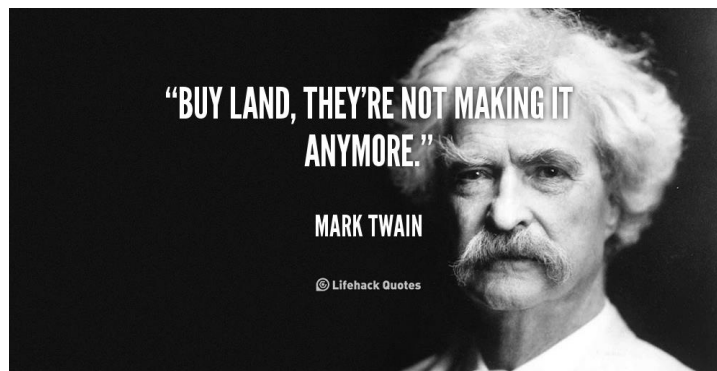


Fit-For-Purpose Land Administration in Perspective

Christiaan Lemmen
FIG Commission 7 Annual Meeting
Coimbra, Portugal, October





Quality Principles - Reminder

Completeness
Logical Consistency
Topological Consistency
Positional Accuracy
Temporal Accuracy
Thematic Accuracy

ISO 19113 Geographic information -- Quality principles
ISO 19157 Geographic information -- Data quality



Challenges in Land Administration

- 70% to be done
- Complex institutional setting
- Corruption / Transparency
- Automation
- Trend: decentralisation

People



People



People to Land Relationships



People to Land Relationships



No Recognition

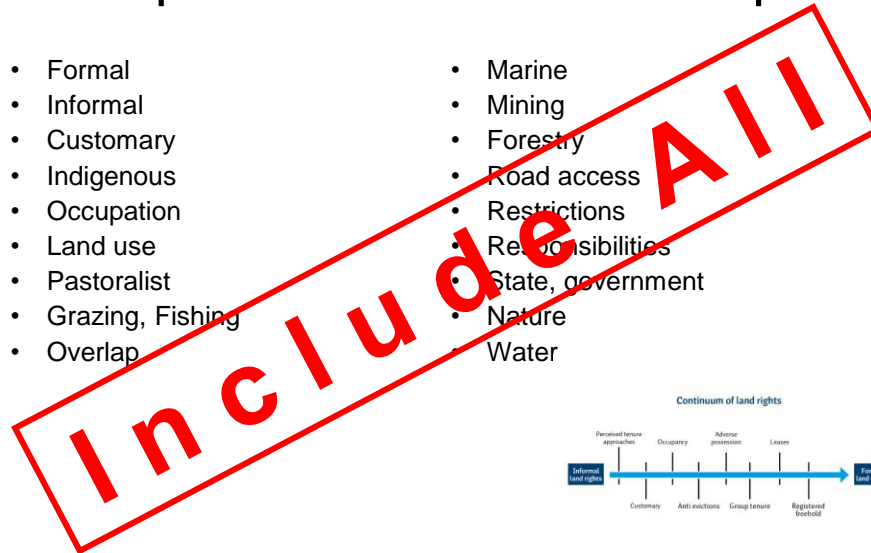
People to Land Relationships

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

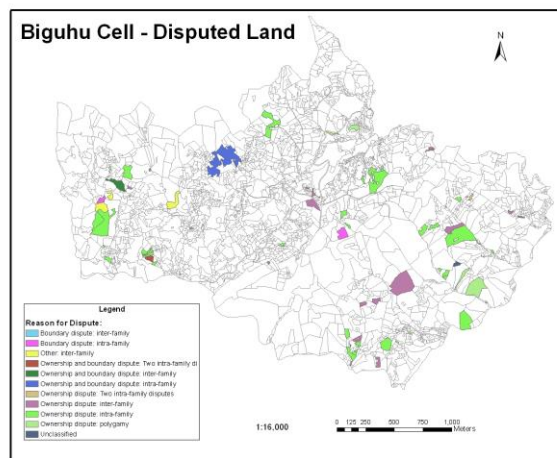


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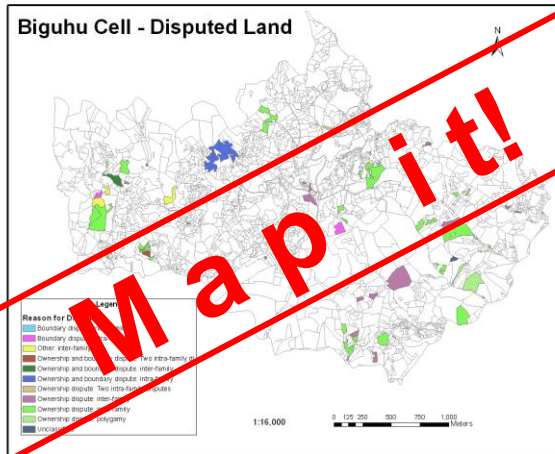


Disputes



Source – NLC Rwanda

Disputes



Source – NLC Rwanda





Boundaries

Visual boundaries



Fixed boundaries



Boundaries

Visual boundaries



Fixed boundaries



Collect Evidence in the Field



Collect Evidence in the Field



Monumentation




Monumentation



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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Processes

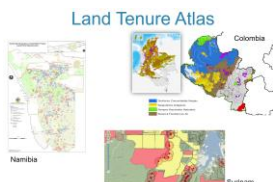
- Initial data acquisition
- Georeferencing
- Elevation model
- Identification
- Transactions
- Surveying/Mapping
- Subdivision, merge
- Information provision
- A/D Conversion
- Formalisation
- Quality improvement
- Map Renovation
- Public inspection
- Area management
- Land consolidation
- Land readjustment
- 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

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Tenure Atlas

- Tenure systems
- Areas with NO land market
- Projects
- Cadastral territories
- National/Global
- Integration with other sources: LGAF, Land Matrix, Land Portal, Cadastral Template

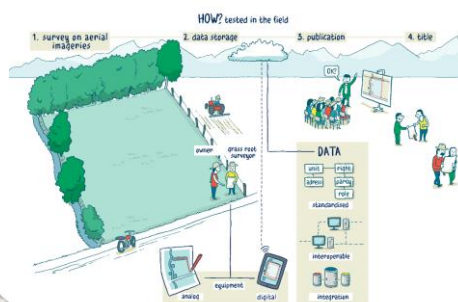


Tenure Atlas

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Fit For Purpose - Guiding Principles



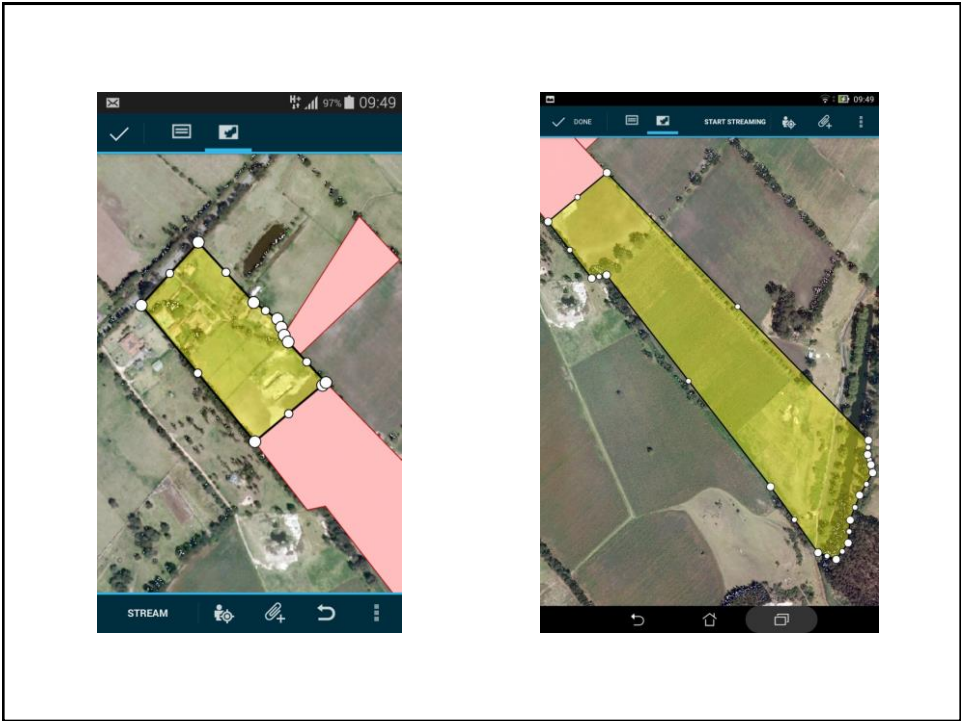
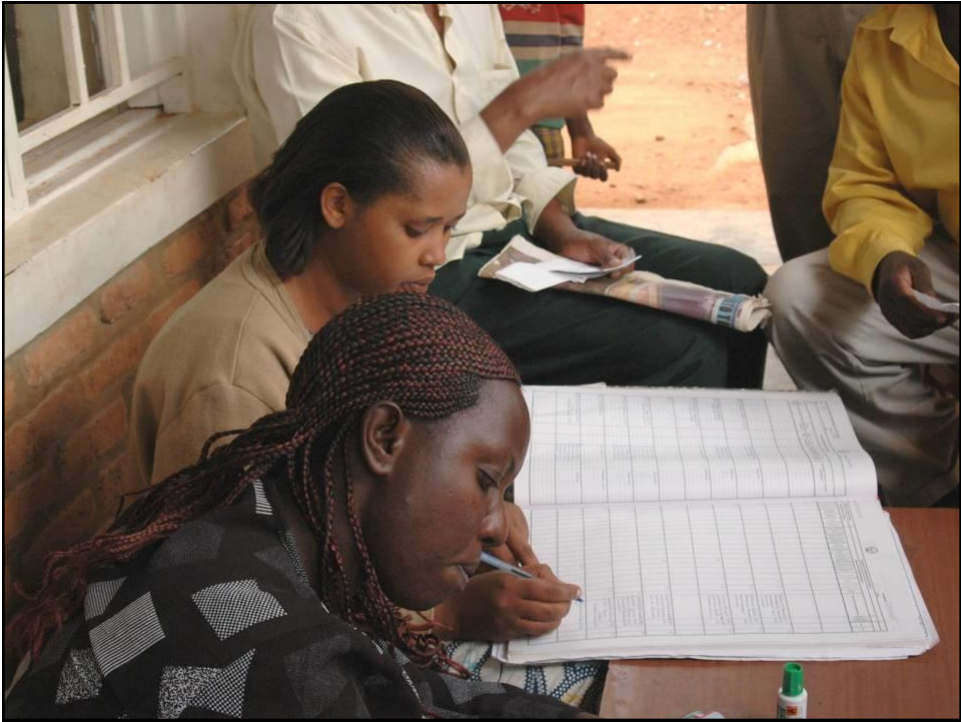
Fit-for-Purpose Land Administration

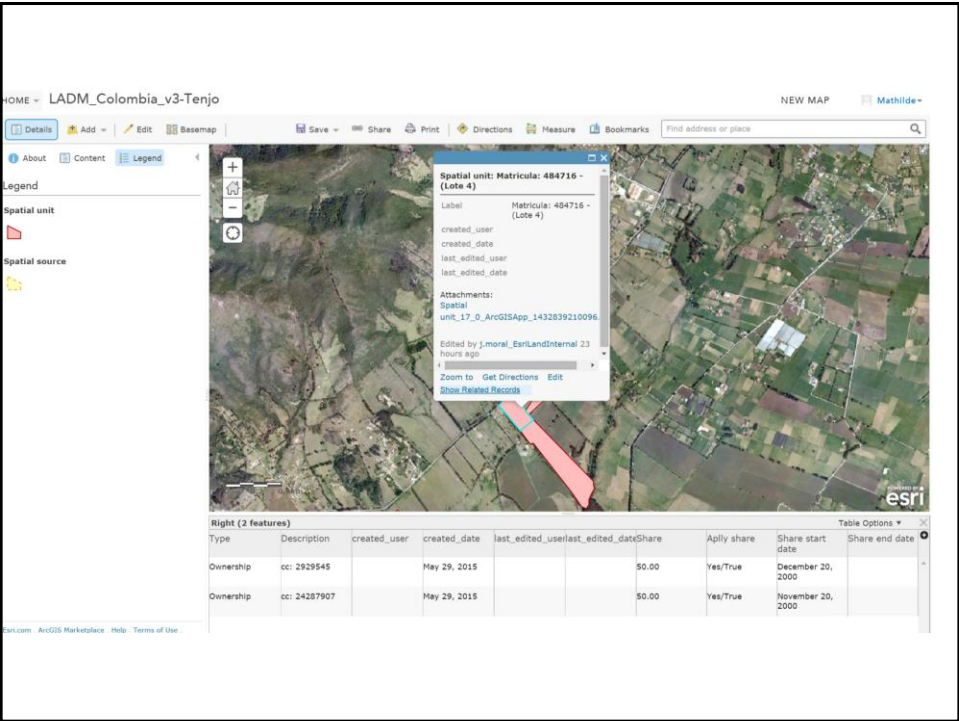
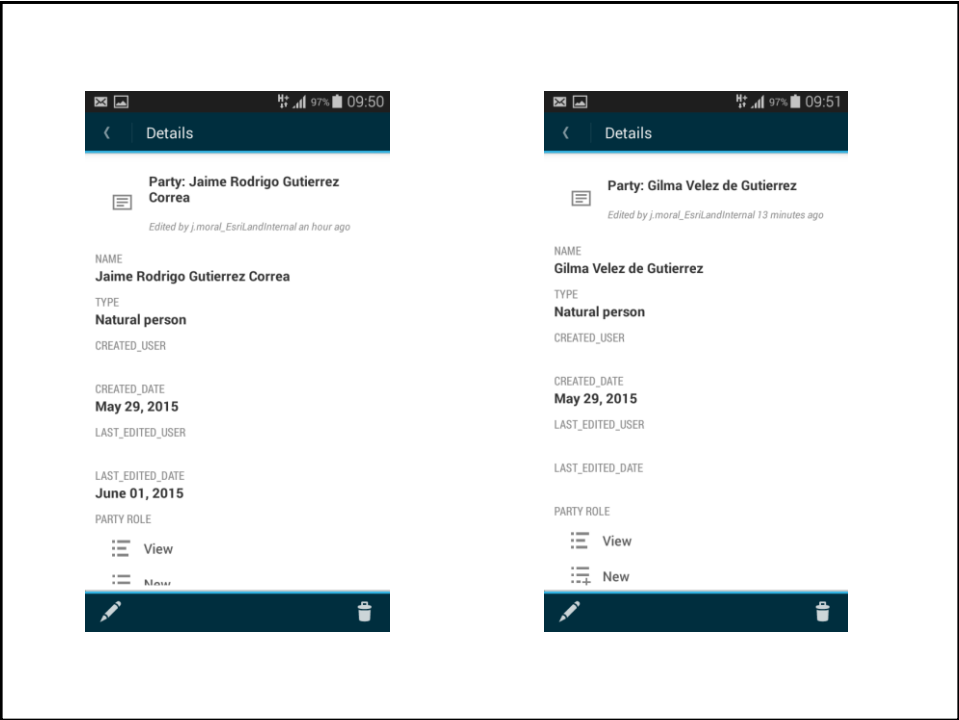
KEY PRINCIPLES		
Spatial Framework	Legal Framework	Institutional Framework
<ul style="list-style-type: none"> Visible (physical) boundaries rather than fixed boundaries Aerial / satellite imagery rather than field surveys Accuracy relates to the purpose rather than technical standards Demands for updating and opportunities for upgrading and ongoing improvement 	<ul style="list-style-type: none"> A flexible framework designed along administrative rather than judicial lines. A continuum of tenure rather than just individual ownership Flexible recordation rather than only one register Ensuring gender equity for land and property rights. 	<ul style="list-style-type: none"> Good land governance rather than bureaucratic barriers Holistic institutional framework rather than sectorial siloes Flexible IT approach rather than high-end technology solutions Transparent land information with easy and affordable access for all

Aerial imageries for participatory field adjudication



Source: Zerfu Hailu, Ethiopia





Example Case

Conventional

- 100 years
- High Costs
- Technology driven
- By Government
- Rigid

FFP

- 10 years
- Low Costs
- Demand driven
- By Citizens
- Transparent

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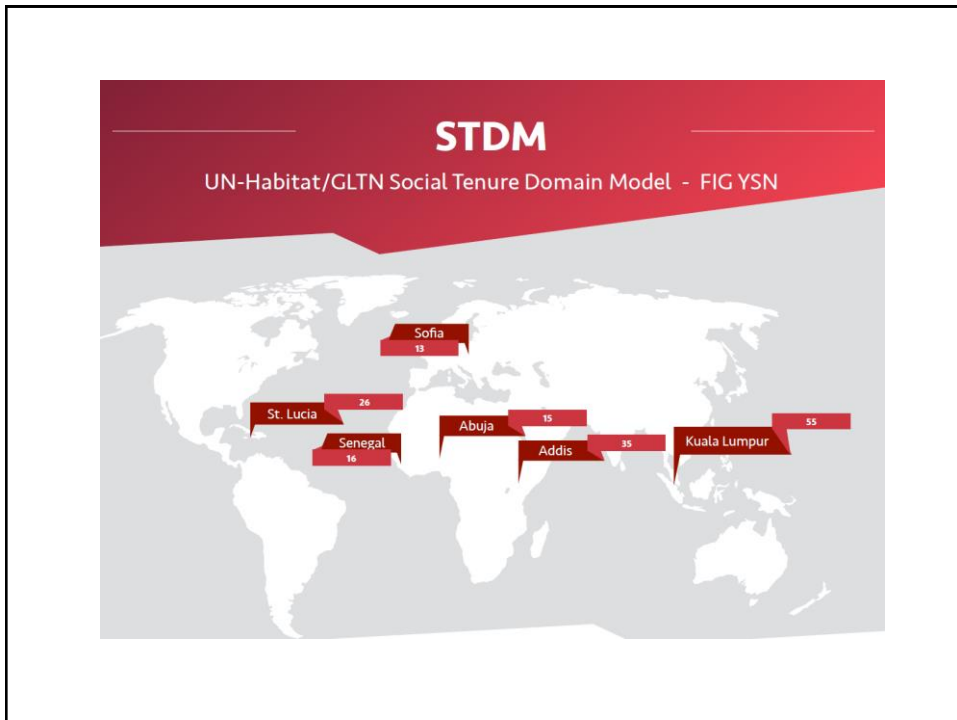
FFP

- 10 years
- Low Costs
- Demand driven
- By Citizens
- Transparent

Your Choice?



[illegible]



WE OFFER 3 KINDS OF SERVICES

GOOD-CHEAP-FAST

BUT YOU CAN PICK ONLY TWO

GOOD & CHEAP WON'T BE **FAST**

FAST & GOOD WON'T BE **CHEAP**

CHEAP & FAST WON'T BE **GOOD**



Fit-For-Purpose Land Administration



As little as possible – as much as necessary (for the purpose)

Fast – Cheap – and Good (enough for the purpose)

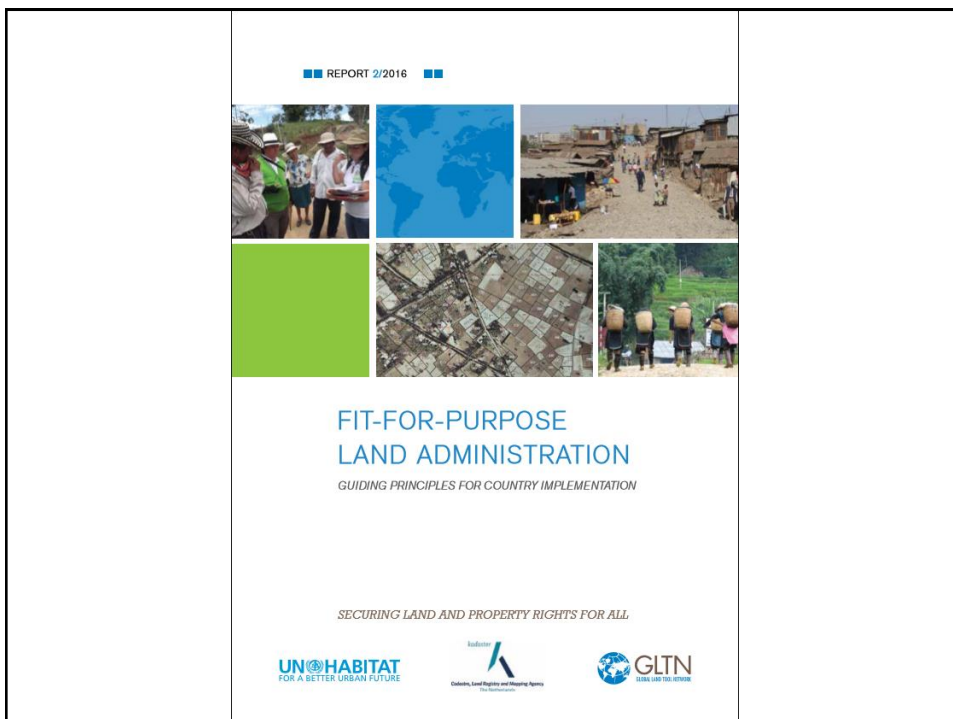
Concluding remarks

- Land administration is basically about people. It is about the relation between people and places, and the policies, institutions and regulations that govern this relationship.
- When building land administration systems in less developed countries - focus should be on a “**fit-for-purpose approach**” that will meet the needs of society today and **can be incrementally improved over time**.

Challenges in Land Administration

- 70% to be done
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Fit-For-Purpose





Thanks!

