

# Effective Land Administration A Framework and its Components

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UN GGIM Seminar “Effective Land Administration”

Deqing China  
September, 28th 2018





# Data



# Waiting Transactions



# Waiting Transactions

ICT changes  
Business



# Cadastral Maps



# Back up





# Purpose

- Peace Building and Security
- Smart and Resilient Societies
- Secure Tenure Rights for All
- Access to Land for All
- Sustainable Land Use
- Protected Environment
- Access to Basic Infrastructure (Water, Sanitation)
- Social Justice
- Resource Management
- Storage CO2 and Other
- Access to Credit
- Slum Upgrading
- Access to Housing
- City Management

# Needs

- Digital environment
- Overview of existing tenancy – complete coverage
- Faster, Cheaper, Good enough
- Within time limit – performance
- Conversion to legal system
- Maintainable



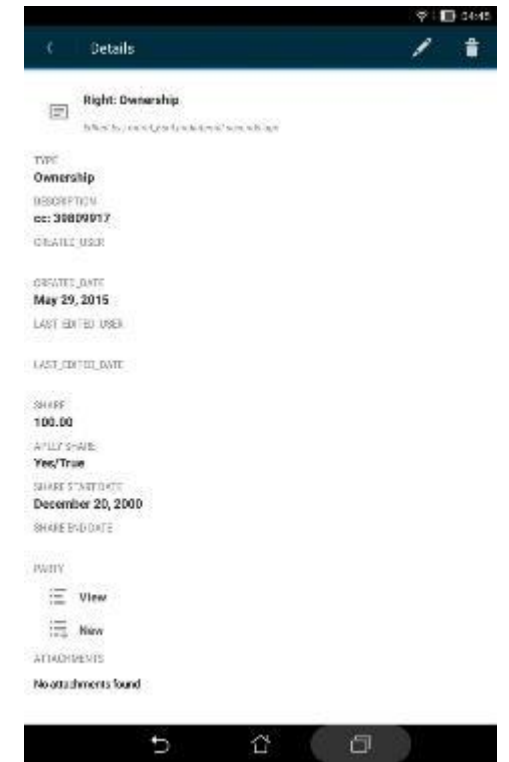
Multiplier

**Mission 3 Billion**

**10 Years**

# Integrated Approach

- Focus Land Titling



# Identification of Landobject



# Identification of Person



# Results – Shown Immediately after Acquisition



# Cloud


HOME ▾ LADM\_Colombia\_v3-Tenjo NEW MAP Mathilde ▾

Details Add Edit Basemap Save Share Print Directions Measure Bookmarks


About Content Legend


**Legend**

**Spatial unit**



**Spatial source**





**Spatial unit: Matricula: 484716 - (Lote 4)**

Label: Matricula: 484716 - (Lote 4)

created\_user  
created\_date  
last\_edited\_user  
last\_edited\_date

Attachments:  
Spatial  
unit\_17\_0\_ArcGISApp\_1432839210096

Edited by j.moral\_EsriLandInternal 23 hours ago

Zoom to Get Directions Edit

Show Related Records

Address
Right
Spatial source

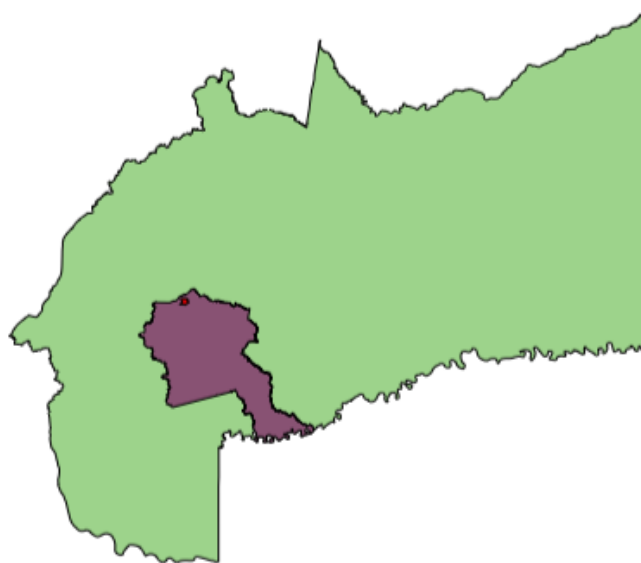
**Right (2 features)** Table Options ▾

Type	Description	created_user	created_date	last_edited_user	last_edited_date	Share	Apply share	Share start date	Share end date
Ownership	cc: 2929545		May 29, 2015			50.00	Yes/True	December 20, 2000	
Ownership	cc: 24287907		May 29, 2015			50.00	Yes/True	November 20, 2000	

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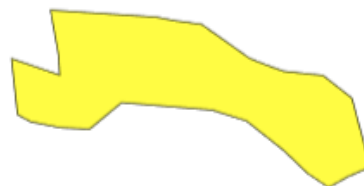


**DEPARTAMENTO DEL META**  
**MUNICIPIO DE VISTA HERMOSA**  
**VEREDA TERMALES**



**LEVANTAMIENTO DE INFORMACIÓN ESPACIAL DE PREDIOS**

**FECHA:** 24/04/2018



ESTE ES UN PRODUCTO RESULTANTE DE UN EJERCICIO ACADÉMICO LLEVADO A CABO POR KADASTER, DE HOLANDA (AGENCIA DE CATASTRO, REGISTRO Y CARTOGRAFÍA DE TIERRAS DEL REINO DE LOS PAISES BAJOS), Y LA UNIVERSIDAD DISTRITAL F. J. C., QUE BUSCA PROBAR Y AJUSTAR UNA METODOLOGÍA PARA EL LEVANTAMIENTO TOPOGRÁFICO DE PROPIEDADES DE TIERRAS RURALES. NO SE PUEDE DERIVAR NINGÚN DERECHO LEGAL DE ESTE DOCUMENTO, NI TIENE VALIDEZ JURÍDICA



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**VEREDA TERMALES**

**Nombre o identificación del Predio:**

**LAS CAMELIAS**



**Área (aproximada):**

**28 ha**



**DEPARTAMENTO DEL META  
MUNICIPIO DE VISTA HERMOSA  
VEREDA TERMALES**

**Nombre o identificación del predio: LAS CAMELIAS**

**Identificación de los propietarios / poseedores**

<b>Número Identificación</b>	<b>Nombre Completo</b>
C. C. 17290430	SERGIO ANTONIO GUERRERO
C. C. 40275828	LUZ ENIA VALENCIA OSPINA

**Fotos de los documentos y los propietarios / poseedores**



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**VEREDA TERMALES**

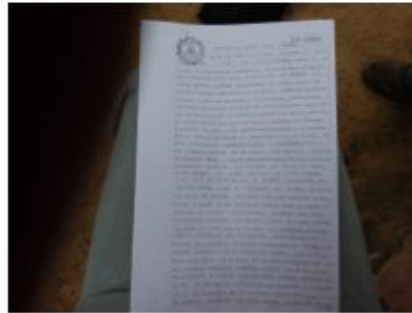
**Nombre o identificación del predio:**

**LAS CAMELIAS**

**Documentos que asocian el terreno con los propietarios / poseedores**

**Tipo de documento:**

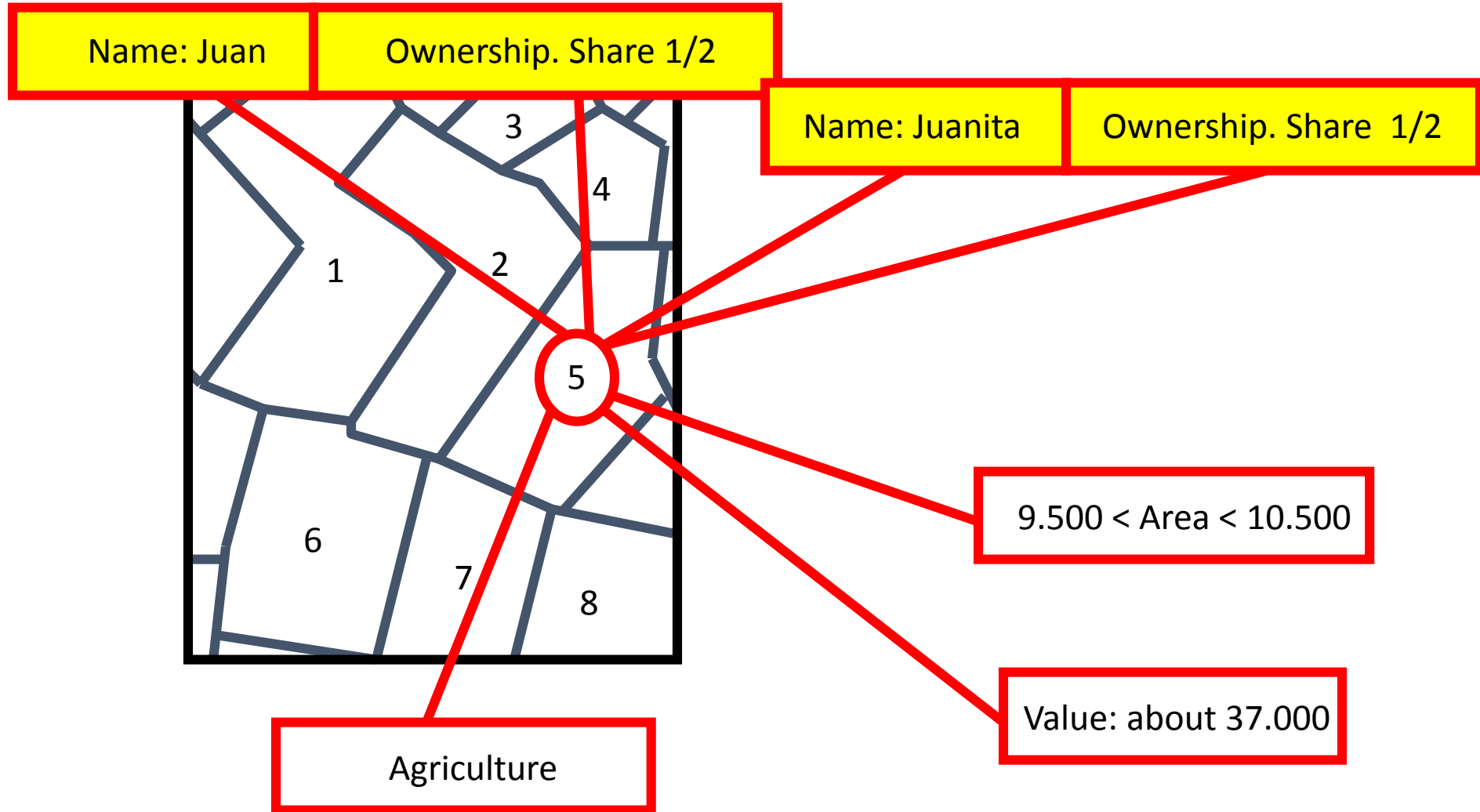
Propiedad



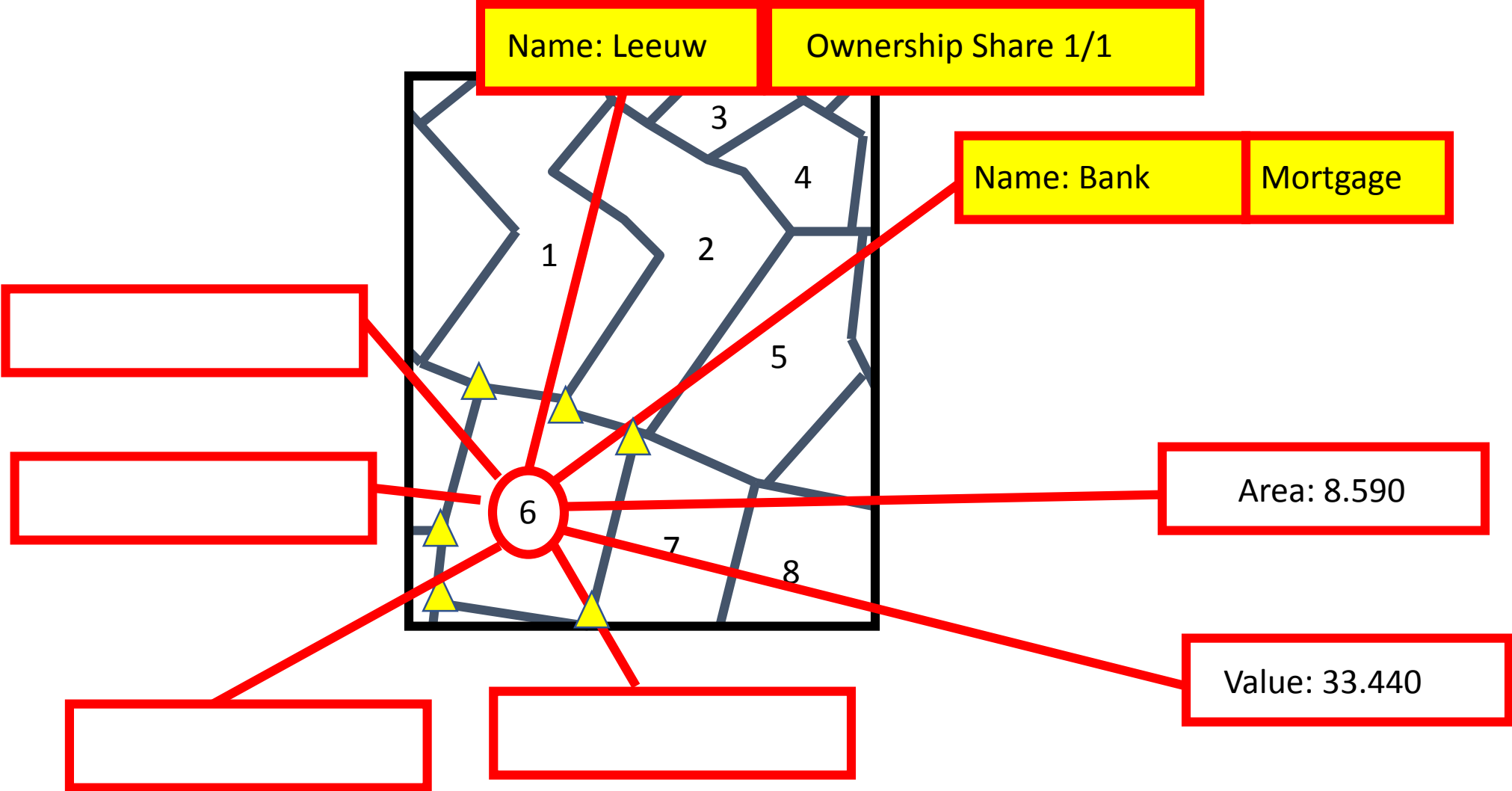




# Object Identification & Minimal Attributes



# Boundary Definition & Many Attributes



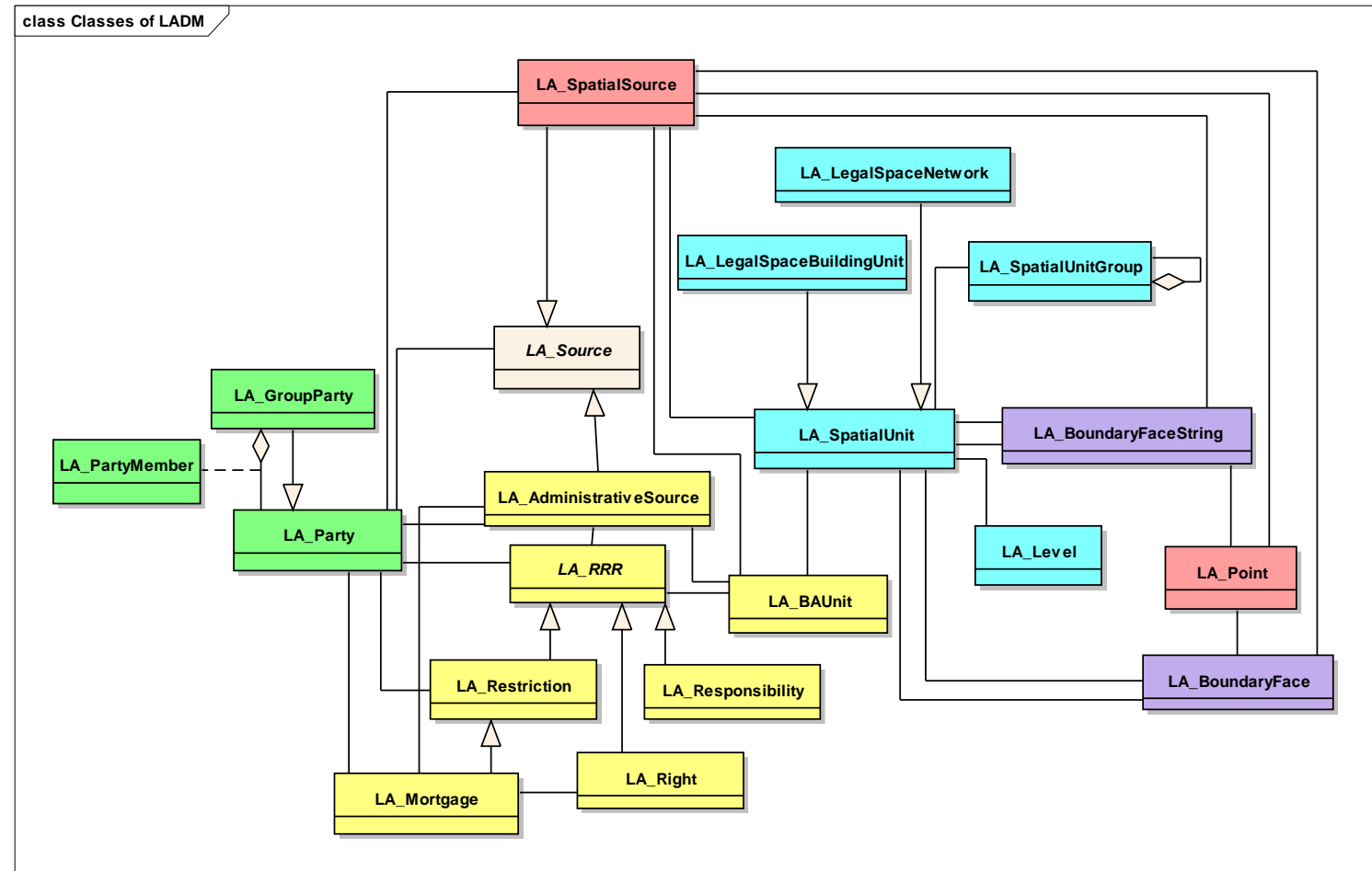


# Complete Overview: Continuum of Land Rights



# Land Administration Domain Model

- Components
- Parties (green)
- Rights (yellow)
- Spatial Units (blue)
- Surveying (pink)
- Geometry (violet)



# Process

- Fast – light equipment
- Reliable – collect attributes once
- Cheap – grassroot (local) surveyors under professional management
- Transparent – check with community



# General

- Guidelines for tenure security assessments, recognition and typology formulation in accordance with the continuum approach
- Legalise Fit-For-Purpose Approach
- National Tenure Atlas
- Make an inventory of global spatial data providers
- Performance measurement (indicators) and contents of databases for land administration
- Pilot methodology
- Develop guidelines and policies for data infrastructure and for ICT infrastructure

# Recognise

- Build broad support for all relevant levels of government
- Create and agreed tenure classification and typology
- Develop a basis for an approach of recognition of previously unrecognised land tenure types and land rights
- Check gender issues
- Publish the land tenure and land rights classification, typology and codes and related tenure descriptions and areas of application
- Identify new roles of professionals and other relevant actors

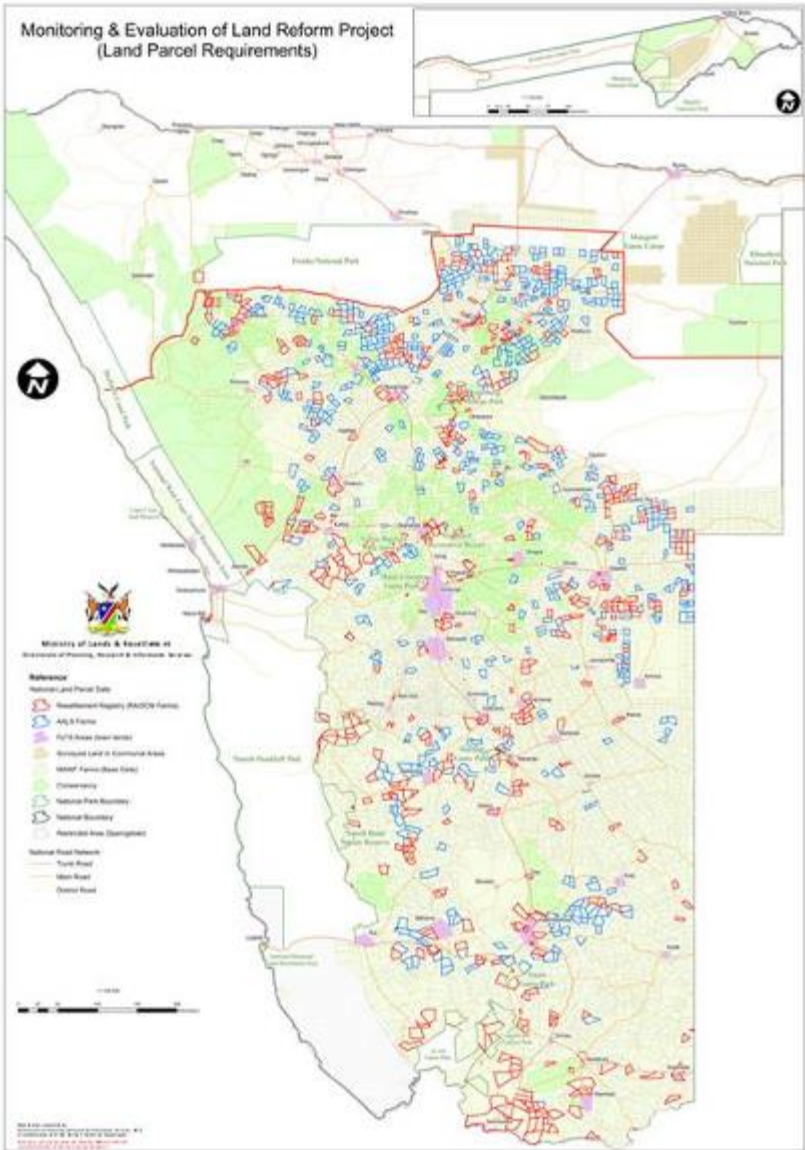
# Recordation

- Make a decision on ICT
- Appoint an authority to certify land data collector supervisors
- Introduce grassroot surveyors
- Set minimal requirements for data to be collected
- Publish classification tables (rights, rightholders, etc)
- Develop a monitoring tool for land administration projects
- Use the National Tenure Atlas to identify areas for data collection
- Organise data collection per area/project in clear steps to include – priority areas: disaster, conflict
- Make a complete recordation of land rights
- Improve quality of all data, incrementally over time

# Review for Conversion

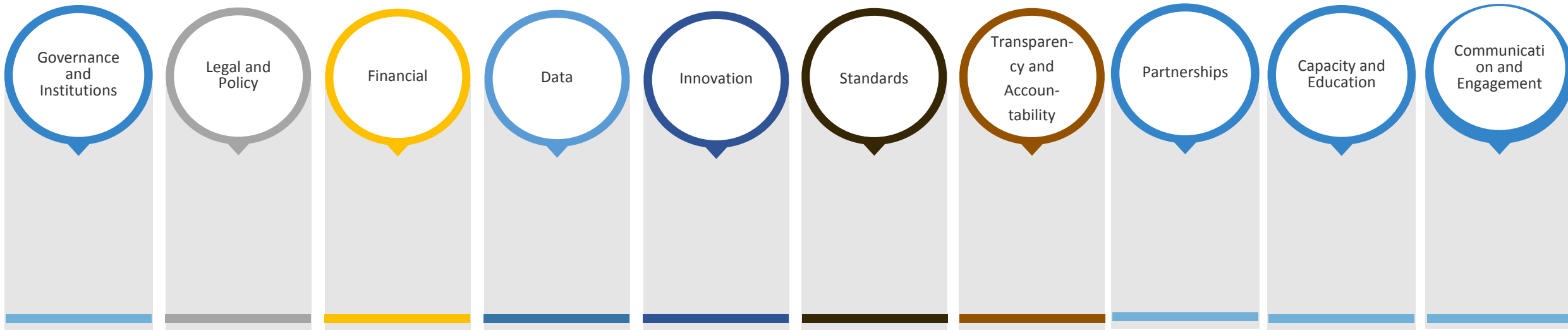
- Establish a legal framework to allow for conversion
- Take steps for upgrade along a continuum of land rights recordation
- Include legacy and historical data
- Technical conversions
- Link data to the source
- Develop linkages with paper-based systems

# Tenure Atlas





# 10 Pillars as the basis of the Framework



# Governance and Institutions

- Transparency and Accountability
- Responsible Governance
- Coordination and Integration
- Enabling Environment for Policies, Standards, Regulations, etc.
- Engaged, structured and outcome focused
- Effective And Efficient Institutions



## Legal and Policy

- Fit-For-Purpose Land Administration; Continuum of land rights
- Conflict-sensitive land administration
- Legal policy and institutional cohesion
- Common implementation of law
- Norms, Policies and Guides
- Implementation; enforcement



## Financial

- Business model – sustainable, affordable (providers and end-users); Non profit and cost covey
- Partnership – donors
- Investment – Commercial, Tools, Procedures
- Streamlining of Financing Procedures; Supporting service
- P.M.: Benefits: Sustainable Economy through Land Administration, social h=justice, less court cases



## Data

- Coordinate data sharing and access; Open data
- Custodianship and Maintenance
- Current Accurate; Reliable
- Land Rights, Land Value, Land Use, Gender, Conflict, Disaster
- Conversion of legacy
- Privacy protection
- Data protection
- Data quality



# Innovation

- Cost-effective land administration services
- Pro-poor and conflict-sensitive land tools
- Processes, simplification
- Research
- AI, Big Data, Internet of things
- Crowd Sourcing



# Standards

- Appropriate standards that fit legal, financial and capacity context
- Fit For Purpose
- LADM, STDM
- ISO, OGC
- Classification
- Digital - Interoperability (legal, semantics, technical)



# Transparency and Accountability

- Guiding principles should be under governance and institutions
- Accessibility
- Gender sensitivity
- Corruption
- Equal access





# Partnerships

- Coordination
- Community Partnership
- Industry Partnership and Joint Ventures: PPP
- International and Inter-Agency Coordination and Input



# Capacity and Education

- Knowledge and skills transfer to ensure sustainability
- Capacity development of international and national officers working in conflict
- Skills Straining; Professional Training; Peer-to-peer learning
- Inter Government; Sharing knowledge; Interdisciplinary
- Ethics
- Grass-root surveyors



# Communication and Engagement

- Clear engagement with land stakeholders; Stakeholder analysis
- Awareness Continuous
- Relevant
- Everybody
- Research
- Usage of communication channels (pictures, videos)
- Gender equity; Policy process
- Effective communication strategies for different stakeholders using appropriate channels such as radio, social media etc.
- Communication Strategies: Stakeholder Identification, Monitoring and Evaluation
  - Advocacy
  - Empowerment and Improved Access to information
  - channels such as radio, social media etc




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Advocacy and Awareness





19<sup>th</sup> Annual Bank  
Conference on Land  
& Poverty

Concluding remarks

Klaus Deininger

Annual World Bank  
Conference

**LAND AND POVERTY**

Washington DC, March 19-23,

# Secure tenure for all is within reach

## Approaches need to be fit for purpose

- Accessible, inclusive & affordable to all (incl. group rights)
- More participatory & cheaper land admin. adapted to local norms
- Achieving gender equity & sustaining it
- Enables feedback loops (social norms, regulations)

## A need to ensure sustainability, coverage, transparency

- Rights are not static & need to adapt to changing circumstances
- Documentation of rights should be universal & public
- Specific requirements change

## But implementing it often not easy

- Need regulations to innovatively adapt to traditions
- Tenure security different from high precision survey
- Partnership with surveyors & private sector



# IT (cloud, EO, connectivity, BC) is transforming the land sector

## Reduce cost & improve quality of service delivery

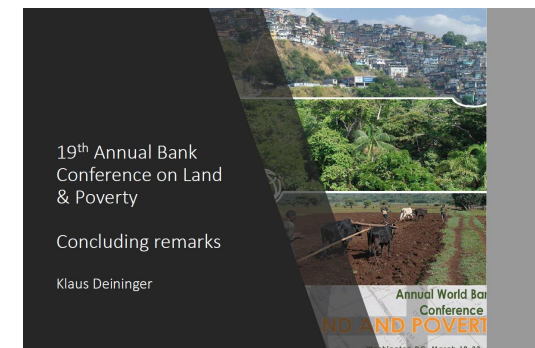
- Allow cheaper, participatory land admin. adapted to local norms
- Increase transparency & accountability
- Enables linking land use & tenure, monitoring (incl. large farms)

## Interoperability amplifies benefits from land admin.

- Makes mortgage markets possible (link to pers. ID & parcel)
- Shows underuse & wealth bias of land taxation
- Allows smart (insurance) contracts & supply chain management
- Compliance with & cost of planning regulations can be quantified

## But raise difficult legal & institutional issues

- Who owns the data?
- How to update regulations written centuries ago?
- How to build capacity to supervise private sector?
- Partnership with land registries & legal experts



Thanks