SiGIT Land Information System and the Challenges Imposed by the Fit For Purpose Approach to Land Administration

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Key words: Access to land; Cadastre; Digital cadastre; e-Governance; Land management; Security of tenure; Standards; Land Information System; Cadatre Interoperability; SiGIT; LIMS

SUMMARY

It is now five years since the Mozambican's Land Information Management System (LIMS/SiGIT), an ISO 19152 Land Administration Domain Model (LADM) based system, was developed, under a Government project named "Land Tenure Security".

The SiGIT architecture and design was built taking into consideration the 10 (ten) Land Administration Principles stated in Williamson et al. (2010) and the 10 (ten) vital considerations to ensure success of land systems implementations proposed by Lewis (2009). These concepts were very important to gauge security, scalability and sustainability of the system.

The system incorporated into its workflows all land-related legislations, regulations and policies, and all land administration processes from registration, to taxation, to expansion or reduction of area, to transmission of rights, to revocation or cancellation of rights (Balas, 2016). The system was developed with specific workflows for urban and rural areas.

With the Launch of the "Terra Segura" program aiming at registering 5 million parcels and 4 thousand communities, SiGIT was tested intensely and therefore new requirements were defined. As recommended by Williamson et al. (2010) SiGIT must ensure that it is secure, scalable and sustainable solution and that enables flexible responses to challenges associated with change and positions the organization for both short and long-term successes. Changes had to be made to incorporate new requirements aligned with the defined Fit For Purpose land tenure registration methodology defined for the program: (i) allow for delimitations (DelCOM) and regularizations (RDUAT) to co-exist within the same project area, ensuring community and individual rights would be registered; (ii) interoperate with a mobile application for field data collection reducing data rejection and increasing speed for data collection and manipulation; (iii) develop new reports for

monitoring and control supporting the management function of the program.

More recently, and because there is a need for reaching cruise speed in registration process, other requirements were defined such as the need to interoperate with support cadastres that validate tenants identity, namely for individuals (ID card system) and for organizations (registration system and/or taxation system). This requirement poses a huge challenge since not all cadastres are ready to interoperate. The main goal is to facilitate the massive land tenure registration, reducing the time of collecting information with regards to citizen's identity. When this is achieved, the next goal would be to interoperate with other cadastres that depend in the land cadastre such as the mining, forestry and conservation areas cadastres.

With regards to the requirement of keeping the land cadastre up-to-date and accurate, there is also a need to incorporate mechanisms for community feeds of cadastral changes at community level.

These are the challenges for the next cycle of the SiGIT application and we intend to illustrate the work that is being performed in Mozambique with regards to land tenure security and the support that the land information system can provide to accelerate that process.