

Low-Cost Land Information System for Sustainable Urban Development: Case Examples in Kenya and Zambia

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SUMMARY

Sustainable urban development strongly depends on how well land is accessed, managed, used and transferred for the benefit of the current and projected urban population. Ensuring sustainable urban development requires proper land information. If relevant and good decisions are to be made by public authorities, private resource users or community organizations, they must be based on sound information about the land and environment in order to contribute to sustainable development. Authoritative and up-to-date land information that is consistently available and accessible over time reinforces good land administration and management leading to good land governance and sustainable development.

This paper describes the experiences of developing and deploying of innovative land information systems coupled with appropriate land tools and methodologies in Kenya and Zambia. The typical implementation process involves a scoping study where a thorough understanding and analysis of the needs of the lands institution who are the primary custodians of land information within the given jurisdiction. It also determines capacity development needs at both the organizational and individual levels as well as identify data accessibility and sharing requirements for both internal (other departments such as planning finance, housing) and external clients (other government agencies, general public). Based on the scoping study, the process of developing and deploying the land information system basically involves: (re)designing data collection, approval, analysis and integration of business processes; developing the system using agile ICT approaches; and, providing on-the-job training to relevant staff members in the institution.

The paper highlights the changes in procedures, responsibilities and computing environment within these land institutions with a focus on good land governance and efficient land services. This has been achieved by adopting flexible user-driven ICT approaches built upon open source software

technologies and transparent land information with easy access for other departments within the institution. The paper also highlights the importance of capacity building as a key component in ensuring successful deployment of innovative land information systems. The need to develop local competencies is given prominence as the key to developing sustainable land information. The implementation and outcome of these initiatives in Kenya and Zambia have provided key lessons for consideration in future projects particularly in addressing the requirements of other government authorities including at national level. These include technical capabilities of the information system that are low-cost, related tools and methodologies, business process management, capacity development at societal, organizational and individual levels; multi-stakeholder collaboration, and, knowledge sharing and management.

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