

Historical Layers as Added Value: Integrating Geo-Historical Archives into Digital Cadastres in the Global South

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SUMMARY

Land administration in the Global South increasingly relies on digital cadastres and land information systems (LIS) to deliver secure, inclusive, and transparent land rights. Yet, many of these systems start from a fragmented or incomplete documentary base. This paper explores how historical geo-relevant archival material—maps, title deeds, survey records, and related documents—can serve as a critical, value-adding layer in building and improving digital land administration systems.

The research, conducted under Kadaster International, investigates the proposition that digitising and integrating such historical sources can accelerate land rights registration and enhance inclusivity, particularly where colonial and post-colonial records remain the only surviving evidence of ownership or tenure. Drawing on interviews with digital humanists, economic historians, and cadastral experts, and supported by case examples from Africa, Asia, and the Caribbean, the study situates this work within the broader “spatial turn” and emerging “historical turn” in land administration.

Collaboration between land administration authorities and digital humanities groups emerges as the missing link in current digitisation efforts. While digital humanists and cultural heritage institutions have advanced techniques in digitisation, metadata structuring, and visualisation, cadastral organisations bring expertise in spatial data management, quality control, and land governance frameworks. Bridging these domains could unlock new co-financing opportunities—from cultural heritage funds to development banks—while producing interoperable, context-rich digital archives that support both governance and research.

The paper outlines a conceptual and methodological framework for assessing, digitising, and

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integrating historical materials into modern cadastres. It stresses the need for critical source evaluation, especially of colonial records, and highlights the potential of AI and deep learning to extract structured spatial information from legacy maps.

By linking digital cadastres to digital humanities initiatives, the project envisions a fit-for-purpose, historically grounded digital land administration model that strengthens land rights, preserves cultural heritage, and contributes to the UN Sustainable Development Goals. The paper concludes by proposing a collaborative “toolbox” for institutions in the Global South to identify, assess, and digitise geo-historical materials—transforming archives from passive repositories into active instruments of land justice and development.

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