

# Land Rights, Digital Governance, and Disaster Preparedness: A Case Study of PULSE Implementation in Punjab

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## SUMMARY

The Province of Punjab in Pakistan significantly contributes to the country's economy, with a GDP of \$225 billion in 2023. The province is home to several important industries as well as fertile land, agricultural landscape and known to be the food basket for Pakistan. Punjab's high vulnerability to the occurrence of disasters and climate change is a risk multiplier, compounding its human and economic development challenges. Increasingly frequent and intense extreme weather events are impacting land management, ecosystems, settlements and infrastructure. To address these challenges Punjab Government with the assistance from the World Bank is implementing Punjab Urban Land Systems Enhancement (PULSE) Project that will advance its efforts to strengthen land administration, support of urban development including the disaster management and climate change mitigation and adaptation. PULSE will assist in modernization and digitization of land records across the province to ensure efficient and transparent land registration processes. Specifically, the project will assist in developing a province-wide digital cadastral map, standardize and interlink land records, and improve data in both urban and rural areas. Digitized rural and urban land administration systems and geospatial information play critical roles in the planning, monitoring, and implementing responses before, during, and after disasters in the province. The COVID-19 deepened social vulnerabilities underlining the importance of land as a social safety net and as critical family assets, shelter, and a vehicle of economic recovery. PULSE Project will assist province policy makers in identifying vulnerable and informal urban population clusters and target investments that address climate change risks, through accurate land records and improved planning coupled with up-to-date geospatial information. The project believes that acknowledging people's existing land rights is essential for socially sustainable land-use planning and regulations. Considering the high degree of disaster vulnerability in Punjab, it is critical to develop risk-informed urban-spatial planning and public assets management to meet the urgency of the disaster management and early preparedness, as well as the climate crisis, while maximizing

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opportunities to enhance urban resilience and overall livability. This project will mark the beginning of a new phase in the growing sophistication when it comes to strengthening disaster risk management and ensuring that risk informed decision making and planning becomes part of the daily life of government.

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