

The Case for Using Simulation in Land Administration with A Plan to Build Capability and Capacity to Use it Operationally

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Key words: Access to land; Capacity building; Implementation of plans; Land management; Security of tenure

SUMMARY

This paper has four parts.

Part A Sets the Scene. It considers that success in Land Administration (LA) with Development Assistance (DA) is achieving improvements in LA with DA and sustaining those improvements post DA. What simulation is used for and in what areas is noted, as is the use of simulation in some non-LA areas of DA. The applicability of SD to LA/DA was shown at FIG Orlando 2023 by the lead author. It notes that investment in LA/DA has been occurring for decades, and that the magnitude of the task is still great.

Part B Develops the Rationale for using simulation in LA. The simulation approach used is that of Strategy Dynamics (SD). SD has 7 key characteristics, and 4 other characteristics which are listed. These facilitate 3 major features very useful in LA/DA. These give rise to 9 “Propositions for Discussion” which can contribute to increased success and a reduction in the magnitude of the task of improving LA. The rationale for using SD (simulation) is summarised, and the following questions posed- As simulation is routinely used in many industry sectors to test plans before investing, why not use or trial it in LA/ DA? Is LA so different that simulation/SD is not applicable? If so, Why?

Part C Provides a Plan to build the necessary capability and capacity to use SD operationally. Currently the LA/DA workforce has a low level of awareness and skills in SD. It will be necessary to initially build capability. Ideally this should be a university active in LA/DA. Challenges to building capability and capacity are identified, with ways to overcome. A four stage plan is outlined with major tasks. A network diagram is shown with milestones and indicative timings. Critical success factors are listed and the benefits to efforts

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outlined.

Part D Provides a Short Wrap Up.

How this paper fits the conference theme of Collaboration, Innovation, Resilience, Championing a Digital Generation - This paper fosters innovation by making the case for using simulation in LA & DA, where it is not currently used. It contributes to a digital generation as simulation is completely digital; a plan is presented to build the capability and capacity of the LA/DA workforce to use sim/SD operationally at scale.

NB – This paper builds on the paper I presented at the 2022 FIG Working Week in Orlando- Simulation Models to Test Improvement Proposals in Land Administration Before Investing [Special reference to Developing Countries]

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