New Technologies for Cadastral Systems

Brent Jones (USA)

Key words: Cadastre; Cartography; Digital cadastre; Implementation of plans; Informal settlements; Land distribution; Land management; Land readjustment; Low cost technology; Property taxes; Security of tenure; Spatial planning; Valuation;

SUMMARY

New Spatial Technologies for Cadastral Systems New spatial technologies are available for cadastral systems. In the past, complex, custom developed software systems were the norm. Now there are dramatic advances that enable new ways to think about developing sustainable cadastral systems. These new capabilities fit for formal systems and also for documenting customary rights and uses. Although it may be counter intuitive to think of using cloud-based systems, these systems are leveraging low-cost devices in challenging environments. Mobile devices have lowered the barrier of entry in both cost and capacity and created new opportunities with data collection and crowd sourcing data. Many of these technologies may appear on the surface as unrealistic in many parts of the world because of poor connectivity, remote locations and high cost. But with new geographic information system (GIS) technology and working with lightweight, inexpensive tools such as android phones and in the cloud in a disconnected environment, it becomes a reliable, scalable mapping/cadastre platform to support a wide range of activities along the continuum of rights. This presentation will detail the new spatial technologies available and easy-to-use, cost-effective and scalable deployment schemes.