Fit-For-Purpose Land Administration, Standards and Interoperability

Christiaan Lemmen
Kadaster International
University of Twente/ITC

UN GGIM Seminar "Effective Land Administration"

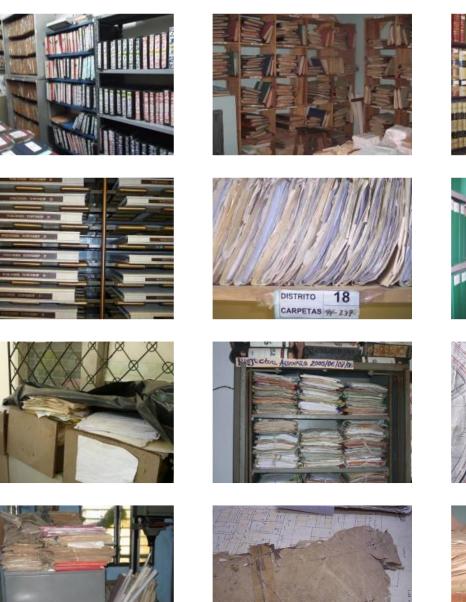
Deqing China September, 27th 2018



Challenges in Land Administration

- Land rights for all
- 70% to be done
- Complex institutional setting
- Transparency
- Automation

Data



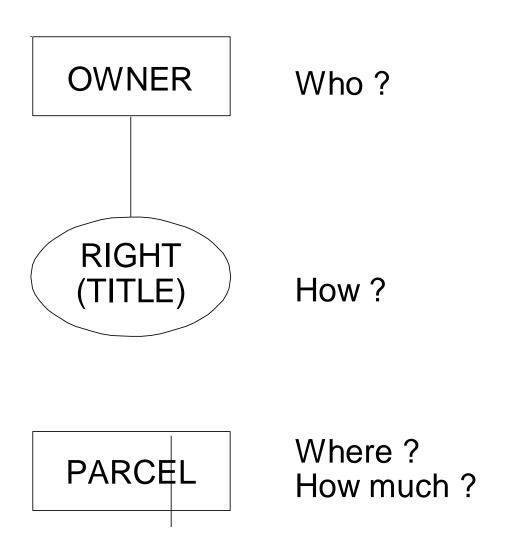




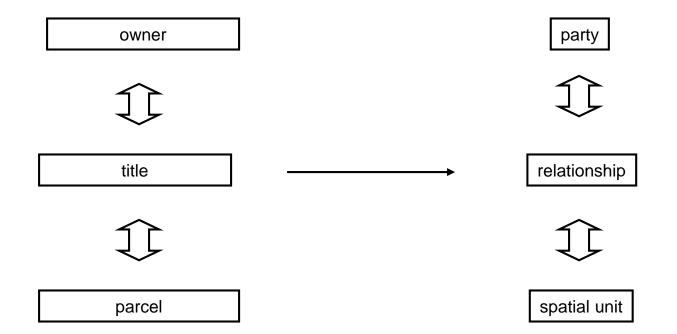




Core of Land Administration



Core of land administration





Tenure Relationships Traditional land rights Overlap

Land rights of settled and displaced populations

Communal land rights

Personal use rights

Squatting illegally Water rights

Indigenous land rights

Informal rights

Customary land rights Formal land rights

Illegal occupation

Common rights to grazing land

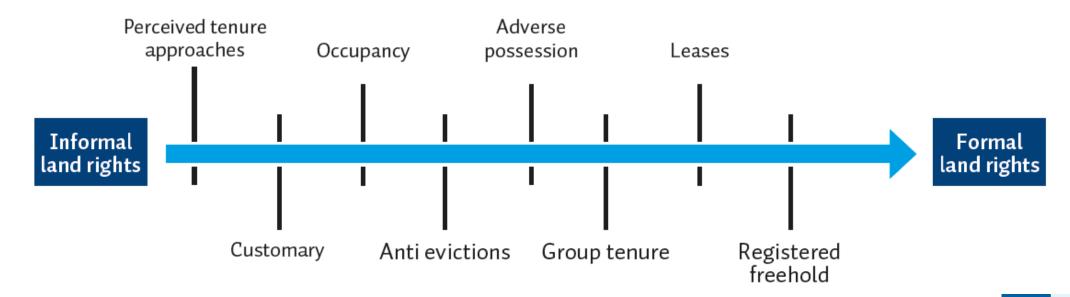
Land Administration ISO 19152

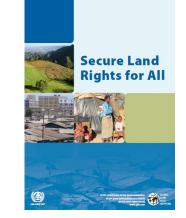
Process of determining, recording and disseminating information about the relationship between people and land

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



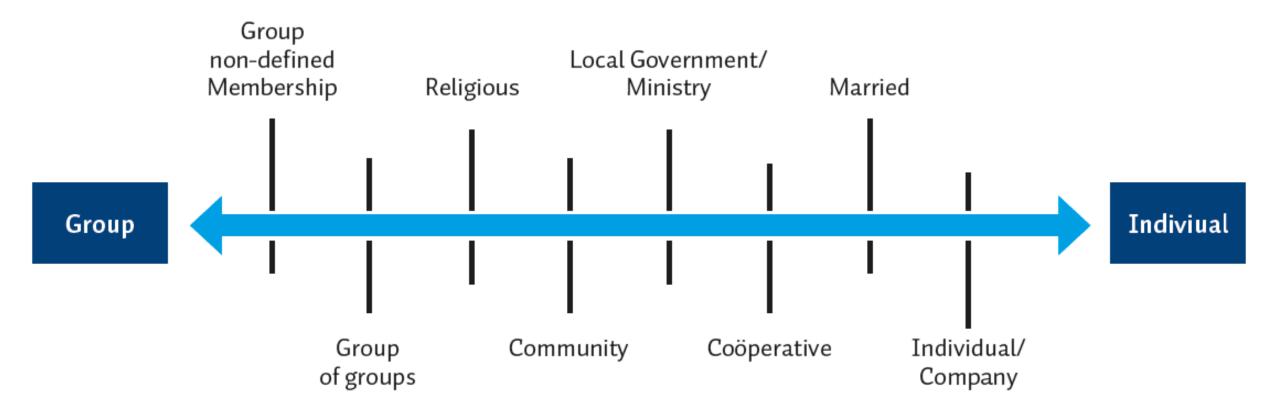
Continuum of land rights



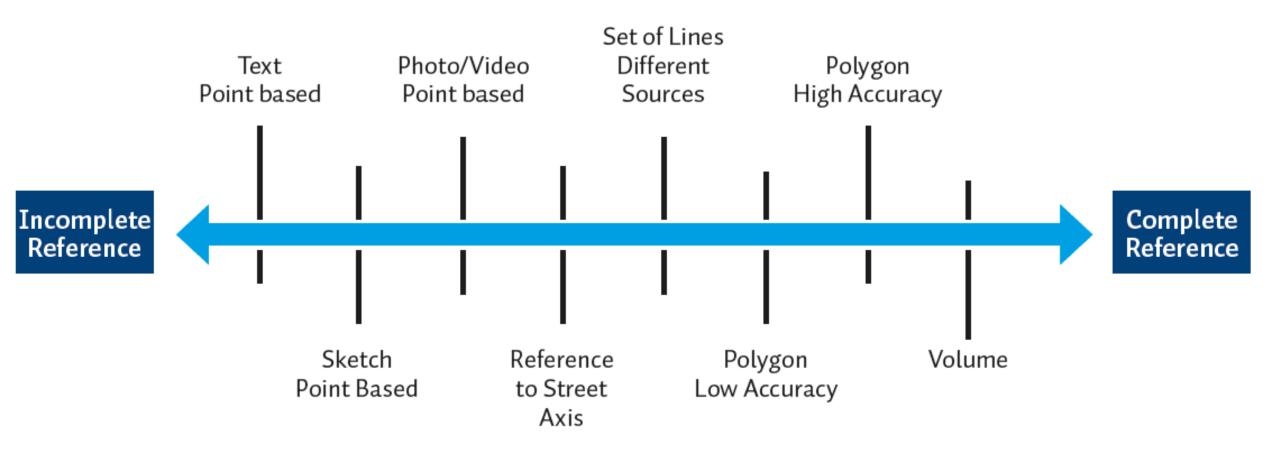




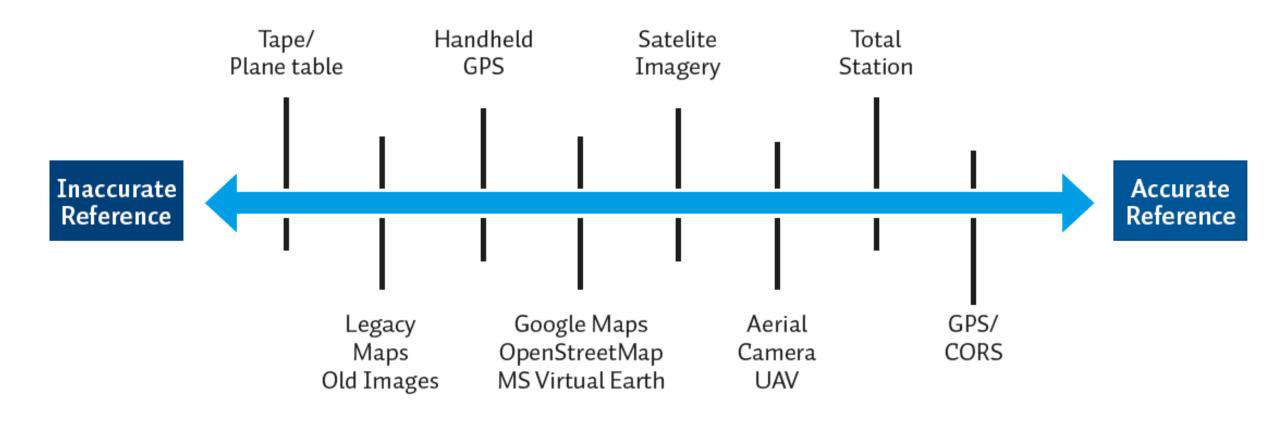
Continuum of rightholders



Representations of spatial units



Acquisition methods



Purposes

- Implementation of land policy
- Land reform
- Slum upgrade
- Certainty of ownership
- Social justice
- Legal certainty
- Land market
- Public services
- Taxation

- City Management
- Reduction of dispute
- Access to credit
- Development and use of land
- Resource management
- Environmental protection
- Improved conveyancing
- Information infrastructure

Fit-for-Purpose Land Administration – the concept

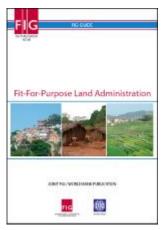
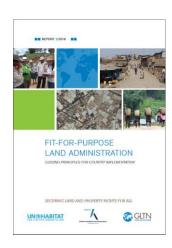


FIG pub. no. 60 **2014**

Spatial Framework:

Aerial imageries country wide Participatory field adjudication Incremental improvement Continuum of accuracy





Guidlines 2016

Legal Framework:

Enshrine FFP approach in law Secure all land rights for all Human rights, gender equity Continuum of tenure - STDM

Institutional Framework:

Holistic, transparent and cost effective Sustainable IT-approach Ongoing capacity development Continuum of services

Fundamental charactersitics

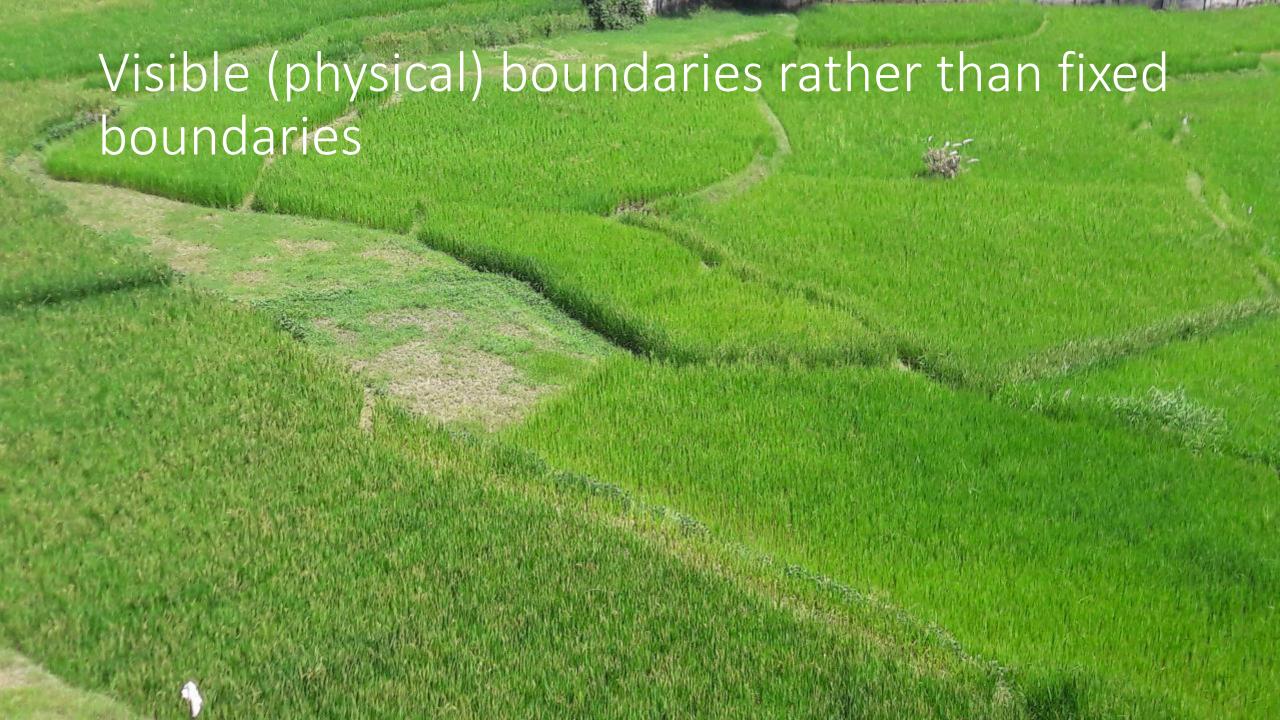
1. Focus on purpose - Focusing firstly on the "what" in terms of the end outcome and then designing the "how" to be the most "fit" for achieving the purpose

Fundamental charactersitics

- 1. 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
- 2. 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

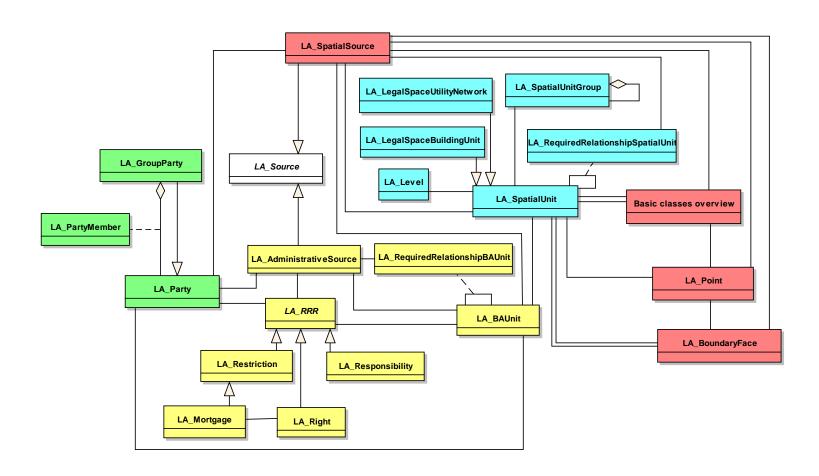
Fundamental charactersitics

- 1. 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
- 2. 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
- 3. 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

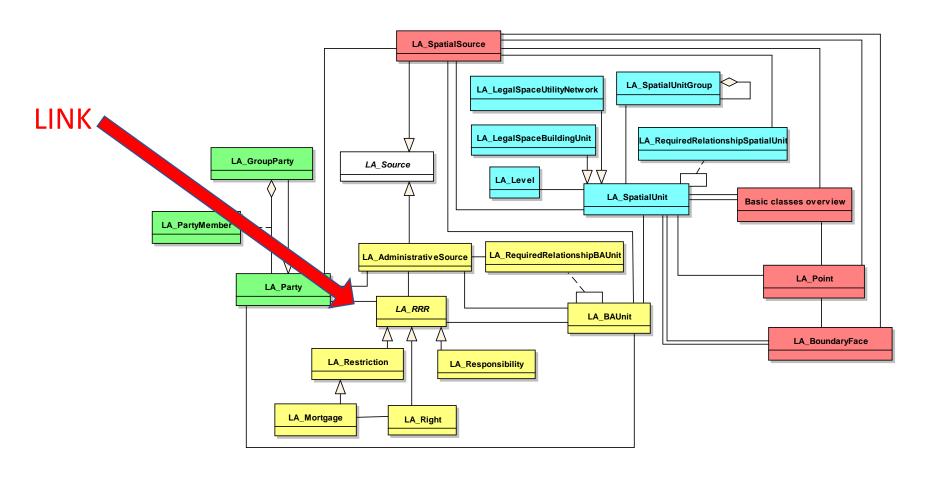




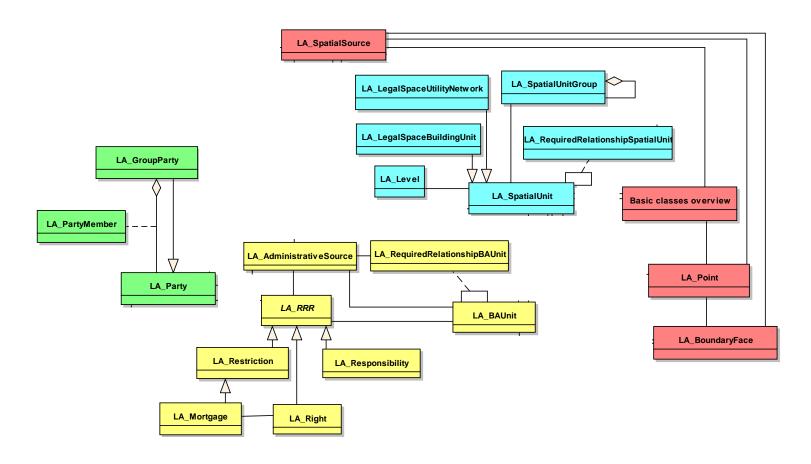
LADM



Associations between Classes: distributed responsibilities



Associations between Classes: distributed responsibilities



Revision ISO 19152 The Land Administration Domain Model







ISO 19152 Land Administration Domain Model (LADM)

- LADM was proposed to ISO/TC 211 by FIG in 2008
- ISO/TC 211 approved LADM as a standard and allocated ISO 19152
- Published as an International Standard "ISO 19152:2012 Geographic Information – Land Administration Domain Model (LADM)"
- Proposal to revise LADM 2017
- Approved by ISO/TC 211 to revise 2018
- Initiate Stage 0 to gather all requirements from a diverse group of organisations

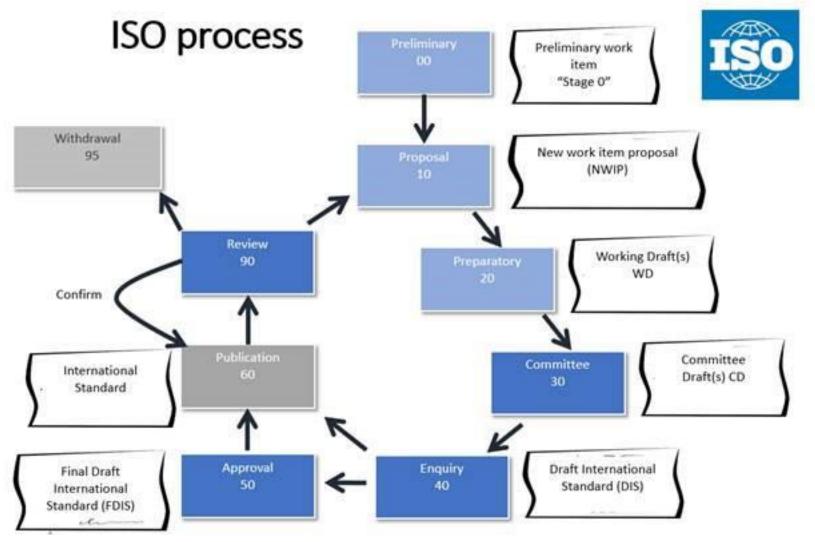




Organisations that have an interest

- FAO
- UN HABITAT
- UN Division for Ocean Affairs and the Law of the Sea
- UNGGIM Land Administration and Management
- ISO/TC 211 members
- FIG
- Valuation Community
- OGC
- IHO
- World Bank
- Royal Institution of Chartered Surveyors

Revision Process



Possible Topics

- Land Management Processes
- Taxation and Valuation
- Social Tenure to Legal Tenure
- Conflicts and disaster
- 3D & 4D, Indoor, BIM
- Marine Limits & Boundaries
- Volunteered Land Administration & Crowdsourcing
- Blockchain





Thank You