Digital Transformation of Land Administration:
Stages, Status, and Solutions

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SUMMARY

There is longstanding consensus that land administration systems must undergo digital transformation: key datasets, processes, transactions and users experiences should move towards being fully digital. Many systems, and the actors embedded within them, now exhibit this trait – from land surveying and mapping, through to land marketing and sales, to contracting and conveyancing/notary work, and finally to lodgement and registration – all are digitally transformed. However, most systems still operate in a parallel or hybrid fashion: a combination of manual processing, paper documentation, automation, and digital systems are used. This paper explores the results of recent digital transformation projects undertaken collaboratively between Kadaster International (Netherlands) and project partners in Indonesia, Armenia, and Mozambique. Whilst there are significant differences at the country level with regards to legal approaches, finances, partnerships, legacy IT systems (if any), and available capacity – all of the countries face common challenges when dealing with archive digitisation and storage, spatial/textual data quality, standards, digital transaction design, system maintenance, and building public awareness and trust. The UN-GGIM Framework for Effective Land Administration (FELA) provides a means for understanding and undertaking digital transformation at both organisational and sector level: it can help to unpack the stages and status of digital transformation within land administration system. It also reveals potential solutions to speed up responsibly moving towards fully digital systems. The cases reveal the importance of linking local knowledge with international expertise and standardisation.

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