



(L-R) Mike C, a supervisor of Land Information Systems, Richard Oput the co-ordinator CEPD land component, Gregory Myers, the Lead Land Specialist at World Bank and Alexander Solovov, ICT consultant with National Land Information centre and staff inspecting the ICT department at NLIS in Kampala on June 13, 2016

# ICT transforms land registry

By Owen Wagabaza

**R**ight from its inception in 1908 till 2013, the Land Registry had been running on a manual system of record keeping and land registration. Despite the growing demand for titling of property, registration and data storage, the Land Registry had remained inefficient and poor. Until 2013, less than 20% of the land in Uganda was registered.

"Many land records were not properly filled, there were missing land reports, records would at times be hidden and stolen and many had been torn as a result of poor handling. Modernisation of the land administration system turned into not an option but a must," says Dennis Obbo, the lands ministry spokesperson.

In 2003, the NRM government took a decision to computerise the land records. In the same year, the land titles computerisation exercise started with the Government hiring data entry staff and experienced professionals with a legal background to vet the physical land title records in preparation for their conversion into digital copies.

"The vetting entailed a series of activities aimed at ascertaining the genuineness and authenticity of the land title information as having been issued legitimately," Obbo says.

The process of carrying out the actual conversion, from physical to digital, began in February 2010, and run up to February 2013. A consortium of firms led by IGN France International carried out this conversion. As a quality

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measure, IGN France International crosschecked the records a number of times to reconfirm each and every record.

In 2013, after the Cabinet approved the National Land Policy which called for, among others, the need to establish and maintain a reliable and user-friendly Land Information System as a public good for planning and national development, the National Land Information System was established.

## What is a National Land Information System?

The Uganda National Land Information System website defines an NLIS as a geographic information system for cadastral and land-use mapping, typically used by the local government. Similar to a GIS, an NLIS is designed specifically to contain spatially land related data for a defined area and procedures and techniques for the systematic collection, update, processing and distribution of this data.

"A NLIS is a decision-making tool that creates, visualises, analyses,

reports and publishes land-based data such as parcel information, zoning, land use, ownership and general property information. In addition to those land-related data, the NLIS may contain other additional information such as data on soils, hydrology, rainfall or socio-economic information," reads part of the statement on the website.

## Benefits so far

At its inception, the NLIS was expected to be the sole electronic source of land and real estate for mailo, freehold, leasehold and customary rights and interests held under a unified registry for the whole country.

Provide specific system administration tools to manage users, perform workflow management, security audits, system configuration and the configuration of charts of accounts and fee schedules.

The system was expected to support the generation of ground rent demands; generate standardised query and notification



Dennis Obbo

letters as well as other reports; provide a public access module that allows general enquiries by the public within the district land office customer service areas and support decentralised business workflows in the district land offices.

"Benefits registered are already immense. The design of the computerised system introduced a complex set of security procedures with a minimum of four levels of access to various staff, to ensure a secure storage of land information at all times," Obbo says.

According to Obbo, no one can have unencumbered access to the land information to alter it without the knowledge of higher level security keepers. The system itself records and reports any attempts to interfere with records and it is designed such that it will not accept such manipulations.

Obbo says the implementation of land information system has led to a decreasing number of land related disputes, reduced the risks of fraud or bribes, and encourages

investments.

"There is an audit trail of land transactions, it has improved on the quality of records and their management. There is instant retrieval of land related information and, therefore, improved service delivery to the stakeholders," Obbo says.

"There has also been an increase in revenue collections on land transactions from less than sh10b to over sh200b. No transaction can be registered until we have verified with Uganda Revenue Authority that the money has been paid. Soon, the sector will be categorized as a major revenue generating centre," he adds.

## Challenges

Aside from the need to change the mind-set of the managers of the system and the clientele to be served, inadequacy of trained personnel to supervise the system is still a big challenge. This calls for massive sensitisation of stakeholders on land-related matters and adoption of new systems for land management.

There is also the challenge of insufficient budgetary provision for support of land administration service delivery including maintenance and sustenance of the installed system, as well as infrastructure challenges including intermittent power supply in some places and limited inter connectivity.

Moses Ssebirumbi, a land expert says the system will play a major role in eliminating forgeries that have been common in the land sector. It is difficult to forge land titles as it has been the case and this is important, especially now as grabbing is a big issue.