

Developing a Land Registration System Using a Compromise between the Implementation of International Standards and Adaptation to Local Circumstances: The Cambodian Experience



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OVERVIEW

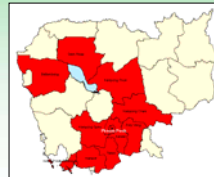
- History of Land Registration in Cambodia
- The LMAP project
- Systematic registration: the process
- Development of the Land Registration System
- Current status
- Future challenges

HISTORY OF LAND REGISTRATION IN CAMBODIA



- Land registration in Cambodia started during French colonial period
- All land records were destroyed by Khmer Rouge
- Private property re-introduced in 1989
- From 1995-2002, pilot projects supported by German, Finnish and French governments registered 81,000 land parcels
- In 2002, multi-donor project LMAP started

THE LMAP PROJECT



- LMAP is a multi-development partner land management and administration project
- Systematic land registration in Cambodia is conducted under LMAP component 3 "Land titling program and development of the land registration system"
- LMAP started in 8 provinces and has expanded to 11 provinces in 2004
- 26 Land registration teams consisting of adjudicators, surveyors, demarcators, GIS and data entry officers (total 700 staff)

SYSTEMATIC REGISTRATION: THE PROCESS



Systematic registration is done village by village. The registration process follows the following steps:

- Opening meeting
- Field work
- Office work
- Public Display
- Title issuing

OPENING MEETING



After an adjudication area is declared, an opening meeting is held to inform the public about land registration.



FIELD WORK



During field work, the parcel boundaries are demarcated and owner information is recorded on the Parcel Form.



FIG Working Week
Hong Kong, 13-17 May 2007



FIELD WORK / SURVEYING



Where the parcel boundaries are not clearly visible on orthophoto, boundaries are surveyed by total station.

FIG Working Week
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OFFICE WORK



In the office, the information from the field work is processed. The owner information on the Parcel Form is entered into the database.



Field sketches with tape measurements and boundary points from total station are used to digitize the parcel boundaries with the orthophoto as background.

FIG Working Week
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PUBLIC DISPLAY



When the field work for one village is completed and the information is processed, the Cadastral Index Map and the List of Owners are printed and publicly displayed for 30 days.

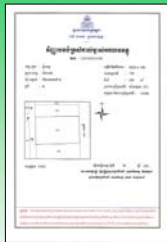


During the Public Display, owners can verify the information and request modifications.

FIG Working Week
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TITLE ISSUING



The last step in the systematic registration process is the issuing of land title certificates. A title issuing ceremony is held in every village, but the owners can also collect their land title later.

FIG Working Week
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DEVELOPMENT OF THE CAMBODIAN LAND REGISTRATION SYSTEM



At the start of LMAP, a registration system had to be developed that was:

- Suitable for systematic registration of at least 1 million land parcels, as well as subsequent transactions
- Technically flexible : the legal framework is still in development
- Affordable: Cambodia cannot afford to spend a lot of money on software / hardware
- User-friendly: Officers with limited computer skills must be able to use it
- In Khmer language

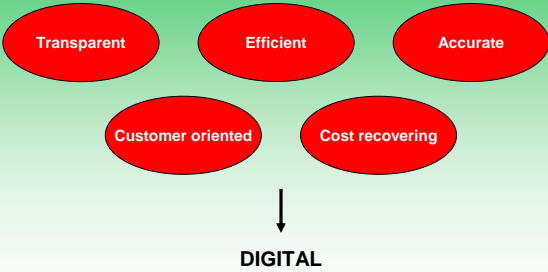


FIG Working Week
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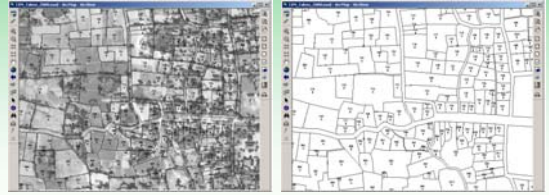
DEVELOPMENT OF THE CAMBODIAN LAND REGISTRATION SYSTEM

Most of us agree that a land registration system should be:



DEVELOPMENT OF THE CAMBODIAN LAND REGISTRATION SYSTEM

Considering the requirements and circumstances, it was decided that a low cost digital system based on orthophotos and locally developed database and GIS tools, that could be upgraded later on, would be the best option to realize the expected output of 1 million registrations.



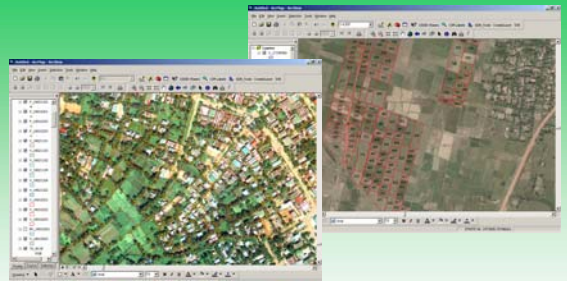
DEVELOPMENT OF THE CAMBODIAN LAND REGISTRATION SYSTEM



The Land Registration System consists of GIS tools and the Cadastral database.

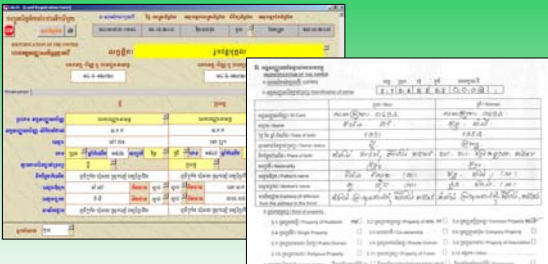
ArcGIS (ArcView), MS Access and SQL Server are used as data stores.

DEVELOPMENT OF THE CAMBODIAN LAND REGISTRATION SYSTEM



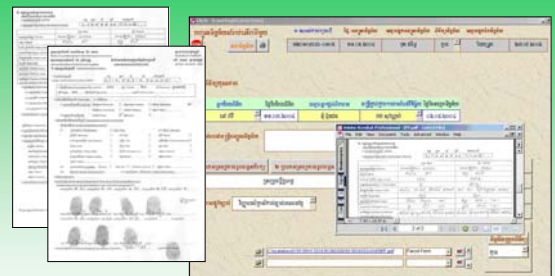
Orthophotos are used as background for on-screen digitizing. In most rural areas, the orthophotos are enough to identify parcel boundaries. Where the boundaries cannot be identified clearly on the orthophoto, they are surveyed by tape and total station.

DEVELOPMENT OF THE CAMBODIAN LAND REGISTRATION SYSTEM



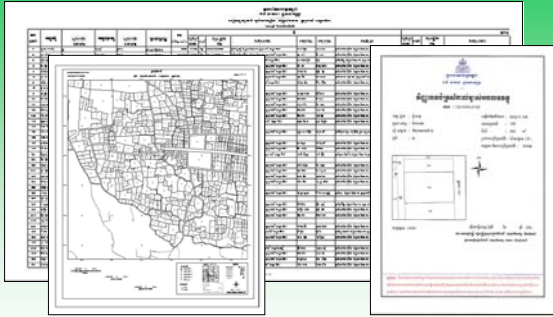
The data entry application was designed to resemble the Parcel Form, so that it is easy to copy information from the form into the database.

DEVELOPMENT OF THE CAMBODIAN LAND REGISTRATION SYSTEM



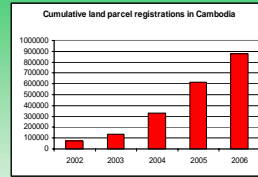
Paper documents are scanned and linked to the system for efficient storage and retrieval.

DEVELOPMENT OF THE CAMBODIAN LAND REGISTRATION SYSTEM



The Land Book, List of Owners, Land Title and Cadastral Index Map are the outputs of the system.

CURRENT STATUS OF LAND REGISTRATION IN CAMBODIA



- Nearly 1 million land parcels registered
- 23,000 new registrations per month
- Access databases being migrated to SQL Server
- Digital register is not yet fully recognized, but discussions are ongoing to replace the national paper register with digital files.

FUTURE CHALLENGES



- Making land registration data available to customers
- Growing towards a multi-purpose cadastre; include land valuation data
- Complete systematic registration of the whole of Cambodia
- Making the land registration system self-financing and sustainable

Thank you for your attention!



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