#### Developing a Modern Cadastre in Lao PDR

Bounhom Heuangsavath Deputy Director General, Department of Lands, Lao PDR

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#### **Project Contributors**





# Lao PDR

- 16 provinces, 1municipality
- 6.2 million population
  - 80% based in rural areas
- 236,800 sq km area
- Estimated 1.6 million land parcels (PAD, 2003)
- Adopted the New Economic
  Mechanism in 1986

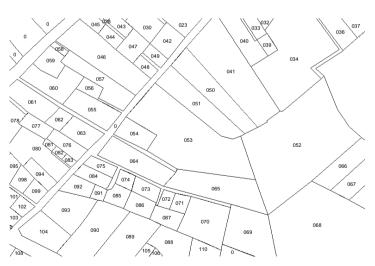


# Lao Land Titling Project

- Started July 1997
  - Phase 2 October 2003- 2008
- Focused on urban , peri-urban and lowland agriculture land
- Working in 9 of seventeen provinces in Lao PDR
- Adjudicated 450,000+ land parcels
- Produced 4,500+ cadastral maps

#### Cadastral Surveying and Mapping

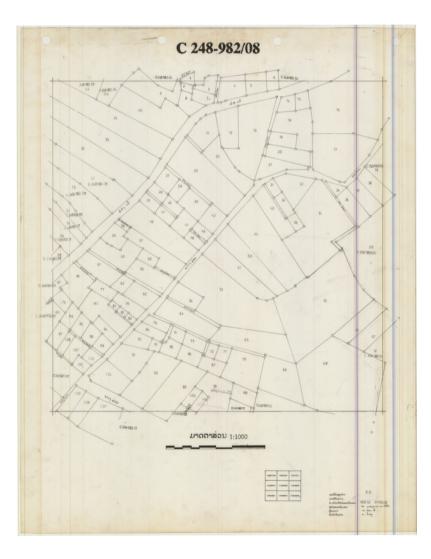
The proposed vision of cadastral surveying is one which supports the development of a computer land information system where registration details and cadastral surveying and mapping information is seamlessly linked.



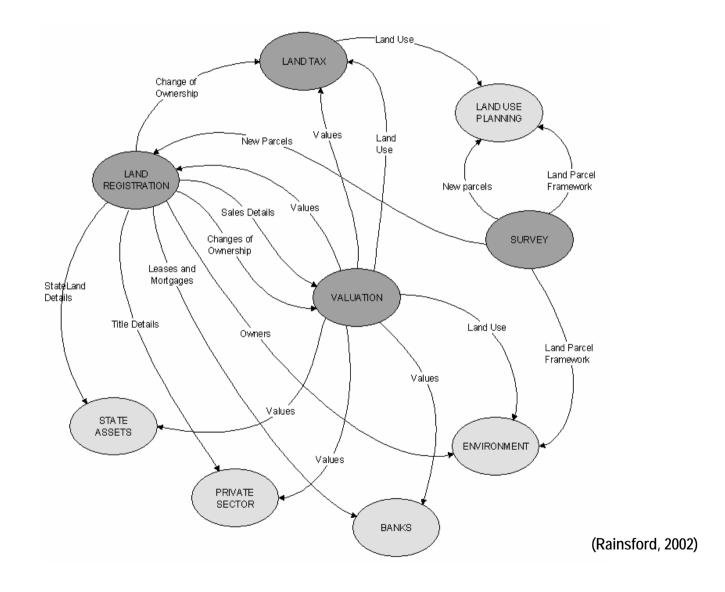


#### The Cadastral Map

- The cadastral map is used to:
  - show the relationship of land parcels to their adjacent parcels;
  - provide a graphical index for reference to land parcel information;
  - provide a unique parcel identifier number to prevent the issue of more than one land title for each parcel.



#### Justifying Cadastral Mapping

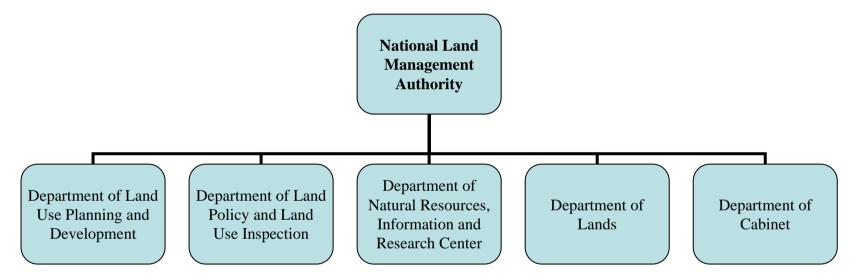


#### Land Administrations

- Responsibilities for land defined in Land Law (2003)
  - 17 functions of land management
  - 10 Ministries to fulfill these functions
- The National Land Management Agency is "charged with the management of the land of the whole country" (Land Law, 2003)

#### Land Administrations

• National Land Management Authority structure:



• The National Geographic Department is also a key partner to cadastral surveying in the Land Titling Project

# Land Information Coordination Strategy

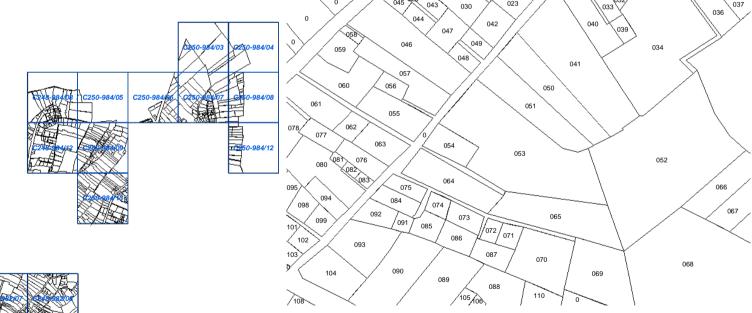
- Provides guidance of data sharing mechanisms to support growing stakeholder demand for data
- Develops the concept of a National SDI
- Promotes vision for spatial information to support economic, social and environmental interests
- Importance of current, complete and accurate cadastral information (especially spatial)

# Improving Accessibility and Integration

- Accessibility is developing through:
  - Single agency responsibility for coordinating land information
  - Development of a National GIS Committee responsible for policy, standards and sharing protocols of land datasets
  - Setup of a Land Information Center in Vientiane Capital
- Improved integration through:
  - The Land Titling Project is developing computer capacity to support a platform for coordinating spatial information
  - New spatial information tools providing support to land administration and management activities.

### Creating a Digital Cadastral Map

The LTP is building the fundamental data infrastructure for future land administration and land management functions in Lao PDR.



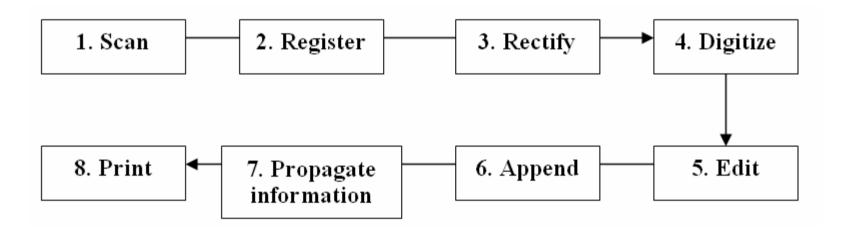


### LTP Computerisation Plan

- The Computerisation Strategy will improve data access, useability, and coordination of land related activities.
- Action Plan for Cadastral Survey and Mapping:
  - Phase1: Establishing foundations for the computerisation of cadastral survey (2005–06);
  - Phase2: Training and equipment rollout (2005 2008);
  - Phase3: Maintenance and operations of computerised cadastral survey (2005 ongoing);
  - Phase4: Data integration (2006 2015).

# Creating a Digital Cadastral Map

 There are 8 tasks involved in the development of a Digital Cadastral Map



# Digital Cadastral Data

- The benefits of having the parcel framework in digital form include:
  - Property values or sales information can be plotted on maps to assist in auditing values or analysing sales to determine rate tables.
  - Land use can be portrayed to assist in urban planning, zoning or for identifying non-conforming land uses.
  - State land parcels can be graphically displayed to assist in planning, leasing and disposal activities.
  - Land tax declarations can be mapped to discover properties and check land areas.

# Issues Moving to a Modern Cadastre

- Improving the ICT systems
- Data custodianship
  - Storage, maintenance and updating
  - NLMA to regulate the data sharing policy
- Training requirements
- Financial considerations
  - Future benefits require complete computerisation

#### Conclusions

- The National Land Management Authority and other government agencies now demand land-related spatial data.
- The Land Titling Project is developing important data infrastructure for land administration and management in Lao PDR.
- Within this there is increased capacity to coordinate land related multi-agency relationships.