



सत्यमेव जयते



“Digitization of Land Records & Registration in India”

Session:4

“Strengthening Land Tenure for a Sustainable and Inclusive Future”

by

Manoj Joshi

Secretary

Department of Land Resources

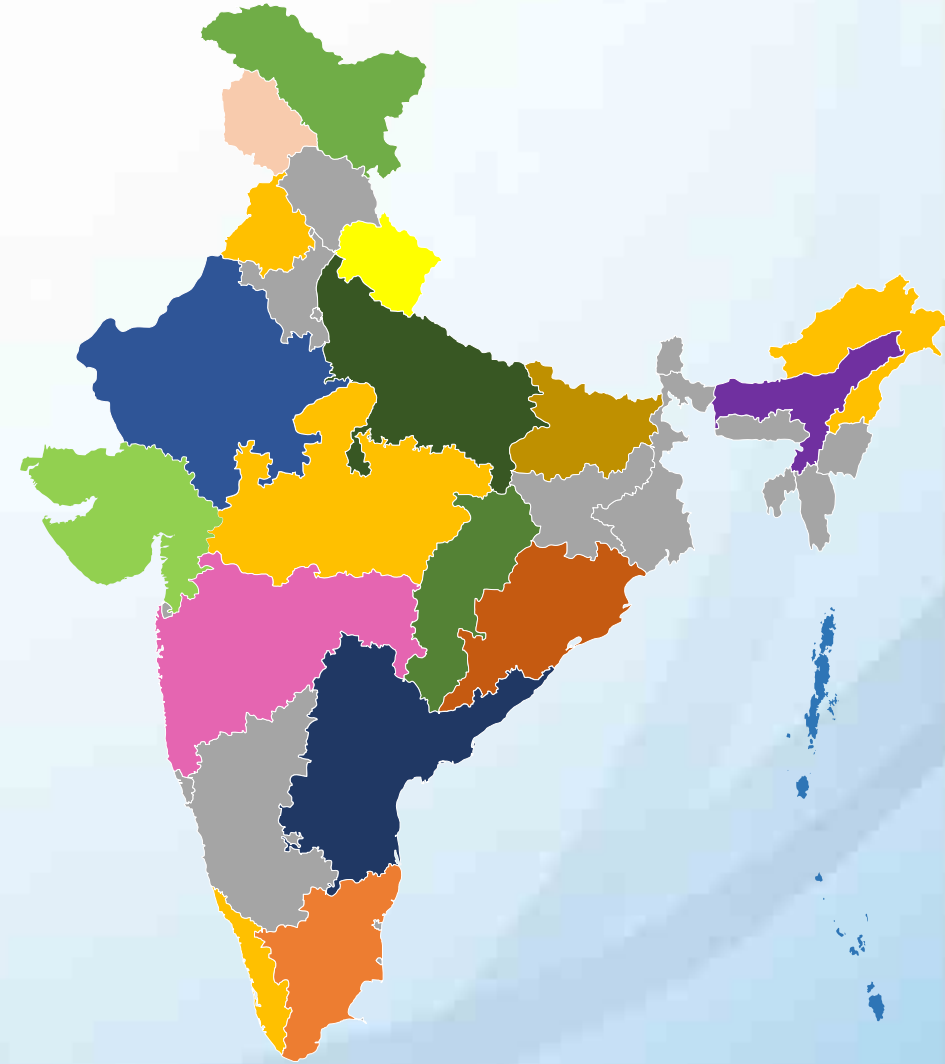
Government of India



INDIA at a Glance

Department of Land Resources

- 3.28 million sq. km area
- Over 1.4 billion people
- 28 States and 8 Union territories
- 785 Districts
- 0.65 million villages
- 36 million village Cadastral Maps
- 342 million Record of Rights (RoRs)





Land Records System : An Indian Perspective

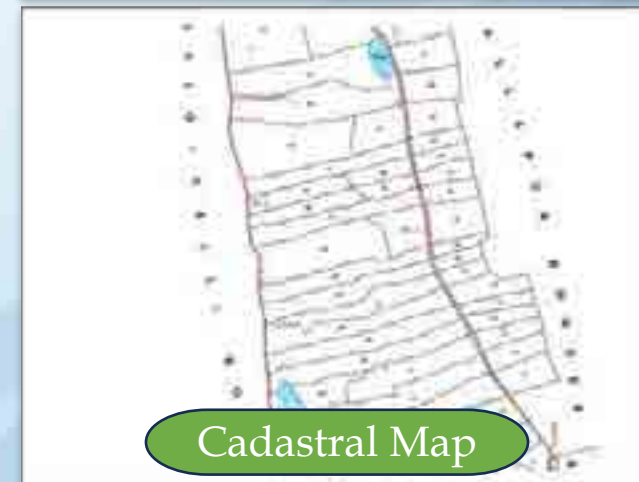
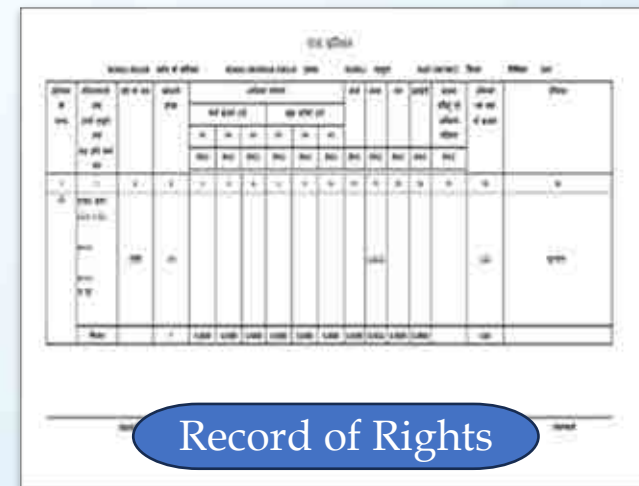
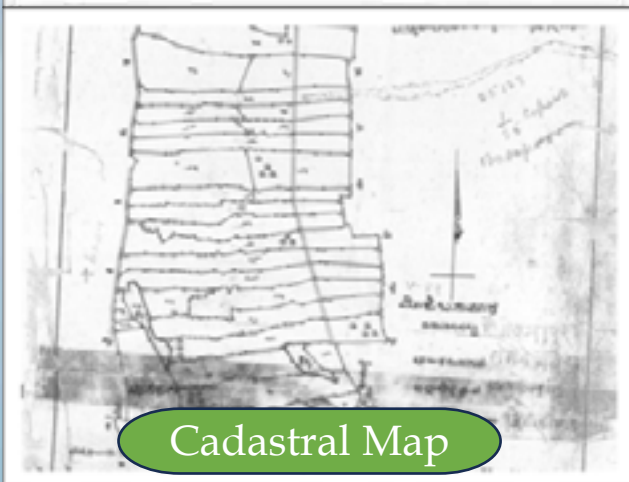
Hierarchy

Revenue

Registration

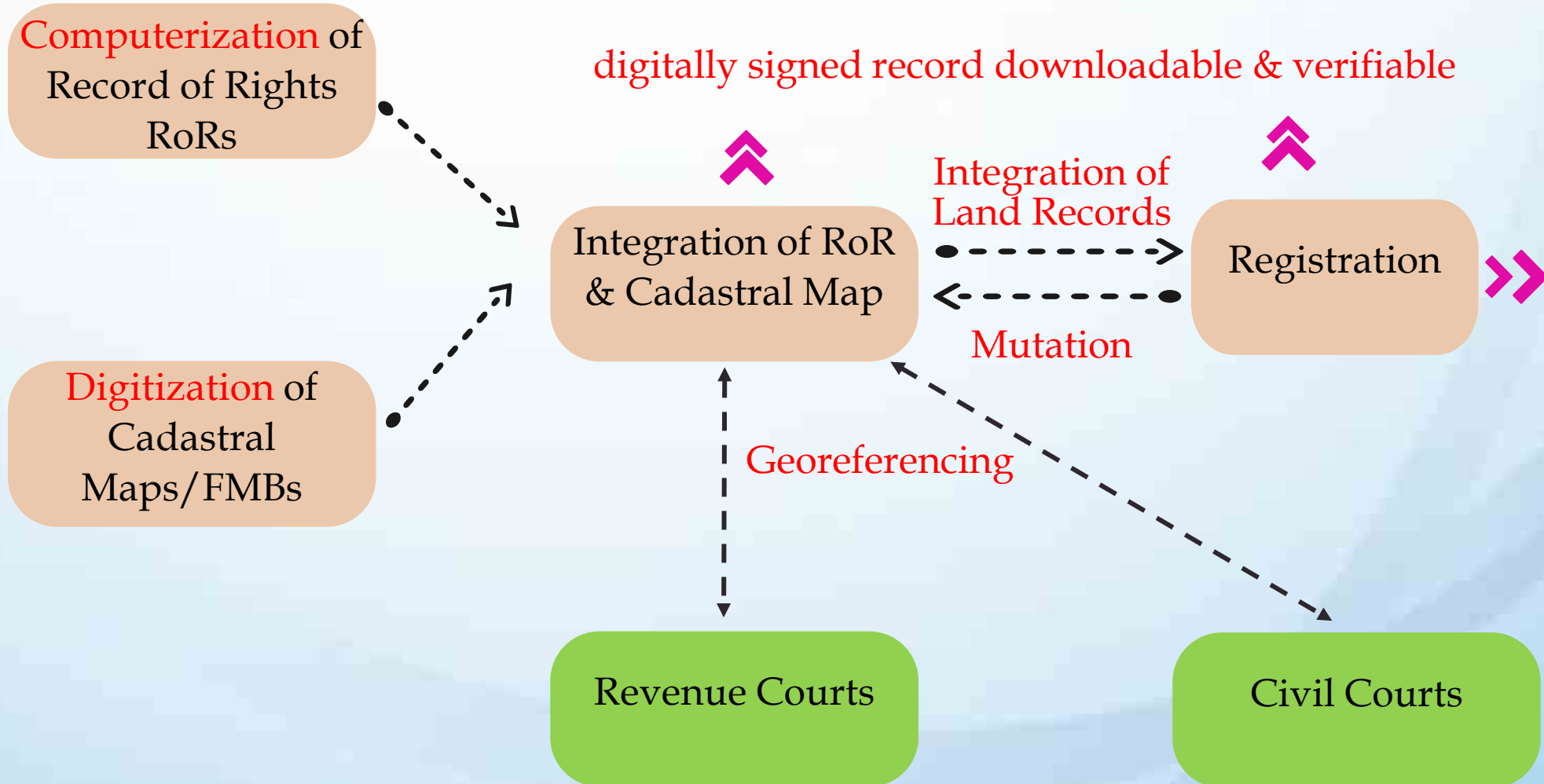
Now

Earlier



Stages of Land Records Digitization & Registration

Land records
Digitization
Stages



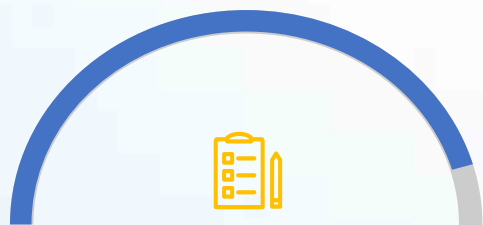
Generation of ULPIN



Digital India Land Records Modernization Programme (DILRMP)

Department of Land Resources

At a glance



95.4%

(32,60,95,655/34,19,98,590)

Record of Rights
Computerized



94.9%

(5,061/5,336)

Sub Registrar Offices
Computerized



87.6%

(4,670/5,336)

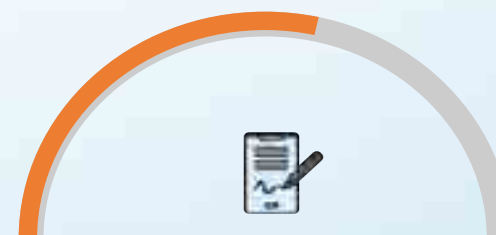
Sub Registrar Offices
Integrated with Land Record Database



83.5%

(2,52,49,830/3,02,50,142)

Cadastral Mapsheets/FMBs
Digitized



63.9%

(418,488/6,54,618)

Villages can download digitally
signed RoRs



Innovative Initiatives under DILRMP

Unique Land Parcel Identification Number (ULPIN) or Bhu-Aadhaar:

- 14 digits - Alpha-numeric unique ID
- based on Geo-coordinates of land parcel
- 142 Million ULPINs assigned to land parcels

Transliteration of Land Records: 22 Languages



Fig: ULPIN IDs assigned to Land Parcels



Urban Land Records Programme

- Urban Land Records only in few States – Gujarat, Maharashtra, Tamil Nadu, Goa, Chhattisgarh
- Need to carry out fresh survey - Create Land Records & Maps
- Survey of India to do 3D aerial survey - All Urban & Peri Urban land
- 4912 Cities
- 60 million households



Steps:





Challenges

- Difficulty in map updation and maintenance
- Mutation delays
- Land disputes and litigations
- Rapid Urbanization
- Fresh development of peri urban land & sale
- Keeping pace for changes on RoR & Maps



Way Forward

- Saturation of digitization of land records in Rural Areas
- Conclude survey of Abadi areas in Villages (Rural settlements)
 - Swamitva Program
- Creation of Urban Land Records
- Focus on geo-referencing
- Technology based solutions (AI/ML) & Blockchain



Department of Land Resources

Questions ?



सत्यमेव जयते

भूमि संसाधन विभाग
DEPARTMENT OF
LAND RESOURCES

Thank You

Contact:
secylr@nic.in

Smart Land Services

Ministry of Land
Government of Bangladesh



ভূমি মন্ত্রণালয়
স্মার্ট ভূমিসেবায় আপনাকে স্বাগতম

Smart Land Services ... Cashless Land Offices...

- **60 million Land Ownership Records** Available Online
- **50 million BDT** Deposited Digitally to Treasury per Day
- **350,000 Ownership Transfer Cases** Disposed/Month
- **5,000 Services** Provided by 16122 Call Centre/Day
- **600,000 Citizens** Receive AI calls per Month
- **15 MOUs Signed** for Data-sharing with Govt/Private Org

Core Land Services are ONLINE

নোটিশ: (সে আপনাকে স্মার্ট ভূমি মন্ত্রণালয়।)



ই-নামজারি



ভূমি উন্নয়ন কর



স্মার্ট ভূমি
রেকর্ড ও ম্যাপ

স্মার্ট ভূমি রেকর্ড ও ম্যাপ



স্মার্ট ভূমি নকশা



মর্টগেজ তথ্য যাচাই



স্মার্ট ভূমি পিডিয়া
ভূমির সকল তথ্য অনলাইনে

স্মার্ট ভূমি পিডিয়া

60 Million Land Ownership Records are Available Online

সার্ভে খতিয়ান অনুসন্ধান

বিভাগ	জেলা	উপজেলা	খতিয়ানের ধরন	মৌজা	খতিয়ানের তারিখ
বরিশাল	ঢাকা	কালিয়াজুড়	বি আর এস	অনুসন্ধান	খতিয়ান নং
চট্টগ্রাম	ফরিদপুর	তেজগাঁও উয়েম সার্কেল	বি এস	1-শ্রীধর	2- দঃ সিকদার রিয়েল এস্টেট
ঢাকা	গাজীপুর	ক্যাটনমেট	নি এস	2-বায়েখালী	3- দঃ আহম্মা বেগম
খুলনা	গোপালগঞ্জ	ভেমরা	আরএস	3-রাজমতরী	4- দঃ মোহাঃ আহম্মা বেগম, জামিলা মাহবুব, ফারিয়াল মাহবুব
রাজশাহী	কিশোরগঞ্জ	বামরাই	এস এ	4-উত্তর সোনা টেম্বর	6- দঃ আজহার হোসেন
রংপুর	মানারীপুর	ধানমন্ডি	দিয়ারা	5-দক্ষিণ সোনা টেম্বর	7- দঃ আতিকুল হক, আতিকুল ইসলাম সিদ্দিকী
সিগেট	মানিকগঞ্জ	দোহার	পেটি	6-ছোট শিকারীটোলা	8- দঃ আতাউল্লাহ বানু
				7-বাকসার	অধিকতর অনুসন্ধান

সন্ধান করতে ক্লিক করুন।

তথ্যচিত্র



১,৯৭৭ জন
আজকের সেবা গ্রহীতা



১,২১,৭০,২৫৯ জন
মোট সেবা গ্রহীতা



২,৬৪,৮৭,৭২০ জন
মোট ভিজিটর



১৪,৮৫,৭৮,৪০৪ বার
মোট পেজ ভিজিট

Challenges: *Key Research Findings*

- **80%** Citizens are NOT AWARE of digital land Services
- **70%** Citizens apply for digital land services through other means (not by themselves)
- **98%** Citizens have showed interest to get land services without going to land offices

Land Ministry's Dream by 2026



60% Land Services done by Citizens themselves

30% Land Services delivered by SMART LAND POINT

10% Land Services provided by Physical Visits of land offices



Land Services

AGENT Engagement

Guideline 2023

Citizens' Land Care Centre



নাগরিক ভূমিসেবা কেন্দ্র

১৬৩১২২, পলি-মহলার, মঙ্গল শহর, ঢাকা-১২১৫



নাগরিক ভূমিসেবা কেন্দ্র থেকে যে সকল সেবাগুলো নাগরিকগণ নিতে পারবেন

১. নামজারি আবেদন
২. নামজারি কোর্ট ফি, স্টেটস জারি ফি, মিসিআর ফি পেমেট
৩. নামজারি আবেদন ট্রাকিং
৪. পর্টার অনলাইন/সার্টিফিকেট কপি আবেদন
৫. বৌজা মাপের আবেদন
৬. ভূমি উন্নয়ন করের প্রোভিসিও নিবন্ধন
৭. ভূমি উন্নয়ন কর সেজের জন্য প্রেক্ষিতের খতিয়ানের তথ্য এন্ট্রি
৮. ভূমি উন্নয়ন কর পেমেট
৯. ভূমি সংক্রান্ত পরামর্শ প্রদান
১০. অভিযোগ গ্রহণ

Mobile Land Care Centre

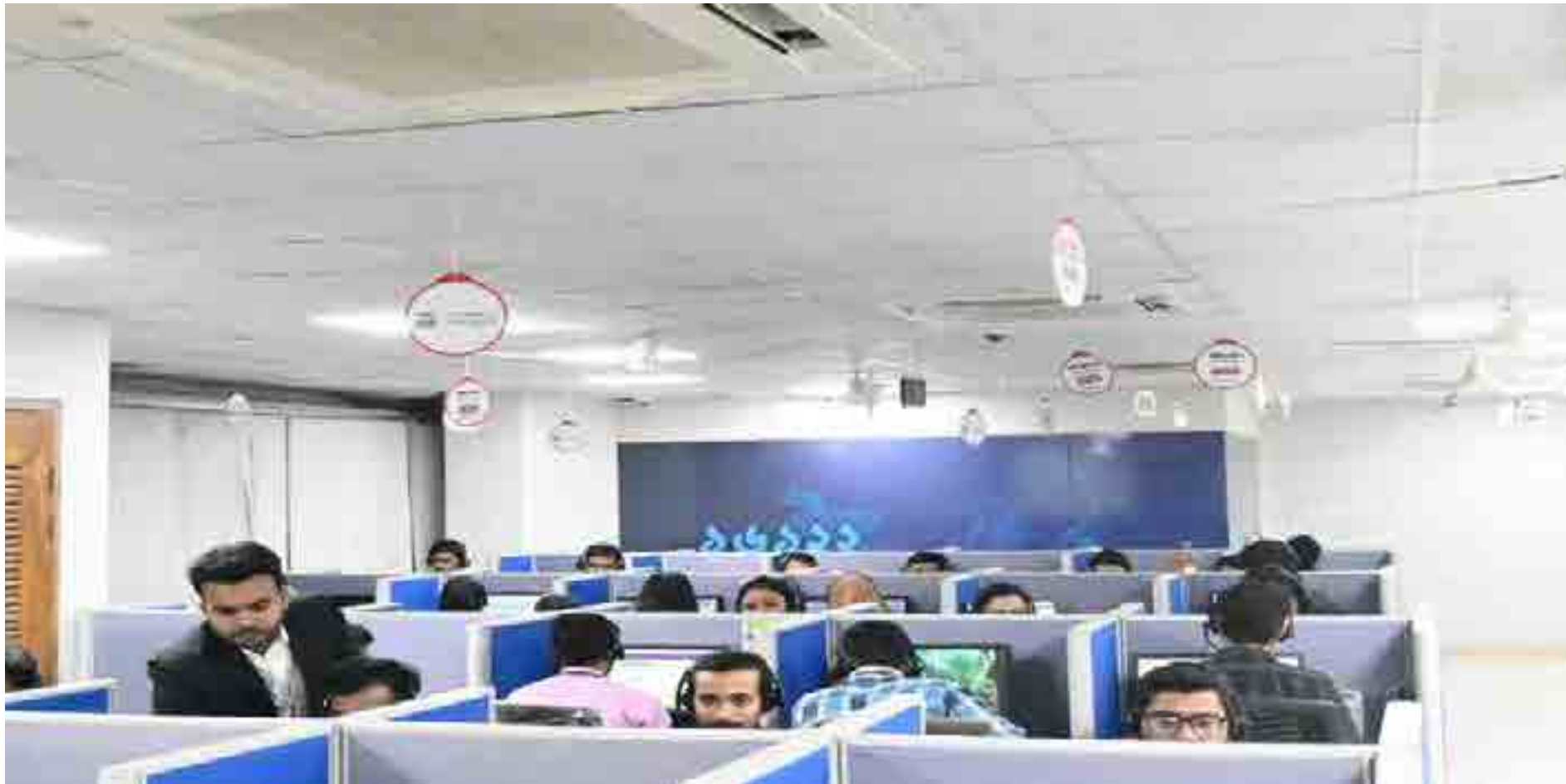


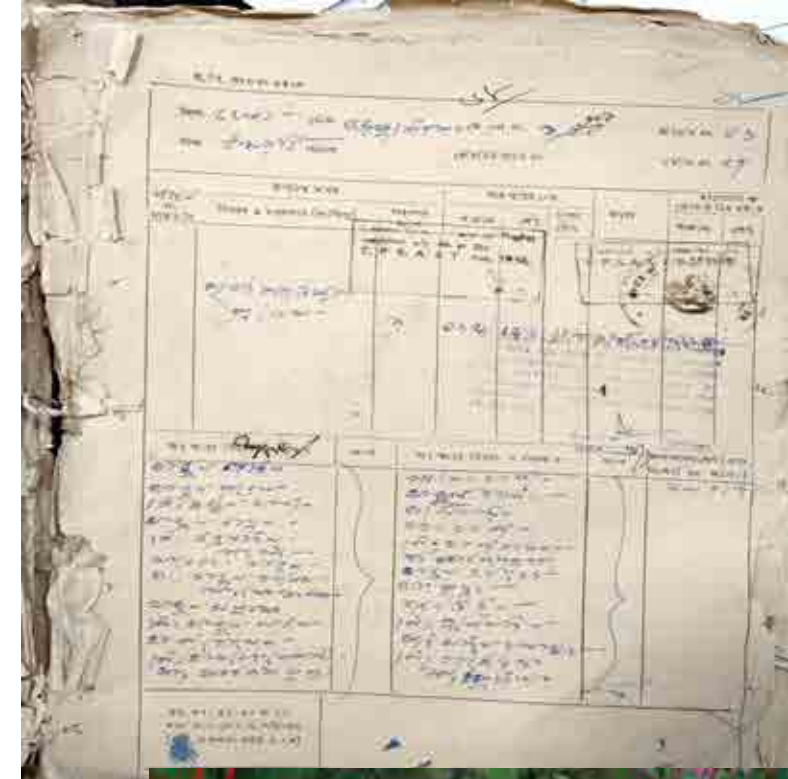
■ তৃণমূল পর্যায়ে ভূমিসেবা পৌঁছে দিতে চালু হয়েছে ভ্রাম্যমাণ ভূমিসেবা কেন্দ্র

Recent Innovations

- Introducing AI in Core Land Services
- Citizens can get Application Status by Calling 16122
- Citizens' Rating about Service Quality

AI in Core Land Services Along with Call Centre 24/7





- Mouza Maps are getting DIZITIZED
- Satellite Image-based Land type



Zoning Database for Protecting Agricultural Land

The screenshot shows a web interface with the following components:

সংক্ষিপ্ত তথ্য:

মৌজার নামঃ হাৎনী

বিদ্যাপত্র নামঃ	গ্রাফা
জেলা নামঃ	মহানগর
খানা উপজেলা নামঃ	মির্জাপুর
ইউনিয়ন নামঃ	জলদিয়া
মৌজার নামঃ	হাৎনী:
মৌজা সফটওয়্যারঃ	১৩৭১

প্রধান শ্রেণী অনুসারে জমির শতকরা পরিমাণঃ

শ্রেণী	শতকরা পরিমাণ
কৃষিজ জমি	45.4 %
গ্রামীণ মসজিদ	25.4 %
অন্যান্য কৃষিকাজঃ	0.1 %
সড়ক	11.5 %
অন্যান্য	17.6 %

উপ শ্রেণী অনুসারে জমির শতকরা পরিমাণঃ

উপ শ্রেণী	শতকরা পরিমাণ
ঝিঁঝিঁ জমি	39.2 %
খেসা	4.0 %
এক ফসলী জমি	0.6 %
দুই ফসলী জমি	5.6 %
উপজেলা সড়ক	2.5 %
গাছাধার বেষ্টিত গ্রামীণ মসজিদ	25.3 %
গাছাধার/অন্যান্য সড়ক	1.2 %
গ্রামীণ সড়ক	0.0 %
পুকুর	8.2 %
ঘাটা	4.2 %
ইটি জমি	0.1 %
সিঁড়ি	0.1 %

Legend

- Agriculture
- Residential
- Water
- Road
- Open Area
- Open Area
- Open Area
- Open Area
- Open Area
- Open Area
- Open Area
- Open Area
- Open Area
- Open Area
- Open Area
- Open Area

The map background shows a satellite view of agricultural land with various zoning overlays. On the right side, there is a layer control panel with the following layers:

- Highlighted Layer
- Data layer
- Jamda's boundary
- Zone name

UN Public Service Award 2020 for Smart Land Ownership Transfer System



ই-মিউটেশন বাস্তবায়নের স্বীকৃতিস্বরূপ ভূমি মন্ত্রণালয় জাতিসংঘের মর্যাদাপূর্ণ United Nations Public Service Award 2020 অর্জন করে



United Nations Public Service Awards

Winner

Category on Developing transparent and accountable public institutions

This certificate is given in recognition of the contribution of

e-Mutation

Ministry of Land

People's Republic of Bangladesh

*for innovation and excellence in public services supporting the implementation
of the 2030 Agenda for Sustainable Development*

A handwritten signature in black ink, appearing to be '刘振民' (Liu Zhenmin), is written over a horizontal line.

LIU Zhenmin

Under-Secretary-General for Economic and Social Affairs

23 June 2020



UN - WSIS Award 2022 for Smart Land Tax System



SOPs/Guidelines under Digitization, Knowledge Management & Performance

Cluster A: Digitization & Service Delivery

- 1. Guideline for Agent-based Service Design**
- 2. Guideline for Systems Sustainability through ALAMS**
- 3. Guideline for Citizen-centric Service Design (Smart Connect)**
- 4. Guideline for Land Data Security and Data Sharing**

Smart Land Service: *Key Targets*

1. Converting all Land Services into Smart Services

2026 > 60%

2031 > 100%

1041 > 100%

2. Shifting All Land Service Applications to SMART APP

2026 > 60%

2031 > 80%

1041 >

100%

3. Eliminating Discretionary Powers of Land Officials

2026 > 80%

2031 > 100%

1041 > 100%

4. Linking with Other Ministry/Organizations' Smart Services

2026 > 50%

2031 > 80%

1041 >

100%

5. Eliminating Unnecessary and Redundant Discretionary Powers

“Realizing the Potential Property Valuation to Support Economic Growth in the Country”

CONSOLACION OFELIA Q. AGCAOILI

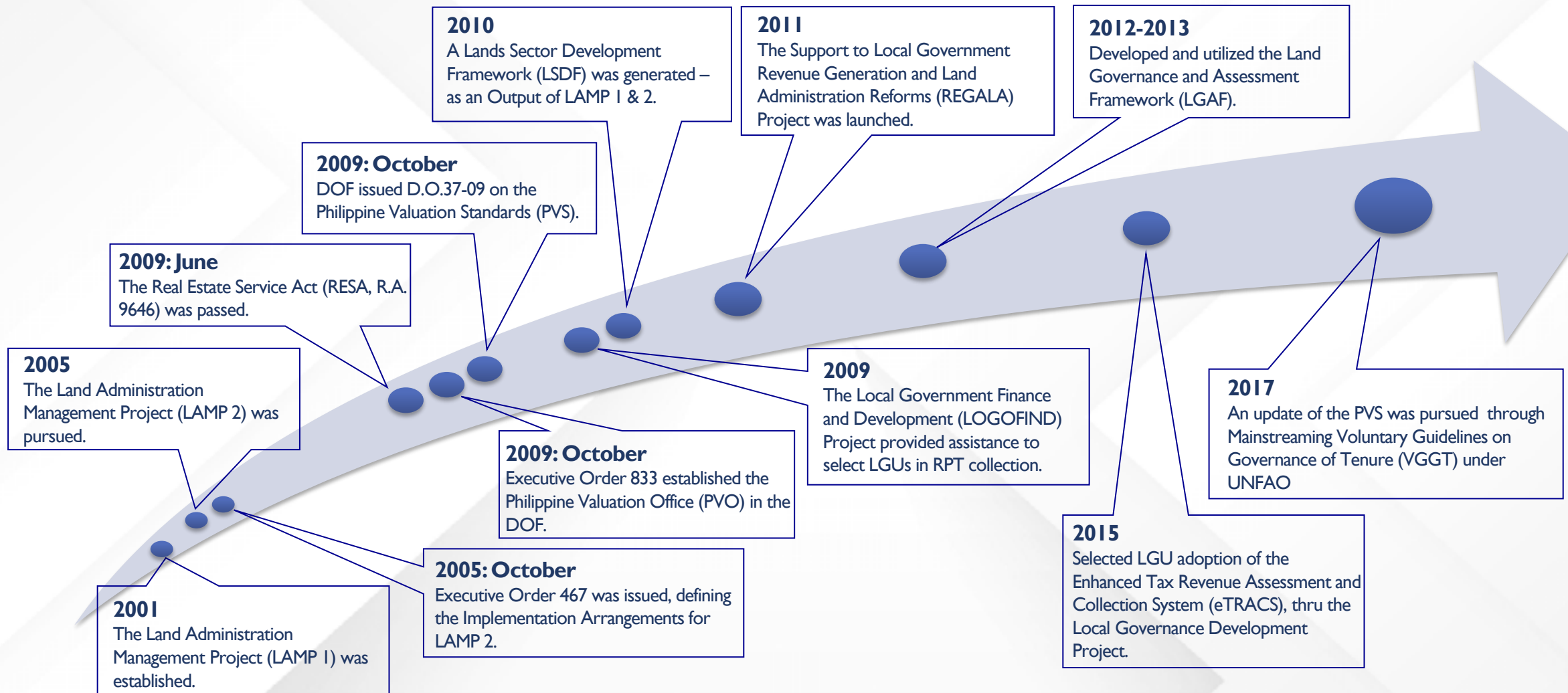
Executive Director

Bureau of Local Government Finance-Department of Finance

Philippines

May 13-17, 2024

THE PHILIPPINE LAND MANAGEMENT REFORM ROADMAP



Vision: Efficient and effective management of all lands and other natural resources for the benefit of present and future Filipinos and promote optimal use and sustainable management of land and natural resources (over-all)

Mission. The Mission of the sector is to:

- ❑ Accelerate recognition, protection and disposition of land rights and claims to ensure tenure security (new)
- ❑ Establish an affordable, simple, demand-driven, open, efficient and effective LAM services. (enhance LSDF 2018-2030)
- ❑ Establish an effective and transparent land valuation and taxation system to support inclusive and sustainable growth. (enhance LSDF 2018-2030)
- ❑ Develop an integrated, accessible and modern geospatial land information system for all. (LSDF 2018-2030)
- ❑ Strengthen appropriate and responsive grievance mechanisms (formal, traditional, informal, alternative) to peacefully resolve land conflicts and tenurial concerns (new)



Strategies

Land Administration

A. LAM Policy reforms

- ❑ A Multi-stakeholder approach in updating and rationalization of public land laws and policies adopted
- ❑ Open transparent and participative monitoring of land tenure and resource use is established

B. Land Titling, Registration and Tenure Security

- ❑ Implementation of National Land Titling Program is completed
- ❑ Secure accurate, simplified and affordable land registration and records system and services is established
- ❑ A rationalized, transparent and simplified issuance of instruments is established

C. Survey and Mapping

- ❑ Implementation of national program to review and update the country's land classification is completed
- ❑ Cadastral survey is completed and cadastral maps are finalized
- ❑ Political boundary surveys are completed and disputes are resolved

Land Management and Governance

- ❑ Devolution and decentralization of public land management is completed
- ❑ LAM policy reforms are approved and implemented (Legislative and Executive)
- ❑ Open, transparent and efficient monitoring of land use and development, issuance of permits and regulations is established

Land Information Systems and Management

- ❑ Linkage of National Spatial Data Infrastructure (NDSI) to national ICT framework is established
- ❑ Comprehensive LIM policy and strategic framework for standards and procedure is adopted and mainstreamed
- ❑ Collaborative governance framework for LIM and inter-agency coordination is strengthened
- ❑ LAM services and LGU capacity building is decentralized

Land Valuation and Market Development

- ❑ LGU revenue through local real property tax is strengthened
- ❑ An integrated national real property valuation and assessment system is established
- ❑ Philippine Valuation Standards is adopted
- ❑ A natural resource-based accounting and valuation system and integrated into the national capital accounts is adopted

Putting the Framework and Roadmap into a Reality

Land Valuation and Market Development

- LGU revenue through local property tax is strengthened
- An integral national real property valuation and assessment system is established
- Philippine Valuation Standards is adopted
- A natural resource-based accounting and valuation system and integrated into the national capital accounts adopted

LGU revenue through local property tax is strengthened

An integral national real property valuation and assessment system is established

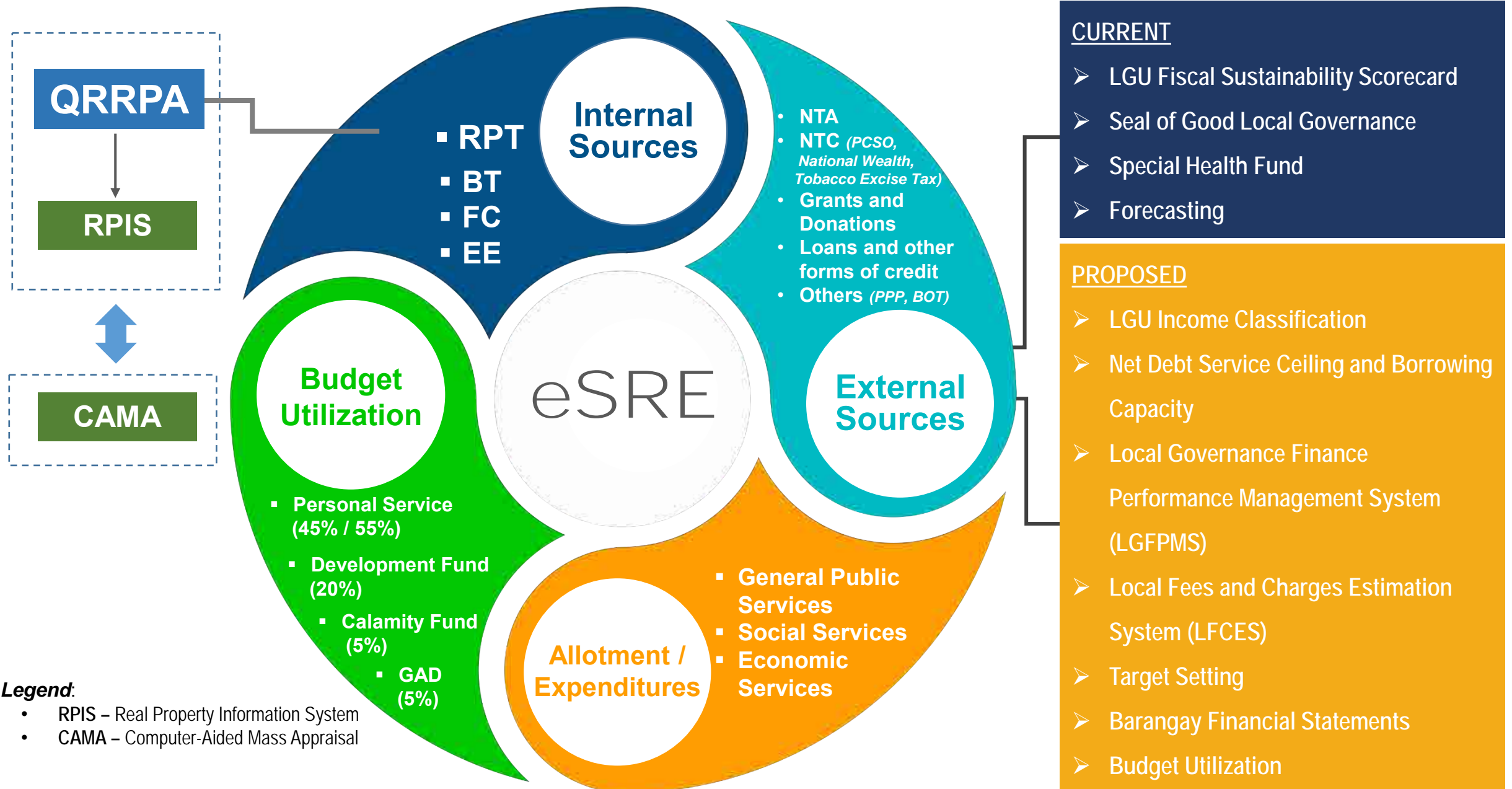
Philippine Valuation Standards is adopted

Real Property Valuation and Assessment Reform (RPVAR)

Salient Points of RPVAR



1. Roles of BLGF and establishment of the Real Property Valuation Services (RPVS)
2. Creation of central and regional consultative committee
3. Preparation and approval of the SMVs
4. Setting assessment levels and tax rates
5. Publication of assessment levels and tax rates
6. Use of SMVs
7. Regular updating of the SMVs
8. Conduct of capacity building interventions
9. Development of Real Property Information System
10. Transmission of real property data to the BLGF
11. Appointment of assessors
12. Qualification of local government assessors
13. Penal provisions
14. Transitory guidelines
15. Saving clause
16. Budgetary requirements for the updating of SMVs



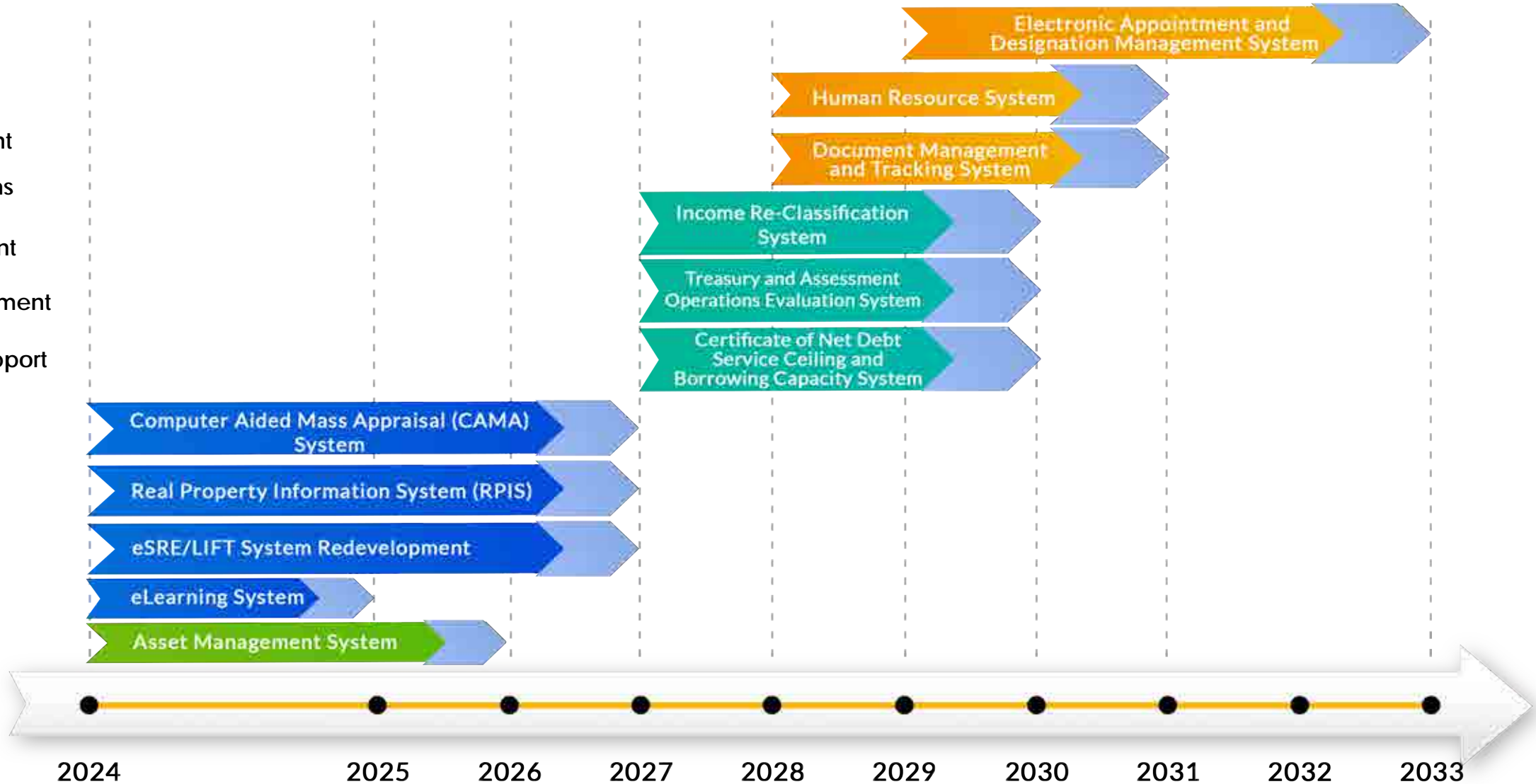
Legend:

- RPIS – Real Property Information System
- CAMA – Computer-Aided Mass Appraisal

Roadmap to Full Digitalization of BLGF Services

Legend:

- Ongoing Development
- LGRP Systems
- Enhancement
- For Development
- Decision Support System



Thank You &
Mabuhay!!!



Development of the Land and Housing Value Public Announcement System in Korea

Sanghun Lee

May 17, 2024

Introduction

Real Estate Value Public Announcement System

Land Value Public Announcement System

Reference Lot

Individual lot

Housing Value Public Announcement System

Detached house

Apartment house

Standard house

Individual house

Country Context

	Standard Land Price	Standard Price of Fair Market Value for Taxation	Standard Market Price	Appraised Market Price
Agency	Ministry of Land, Infrastructure and Transport (MOLIT)	Ministry of the Interior and Safety (MOIS)	National Tax Service (NTS)	Ministry of Economy and Finance (MOEF)
Purposes	To be used as the basis for calculating land acquisition compensation	Tax bases for local taxes, including acquisition tax, registration tax, and property tax	To serve as the tax base for transfer income tax within specific areas	To be utilized as the basis for collateral assessment and property revaluation
Assessor	Land Appraisers	Reference Land: Land Appraisers or Certified Appraisers	Public Officials	Certified Appraisers

Challenges

	Standard Land Price	Standard Price of Fair Market Value for Taxation	Standard Market Price	Appraised Market Price
Purposes	To be used as the basis for calculating land acquisition compensation	Tax bases for local taxes, including acquisition tax, registration tax, and property tax	To serve as the tax base for transfer income tax within specific areas	To be utilized as the basis for collateral assessment and property revaluation



A lack of coherence and an inability to produce objective land values

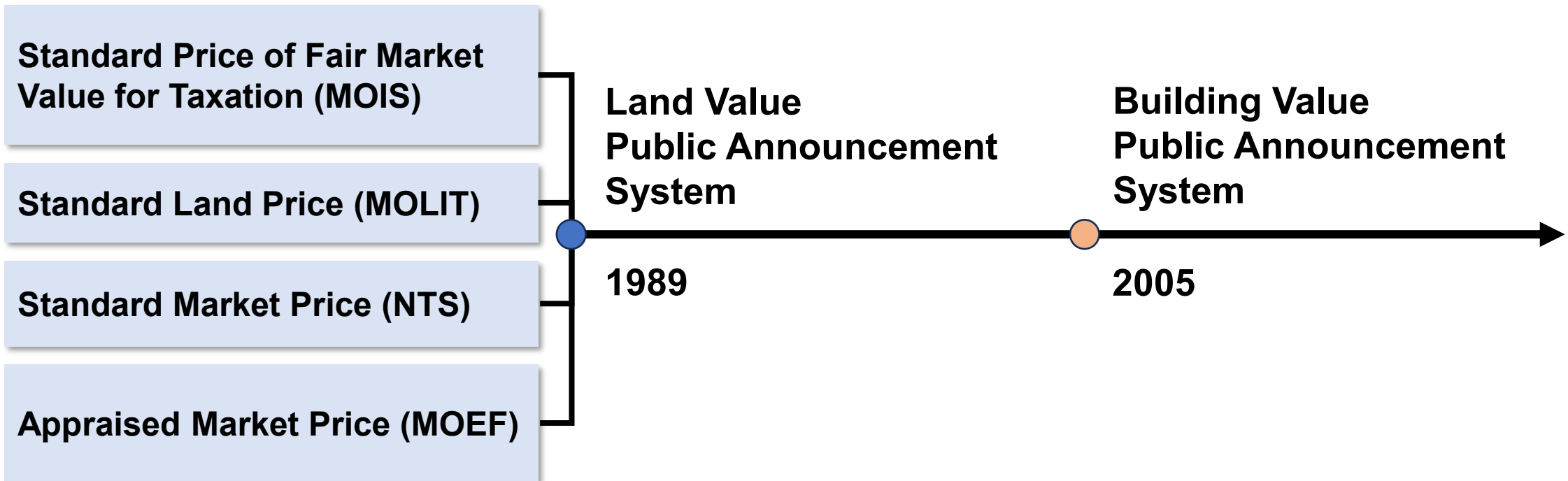


**Public Distrust
Administrative and financial waste**

Key Actions and Initiatives

To strengthen real estate holding tax and to realize fair taxation

- In 1989 land value public announcement system was introduced
- In 2005 housing value public announcement system was introduced



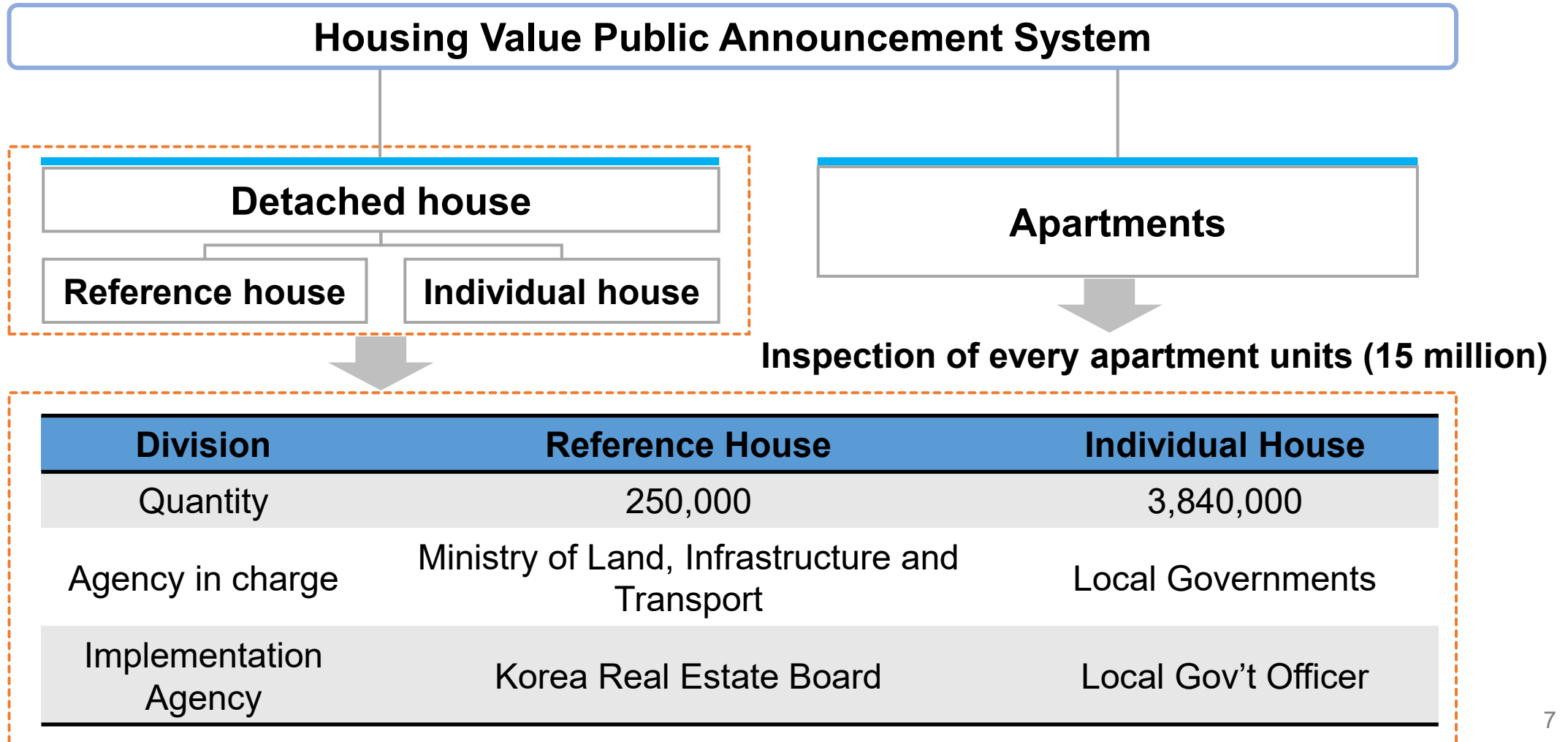
Key Actions and Initiatives

Land Value Public Announcement System

	Publicly Announced Value of Reference Lot	Publicly Announced Value of Individual Lot
Valuation Party	Certified Appraiser	Local government officials (city, county, district)
Valuation Object	Reference lot: 560,000 parcels	Individual lot: 35 million parcels
Main Valuation Method	Sales Comparison Method	Mass Valuation using Index Table
Base date	January 1 st of every year	January 1 st of every year
Public Announcement Date	End of February	End of May
Announced Value	Value per m ²	Value per m ²

Key Actions and Initiatives

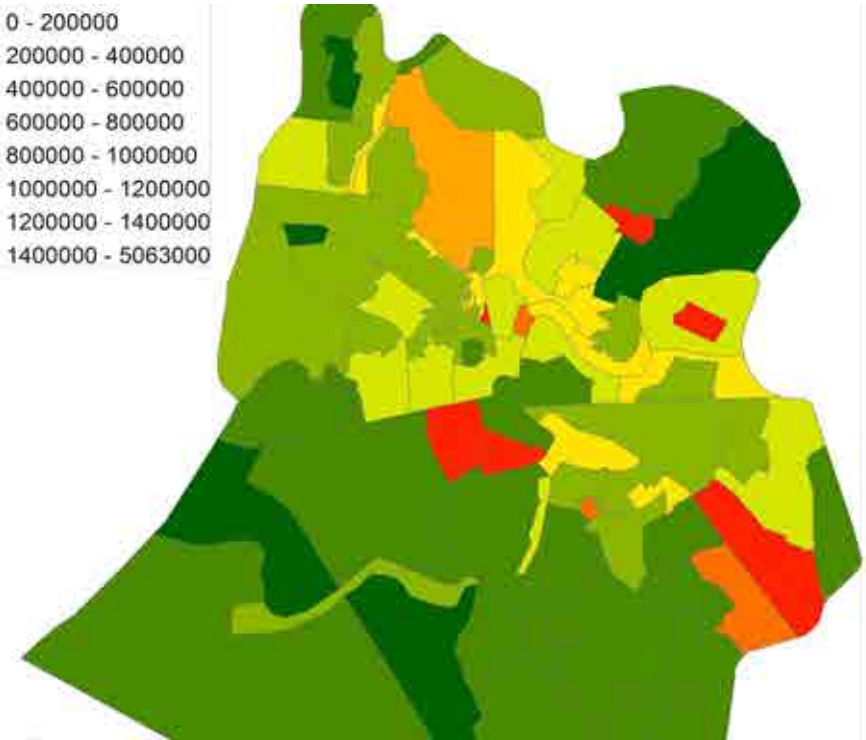
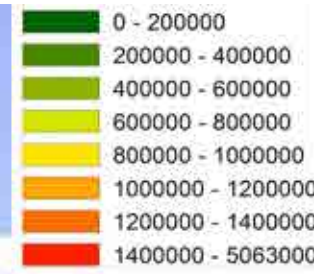
Housing Value Public Announcement System



Lessons Learned and Conclusion

The land and housing mass valuation system, based on national land and building information systems, enables a wide array of uses for land and housing values, including purposes such as welfare and taxation

Types	Purposes
Welfare (10 items)	Criteria for determining Basic Pension recipients, Criteria for determining recipients of Basic Livelihood Security, Criteria for determining Disability Pension, etc.
Fees (4 items)	Calculation of Development Impact Fees, Agricultural Land Conservation Fees, Conservation Fees in Development Restricted Areas, etc.
Administrative (18 items)	Calculation of damages and compensation in civil lawsuits, Verification of declared transaction prices, National wealth estimation, Fine calculation for non-permitted use of agricultural land, Criteria for imposing fines and penalties, etc.
Tax (8 items)	Local taxes (property tax, acquisition tax, registration license tax), national taxes (inheritance tax, gift tax, comprehensive real estate tax, capital gains tax), etc.
Real Estate Appraisal (20 items)	Compensation appraisal, auction appraisal, mortgage appraisal, estimated purchase price when claiming road acquisition, etc.



WORLD BANK LAND CONFERENCE 2024

TRANSFORMING ECONOMIES: EFFECTIVE LAND AND PROPERTY VALUATION AMID RAPID URBANIZATION

Presented by:
Dony Erwan Brillianto
Head of Planning and Cooperation Bureau,
Ministry of Agrarian Affairs and Spatial Planning/
Head of National Land Agency of Indonesia

Washington DC, 17 May 2024



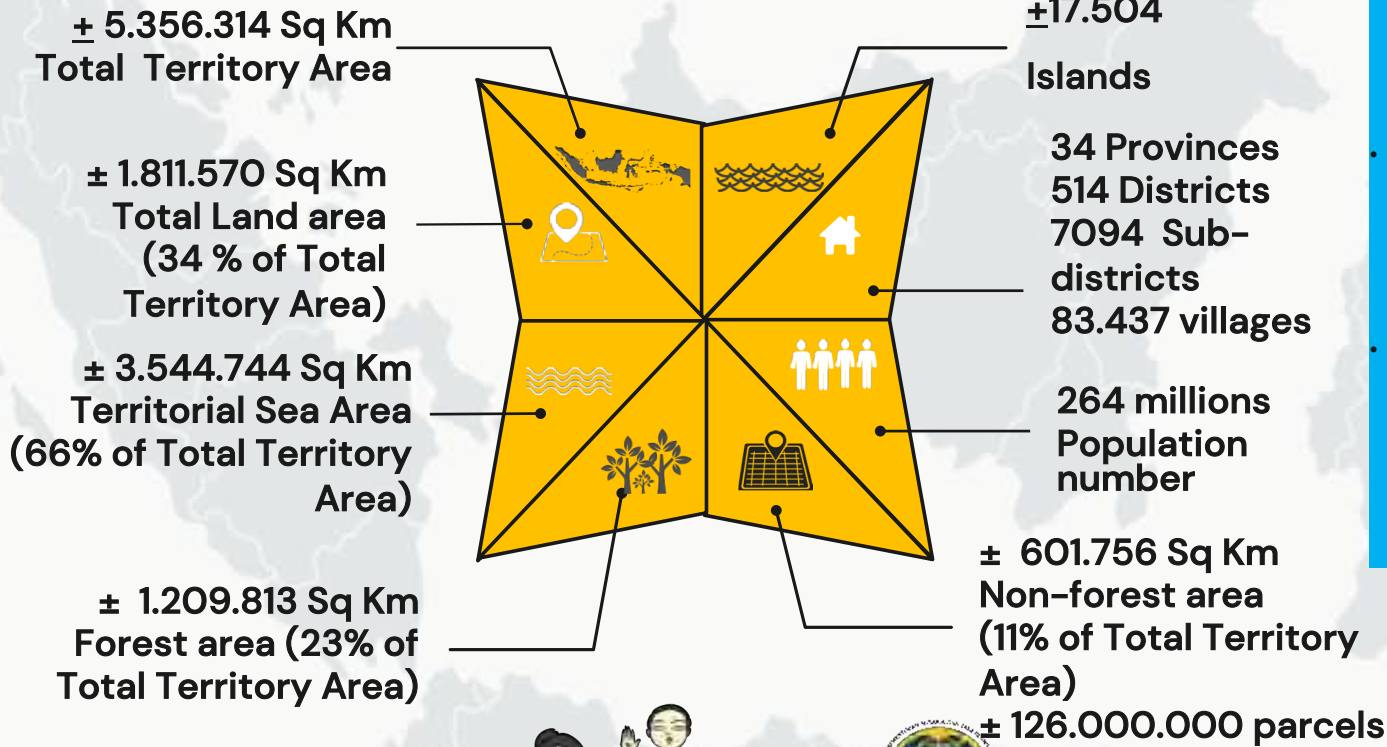
THE WORLD BANK



INDONESIA AT A GLANCE



ATR/BPN
maju dan modern



17.590 employees
(including ± 2.279 internal cadastral surveyors)



33 Regional Offices
486 Local Offices

- Since 2017, the land registration system in Indonesia has been changing quite massive due to the implementation of **complete-systematic land registration program (called PTSL)**.
- PTSL is an innovation method from the government of Indonesia to provide the basic needs of the community by administering parcels and issuing the land certificate.
- The rate of land registration which was previously less than one million parcels per year, increased by 5 million parcels in 2017 until 9 million parcels by 2020.



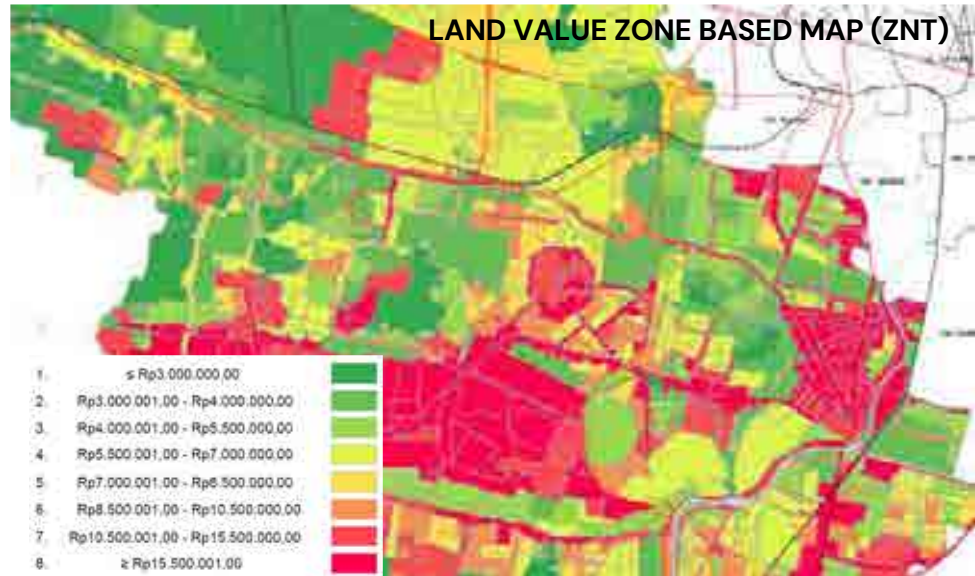
"ALL LAND IN INDONESIA MUST BE REGISTERED BY 2025..."

126 MILLION PARCELS

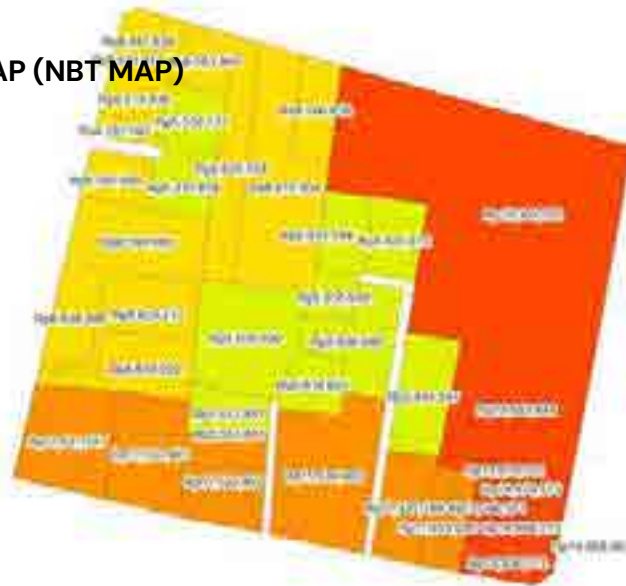
Land parcel registration progress up to April 2024

111,8 million parcels registered (88,7 %)	14,2 million parcels (11,3%)
90,3 million parcels certified (71,7 %)	35,7 million parcels (28,3%)

LAND VALUE INFORMATION INDONESIA



LAND VALUE PARCEL BASED MAP (NBT MAP)



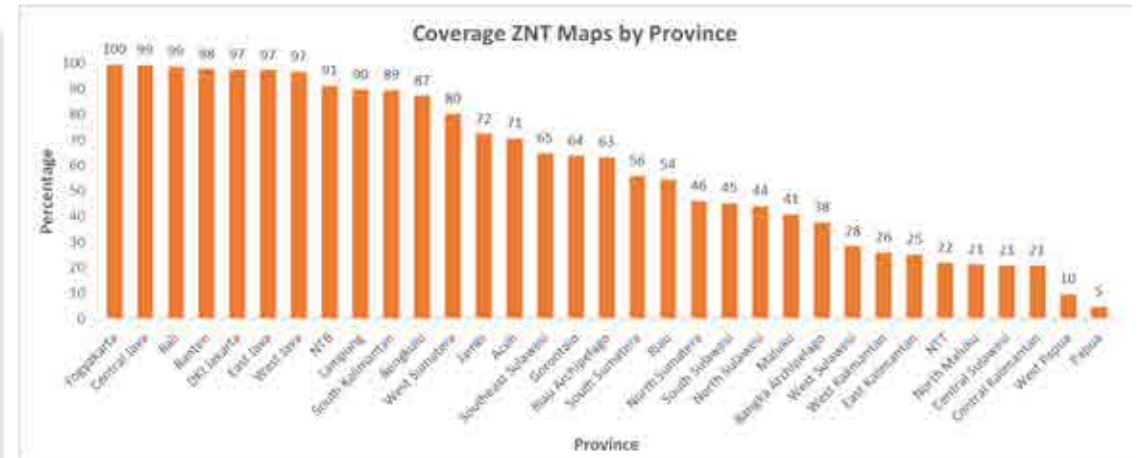
METHOD	ZNT	NBT MAP
MAPPING BASIS	Zone	Land Parcel
COLLECTING DATA (SAMPLE)	Surveying transaction dan offer data	Surveying transaction dan offer data
SAMPLE DISTRIBUTION	At least 3 sample in each zone	Spread evenly across all independent variables are represented
DATA PROCESSING	Average of land value sample in each zone	Geographically Weighted Regression (GWR). The effect of independent variables to land value (dependent variable)
QUALITY CONTROL	<p>Standard Deviation Relative every zone is less than</p> <ul style="list-style-type: none"> • 30% for scale 1:25.000 • 25% for scale 1:10.000 • 20% for scale 1:2.500 	<p>a. Sample (model prediction)</p> <ul style="list-style-type: none"> • $R^2 > 80\%$ • Spatial Autocorrelation should be random • MAPE less than 20% <p>b. Population (Prediction all land parcel)</p> <ul style="list-style-type: none"> • Coefficient of variation by zone should be less than 30% • Local Indicator Spatial Association (LISA) → for detecting outlier value prediction

CHALLENGES



ATR/BPN
maju dan modern

Distribution Of Land Value Zone Map (ZNT) Conditions in Indonesia (January 2024)

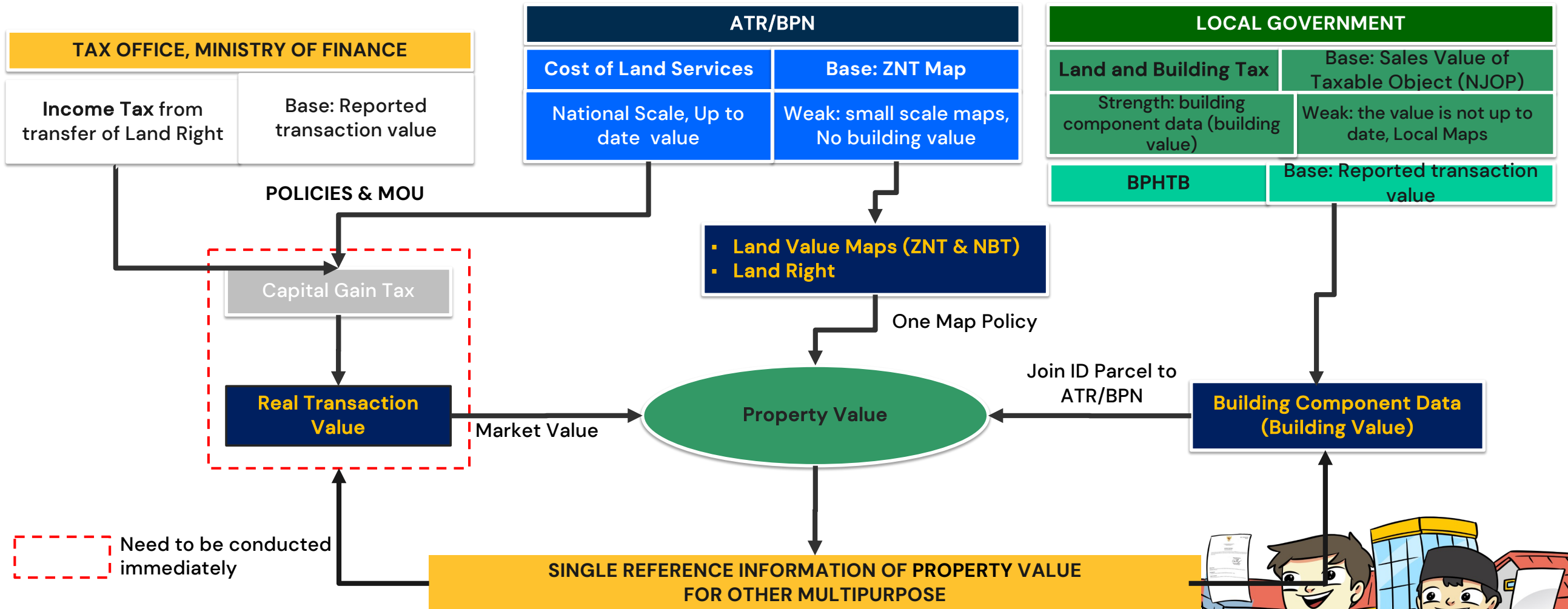


❖ Currently, there are many provinces that still have low land value zone coverage (green polygon). Overall only **58,2 % of Indonesian area** that covered with the land value information.

❖ Some of the cause are:

- ❑ There is no Ministerial (ATR/BPN) regulation regarding land assessment yet, so the collaboration with several agencies is experiencing problems.
- ❑ There are several land value zone (ZNT) that have not yet been updated
- ❑ There is a lack of technical and technological capabilities available for land appraisers and supporting resources in preparing land value zones, there is an urgency to increase their competency and technical training

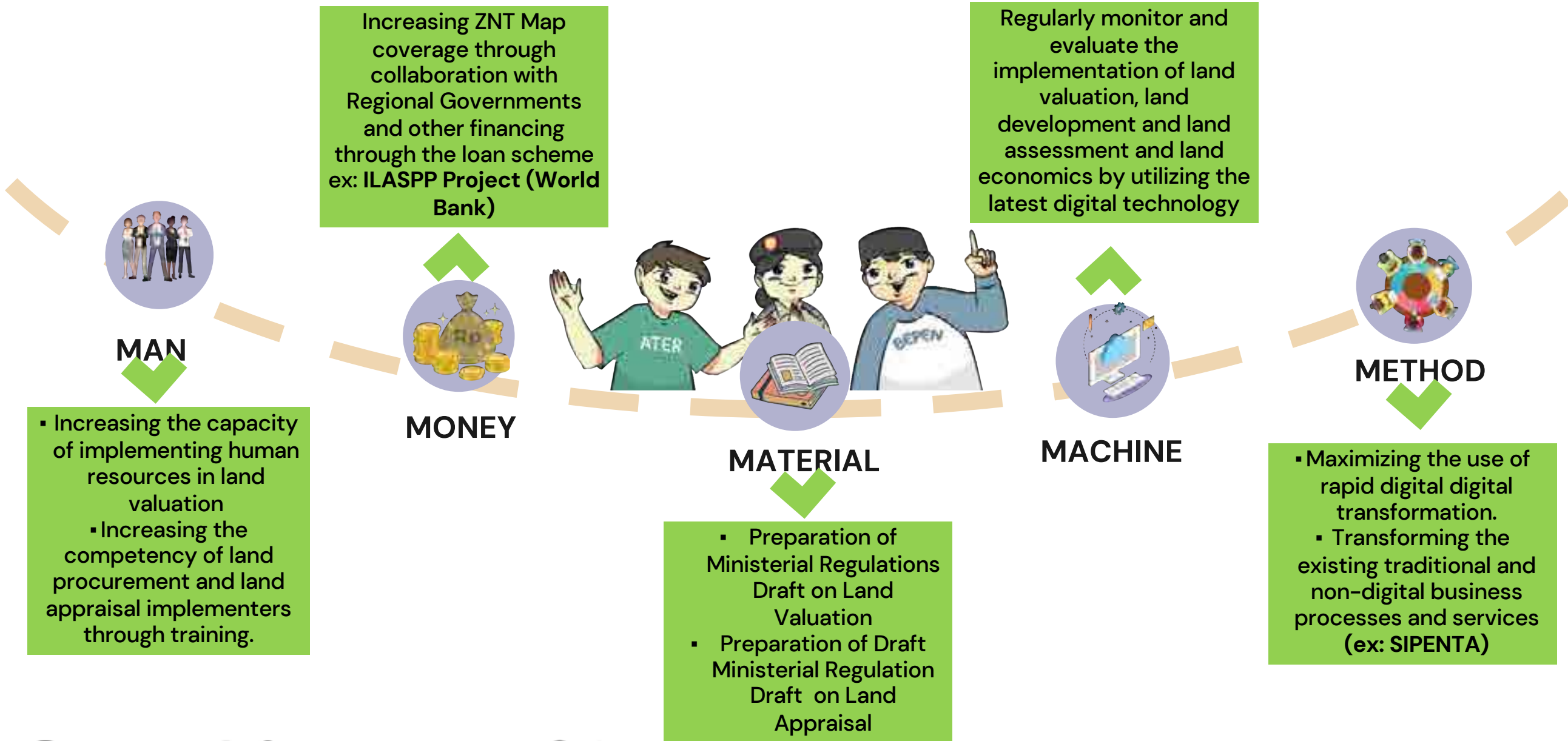
LAND VALUATION AS SINGLE REFERENCES



Need to be conducted immediately



STRATEGIES FOR THE FUTURE




THANK YOU






Ministry of Agrarian Affairs and Spatial
Planning/National Land Agency

Maju dan Modern

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  Kementerian ATR/BPN

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▶ PROGRAM TO ACCELERATE
AGRARIAN REFORM



THE WORLD BANK

PARTICIPATORY MAPPING TO IMPROVE LAND CERTAINTY

World Bank Land Conference 2024

Washington DC, May 17, 2024



Overview of One Map Project

- **Program Objective:** To provide certainty on land tenure and land use at the village level in project areas in 10 provinces (Riau, Jambi, South Sumatra, West Kalimantan, Central Kalimantan, South Kalimantan, East Kalimantan, West Java, Central Java, East Java)
- **Executing Agency:** Ministry of Agrarian and Spatial Planning/National Land Agency (ATR/BPN)
- **Implementing Agency:** Geospatial Information Agency (BIG)
- **Period:** 2019 - 2024 (October 31, 2024)
- **Location: 10 Provinces** (out of 38 provinces in Indonesia)
- **Funding :** USD 200.000.000



Participatory Mapping in One Map Project



Objective: To establish clarity on actual land rights and land use at the village level in the target areas

- Enhance land/natural resources management
- Reduce poverty
- Bridge income disparities
- Generate employment opportunities

**Strong Ownership by Government
Advance Agrarian Reform Land
Administration System**

Participatory Mapping Aspects in Land Registration

Technical Guideline on Complete Systematic Land Registration with Participatory Mapping (PTSL PM), Directorate General of Agrarian Infrastructure, No: 002/JUKNIS-300.UK.01.01/ II/2019. February 1, 2019.

PARTICIPATORY

Involving the community, that land registration is no longer one-way



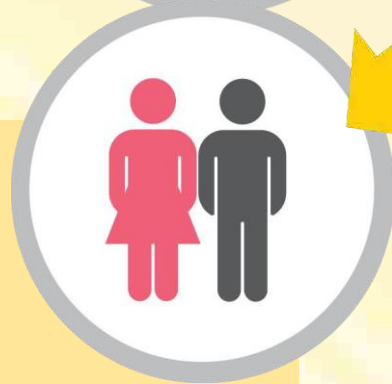
INCLUSIVE

Community involvement comes from various circles, community leaders, young men and women



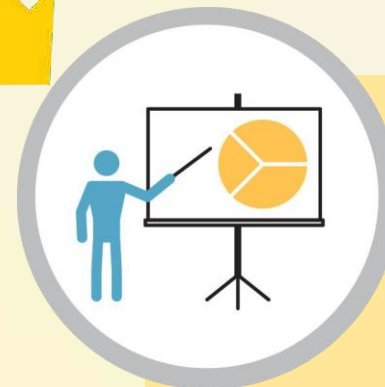
GENDER MAINSTREAMING

Equality for men and women



EMPOWERMENT

The community is given training, and get a **transfer of knowledge** from the surveyor



ENVIRONMENTAL STUDY AND SOCIAL ASPECT

The safeguards process **minimizes risks** that may arise from environmental and social aspects

Community Land Data Collectors (*Puldatan*)



Tasks: to support compilation of **physical and juridical data** in land registration process, including: land parcel, land register, land ownership.

Activity:

1. Install boundary marks
2. Attend measurement process
3. Agree on boundaries with neighboring parcels (*Contradictoire Delimitatie*).

142 Districts

6.465 Villages

Transformational Impacts of Participatory Mapping (from 2019 to 2024)

Job Creation and Private Sector Competitiveness



PPRA has driven many private sector jobs and efficiencies in the surveying and mapping sector.

1,900+
(from 100)

Licensed Surveyors

151+
(from 12)

Survey and Mapping Companies

7,900+
(from 100)

Asistants of Licensed Surveyors

31,206
(from 0)

Community Land Data Collectors

**6,057 (18.8%)
woman**

Follow-up and Improvement



1. Public awareness campaigns (*GEMAPATAS*) are carried out more intensively and collaboratively

2. Optimize capacity of Community Land Data Collectors (*Puldatan*)

3. Synergize funding with Regional Government and Village Government

Thank You



China's Practice and Exploration of Land and Resources Valuation

— *Based on Comprehensive Cadaster* —

Dr. Feng Wenli

Director General

China Land Surveying & Planning Institute

Ministry of Natural Resources, P.R. of China



CONTENTS



Introduction



**Country
Context**



Challenges



**Key actions
and initiatives**



**Lessons
learned**



**Conclusion and
next steps**

1 INTRODUCTION

Land is the Origin of Wealth

富田

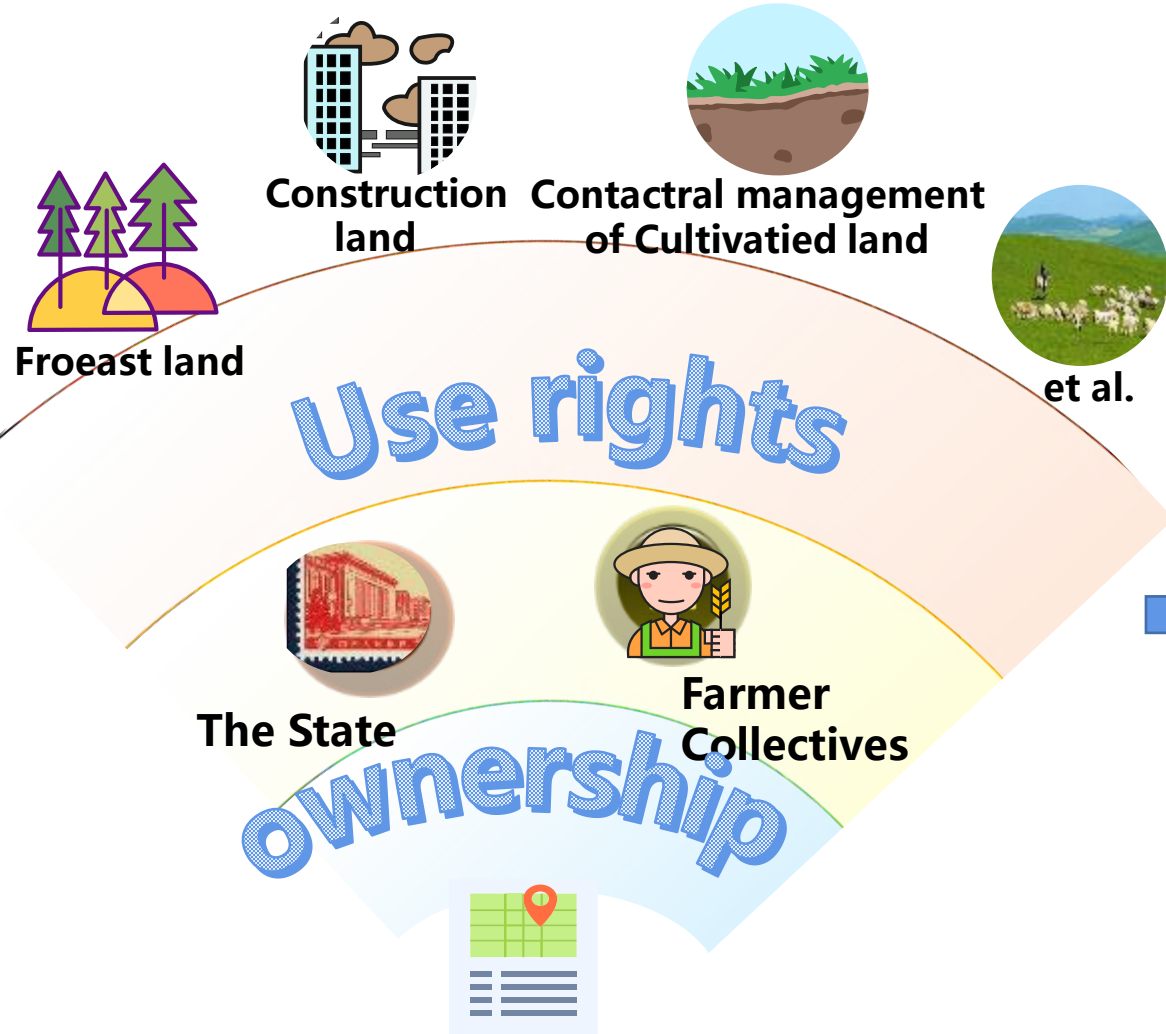
happiness



2 COUNTRY CONTEXT

The Land Tenure and Management System




Land Tenure



Land Paid use system



Land Price System

-  Land price publicity system
-  Monitoring land price system
-  Market transaction price system

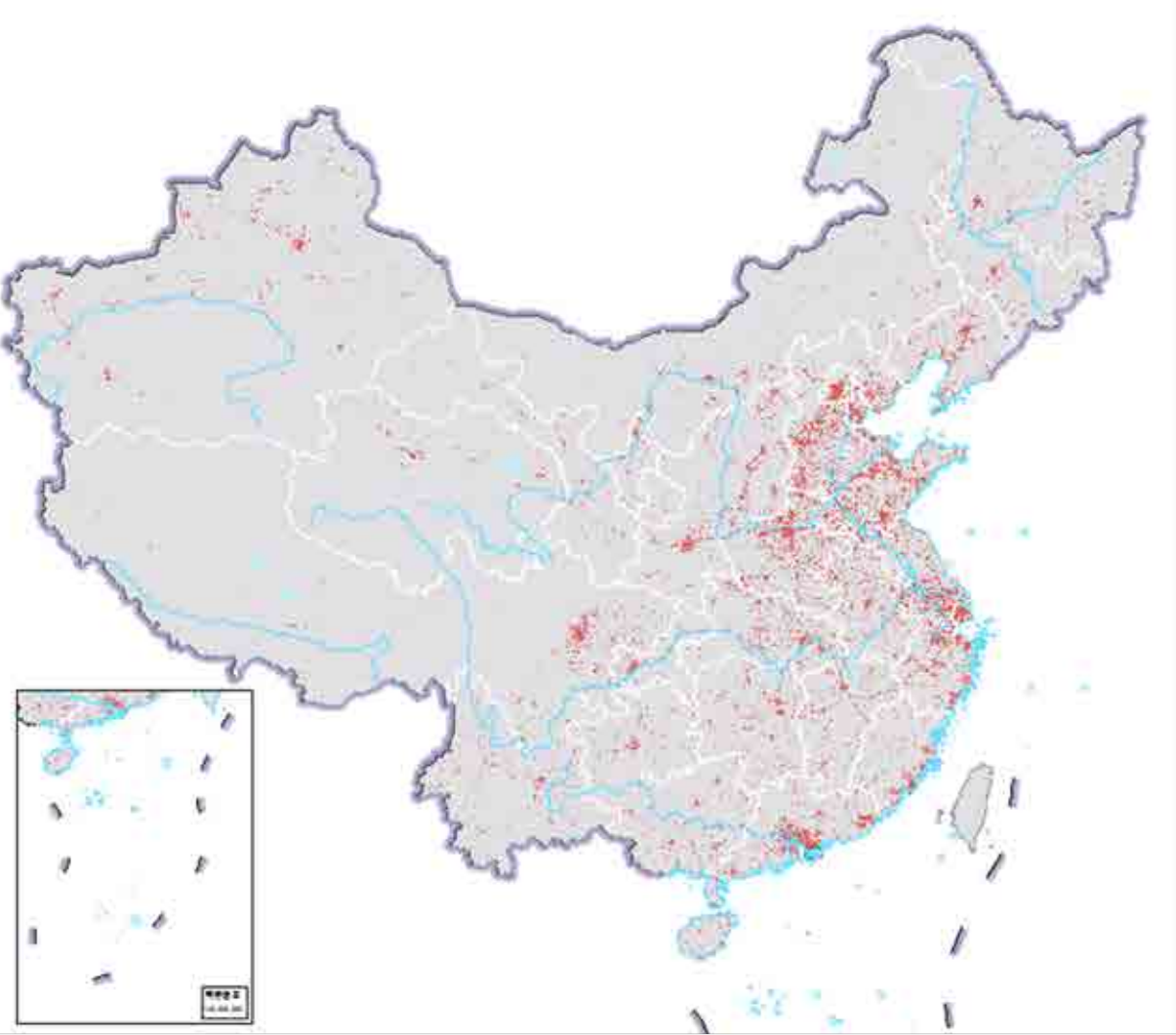
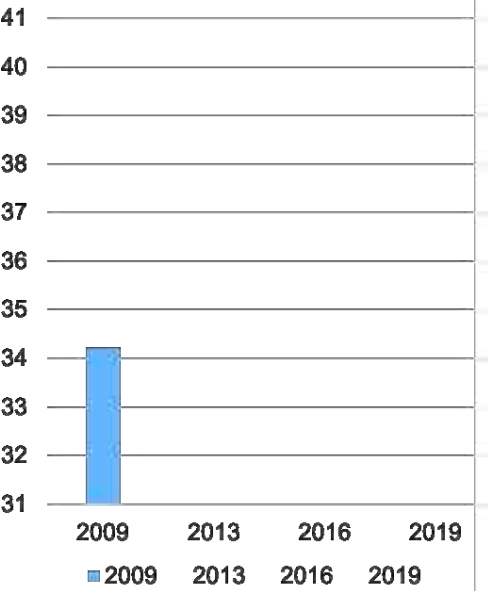
CHALLENGES

I .There's an urgent need to accelerate the development of theory and methodology for the integrated assessment of natural resource assets.

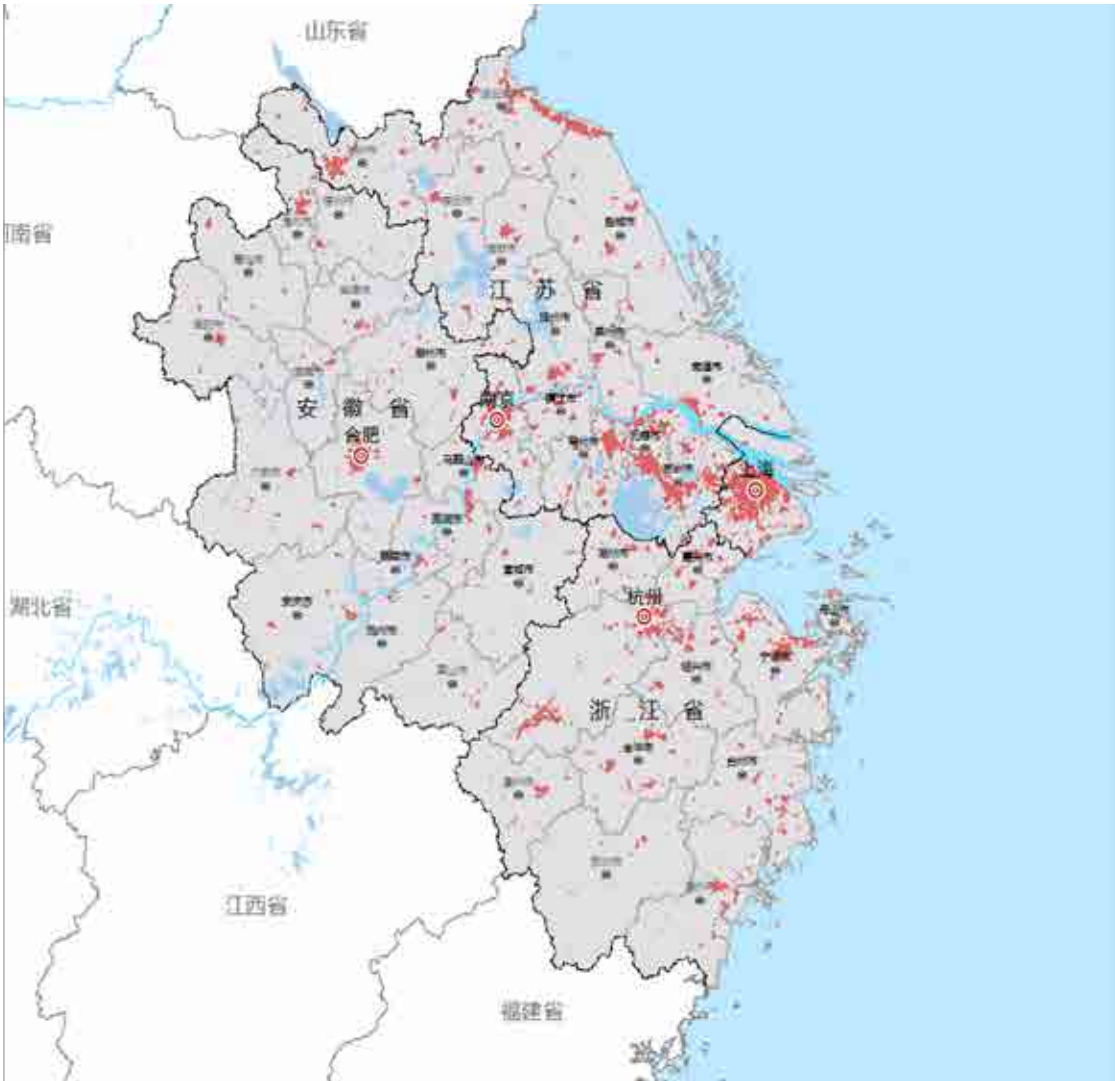
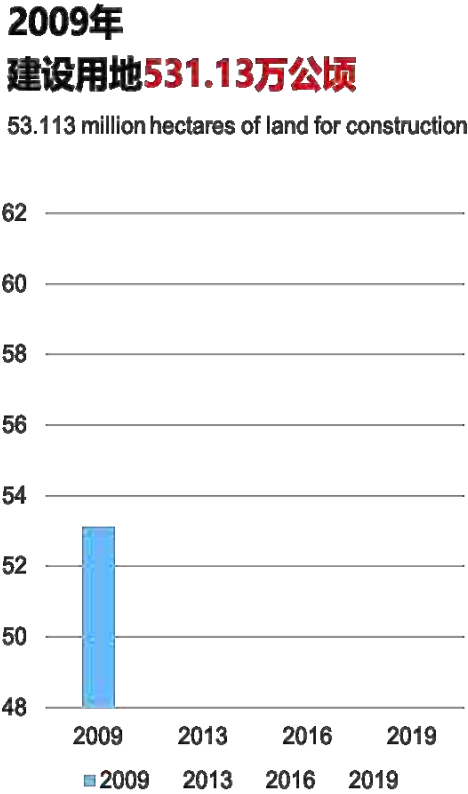


II. Accelerating industrialization and urbanization demand batched, intelligent assessment technologies.

2009年
建设用地3423.80万公顷
34.2380 million hectares of land for construction

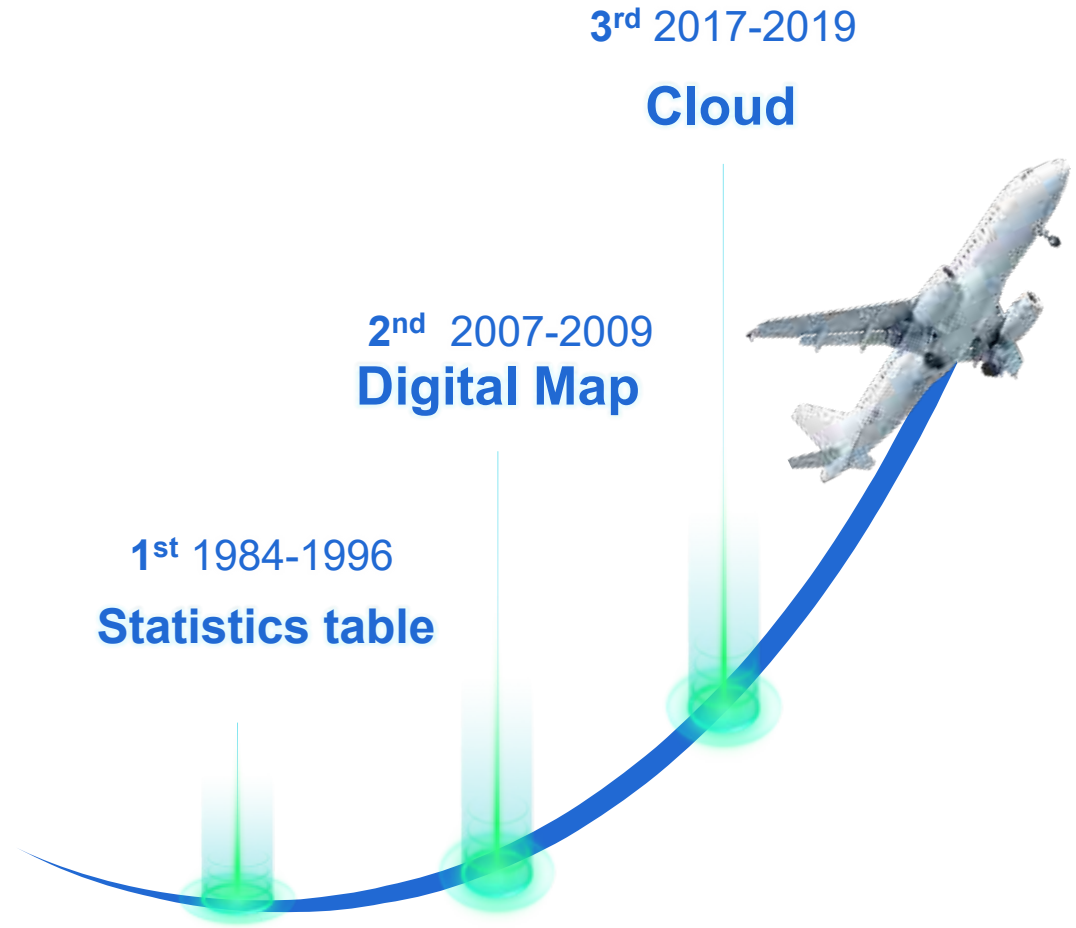
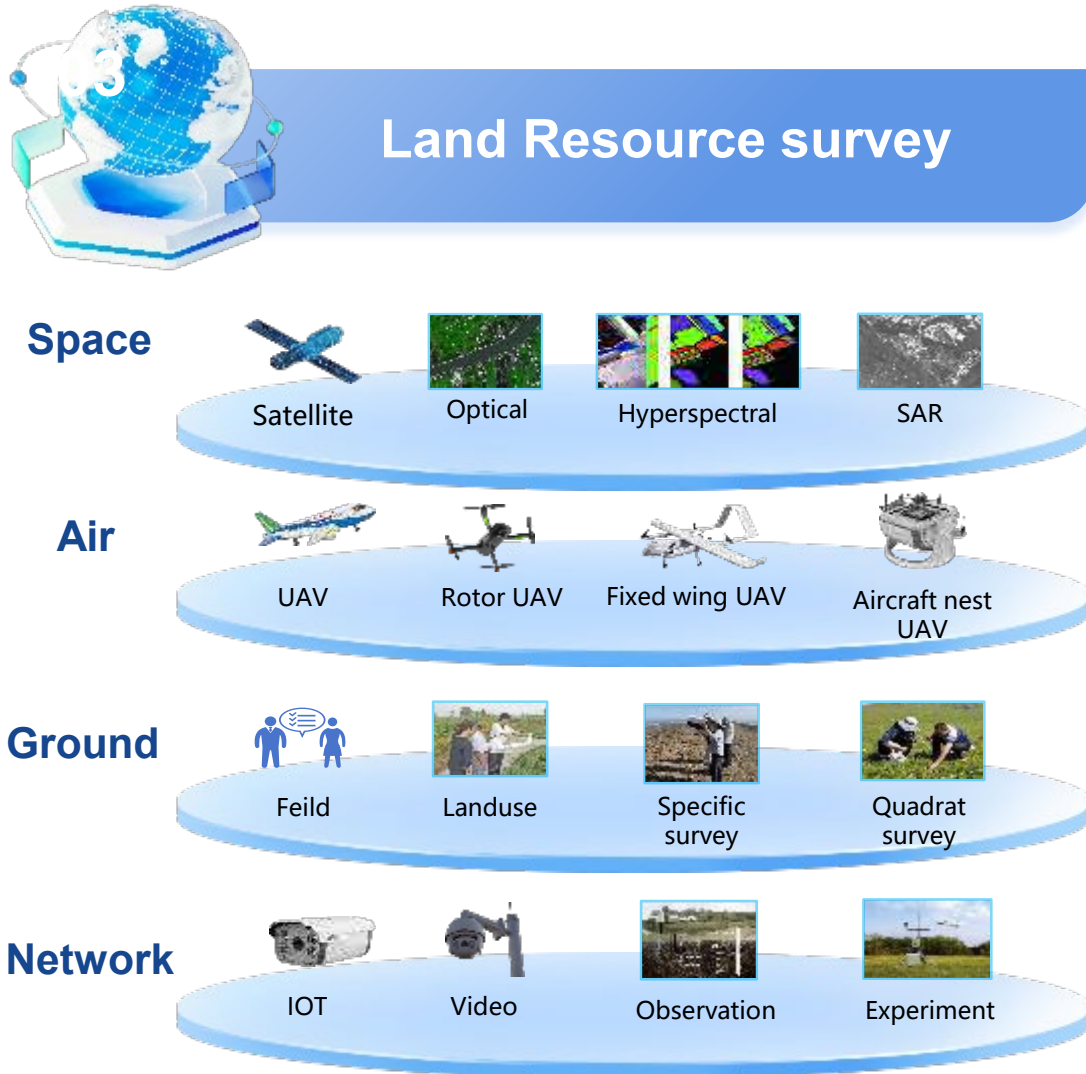


III. Addressing regional development imbalance requires utilizing land price policies and control measures to guide efficient resource allocation.



KEY ACTIONS AND INITIATIVES

I . Establishment of Comprehensive National Land Survey and Annual Update Mechanism

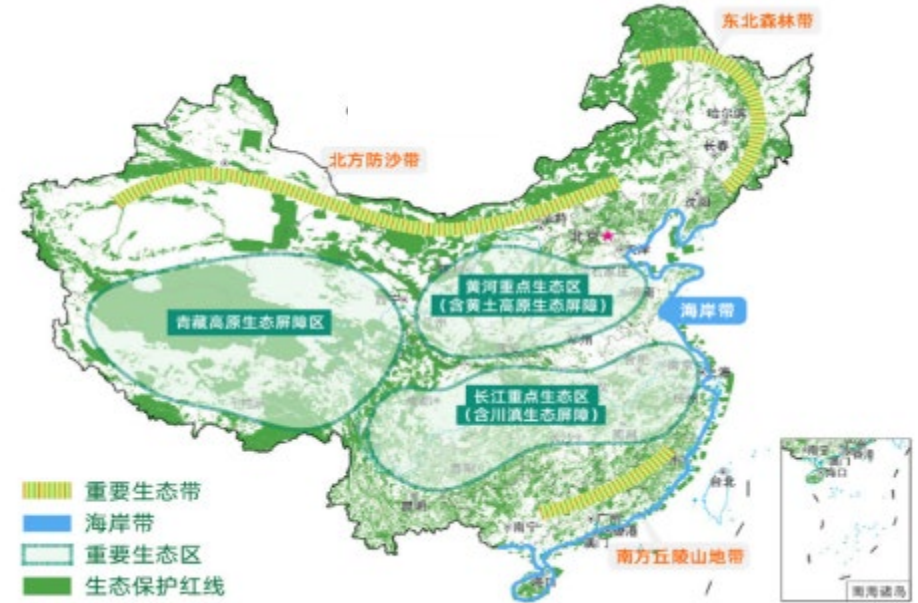


II Unified Cadastral Survey and Registration of Real Estate and Natural Resources

Major reform tasks

The first batch of important ecological space registrations

Establishing a National Real Estate Registration Information Basic Platform



KEY ACTIONS AND INITIATIVES

III Establishment of Land Price Disclosure, Monitoring, and Market Transaction Systems



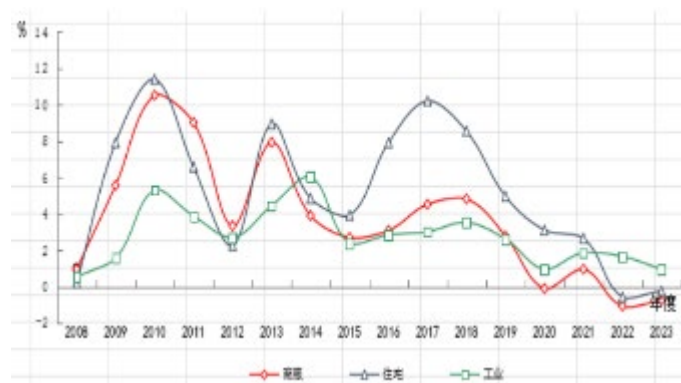
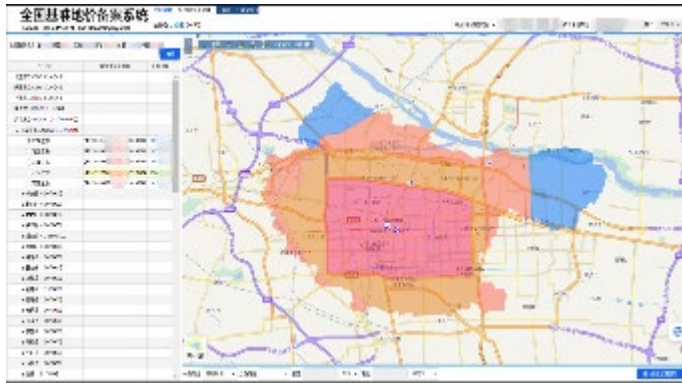
Land price disclosure system



Land price monitoring system



Market transaction price system



5 LESSONS LEARNED

Prerequisite

Full coverage Land Resource Survey

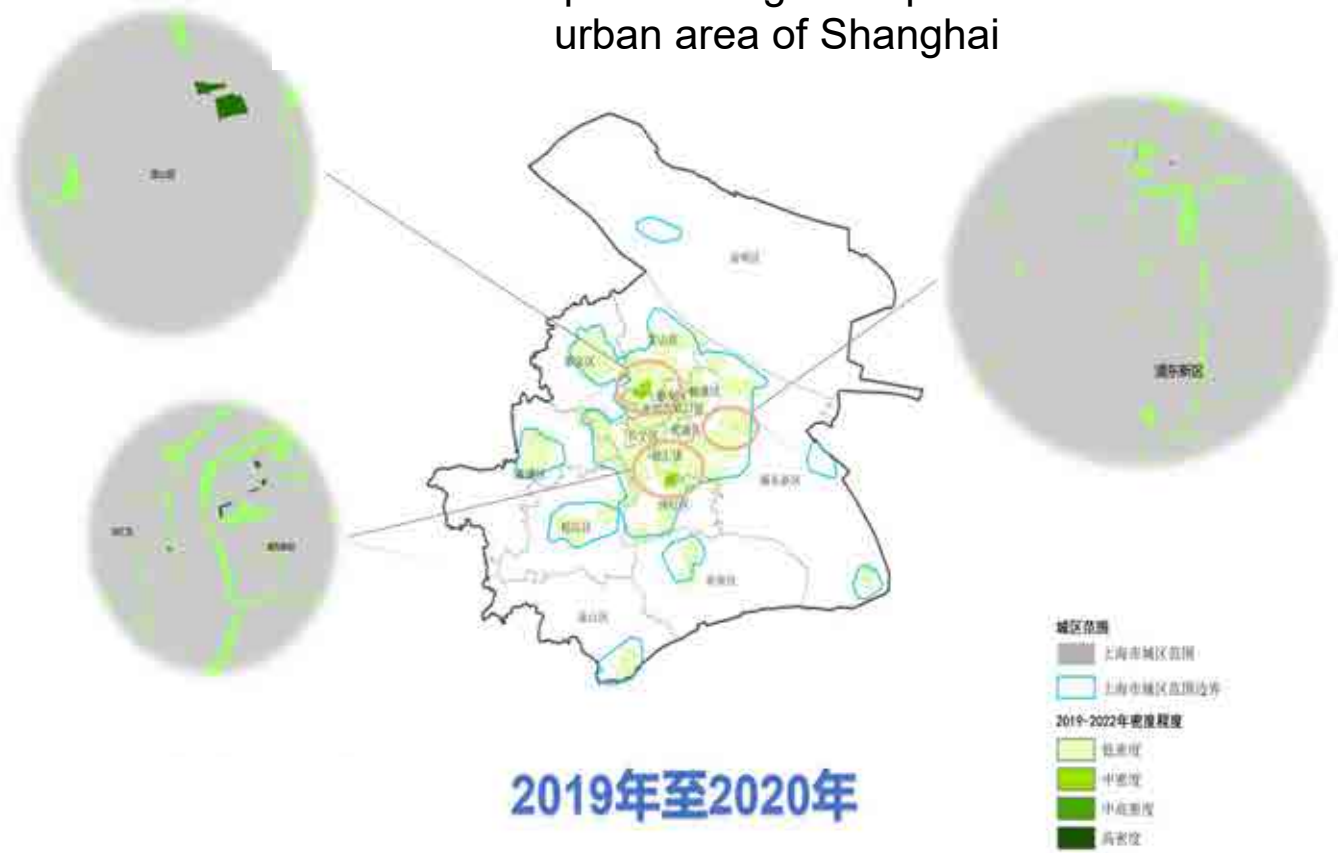
Lever

Dynamic monitoring of land price

Key to SDGs

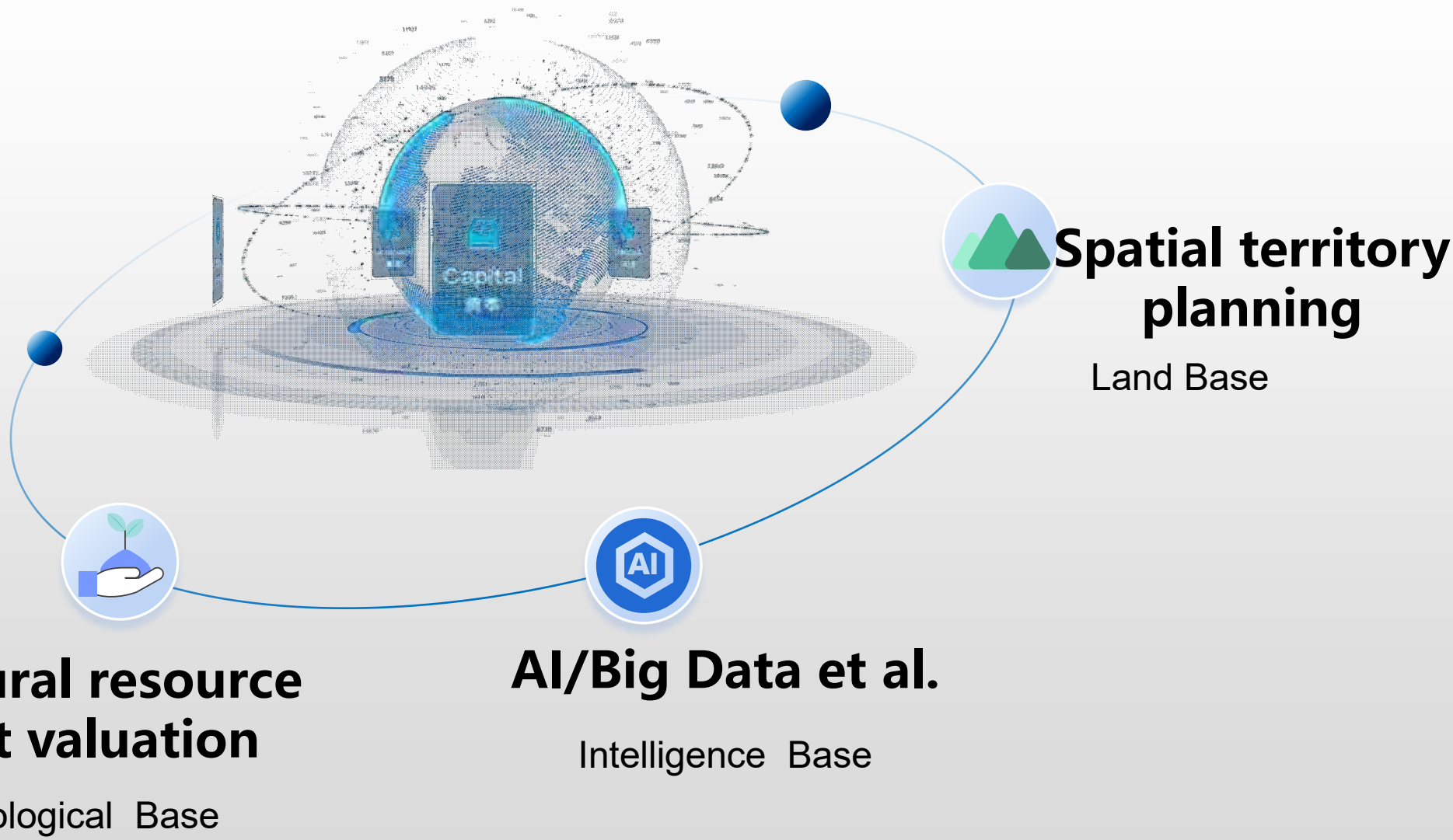
Conservation and intensive land use

Increase in parks and green spaces within the urban area of Shanghai



CONCLUSION AND NEXT STEP

To Develop and Improve Three Base Systems



Natural resource asset valuation

Ecological Base

AI/Big Data et al.

Intelligence Base

Spatial territory planning

Land Base

Beautiful Earth Wonderful Family





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East Asia & Pacific



Property Valuation and Taxation in ASEAN and Korea

World Bank Land Conference | May 17, 2024

The Challenge



1



Rapid economic growth, urbanization, demographic shifts

2



Increasing demand for land, property, municipal services

3



Environmental pressures like climate change, rising sea levels

4



Need robust land administration, valuation, taxation systems

Scope of Regional Report

Real Estate Valuation

- Foundation of real estate markets
- Enables informed decision-making
- Supports mortgage lending, accounting
- Basis for land value capture

Land and Property Tax

- Funds sustainable urbanization
- Encourages efficient land use
- Provides stable local revenue
- Finances climate resilience efforts



Report Overview

- Report covers 7 ASEAN countries : upper-middle-income (Indonesia, Malaysia, Thailand) and lower-middle-income (Cambodia, Lao PDR, Philippines, Vietnam); and Korea
- High variation in social/economic conditions and land/tax regimes
- Korea and Malaysia lead with advanced and digitally enabled systems; Cambodia and Lao PDR in earlier development stages
- Other countries show mixed progress, with ongoing transitions and capacity challenges
- Common issues identified: price underreporting, manual valuations, revaluation difficulties; successful practices highlighted

Main Findings



Land Administration

- Foundation for effective valuation and taxation
- Many countries making progress on digital records
- But land administration systems remain fragmented (coverage, data sharing)
- Opportunity: Develop multi-purpose land information systems

- **Thailand** has made significant progress in land parcel registration
- All private land parcels with titles are fully digitized and in the cadastre
- **Indonesia** Ongoing efforts to digitize public lands under the OneMap project



Real Estate Taxes

- Numerous taxes, with annual property tax and transfer tax most common
- However, there is a big untapped potential allow proportion of GDP and total revenues
- Main challenges include:
 - Under-declaration of prices
 - Outdates valuations
 - Lack of transparency
 - Weak enforcement and need to incentivize compliance

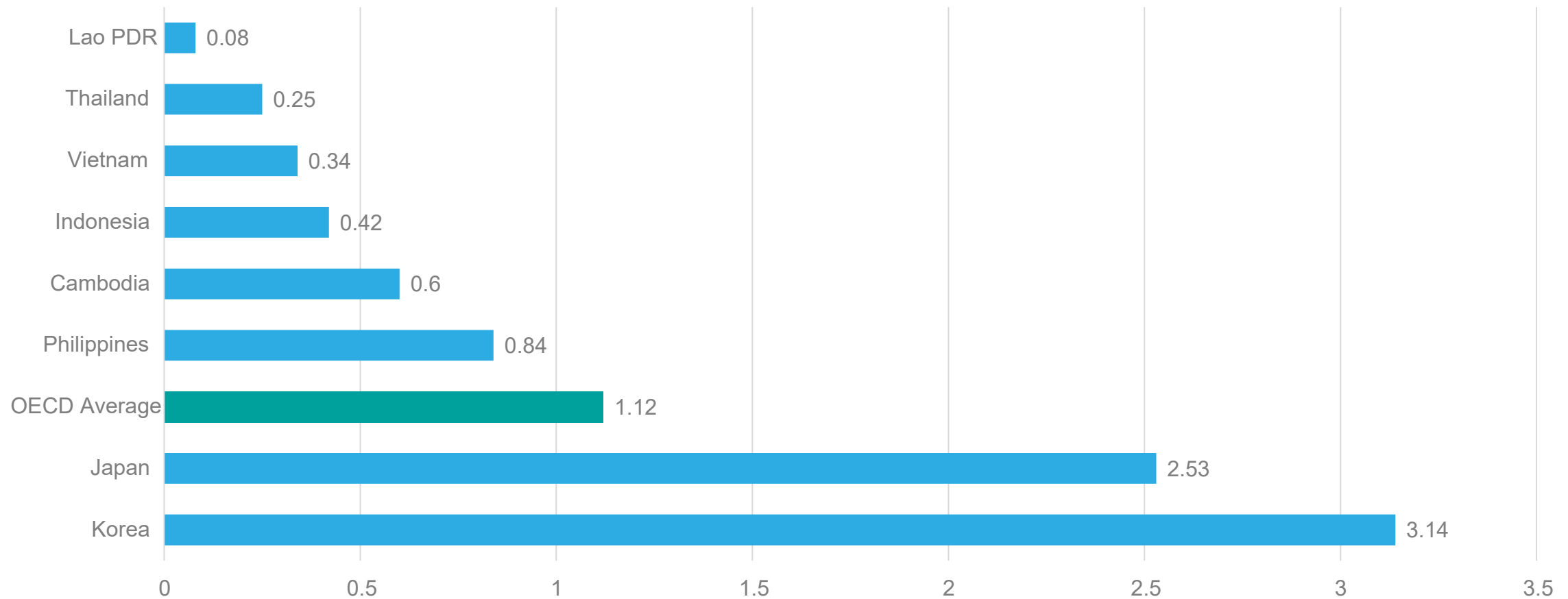


Real Estate Taxes in ASEAN Countries and Korea

Transaction-based Property Taxes and Fees in the Studied Countries

Country	Taxes and Fees	Source of Revenue	Tax Rates
Cambodia	Property Transfer Tax	National	4%
	Capital Gains Tax	National	20%
Indonesia	Acquisition Tax	Sub-national	5%
	Property Transfer Tax	National	2.5%
	Capital Gains Tax	National	2.5%
Korea	Stamp Tax	National	6-45%, but increasingly penal if gains in short term Generally, 4%
	Inheritance Tax		
	Gift Tax		
	Comprehensive Real Estate Holding Tax	Local	
	Capital Gains Tax		
	Acquisition Tax		
	Property Tax		
Local Resource and Facility Tax			
Lao PDR	Property Transfer Tax	National	Agricultural land– 1%; other land, land with buildings 2%
Malaysia	Property Transfer Tax (Stamp Duty)	National	First RM100,000 at 1%; Next RM400,000 at 2%; amount up to RM1m at 3%; over RM1 m at 4% Within 3 years 30%; in fourth year 20%; in fifth year 15%; after fifth year 0%.
	Real Property Gains Tax	National	
Philippines	Property Transfer Tax	Sub-national	0.5%- provinces; 0.75% for cities
	Capital Gains Tax	National	6%
	Estates Tax	National	6%
	Donor's Tax	National	6%
	Documentary Stamp Tax	National	1.5%
Thailand	Transfer Tax	Sub-national	2%
	Stamp Duty	National	0.5%
	Special Business Tax	Shared	3.3%
Vietnam	Registration Tax	National	0.5%
	Income Tax on Sale	National	2%

Recurrent Property Tax as % of GDP



Property Tax Policy and Administration

- Tax base coverage inconsistent
- Rates often inflexible; some use of progressivity
- Exemptions used to protect key sectors like agriculture
- Room to broaden base, make rates more flexible

- Valuations are a major challenge
- Lacks frequent revaluations, quality data, capacity
- Trend toward decentralizing to local governments
- But central support critical for consistency and access to technology



Valuation Practices

- Market value standard, but often outdated
- Mainly manual, only Korea using mass appraisal extensively
- Frequent revaluations stymied by capacity
- Transition to mass appraisal key for efficiency

- **Korea** utilizes a highly advanced Automated Valuation Model (AVM) for annual property revaluations
- The system integrates extensive property characteristics data, market transaction data, and spatial data
- Statistical analysis is used to develop valuation models that are then applied to individual properties



Data for Valuations

- Data scattered across agencies
- Declaration requirements vary
- Some efforts to build transaction databases
- Tech solutions emerging, e.g. aerial imagery

- **Vietnam** is developing a Multi-Purpose Land Information System (MPLIS)
- MPLIS aims to integrate land data from various government agencies into a centralized database
- In the future, MPLIS could serve as a platform for sharing land and property data across government levels and agencies



International Standards

- Alignment growing in importance for market confidence
- Most have adopted/aligned with key standards (IVSC, IFRS)
- But capacity to fully implement still lacking
- Compliance requires qualified valuers, quality data

- Continuing Professional Development (CPD) requirements for valuers vary significantly across ASEAN
- Some countries like **Malaysia and Thailand** require substantive CPD hours annually for license renewal
- Others like **Cambodia and Lao PDR** have limited or no mandatory CPD requirements



Recommendations



Declaration of Real Estate Transactions

- Develop transparent transaction price databases
- Incentivize accurate declarations via tax policy
- Impose strict penalties for non-compliance
- Capture prices via integration with banking, notaries



- Accelerate digitization of land records
- Integrate data across agencies via unique parcel IDs
- Develop multi-purpose land information systems
- Enable data sharing from local to central levels



Mass Appraisal

- Transition gradually to mass appraisal
- Secure political support, resources for transition
- Start with pilots, phased rollout based on readiness
- Leverage regional partnerships for knowledge sharing



- Ensure compliance with international standards
- Boost capacity of valuation profession
- Strengthen academic programs, research
- Support professionalization via industry associations





Thank You

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From Policy to Implementation : Innovations in Land Management and Land Use Planning for Green Growth.

Sri Lanka's Experience

By Dineka Jayasooriya
Director (Land Policy)
Ministry of Tourism & Lands
Sri Lanka
17th May, 2024

CONTENT

- Background
- Land Sector Challenges to Sri Lanka's Development
- Key Priorities in Land Administration of Ministry of Tourism & Lands
- Sri Lanka's Current Experience in Land Management

BACKGROUND

- Sri Lanka is an island which has a total land area of 65,610 km² situated in South Asian Region.
- The **82%** of lands are owned by the **state**
 - Land Commissioner General's Department
 - Land Reforms Commission
 - Sri Lanka Mahaweli Authority
 - Department of Forest Conservation
 - State Plantation Corporation
 - Janatha State Development Board
 - Plantation Companies
- Balanced portion of **18%** is claimed by the **Private Ownership**.



BACKGROUND

- Land Administration in Sri Lanka is institutionally and functionally fragmented and geographically incompleated.
- Institutions of Land Administration in Sri Lanka
 - Ministry of Tourism & Lands (Playing the key role)
 - Land Commissioner General's Department
 - Land Title Settlement Department
 - Survey Department of Sri Lanka
 - Land Use Policy Planning Department
 - Land Reforms Commission
 - Registrar General's Department
 - Valuation Department
 - Provincial Councils
 - Local Authorities

LAND SECTOR CHALLENGES TO SRI LANKA' S DEVELOPMENT

- ➡ Fragmented Land Records
- ➡ Underutilized Agriculture Lands
- ➡ Incomplete Land Tenure Data
- ➡ Heavily – Regulated Land Markets
- ➡ Underperforming Property Tax System

FRAGMENTED LAND RECORDS

- Multiple agencies participate in land management, resulting in multiple databases and poor data exchange.
- Cadastral operations hampered by incomplete digitization of paper records and multiple systems used to complete a single workflow.
- National Spatial Data Infrastructure (NSDI) needs further development to incorporate datasets, share them with the public, and contribute to decision-making.

UNDERUTILIZED AGRICULTURE LANDS

- Total underutilized lands of Sri Lanka are 358,123 ha as at 08.09.2023 (Source: LUPPD records).
- Restrictions on grants and permits on state lands hinder access to land to small-scale agricultural producers, who represent 80% of agricultural producers.
- Restriction of private ownership of agricultural land to 50 acres per person prevents economies of scale and hinders private sector agricultural investments (Land Reforms Law).
- Land fragmentation as a result of demographic growth continues to put downward pressure on agricultural productivity.

INCOMPLETE LAND TENURE DATA

- Survey Department struggles to service requests on a timely manner to make changes to state lands, creating backlogs.
- Full status on the location and use of lands owned by the state is not known.
- Regularization of informal occupations is hampered by the absence of an inventory on state lands.

HEAVILY – REGULATED LAND MARKETS

- The state has the ability to alienate land through permits, but they offer conditional rights, which can be cancelled for non-compliance.
- Insecure land tenure on grants and permits allocated on state lands inhibits households from realizing economic opportunities through collateral-based credit, investments, and migration.
- The request of permits is heavily regulated by the state creating situation where inheritances may be prevented due to a lack of compliance.

UNDERPERFORMING PROPERTY TAX SYSTEM

- The potential of property taxes to contribute to macroeconomic stability is limited by the outdated cadastral records.
- Local governments lack the capacity to conduct mass valuation to update property records.
- Fragmentation of land information systems has made it challenging for Provincial Councils to track tax revenue from stamp duties resulting from changes in ownership of a parcel.

KEY PRIORITIES IN LAND ADMINISTRATION OF MINISTRY OF TOURISM & LANDS

A. Policy Level

- Formulation and amendments of Policies.
- Formulation and amendments of Acts, Rules and Regulations
- Formulation of Manuals, Guidelines and Formats

B. Operational Level

- Integrated and automated robust and open Land Information System
- Inventory and rights registration on state lands and, automated revenue generation
- Land valuation and property taxation

C. Services Enhancement Level

- Capacity assessment
- Institutional strengthening
- Human Resource Development/ Capacity Building

SRI LANKA'S CURRENT EXPERIENCE IN LAND MANAGEMENT

✓ National Land Policy

- Act of Establish the National Land Commission

✓ Land Market

- “Urumaya (Heritance) Program”
- Long Term Land Leases for Investors

✓ Securing Land Rights

- Equal Access of all Women to Housing and Lands

NATIONAL LAND POLICY

ACT OF ESTABLISH THE NATIONAL LAND COMMISSION

- The thirteenth Amendment to the constitution of the democratic Socialist Republic of Sri Lanka, Appendix II – paragraph 3 is about the National Land Commission.
- According to this constitution the Government of Sri Lanka shall establish a National Land Commission which would be responsible for the formulation of national policy with regard to the use of State Land.
- *The Legal Draftsman Department drafted the preliminary act of “Establish the National Land Commission”.*

LAND MARKET

“URUMAYA (HERITANCE) PROGRAM”

- Permits and grants issued to the general public including mainly the farmer community under the Land Development Ordinance have to face various issues in utilizing for human development purposes due to being entitled to the absolute ownership of the land which they have developed and taken the possession of.
- “Urumaya (Heritance) Program” issue land deeds by *granting the absolute ownership of the lands* for who are holding permits and grants issued under the Land Development Ordinance.

LAND MARKET

LONG TERM LAND LEASES FOR INVESTORS

- Institutions that carry out projects approved by the Board of Investment of Sri Lanka for commercial activities make significant contributions to the economy by investing substantial amounts of capital, delivering development activities, and creating opportunities for employment in rural areas.
- State lands are granted for such commercial purposes on long term lease basis for 30 years under the normal procedure or up to 50 years under the approval of the Cabinet of Ministers.
- By repealing the Crown Lands Regulations the *period for a lease of a land for BOI projects shall be 99 years and period for land leases for commercial and agriculture activities shall be 50 years.*

SECURING LAND RIGHTS

EQUAL ACCESS OF ALL WOMEN TO HOUSING AND LANDS

- *Ensured the equal access of all women to housing and lands*, by including amendments to the Land Development Ordinance that restricts the inheritance rights of women and girls.

THANK YOU...!