Informal cadastres as enabling tools for disaster risk management

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Abstract

Disaster Risk Management requires up-to-date land information availed through the cadastre. Informal settlements are often located in disaster prone areas. Having up to date land information about these informal settlements is one step towards disaster preparedness and building community resilience in the highway towards sustainable development. This study designs conceptual models using unified modelling language (UML) for an informal cadastre for recording land information pertinent to disaster risk management based on a South African case study. The results demonstrate that land tenure relationships in informal settlements can be mapped using the Social Tenure Domain Model (STDM). The importance of disaster information is that it provides communities with information to tackle disasters and improve in their capabilities to handle them. With such information, the disaster risk can be minimised. This study is aligned to Sustainable Development Goals (SDGs) 1 and 3. The linkage between spatial data, disaster resilience and the SDGs is explored.