

## Land registration and fit-for-purpose land administration



### المؤتمر العربي الثاني للأراضي

### Second Arab Land Conference

22-24 FEBRUARY 2021  
CAIRO, EGYPT

## Fit-For-Purpose Land Administration

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**ITC**  
UNIVERSITY  
OF TWENTE.





# PEOPLE TO LAND RELATIONSHIPS



## PURPOSES OF LAND ADMINISTRATION

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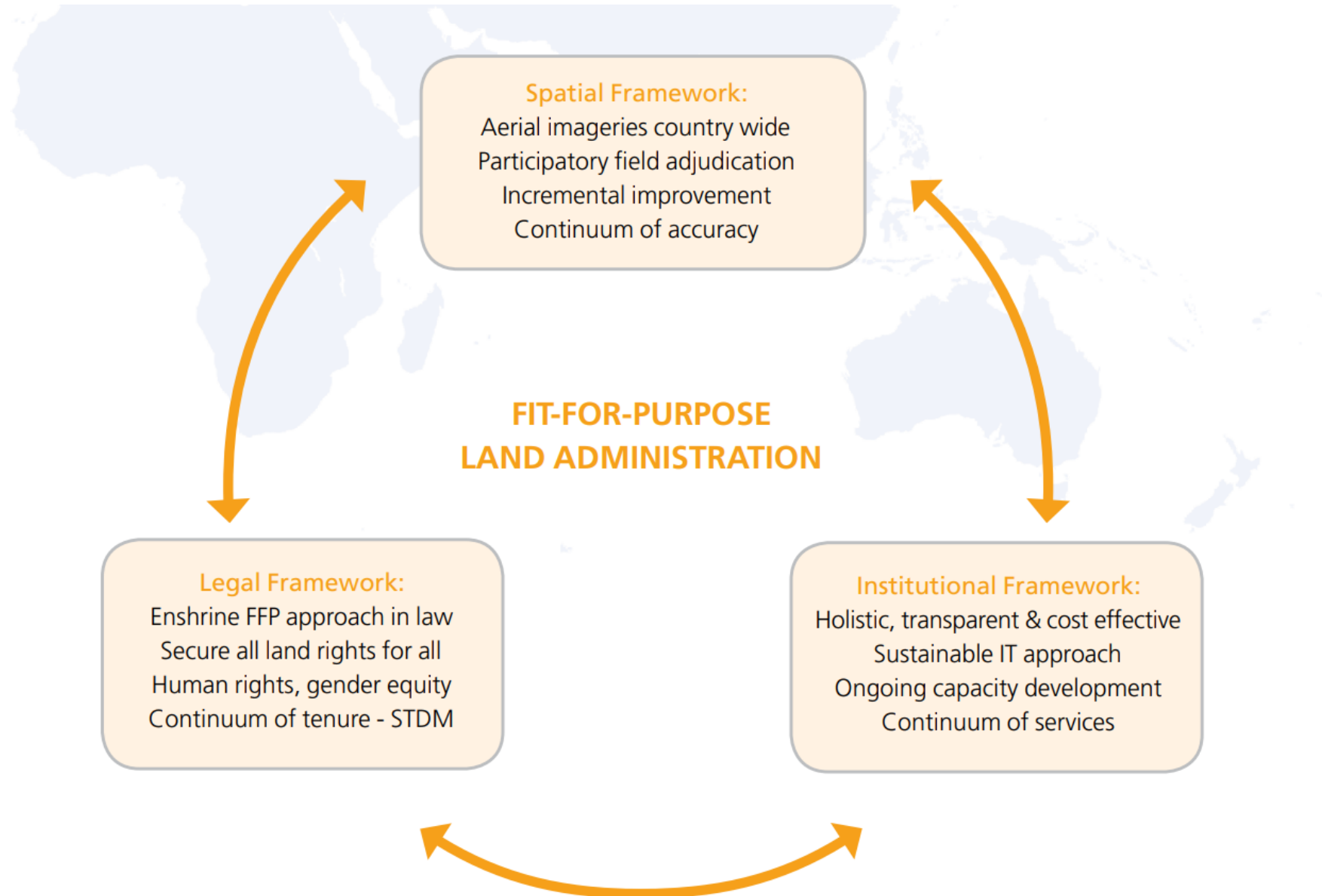
- Peace Building and Security
- Social Justice
- Disaster Management
- Resource Management
- Tenure Security
- Access to Credit
- Taxation
- Smart and Resilient Societies
- Sustainable Land Use
- Protected Environment
- Slum Upgrading
- Access to Housing
- City Management
- Access to Basic Infrastructure



- Coverage
- Institutional setting
- Transparency
- Paper based systems
- Legacy
- Information management
- Decentralisation
- Poor and vulnerable
- Gender

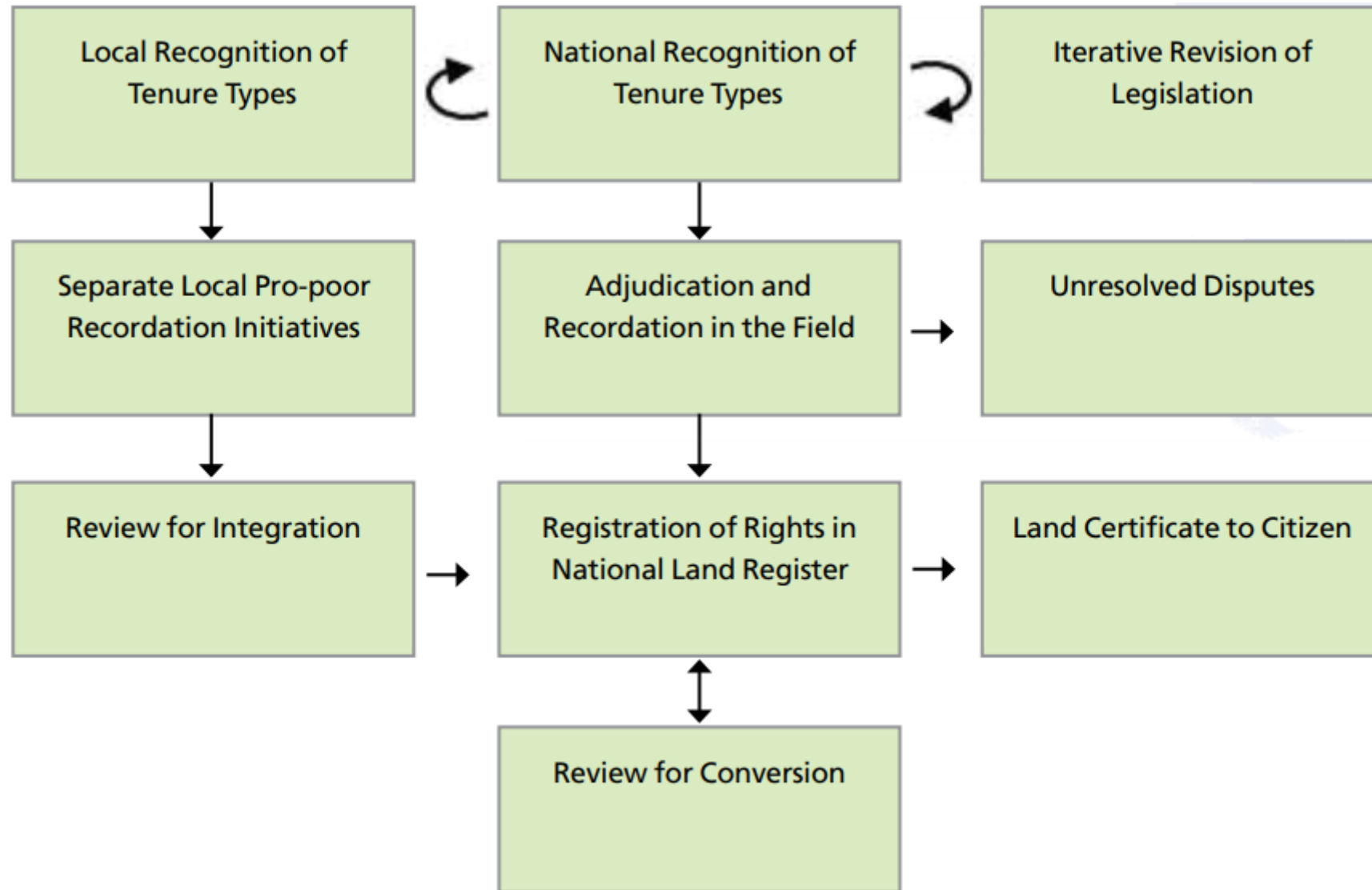


# FIT-FOR-PURPOSE LAND ADMINISTRATION



















- **Focus on purpose** - Focusing firstly on the “what” in terms of the end outcome and then designing the “how” to be the most “fit” for achieving the purpose
- **Flexibility** - It is about flexibility in terms of demands for accuracy; for recording of a range of different tenure types, and for shaping the legal and institutional framework to best accommodate societal needs
- **Incremental improvement** - A Fit-For-Purpose approach will ensure that basic and appropriate land administration systems are built within a relatively short time frame and at affordable costs ... and the systems can then be incrementally improved over time

## FIT-FOR-PURPOSE LAND ADMINISTRATION PROCESSES



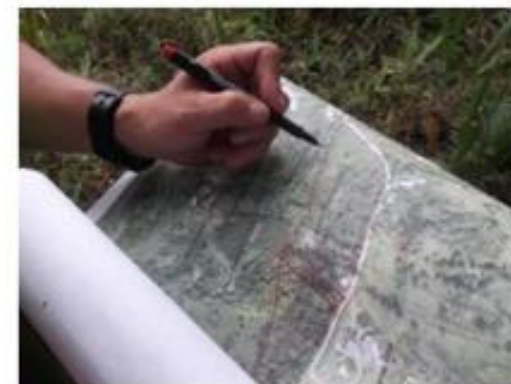
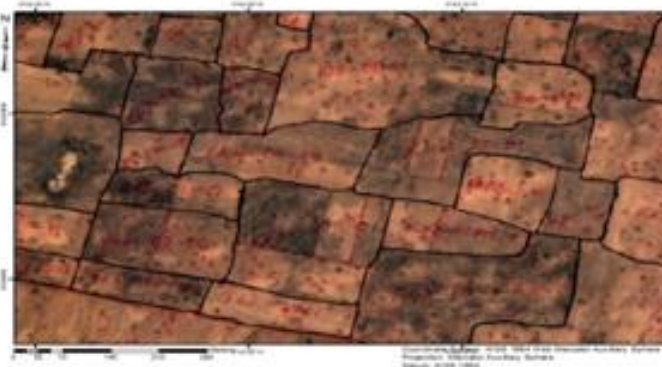


# APPROACHES

 Main Mapper	 Location	 Material	 Mapping Tool	 Spatial Units	 Level of Accuracy	 Demarcation	 Right-holder	 Rights	 Validation	 Storage	 Distribution
Grassroot / Paralegal Surveyor	In the field 	Digital 	GNSS	Volume	Decimeter	Mark	Individual	Registered freehold	Public Inspection	Cloud	Web Services
Crowdsourced/ Volunteered			CORS	Polygon			Individual/ Company	Leases			
Government Surveyor				Total Station		Lines		Married		Group Tenure	
	In the village 	Paper-based 	Aerial Imagery / UAV	Centroid Points	1-5 Meter		Cooperative	Adverse Possession	In the field	Server Database	Webshop
Private Surveyor			Satellite Imagery	Reference to street axis			Local Government/ Ministry	Anti evictions			
			AFE	Sketch/Topology based		Community	Occupancy				
			Handheld GPS	Text/Video based		Religious	Customary				
Lawyer			Tape/Chain/ Plain Table		5-10 Meter	Visible/ Topographical Boundaries	Group of Groups	Perceived tenure approaches	Remote	Analogue Archive	Machines
							Group non defined Membership			Local Office Desk	



## PARTICIPATOR - PAPER OR DIGITAL





## IDENTIFICATION OF LAND OBJECT

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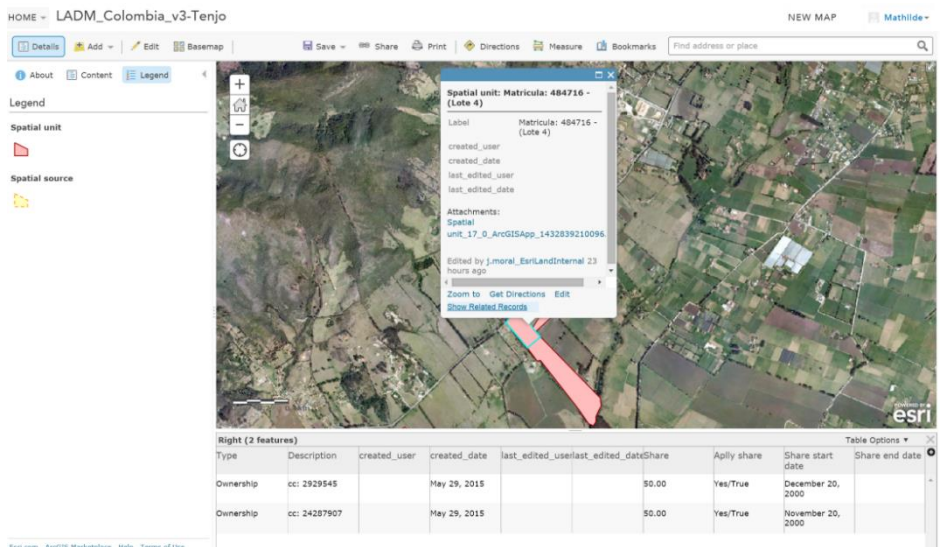


## IDENTIFICATION OF PERSONS

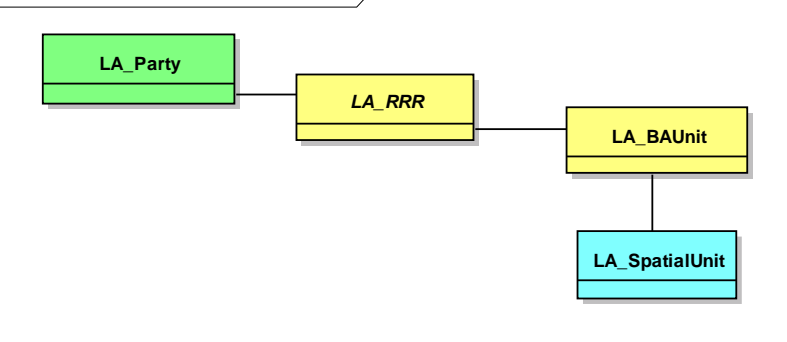




# RESULTS – INTEGRATED APPROACH

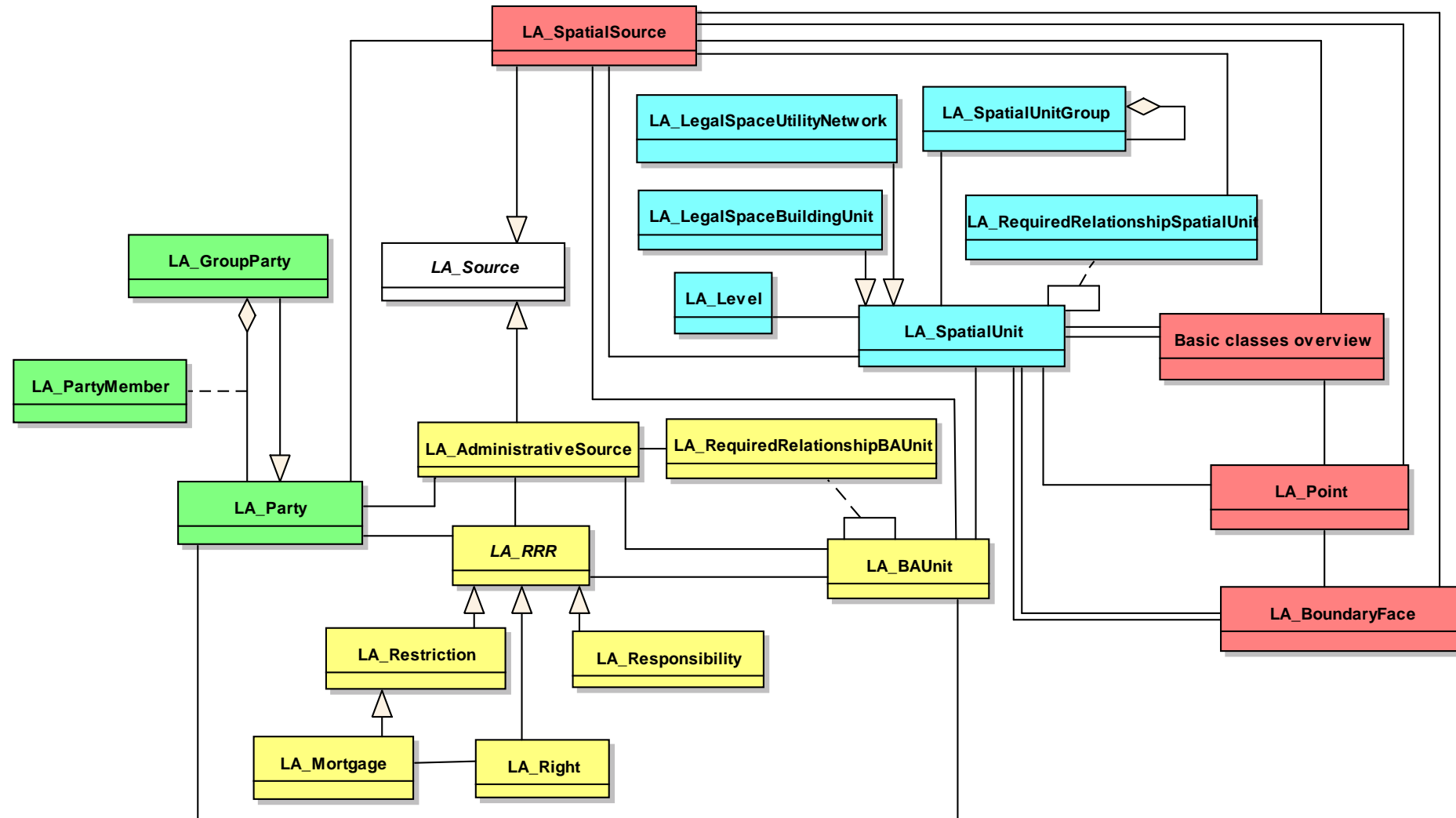


class Figure 2. Basic classes of LADM





# THE LAND ADMINISTRATION DOMAIN MODEL



- It is time to stop thinking of parcel corner accuracy in terms of centimeter accuracy
- It is impossible to calculate any parcel area with 100% precision

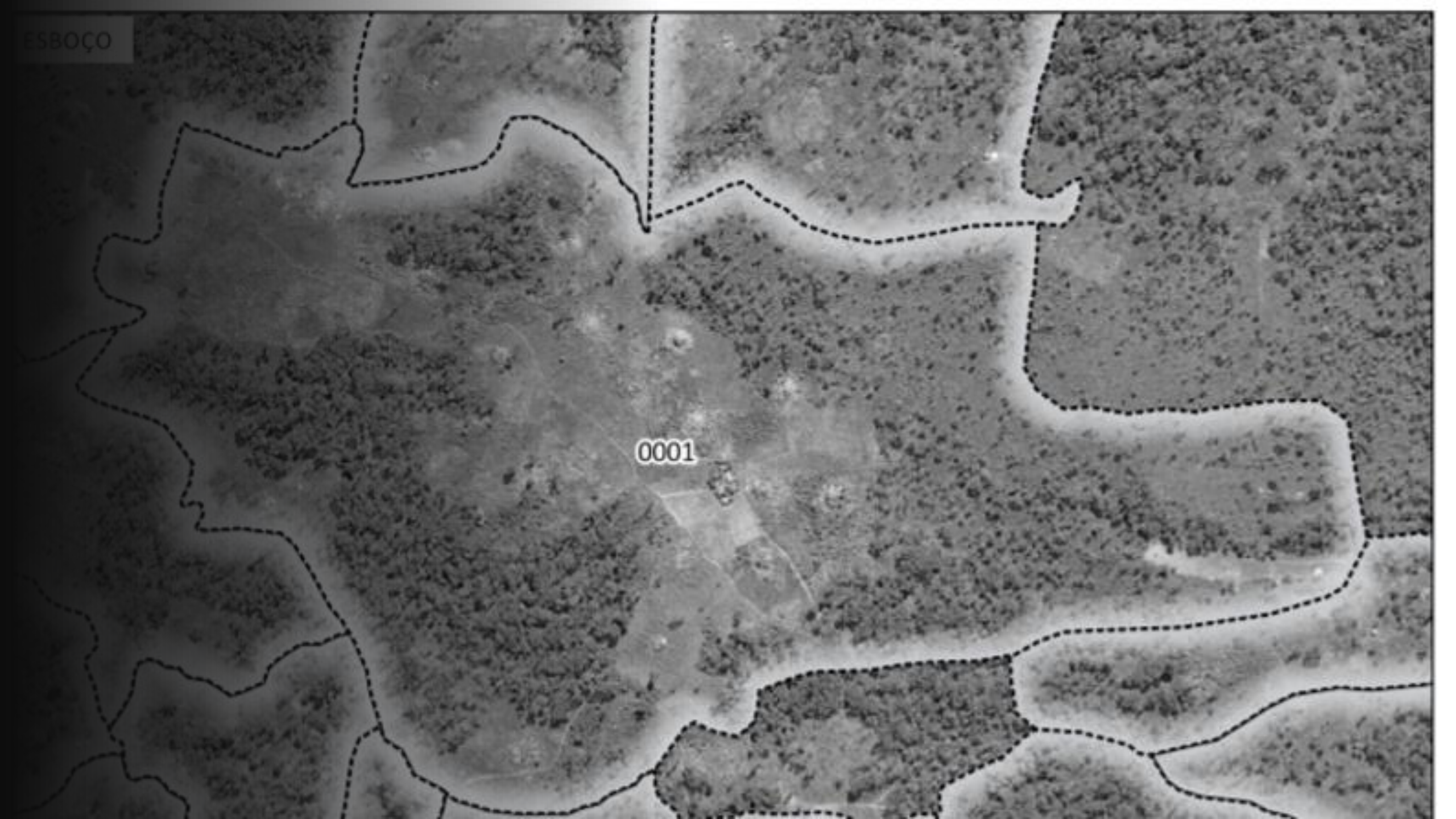


**Jack McKenna**

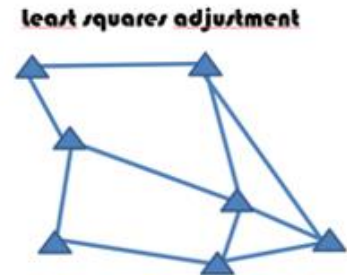
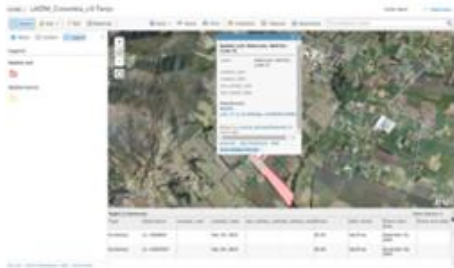
Director, Business Development in Africa and the Caribbean, Trimble Land, Administration Solutions

ESBOÇO

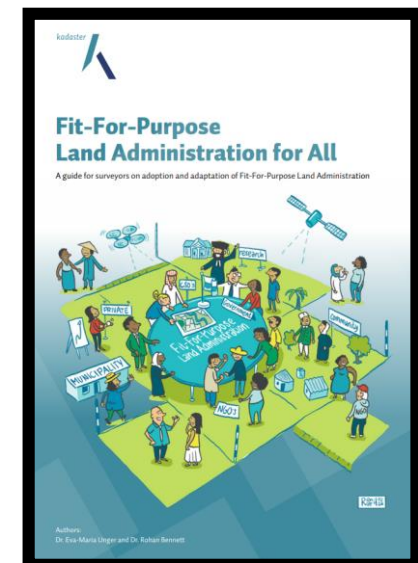
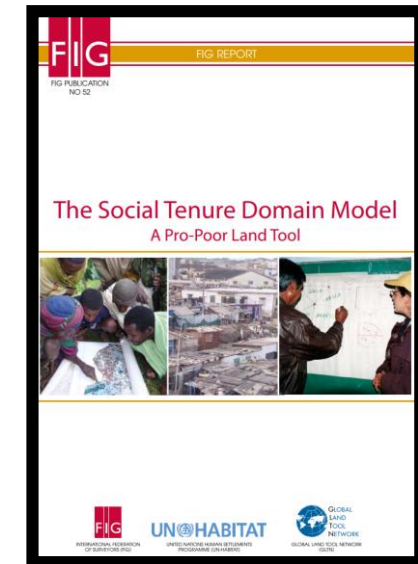
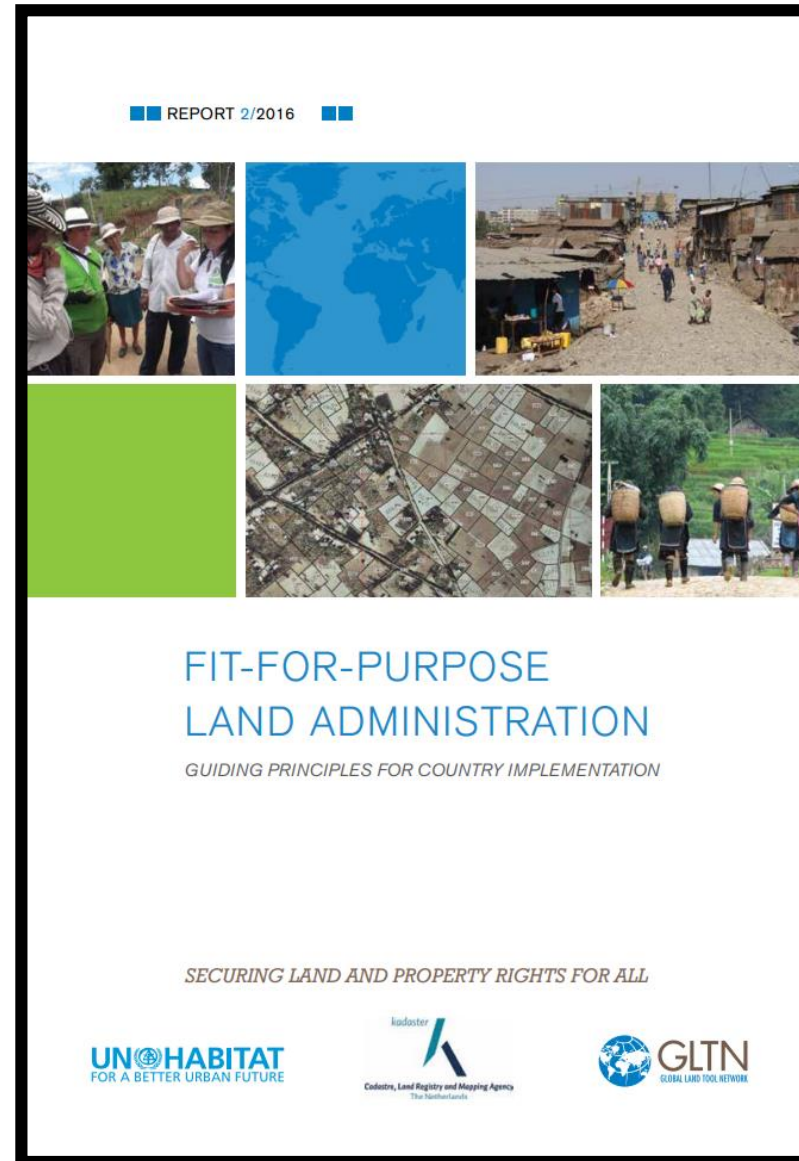
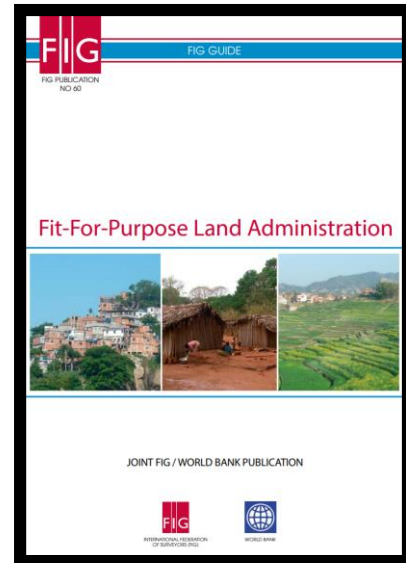
0001

An aerial photograph showing a landscape with a prominent dashed white line that outlines a large, irregularly shaped area. The terrain is textured, appearing to be a mix of vegetation and bare ground. In the center of the outlined area, the number '0001' is printed in white. The overall image has a grainy, high-contrast appearance typical of older aerial photography.

# LAND ADMINISTRATION DEVICES













THANKS

