Flexible Land Information System Championing Reform Towards Formal Cadaster in Developing Countries

Solomon Njogu, John Gitau and Danilo Antonio (Kenya)

Key words: Access to land; Cadastre; Digital cadastre; Geoinformation/GI; Land management; Low

cost technology; Security of tenure; Standards; Social Tenure Domain Model

SUMMARY

The importance of Social Tenure Domain Model in reforming land administration is increasingly being recognized by many governments especially in Africa. The is partly due to its robustness but also as a result of the broad experiences from the various applications context. The software currently being used in about 10 countries has demonstrated the potential of addressing various tenure types while recognizing the various complexity of land rights as appreciated in the continuum of land rights approaches (GLTN, 2014). The uptake by the government is paving new dimensions for its development towards land information system to support broad land management issues in the domain of land use planning, land valuation and land tenure.

Tenure security is recognized as a critical element for social economic development. Unfortunately, many people are still not covered in the formal cadastral systems. The current procedures and requirements for mapping and boundary delineation are often too complex and expensive for the poor and disadvantages group in the community (FIG, 2014). Hence the formal land registration processes do not comply with the actual needs of most citizens for achieving security of tenure (FIG, 2010). Without modernizing these systems, issues of land conflicts, women access to land as well as pertinent issues of urbanization will continue to escalate. In fact, UN Habitat says the population in urban areas is expected to reach 70% by 2050 (UN Habitat 2010). Similarly, the rate of urbanization is expected to be even higher in Africa.

Flexible systems such as the Social Tenure Domain Model (STDM) are responding to the challenges by providing alternative and affordable solutions utilizing low cost technologies to modernize land administration systems (GLTN 2016). The immediate impact includes continous automation of business processes and improvement in digital archiving processes through

Flexible Land Information System Championing Reform Towards Formal Cadaster in Developing Countries (10689) Solomon Njogu, John Gitau and Danilo Antonio (Kenya)

conversion of existing manual records into digital archives. Additionally, the inclusion of community participatory processes in data collection and validation has transformed land governance processes. This paper discusses three case studies covering automation of cadastral business process in Democratic Republic of Congo, automation of land registration processes in Namibia and transformation of cadastral workflows in Nepal through use of STDM. The impact will demonstrate evolution of change management process as well as improvement of land governance process with traditional systems and contribution to land reform processes at the national level.

Flexible Land Information System Championing Reform Towards Formal Cadaster in Developing Countries (10689) Solomon Njogu, John Gitau and Danilo Antonio (Kenya)