Introduction to Land Tenure Administration

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WHAT WE’LL COVER

• Background and Definitions
• Challenges and Issues
• Technology and Change
• Technology to Solve Problems – Examples
• Best Practices
• Key Take Aways
BACKGROUND AND DEFINITIONS
LAND ADMINISTRATION
HOW GOVERNMENTS ADDRESS LAND AND PROPERTY RIGHTS
WHAT IS LAND ADMINISTRATION?

- Systems that register ownership and other rights to land and property
- With a goal of strengthening and securing land tenure
- Enhancing the reliability and efficiency of land and property markets
- And reducing land and property disputes
- Good land administration systems share the following characteristics:
  - Transparency
  - Accessibility
  - Precision
  - Gender Equality
  - Providing access to reliable information at reasonable cost
A GOVERNMENT SERVICE

• Land Administration is a service typically provided by government
• Often at local and provincial/regional levels (& often not financially self-supporting)
• Local offices collect information about a parcel – boundaries, owners, encumbrances
  – Capacity issues and lack of resources often frustrate good service provision
• Information is verified, recorded and stored
• Documentation can be issued to prove ownership or use rights
• In many countries information is primarily located at the provincial/regional level – some countries have a national cadaster/registry – US has a highly decentralized system
• Communal/customary systems need to be integrated into these systems
  – Example: USAID’s Tenure and Global Climate Change project in Zambia
WHY IS LAND ADMINISTRATION IMPORTANT?

• Creates rules for how land and property should be transferred and valued (how may I exercise my tenure rights?)
  – Allowing people/organizations to leverage property for investments/credit
• Creates a valuable inventory of private, communal and state properties
  – So long as it is up-to-date and precise
• Creates a unified database to support efficient land use, land & resource management
• Provides information to support land dispute resolution
• Captures information to support a system of land valuation and land taxation
• A strong land administration system increases stability, predictability and helps support a business enabling environment
LAND ADMINISTRATION SUPPORTS MULTIPLE DEVELOPMENT OBJECTIVES
COMMON ELEMENTS OF A LAND ADMINISTRATION SYSTEM

• Cadastre - a comprehensive register of real property matters, including ownership information, parcel boundaries (via cadastral maps), and land value (where? how big? who?)

• Cadastral or parcel map – contains geospatial information about registered parcels

• Title - formal documentation of an ownership claim over real property

• Deed - document that transfers title from one person or entity to another – deeds do not prove ownership

• Certificate of Use – (typically) formal documentation of a use right

• Encumbrance – a claim on a parcel (such as an easement or lien)
A good land administration system can help raise property values.
TITLING AND REGISTRATION

- Land Administration can capture the continuum of rights
- Formal registration may include deeds or titles
- Countries also use a variety of Certificates to secure rights
- Clarity and precision support investment/property markets
CHALLENGES AND ISSUES
WHAT FRUSTRATES GOOD LAND ADMINISTRATION?

• Conventional approaches are too costly
• Often overly bureaucratic
  – Too many steps, few one-stop shops
• Maintenance problems of registry/cadastre
• Lack of satellite imagery
• Too few trained staff & excessive professional requirements
  – Surveyors, notaries, conveyancers
OTHER CHALLENGES

- Paper records are difficult to search & vulnerable to loss
- Land information is often be fragmented
  - Do ministries share info?
  - This frustrates good land use planning & land management
- Need more local participation and ownership
- Need current geospatial data
LAND ADMINISTRATION AND CORRUPTION

• These can be among the most corrupt government systems
  – As land values rise, incentives for corruption may also rise
  – Costs of abuse can be enormous – lost land, livelihoods, cultural spaces, environmental degradation

• Cumbersome processes may encourage corruption

• Physical layout of land administration offices may contribute to corruption or harassment
  – Are offices/windows open
  – Are women required to talk with officials behind closed doors?

• Long delays in service delivery may encourage use of bribes

• Solutions: publish steps/prices prominently; e-services may help; participatory processes
INNOVATION AND CHANGE

- Cassette Tape
- 10 ½ ” Tape
- 8” 5 ¼ ” 3 ½ ”
- CD
- CD-ROM
- DVD
- USB
- Cloud


- GPS
- GIS
- Internet
- UAS
- Total Station
- High-Res Satellite Imagery
ADDRESSING THE PROBLEM

GPS

• GPS does not require line of sight on the ground
• Satellites act as control points in the sky
• Accuracies increased by factor of 10
• Offers time and cost savings (10x)
• Introduces new global datum different from traditional mapping datum
• Easy to use (participatory)
ADDRESSING THE PROBLEM
SMALL UNMANNED AERIAL SYSTEMS (sUAS)

- High resolution small footprint
- Shortens mapping supply chain
- Current geospatial data on an as needs basis
- Provides mapping capability to small operators
- Fit for purpose
- Participatory
ADDRESSING THE PROBLEM
NEW PLATFORMS & TECHNOLOGY

• LandMark – a way to map & share information about customary land
  – http://www.landmarkmap.org/

• Cadasta Foundation – private digital registry
  – http://cadasta.org/

• Blockchain technologies – private digital registry
  – Being used in Republic of Georgia

• And much can be done with low tech participatory mapping
USAID SUPPORT FOR INNOVATIVE SOLUTIONS

• Mobile Applications to Secure Tenure
  – Tanzania – using mobile technology and participatory mapping approach to provide formalized land rights in support of government commitments
  – Burkina Faso – using mobile technology to map land rights in a Francophone country
  – Zambia – using mobile technology to map land and issue customary certificates

• Responsible Land Based Investment Pilot
  – LandMapp - Ghana
  – Community Mapping and Certification - Mozambique
BEST PRACTICES

- Understand how a stronger land administration system will help meet country/donor goals
- Address key local needs (mapping public lands? Communal lands? Land valuation?)
- Adopt participatory approaches (e.g. mapping, crowd sourcing)
- Integrate gender and needs of vulnerable groups
- Work with customary systems where appropriate
- Use fit for purpose technologies
KEY TAKEAWAYS

• Sound Land Administration is an important foundation for good governance, economic growth and conflict prevention

• Strengthening land administration systems takes time and may take substantial resources

• Changing technology offers innovative approaches, but building capacity to use technology can be a challenge

• Technology changes rapidly, try to anticipate this in program/system design

• New technology can further embed inequality – be aware of this

• Technology should be ‘Fit for purpose’ - fanciest may not be best