

Cadastral Intelligence, Mandated Mobs, and the Rise of the Cadastrobots

Rohan Bennett (Netherlands)

Key words: Cadastre; Digital cadastre; Low cost technology; Security of tenure; Young surveyor; land administration; crowdsourcing; automatic feature extraction; UAV

SUMMARY

‘Cadastral intelligence’ is the to ability acquire knowledge and apply skills about the relationship between people, rights, and land. Within a country, appropriate levels of cadastral intelligence are needed to ensure cadastres are complete, up-to-date, respected– and ultimately contributing to sustainable development. Cadastral intelligence can be examined across governance layers and societal sectors: different actors will hold different levels of cadastral intelligence. In most countries, however, cadastral intelligence is vested in a select few professionals: other cadastral knowledge lies latent and largely underexploited, until now. In this paper, we develop a simple model of cadastral intelligence, one that can be used to assess strengths, weaknesses, and opportunities for cadastral development within a given country context. We reveal why countries with limited numbers of professionals are still able to complete cadastral systems within a limited number of years; why countries with high number of professionals can struggle to maintain complete systems; and how ‘artificial cadastral intelligence’ may radically change how cadastres are created and maintained. Examples are derived from work undertaken in Rwanda, Ethiopia, Indonesia, Mozambique and Mongolia, amongst others.