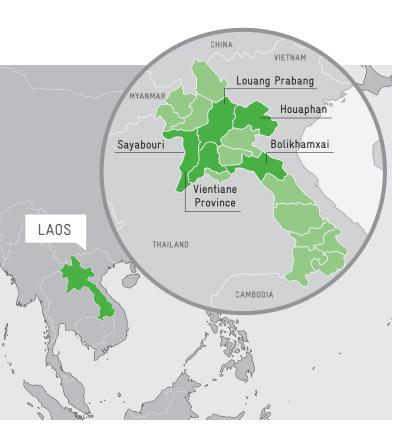


LAOS: SCALING UP THE LAOLANDREG - A COMPREHENSIVE, ELECTRONIC CADASTRE MANAGEMENT SYSTEM



### Programme

THE GLOBAL PROGRAMME 'RESPONSIBLE LAND POLICY' (GPRLP) IS PART OF THE SPECIAL INITIATIVE 'ONE WORLD, NO HUNGER' OF THE GERMAN FEDERAL MINISTRY FOR ECONOMIC COOPERATION AND DEVELOPMENT (BMZ), WHICH AIMS TO REDUCE EXTREME POVERTY AND HUNGER.



The programme is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in countries across Africa, Asia and South America. Its main objective is to secure access to land as a major prerequisite for poverty and hunger reduction in rural areas, especially for women, marginalized groups and indigenous peoples.

### THE GLOBAL PROGRAMME IS IMPLEMENTED ALONG THREE FIELDS OF ACTION:

- Improving procedures to secure land ownership and user rights for the rural population;
- Strengthening civil society;
- Improving the framework conditions for responsible agricultural investments.

In Laos, the 'Enhanced Land Tenure Security Project' (ELTeS) supports five provinces in Northern Laos in securing land user and land ownership rights. The project has supported the expansion of the use of a comprehensive, electronic and user-friendly cadastre management system, the so-called 'LaoLandReg' (LLReg) in all provinces of Lao PDR.

More information on the Global Programme Responsible Land Policy and the country package in Laos.

# Starting point

### IN THE PAST, GOVERNMENT INSTITUTIONS AT ALL LEVELS IN LAOS FACED SUBSTANTIAL

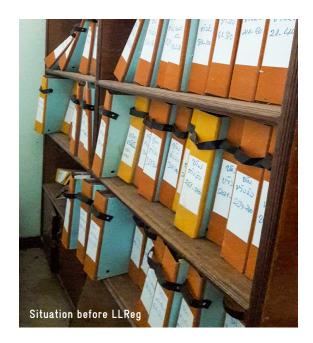
CHALLENGES to manage land-relevant data efficiently. Maps, cadastre and parcel information were mainly administrated via a paper-based system at a decentralized level. A digital predecessor system to LLReg could only handle the textual information and not the complete cadastre data. The system was not well-maintained and hence many provinces and district land offices could not use it. Secure and appropriate storage of the paper-based land register and the cadastre maps were difficult in poorly equipped storage rooms. A systematic archive was lacking and water leaks, mould, dust and pest infestation destroyed parts of the data. Continuous maintenance of the analogue cadastre was not systematically carried out, therefore the cadastre maps were often outdated, as subdivisions, resurveys or consolidation of parcels in the countryside were not captured.

For the rural land rights holder, a number of disadvantages evolved out of this poor cadastre management:

- lengthy administrative processes in a poorly organized, paper-based system;
- imminent threat of loss of the official land record;
- insufficient measures against falsification and fraud via faked land titles.

The decentralized level is mandated to establish the cadastre and the land registry, and the information should be aggregated at a national level. Nationwide access through a unified system at the central level was not in place, hence access to data for land professionals, decision-makers and land users was difficult.

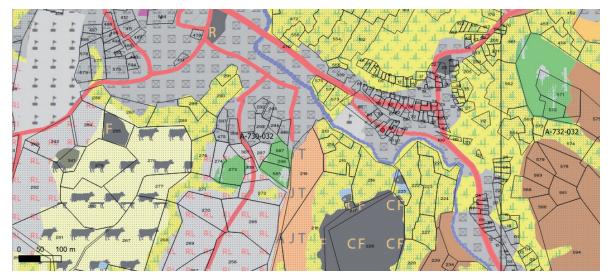
Starting in 2009, the Department of Land which is under the Ministry of Natural Resources and Environment (MoNRE) has been supported by the GIZ 'Land Management and Decentralized Planning' (LMDP) programme and its predecessor projects to develop a comprehensive, electronic and user-friendly cadastre management system, the LLReg. However, until 2017, the LLReg was used only in a few GIZ-supported provinces, as the other provinces continued to manage their data at a decentralized level using different systems.



The main beneficiaries of the LLReg are land offices in the provinces and all the land rights holders (individuals, married couples, owner groups and private, collective and state entities), as LLReg now administers all their statutory tenure rights (ownership or use right) on defined land parcels.

## Positive changes

- 1 The provision of a unified land registration system contributes to the acceleration of systematic first registration to provide statutory land tenure recognition for all people in Laos, not only the urban and peri-urban population but also in rural areas.
- 2 The system supports good governance in the land sector through increased process transparency and traceability, which reduces the margin for misconduct and inconsistencies.
- 3 A unified system eases systematic data compilation and data provision to other data management systems, such as the taxation system and underlying governance processes, such as land tax collection.
- A compiled, up-to-date cadastre contributes to further digitalization of land administration services, such as the provision of a web-based land information portal. Currently there are 500,000 land rights managed in this national database.



Cadastre overview map of a village in LLReg

LLReg provides mainly indirect benefits to rural land rights holders, such as reducing the threat of data loss (through digital data management with a data backup system at a local and a higher level) and diminishing the threat of fraud from faked land titles and other relevant documents (through a

well-established system of user management which includes audit functions). The processing time for first and subsequent registrations has been reduced by the introduction of LLReg to the land offices.

## Approach

### THE DEPARTMENT OF LAND (DOL) TOOK THE MAIN

INITIATIVE for the scaling-up process for LLReg. Conceptual and technical support has been provided by an international expert seconded by the Centre for International Migration and Development (Centrum für Internationale Migration und Entwicklung; CIM) based at the DoL. The Global Programme, LMDP and the German 'Studies and Expert Fund' (SEF) provided financial support for further development of the system based on identified needs, as well as

for the demonstration of operational usage of the system in all GIZ-supported areas. A milestone in the scaling-up process was the recognition of LLReg as the official land registration system and cadastre database of Lao PDR. After the decision, buy-in was obtained from the Lao government and third parties, who granted resources including the provision of staff and a budget to support the roll-out of LLReg to all provinces.

FIELD TEAM 1, IMPORT **EXPORT DATA** VILLAGE 1 LLReg DB Text data 8 Standalone Desktop Computer LLReg DB Database on laptop OFFICE. Text data & DISTRICT FIELD TEAM 2, Hub switch VILLAGE 2 **EXPORT DATA IMPORT** Standalone Laptop Database on laptop

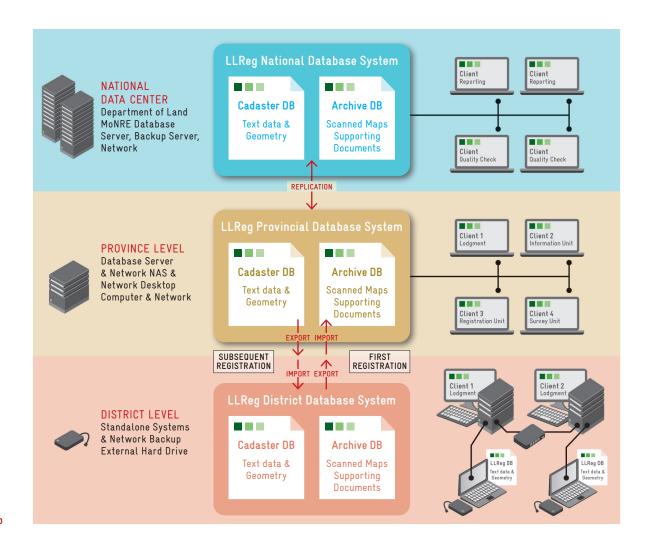
The role of the GIZ team in the scaling-up process is to provide support to the LLReg team of DoL in the following areas:

- Conceptual and technical support for the improvement of the information and communications technology infrastructure;
- Migration of cadastre data from predecessor systems to LLReg;
- Cadastre data synchronization between the provinces and the central level;
- Integration of LLReg in a wider Land Information/Administration System;
- Strengthening of technical capacities of the national LLReg administration Team as well as National Master trainers and backstoppers;
- Assessment and improvement of data security.

Data flow between teams in the villages doing systematic land registration and the district-level land registration office. All digital field data is transferred to the registration office and imported into their cadastral database system.

THE GEOGRAPHICAL EXPANSION has been successful; 18 provinces consisting of a total of 148 districts are using LLReg for land administration. Currently, there is a sectoral expansion of the system taking place. An interface between the national cadastre database and the taxation system has been established to support land tax collection. The DoL is in discussion with the Department of Agriculture Land Management from the Ministry of Agriculture and Forestry to identify a workflow for the integration of the agricultural land survey to LLReg.

18 provinces consisting of a total of 148 districts are using LLReg for land administration.



Technical set-up

## For replication

OVERALL, THE REPLICATION OF LLREG IS A SUCCESS STORY, even though the processes are taking time and require financial and technical support at all organizational levels of the land administration structure.

For the replication of LLReg, e.g., in other countries, the following aspects are considered as key elements:

- Take the initiative to kick-start as soon as government agencies send positive signals;
- Start small and continue to further develop the system, both technically and in its geographical range;
- Develop and maintain a close relationship with all relevant state agencies to ensure official recognition of the system;
- Ensure continued capacity development of government agency staff for smooth running of the system;
- Use mainly Open Source;

- Develop a system which can operate in a poorly established network environment:
  - The database can run on a server or a standalone desktop computer;
  - The system is accessible without requiring good internet access;
  - Data exchange/synchronization occur with a compressed XML file.

NATIONAL	Ministry of Natural Resources and Environment  Realization of further development LaoLandReg and source code maintenance  High qualified IT staff MONRE + local/international external resources  Database Administration/Maintenance  LaoLandReg Administration Core Team (5 staff)  Development of standards and regulation for LaoLandReg specific registration workflow  Institutionalization information & data exchange  Maintenance of server and online system not yet realized  Provision of a operational Master trainer/ Backstopper (8 – 10 staff)
PROVINCE	Provincial Office of Natural Resources and Environment  Training and technical support to the districts  Compilation and Storage of district data at province level  Requesting additional support from national level when needed  Some subsequent backend registration services
DISTRICT	District Office of Natural Resources and Environment  Service provider to customer  Front-end implementation of registration tasks  Requesting additional support from province level when needed

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