NR42 / Policies of Digital Land Governance in India: Actors, processes, and practices

Topic : Research

Chair : Khaliq Parkar (IIIT-H)

Second Chair : Awanish Kumar (Azim Premji University)

Third Chair : sanjana krishnan (Independent)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Digitalization of land has been a significant focus of national and regional policies in India over the last four decades. These policies have evolved from an early focus on digitization of records to making online land transactions possible. During this time, technological adoption has expanded from remote sensing and GIS technologies to the creation of spatial databases and deploying drones and LiDAR for high resolution mapping (Cowan 2025, Richter and Georgiadou 2016). Furthermore, attempts have been made to link land holdings with taxation, licensing, citizens' services, and welfare benefits (Benjamin and Raman 2011, Parkar 2023). These technocratic policy imaginations have aimed to address longstanding land reforms, formalize older processes and practices, and are suggested as contributing to transparency and accountability goals (Shetty and Gupte 2019).

At the same time, land has been a focal point for social and political contestations. Dispossession has been a significant marker of rural India as economic policies have favoured land acquisition for the creation of industrial and economic corridors (Jenkins 2013, Roy 2022). With the shift of policy towards urban renewal and revival, along with the recent push for greenfield cities, real estate markets (Banerjee-Guha 2009) and speculative accumulation (Upadhya 2020) have contributed to land dispossession and marginalization. It is also not surprising that 66% of all civil cases stem from land and property disputes (Wahi 2019). Contemporary studies have already pointed to the multiple failures of technocratic policy in addressing land reforms.

Existing work has pointed to errors in the linking of Record of Rights (RoRs) with cadastral maps (NCAER 2025), incorrectly updated or obsolete land records (Mishra and Suhag 2017; Nayak 2021), gendered exclusions (Jain et al 2023), the inability to address errors in land titles due the opacity of digitization processes (Ramakumar and Ramesh 2023) and failure to deliver services based on such records (Caseley 2004).

Considering the above readings of land digitalization policies and programs, the panel intends to answer the following questions,
How can we situate policies aimed at digital governance of land within the larger questions of land governance in India? How can such digitalization policies contribute to our understanding of contemporary trajectories of land marketisation and neoliberal development? How do epistemic networks of bureaucracies, consultants and technology firms contribute to technocratic policy imaginations around land? How do digitalization processes and practices such as land record digitization, creation and linking of databases, bureaucratic use of data, and citizens' interactions with digital platforms contribute to our understanding of policy? What lessons can we draw from practices of land digitalization across regional policies or between rural and urban contexts?

CALL FOR PAPERS

The historical intertwining of land with caste and gender relations, the resultant persistence of inequalities, and its inherent linkages with social justice requires that land policy in general and digitalization of land in particular require closer scrutiny. To do so, this panel invite papers that answer the above research questions. It aims to bring together empirical studies of land digitalization policies which focus on design, implementations and transformations.

We invite empirical papers which evaluate policy motivations of digitalization, bring to light networks and actors that drive the design and adoption of technology systems, and critically assess the changes that

these policies bring to land governance practices and processes. It is expected that selected papers will represent diverse regional experiences, as well as urban and rural contexts. Papers can highlight practices and processes, actors and networks, or address themes of political economy.

Tentative papers

‘Satellite Slum Clearance: Land, Law and Legibility in Mumbai’, sanjana krishnan

‘Designing land digitalization: between policy instruments and technologies’, Khaliq Parkar

Biography of each chair

Khaliq is faculty at the Human Sciences Research Centre at IIIT Hyderabad. His doctoral research in Geography evaluated digitalization of urban governance initiatives under the Smart Cities Mission.

Awanish is faculty at the School of Development, APU Bengaluru. His research spans the political economy of development, with a focus on land reforms and social inequalities in rural India.

sanjana is a PhD in geography at the University of Kentucky. She is an urban, economic and digital geographer and a computational social scientist. Her research is at the intersection of land and technologies.

References

Banerjee-Guha, Swapna. 2009. “Neoliberalising the ‘Urban’: New Geographies of Power and Injustice in Indian Cities.” Economic and Political Weekly 44 (22): 95–107.

Benjamin, Solomon, and Bhuvaneswari Raman. 2011. “Illegible Claims, Legal Titles, and the Worlding of Bangalore.” Science Politique. Revue Tiers Monde 206 (2): 37–54.

Caseley, Jonathan. 2004. “Public Sector Reform and Corruption. CARD Facade in Andhra Pradesh.” Economic and Political Weekly 39 (11): 1151–56.

Cowan, Thomas. 2025. “High?resolution Property: Drone Enclosures in Digital India.” Transactions of the Institute of British Geographers 50 (4): e70036.

Jain, Charu, Disha Saxena, Somnath Sen, and Deepak Sanan. 2023. “Women’s Land Ownership in India: Evidence from Digital Land Records.” Land Use Policy 133 (October).

Jenkins, Rob. 2013. “Land, Rights and Reform in India.” Pacific Affairs 86 (3): 591–612.

Mishra, Prachee, and Roopal Suhag. 2017. "Land records and titles in India." Ideas for India, PRS Working Paper 20.

Nayak, Pradeep. 2020. “Land Titling or Land Reforms: India’s Policy Dilemma.” In Land and Livelihoods in Neoliberal India, edited by Deepak K. Mishra and Pradeep Nayak. Springer Singapore.

Parkar, Khaliq. 2023. “Digital Legacies and Distressed Capacities.” South Asia Multidisciplinary Academic Journal, no. 30 (July): 30.

Ramakumar, R, and Padmini Ramesh. 2023. “Illegibly Legible: Outcomes of a Land Records Modernisation Programme in South India.” Journal of Agrarian Change 23 (4): 729–54.

Richter, Christine, and Yola Georgiadou. 2016. “Practices of Legibility Making in Indian Cities: Property Mapping Through Geographic Information Systems and Slum Listing in Government Schemes.” Information Technology for Development 22 (1): 75–93.

Roy, Animesh. 2023. “From Colonial to Neoliberal Regime: Understanding the Paradigms of Land Dispossession in India.” Journal of Land and Rural Studies 11 (1): 28–51.

Shetty, Prasad, and Rupali Gupte. 2019. “Cities and Smartness.” In India’ s Contemporary Urban Conundrum, edited by Sujata Patel and Omita Goyal. Routledge.

Upadhya, Carol. 2020. “Assembling Amaravati: Speculative Accumulation in a New Indian City.” Economy and Society 49 (1): 141–69.

Wahi, Namita. (2019) Understanding Land Conflict in India and Suggestions for Reform. CPR Working Paper. https://cprindia.org/understanding-land-conflict-in-india-and-suggestions/