

A Review of Kenya's Ardhisasa Land Information System: Institutional and Technical Issues

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Key words: Cadastre; Digital cadastre; Informal settlements; Land management; Young surveyor; Land Information System

SUMMARY

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Abstract

All physical development sits upon land. Effective land management is therefore essential for promoting sustainable development, securing property rights, and enhancing land administration processes. Kenya's land administration has been marked by inefficiency, fragmentation, and opacity owing to the largely paper-based Land Information Management System. The digital Land Information System, Ardhisasa, under the National Land Information Management System (NLIMS), was launched in April 2021 as a leap towards the modernization of land administration through automated land records and transactions. This paper reviews the performance of Ardhisasa and focuses on identifying and analyzing the key institutional challenges and technical challenges affecting its optimal performance and proposing recommendations to enhance system performance, efficiency and reliability.

Data was collected through structured interviews, open-ended questionnaires, and stakeholder consultations with key institutions

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such as the Ministry of Lands and the National Land Commission. Data was also gathered from a range of system users, including planners, valuers, lawyers, surveyors, average citizens, and system operators.

The findings indicate several technical and institutional challenges, including frequent system downtimes, incomplete and missing land records, datum differences in data, and system integration challenges with external databases. Institutionally, the findings further indicate that Ardhisasa's implementation was characterized by institutional misalignment, capacity constraints, resistance to change, and poor engagement with stakeholders.

This paper concludes that the success of Ardhisasa will depend not only on the technology but also on institutional preparedness, legislation clarity, political will, and public trust. Key recommendations include harmonization of survey datums, strengthening system interoperability, enhancing user training and documentation, digitization of all records, and developing a mobile application for greater accessibility to tackle the technical challenges.

Addressing these challenges will be critical for ensuring that Ardhisasa realizes its potential as a transparent, reliable, and scalable land information management system capable of supporting Kenya's broader goals for land reform and digital transformation.