

Addressing the data and information needs

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Land Administration

- Land Tenure <
- Land Value
- Land Use
- Land Development

- Reference system
- Land Information function

Focus to data

- Data
- Definitions
- Linking
- Processes
- Atlas
- Quality

Land Administration: Data

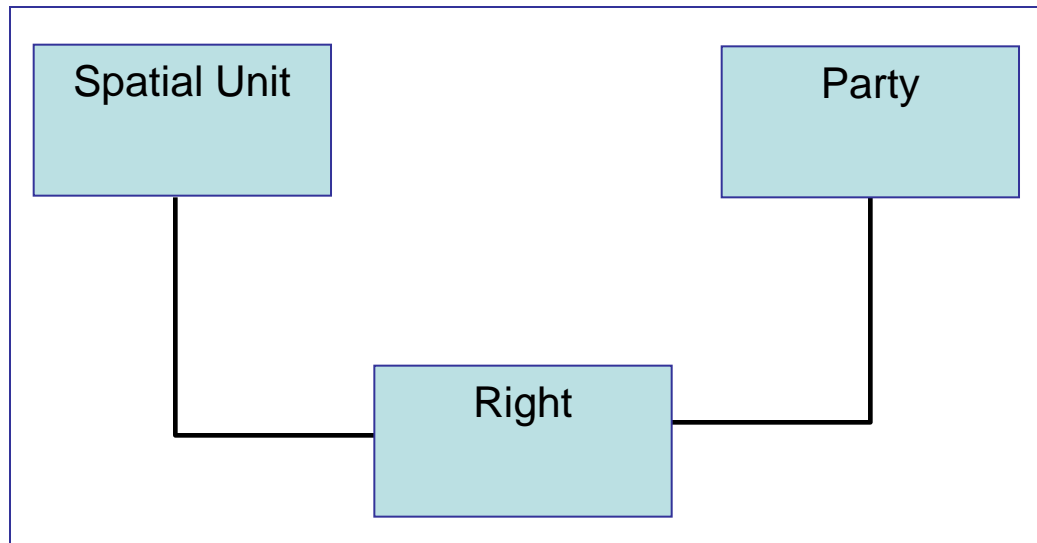
- spatial unit type
- right type
- restriction type
- mortgage type
- party type
- identifiers
- value
- area
- geographic name
- name
- role
- date
- source
- surveys
- co-ordinates
- boundary
- topology
- levels
- dimension
- land use
- share
- transaction type
- history
- right relation

Land Administration: Data

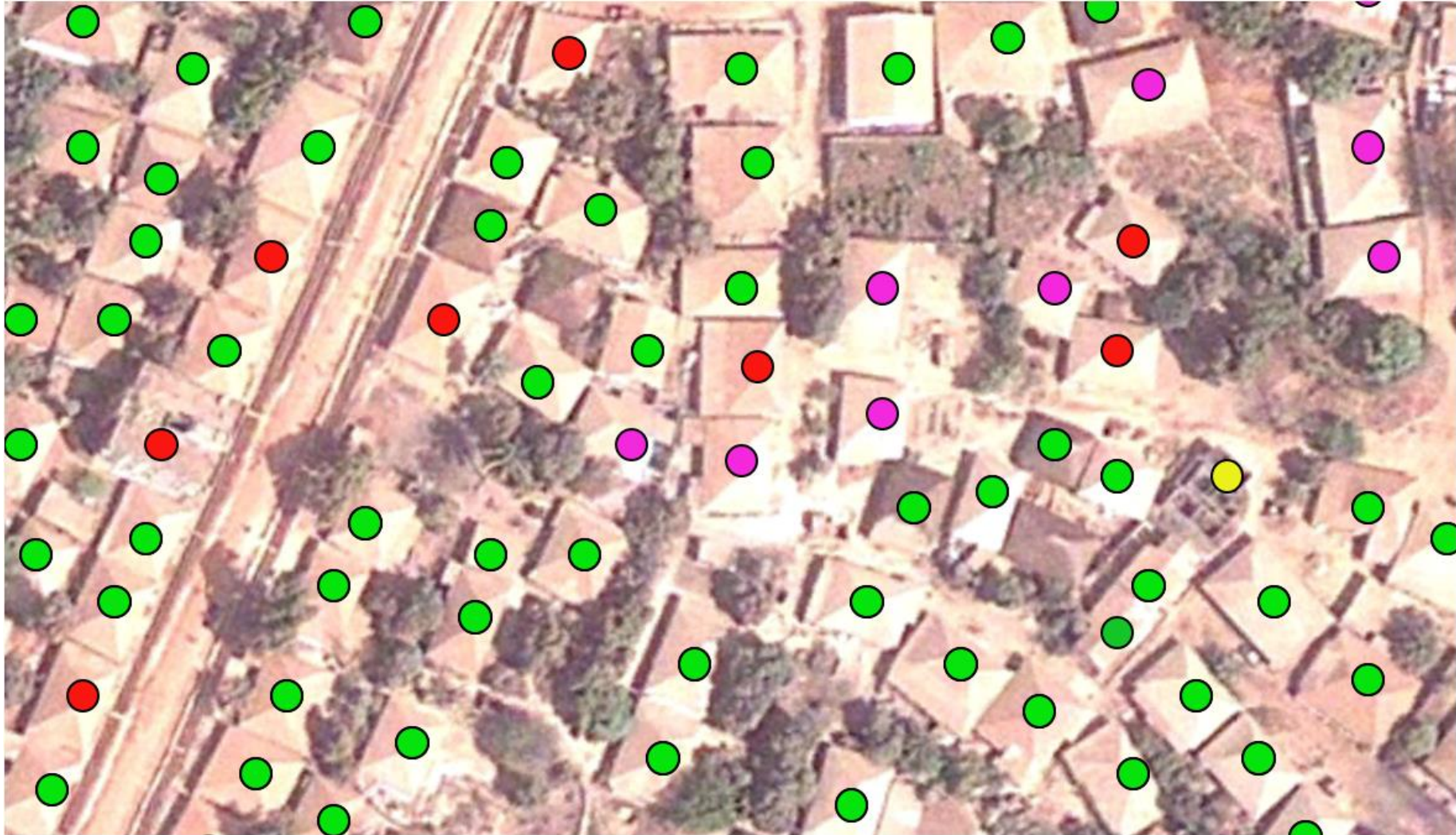
- spatial unit type
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Multiplicier

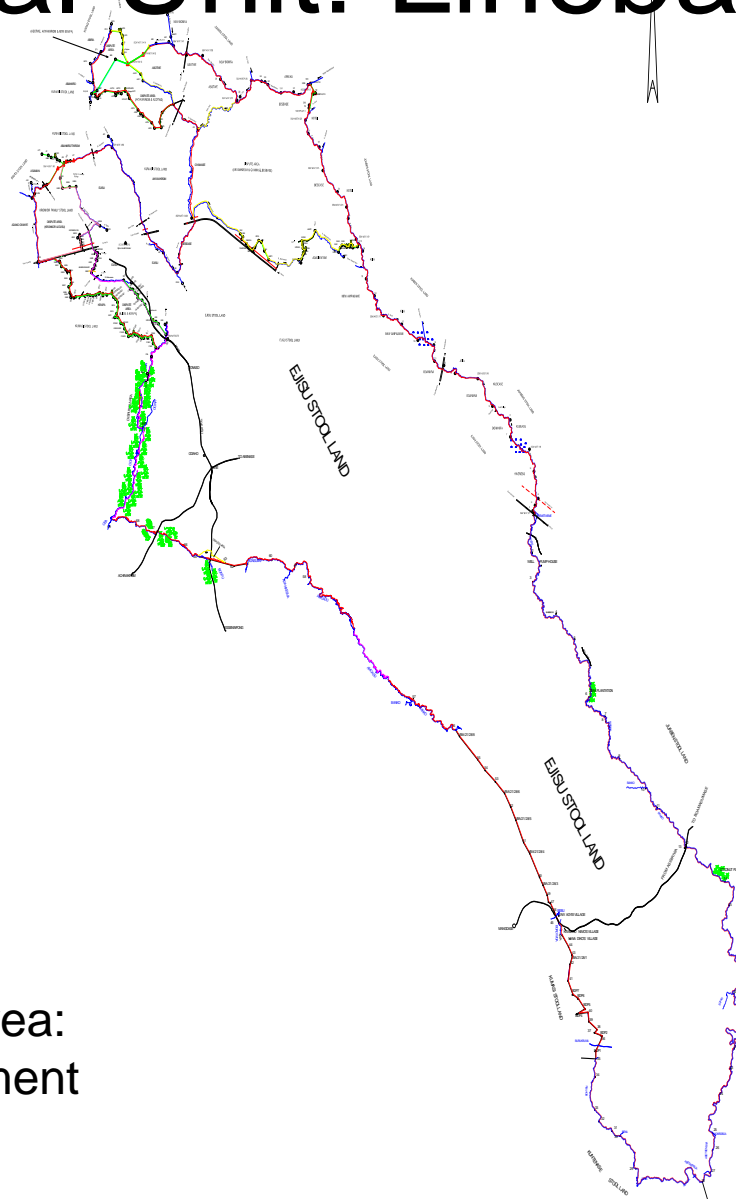
Land Administration Basic datamodel



Spatial Unit: Point Based



Spatial Unit: Linebased



Map of Ejisu Customary Area:
Labels with level of agreement

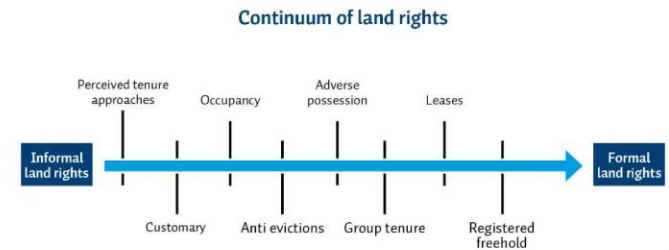
Spatial Unit: Polygon Based



Romania
Sporadic Titling

All People to Land Relationships

- Formal
- Informal
- Customary
- Indigenous
- Occupation
- Land use
- Pastoralist
- Grazing, Fishing
- Overlap
- Marine
- Mining
- Forestry
- Road access
- Restrictions
- Responsibilities
- State, government
- Nature
- Water

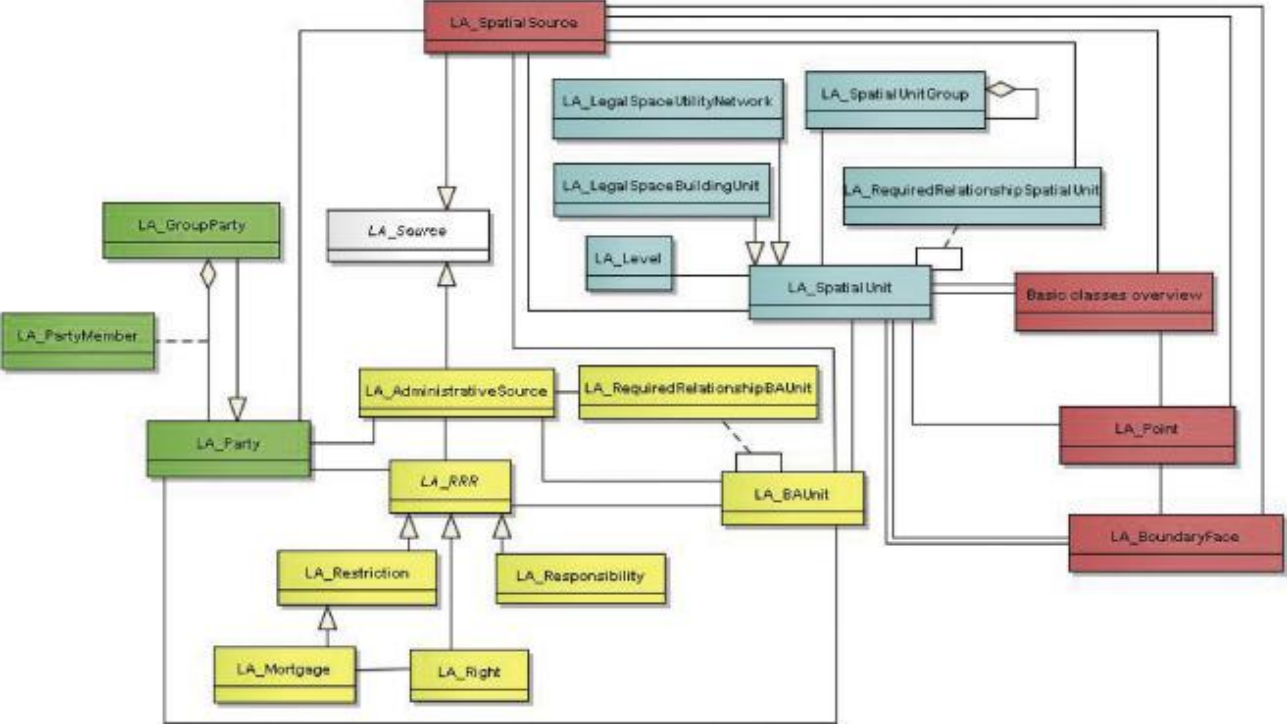


Share in a right



$1/2$	$1/2$
$2/3$	$1/3$
1	0

Land Administration Domain Model



Data Definitions

4.1.20

right

action, activity or class of actions that a system participant may perform on or using an associated resource

[ISO 19132:2007, 4.38]

NOTE 1 A right may provide a formal or informal entitlement to own or do something.

NOTE 2 This International Standard deals with real rights and personal rights. Real rights are rights over or in respect of **spatial units** (4.1.23) (e.g. ownership, or usufruct). Personal rights are rights that **parties** (4.1.13) have (e.g. fishing rights, grazing rights, or use rights).

NOTE 3 Rights may be overlapping, or may be in disagreement.

EXAMPLE Ownership right, apartment right, tenancy right, possessions, customary right, Islamic right (e.g. miri or milk), indigenous right, or informal right.



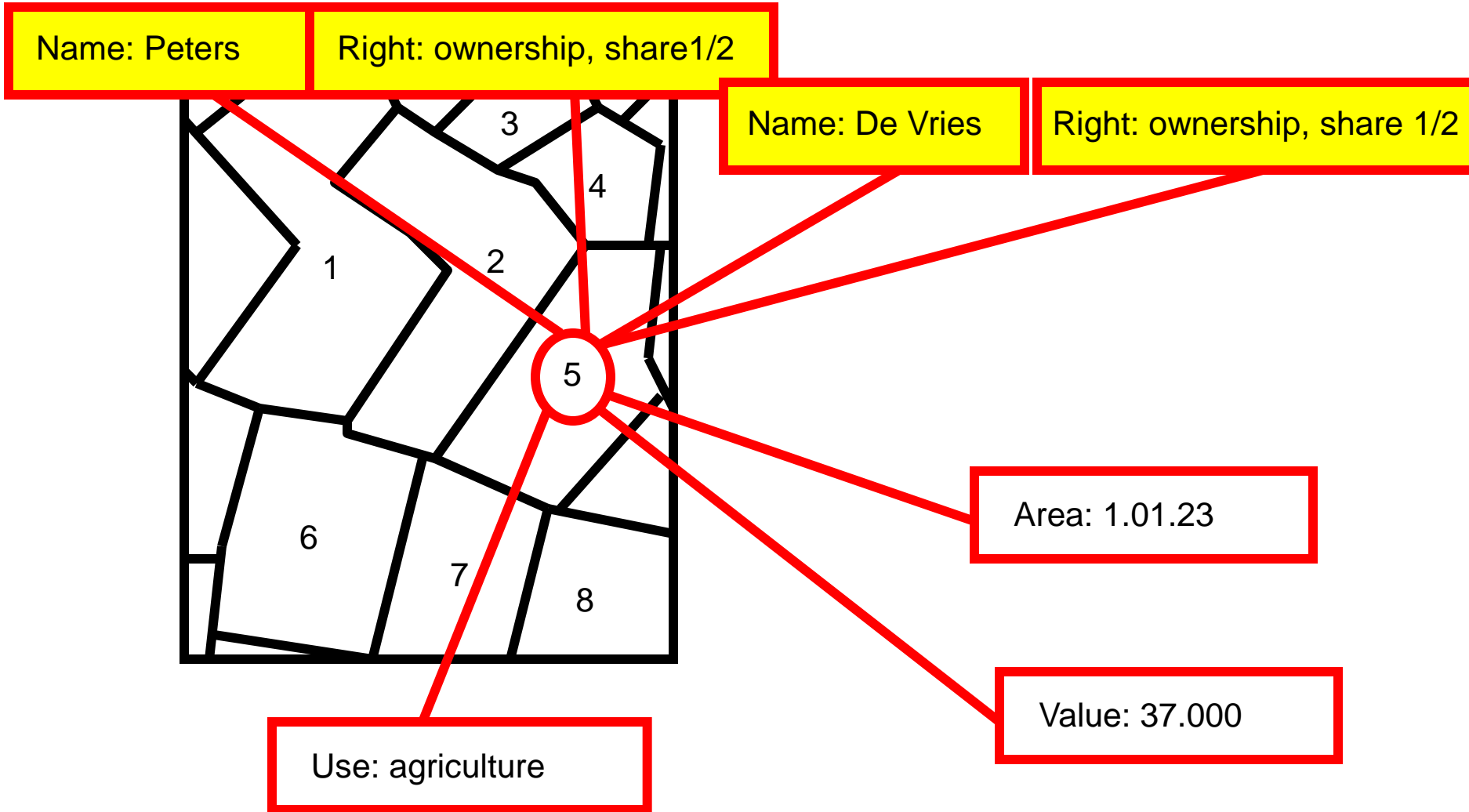
Spatial Unit: Ownership



Spatial Unit: Urban Rural Tax

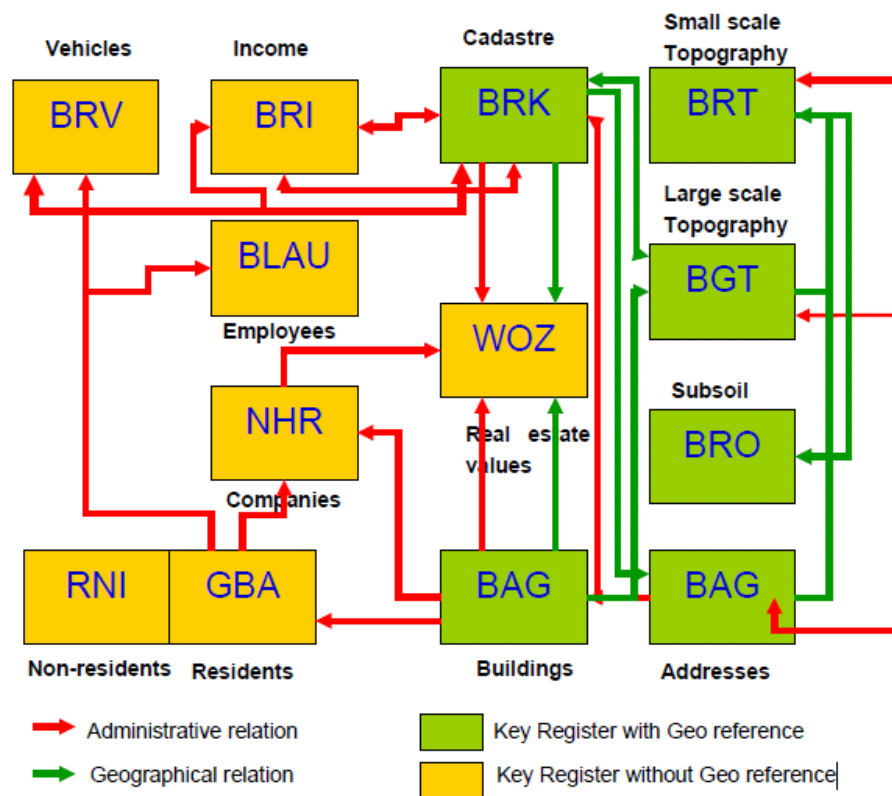


LINKING

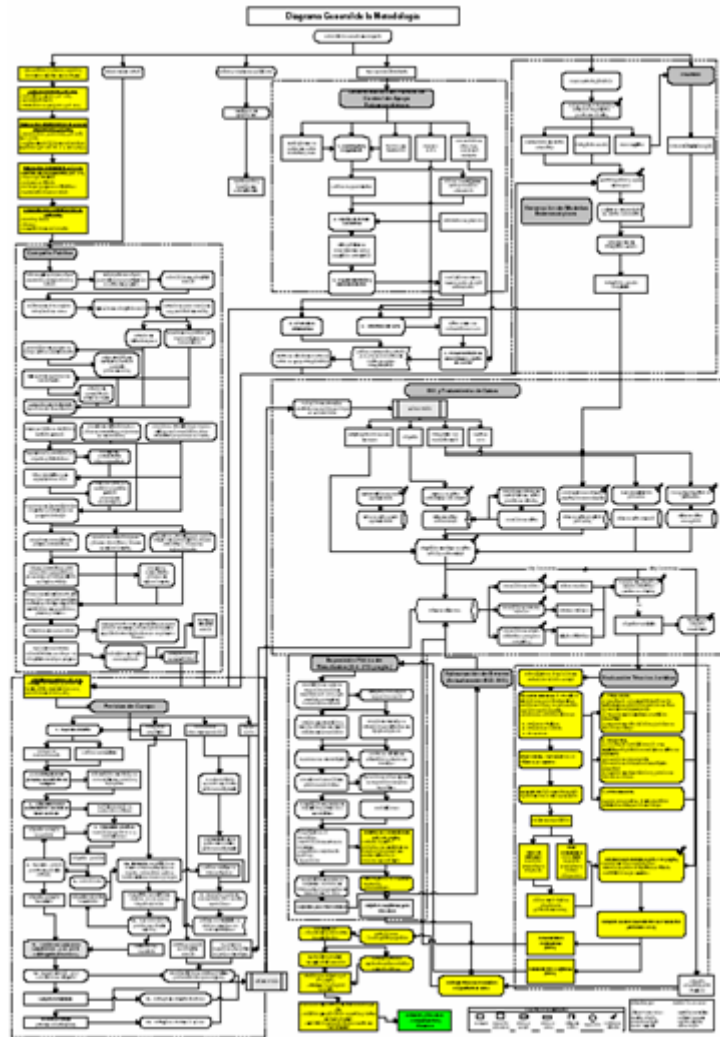




Authentic Registers



Complex Procedures



Processes

- Initial data acquisition
- Georeferencing
- Elevation model
- Identification
- Transactions
- Surveying/Mapping
- Subdivision, merge
- Information provision
- A/D Conversion
- Formalisation
- Quality improvement
- Map Renovation
- Public inspection
- Area management
- Land consolidation
- Land readjustment
- Fragmentation index
- Price index
- Cloud-free images
- Informing authorities/citizens
- Crowdsourcing
- Scanning, printing
- Digitizing
- Customers request (application)
- Public inspection
- Sending letters
- Objection, complaint
- Maintenance historical data
- Signature (digital)
- Topology building
- Time registration
- Resource management
- Developing norms
- Workflows
- IT Support – ITIL

Collect Evidence in the Field



Tenure Atlas

- Tenure systems

- Projects

- Cadastral territories

- National/Global

- Integration with

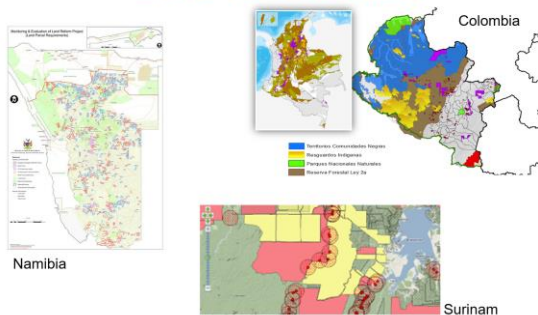
other sources:

LGAF, Land Matrix,

Land Portal,

Cadastral Template

Land Tenure Atlas



Quality Principles

Completeness

Logical Consistency

Topological Consistency

Positional Accuracy

Temporal Accuracy

Thematic Accuracy

ISO 19113 Geographic information -- Quality principles

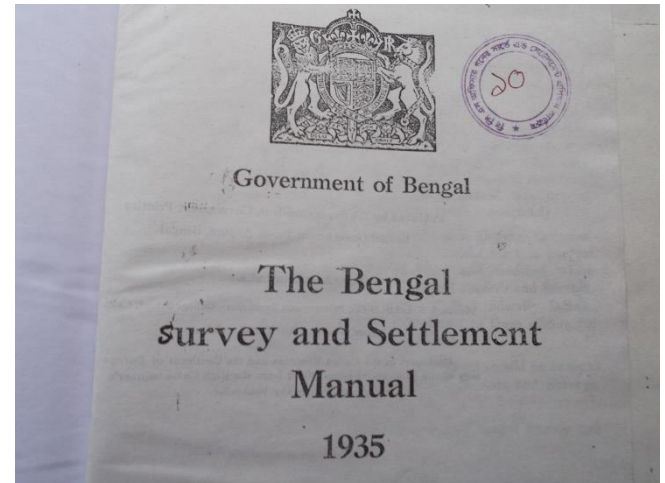
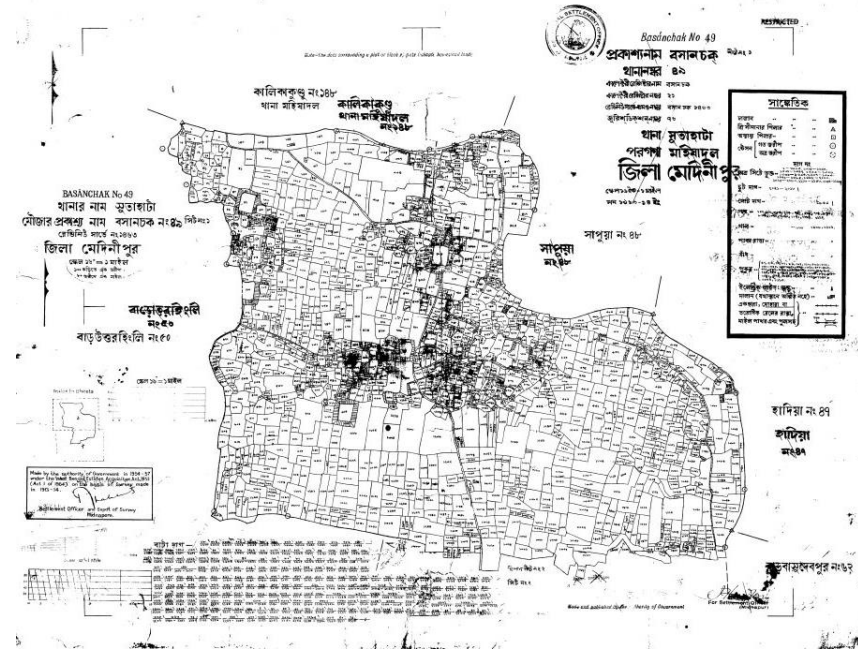
ISO 19157 Geographic information -- Data quality



Monumentation



Legacy



Back up

