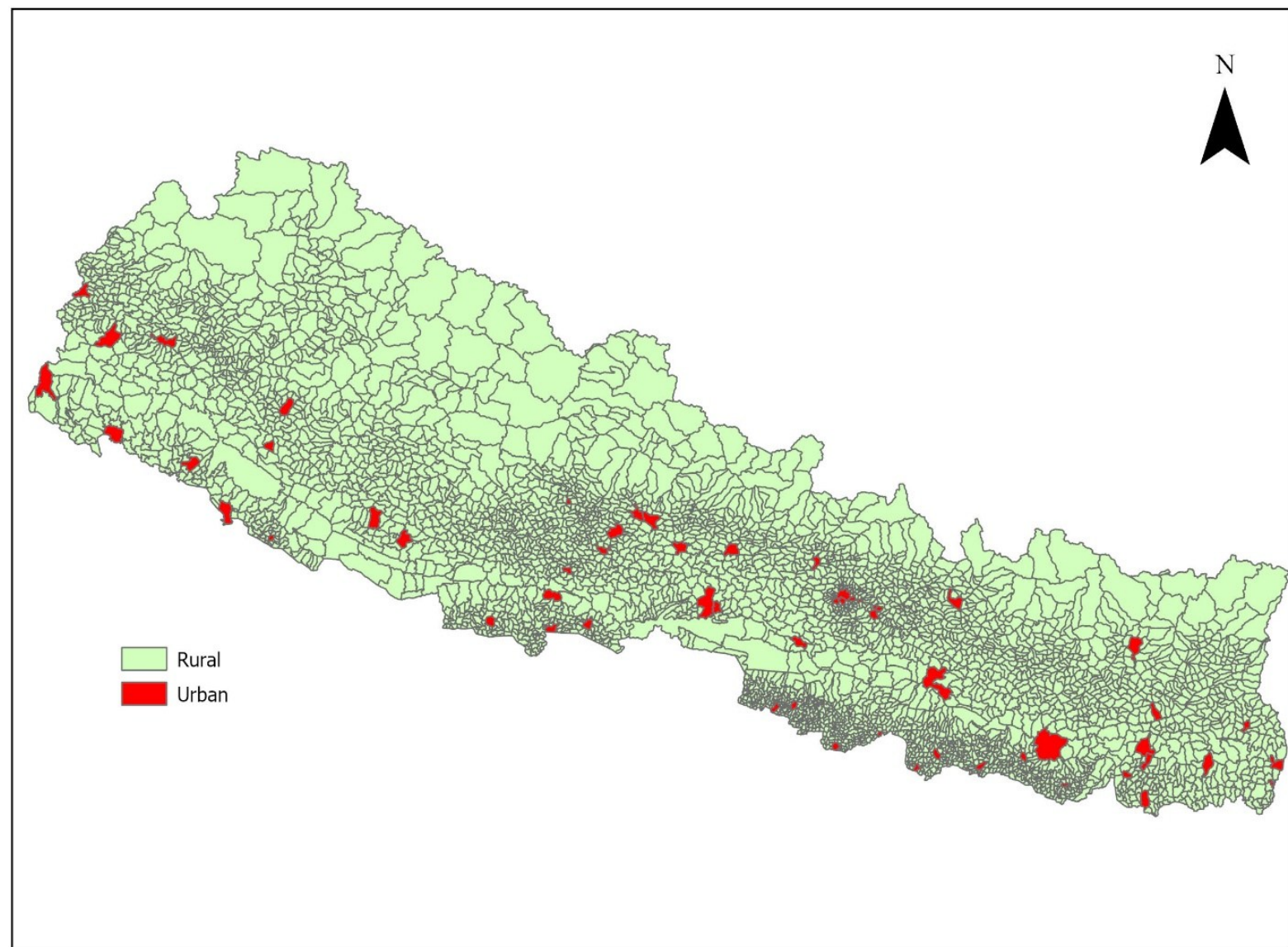
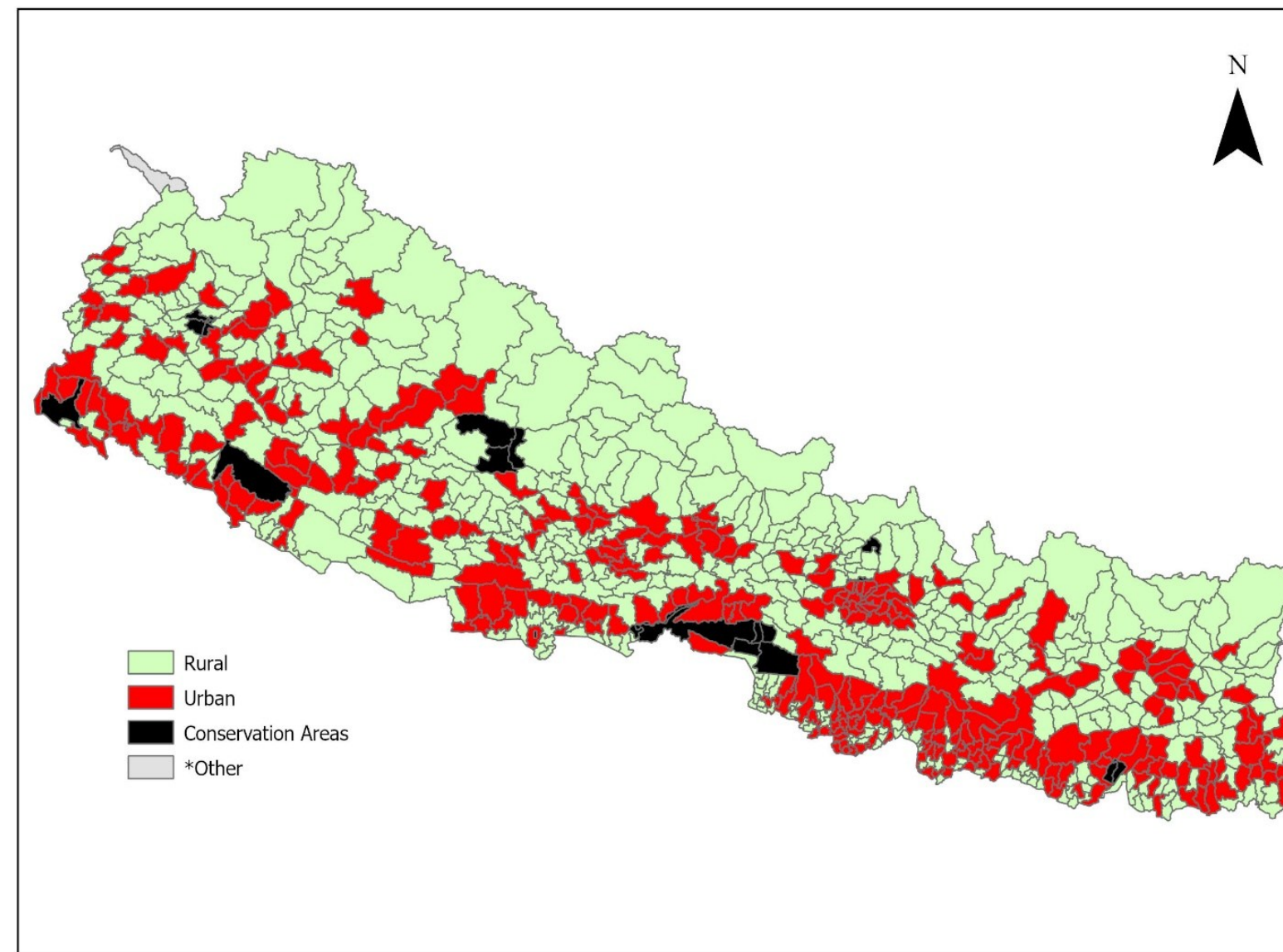


A Public Health Challenge

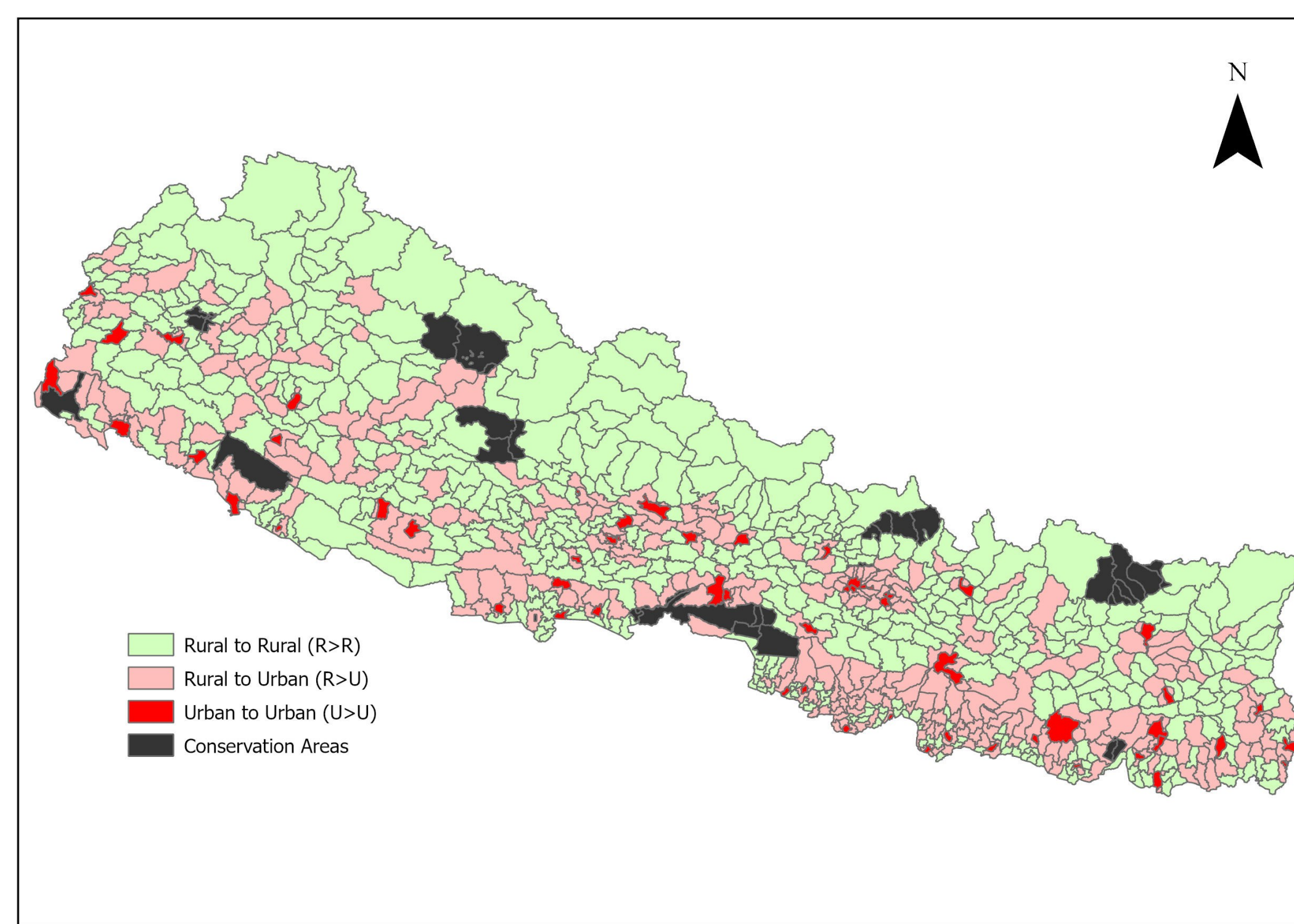
Nepal Administrative Regions (2011)



Nepal Administrative Regions (2022)



Rural-Urban Transitions in Nepal (2011 to 2022)



Population in Nepal officially designated urban rose from 17% in 2011 to 66% in 2021¹, a political-administrative change not reflecting changes in settlement patterns, infrastructure or service delivery.

- Federal restructuring of Nepal in 2015 reclassified many rural areas as urban producing, **three distinct settlement types**: areas that remained rural (R>R), areas that transitioned to urban (R>U), and areas with longstanding urban status (U>U).

- Nearly a decade later, **most areas that transitioned to urban designation lack basic infrastructure (roads, water resources, government offices) & health services** normally expected in urban settings.

Why it Matters

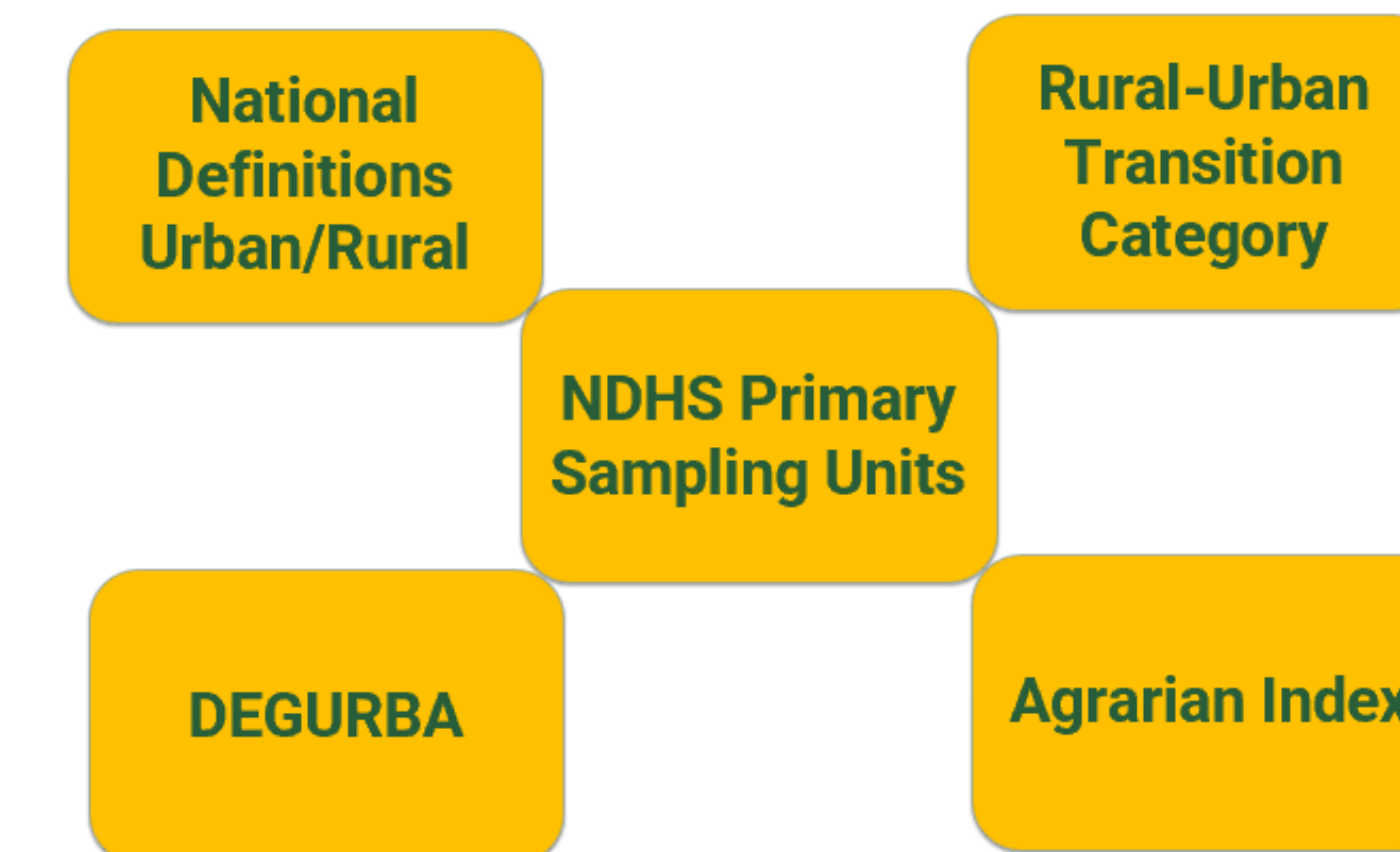
Human Impact

- Families in newly-designated urban municipalities **lose access to rural outreach services** but still lack urban facilities, leaving them with fewer options than before.
- Women must **travel farther for antenatal care, delivery, and emergency care** because no higher-level facility exists within the reclassified municipality.
- Children in newly-designated urban areas more likely to **miss preventive services** (immunization, vitamin A, deworming, growth monitoring) that were previously delivered through rural outreach programs.

System and Policy Impact

- Municipal governments are now responsible for service delivery, but often **lack technical experts, staff, budget, infrastructure, and planning capacity** required for their responsibilities.
- Reclassification **removes eligibility for rural programs but does not guarantee access to urban health systems**.
- These **gaps are invisible** in national rural/urban reporting, the needs of millions are not reflected in budgeting, planning, or performance tracking.

Research Methods

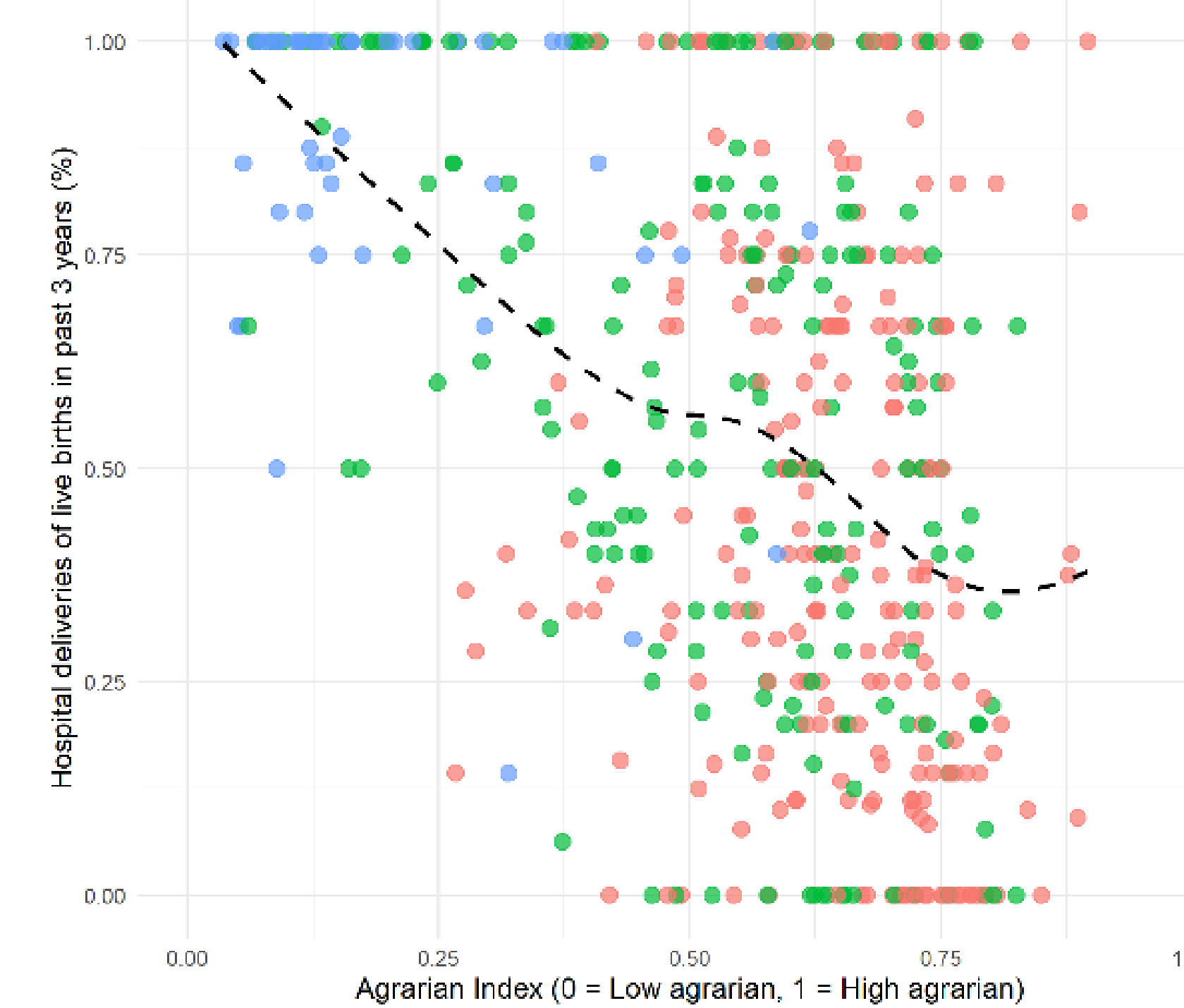


- Developed a new rural-urban transition map for Nepal and linked it to NDHS cluster coordinates using Monte Carlo point-in-polygon method to correct for GPS displacement.
- Conducted descriptive analyses of NDHS 2011 – 2022, reclassifying clusters using three spatial systems: rural-urban transitions (R>R, R>U, U>U), DEGURBA (Degree of Urbanization), and an agrarian index (continuous rurality scale).
- Outcomes analyzed: **maternal and child health, nutrition, WASH, clean cooking fuel, electricity, facility access, and service utilization.**

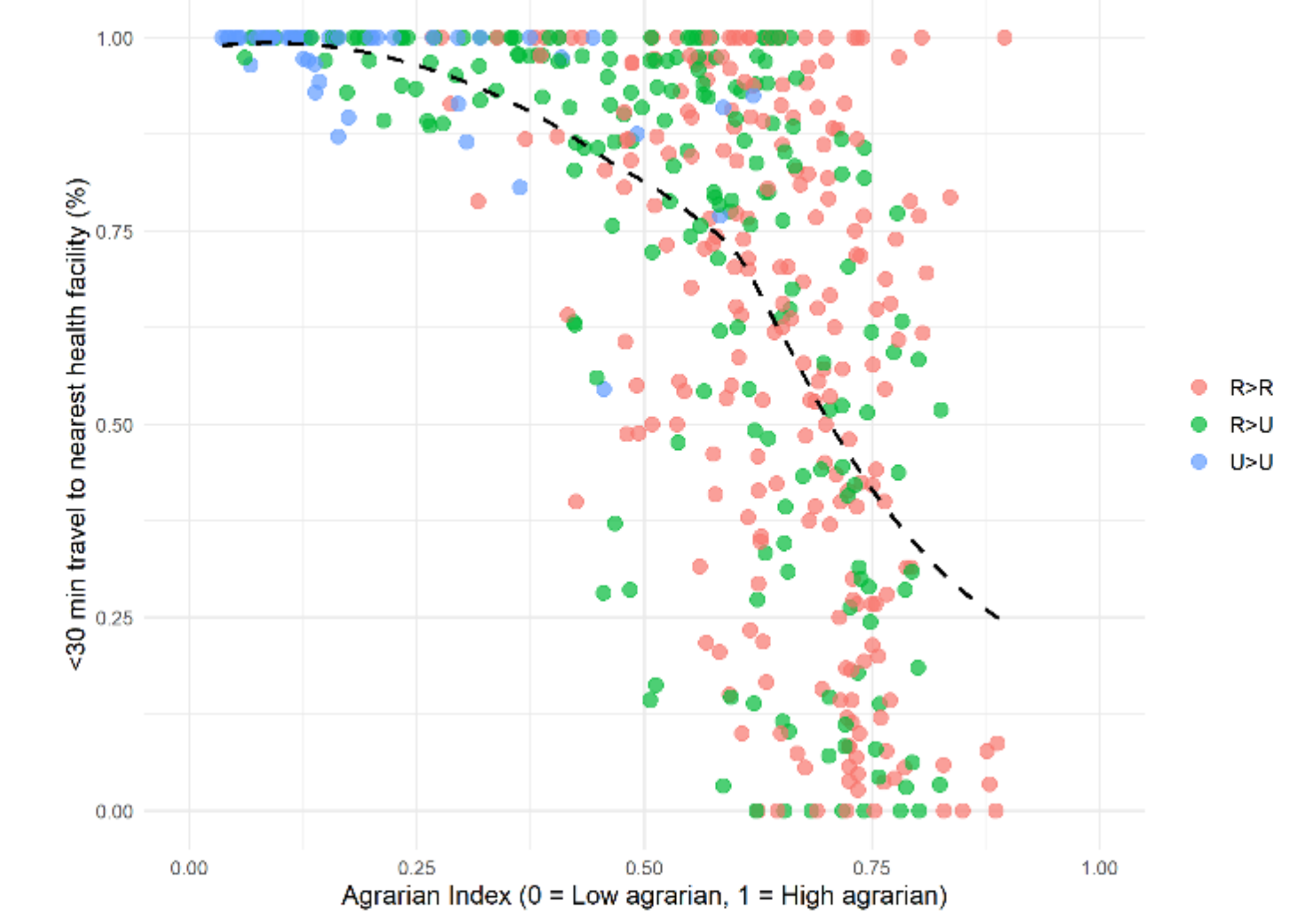
Key Findings

- Transitional urban areas (R>U) generally have poorer healthcare access than U>U urban areas.
- R>U is not a homogeneous population; agrarian stratification reveals **three distinct profiles**.
- DEGURBA shows a clear **3-step pattern (rural – peri-urban – urban)** with less internal variations, making it useful for planning.

Hospital births by rural-urban transition categories



Distance to nearest health facility by rural-urban transition categories



Source: NDHS 2022 (cluster-level analysis)

What Comes Next

From Research → Policy + Public Health Action

For Decision-Makers

- Policy brief + stakeholder workshop to support context appropriate health planning for transitional urban settlements in Nepal (planned).

For the Research Community

Journal manuscript based on final thesis results.

