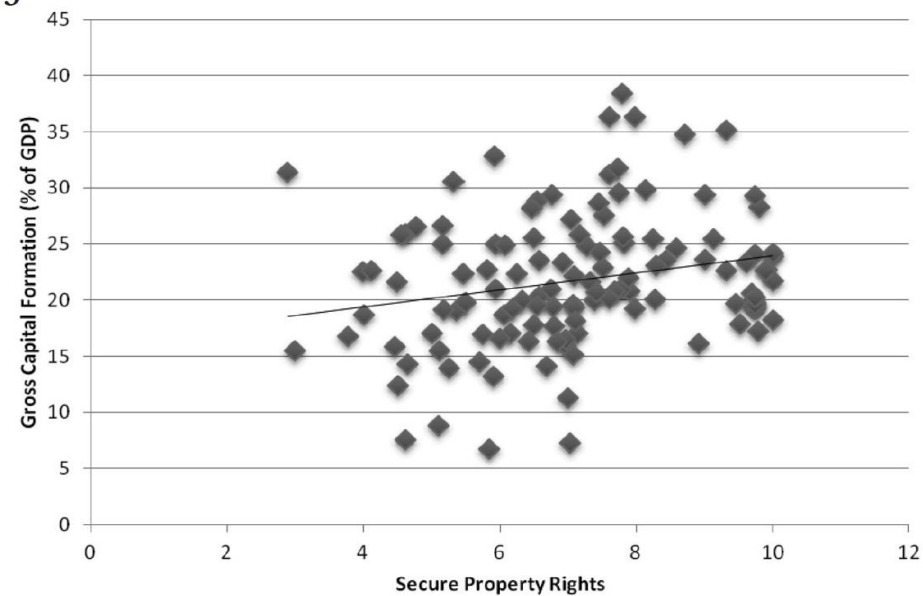


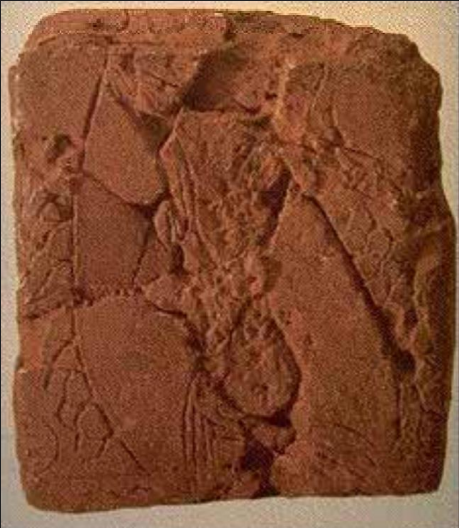
Figure 3



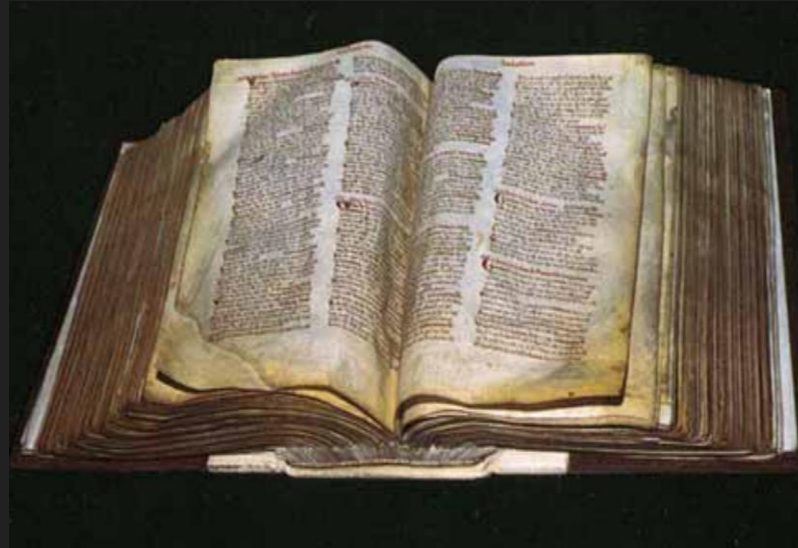
OUTLINE

- Brief History of Land Rights Mapping and Registration
- Preconditions Making Land Registration Desirable and Successful
- Advantages & Disadvantages of Land Registration Systems
- Comparison of Deed Registration and Title Registration Systems
- The Situation in India
- Proposals for India
- Is Blockchain the Answer?

A Long Tradition



Mesopotamian clay tablet map showing geographic features and dwellings (2500 BC)



King William's Domesday Book (1086)



Colonial American property recordation map (1600s)

Evolution of Land Rights Systems

- **Border Markings**
 - Roman stone and stump boundary markers
- **Customary Private Rituals**
 - Turf and Twig
 - Livery of Seisin
- **Official Registries (mainly for taxation)**
 - Egyptian Royal Registry
 - Domesday Book
 - Napoleon's Cadastres
- **Filing of Deeds**
 - Virginia Statute of 1640

Why *Registration*?

CONDITIONS MAKING LAND REGISTRATION DESIRABLE

- Where land title insecurity is restraining development
- Where land markets are in early development
- Where there is a high incidence of disputed title
- Where redistributive land reform is contemplated

What Is Needed for Success?

- Landowners and private sector must support the system
- Government must assume a role and commit to the system's duration
- Property rights must be clear and enforced
- A system and staff for registration must be established
- Maps, Maps, Maps!
 - Surveys must be accurate
 - Parcel boundaries must be clear
 - Mapping must be transparent and accessible

Advantages of Registration Systems

- Greater tenure security
- Facilitates credit markets
- Reduces cost of land transactions
- Improves conditions for property taxation
- Facilitates land reform
- Reduces land title disputes
- Stimulates land markets
- Provides better basis for insurance
- Improves government administration

Difficulties of Introducing Land Registration

- Transitioning to the system can be costly and slow
- Depending on the system, government administration can be costly
 - Or private process can be costly
- Can generate fear of land taxes
- Dynamic land markets can disadvantage smallholders

Two Major Systems

○ Deeds Registration (e.g, US and India)

- Focuses on rightful claimant
- Matches legal relationship of the claimant to a legal land object

○ Title Registration (e.g., UK, Aus, EU, etc.)

- Focuses on legal land object
- Matches legal relationship of the land to the rightful claimant

COMPARISON

Deeds Registration

- Government acts as repository of private deed documents
 - Reviews formal document requirements
 - Performs no legal analysis
 - Indexes deeds by entity or parcel
 - Provides public search mechanism
- Buyer must conduct title search
- Title assurance can be obtained through private insurance market
- Used in India and most of US

Title Registration

- Government acts as certifier of title
 - Establishes indefeasible certificate of title
 - Parcel based
 - First registration requires adjudication
 - Adjudication for subsequent transactions based on defined trigger events
- Title assurance provided by government
- No need for title searches
- Much higher running costs for government
 - Skilled legal and administrative specialists

Situation for India (Mishra & Suhag 2017)

State of the System

- Zamindari system recorded person in possession
- Deeds registration system going forward post-independence
- Gaps in land records
- Gaps in legal framework
- Poor administration of records
- Slow progress on Digital India Land Records Modernization Program

Implications

- High level of litigation
- Long timeline to establish title
- Agricultural credit and insurance difficulties
- Delayed infrastructure development
- Lost urban property taxes
- Difficult commercial development credit market

PROPOSAL

Adopt Title Registration System

Committee on Financial Sector Reforms (2009) – move to a conclusive title registration system

Mishra & Suhag Assessment (2017):

- Will require all existing land records are “adjudicated” for accuracy, encumbrances, complete records, etc.
- Will require accurate surveying and mapping and correlation to documented boundaries
- Will require “single window” for access and updating
- Will require extensive legal reform

Experimentation in India with Title Systems

Experience thus far (Ishaqui 2019):

- Rajasthan State 2016 legislation not successfully implemented
- Maharashtra State 2015 legislation not successfully implemented
- Telangana State is currently considering
- Many have expressed skepticism that the transition is not feasible at reasonable costs and will have unanticipated adverse effects along the way

ALTERNATIVE PROPOSAL:

Facilitate Private Title Insurance

Anirudh Burman (2019 in Wash. Intl. L.J.):

- Experiments with title registration in India (previous slide) have not been successful
- Stay with deeds registration
- But develop an active private title insurance market as in US
 - 2016 Real Estate Regulation Act allows states to *require* title insurance for projects
 - Most title registration systems exclude many defects and encumbrances from government assurance
 - E.g., US title insurance companies are thriving in Australia, which uses Torrens title registration system, and gaining foothold in EU
- Burman suggests facilitating rather than mandating private title insurance

What About Blockchain?

First – What *is* blockchain?

What About Blockchain?

I have no clue!

What About Blockchain?

Blockchain is not magic—It is a database technology tool, not a system

- Computerized distributed ledger tool
- Uses hash encryption technology
- Attaches “blocks” to “chain” of ledgered events
- Requires storage on decentralized network
- Requires permission of all network users to add/alter

Blockchain Hype?

Oprunenco & Akmeemana (2018)

- Using blockchain to make land registry more reliable in India
- Propose using blockchain “working in the background” as recorder of deeds registration system
- Claim this will produce “real-time traceability and transparency,” “increase citizen’s confidence in the government,” and “enhance data security and ensure authenticity of land records.”

The Blockchain and Land Registration Experience So Far

- Blockchain-based land registration has been explored in Dubai, Georgia, Brazil, Ukraine, and the US State of Vermont
- Many reported “pilots” never really got started (Honduras; Ghana)
- Some reported “blockchain” experiments were not actually distributed blockchain (Chromaway in Sweden)
- It has been difficult to scale up in fragmented land administration systems, such as the county-based system in the US (as in the Vermont experiment), and as in India
 - Better suited to nation-wide registry systems
 - Or local-based systems with full inter-local interoperability

Blockchain-for-Land Challenges

- Difficult to ensure both central authentication *and* open access at the same time
- Requires all parcels get moved onto the blockchain registry and all transactions be recorded
- All records need still must be stored for verification and for succession of technology
- Entrenched competition interests (e.g., title insurance industry) and corruption preying on poor registry systems will resist

But If You Can Overcome All That...

ADVANTAGES OF BLOCKCHAIN FOR LAND REGISTRY:

- Builds data resilience by replicating registry across many computers and servers
- Allows greater real-time transparency
- Greater protection against hacks
- More tamper-resistant
- Facilitates auto-executing “smart contracts”

Ultimately, however, blockchain for land registration, unlike for “currency,” cannot avoid the need for government to act as a central repository, validate documents, and enforce the system. There is no blockchain-for-land solution that replaces *government*—it can only facilitate *governance*.

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QUESTIONS