

Urbanization and periurban water security

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Periurban

- Confusing term with no consensus regarding its meaning
- Used to denote a place
 - Fringe areas around cities
 - Rural areas, but also urban areas away from the core
- Process
 - Transition from rural to urban
- Concept/analytic construct
 - To study rural-urban relationships

What defines periurban

- Place-based definitions problematic
 - Definition of urban and rural vary from country to country
 - Towns and villages often get reclassified frequently
- Look for certain features:
 - Changing land use
 - Multiple claimants
 - Social heterogeneity
 - Livelihoods across both urban and rural spaces
 - Changing locus of control over natural resources

Counterparts of periurban in other languages

- Dutch
 - *halfstedig* (semi-urban)
- East Asia
 - '*desakota*' (city village)
- German
 - *urban landlichen zonen* (urban rural zones)
- Afrikaans
 - *buitestedelik* (outer city or beyond the city)

Locating a 'periurbanscape'

- A mixed patchwork of contrasting land uses
 - Agricultural fields, farm-houses, amusement parks, brick kilns, mining and quarrying, high rise buildings

Different kinds of periurban water security issues

- Issues related to ecological foot-print of urbanization
 - Land acquisition for building WTPs and canals for carrying water to the city
 - Gurgaon
 - Encroachment of commons for urban expansion
 - Hyderabad, Khulna
- The flows of water between rural and urban areas
 - The use of wastewater for agriculture
 - Several south Asian cities
 - water flowing from villages to cities
 - Kathmandu, Chennai, Hyderabad

Periurban water security issues

- Issues related to the land tenure status and links with water rights and access
 - Loss of access to water sources on account of land acquisition
 - Common across cities
 - use of rural water for farm-houses
 - Gurgaon, Delhi/NCR
- Issues arising from the fragmentation between rural development and urban planning and institutional or regulatory lacunae
 - health implications of wastewater use in agriculture
 - rural-urban water conflicts
 - unregulated transfers of water from rural to urban areas
 - pollution of water sources
 - Several cities in South Asia

Urbanization and climate change as multiple stressors on water security

- Climate variability/change and urbanization interact to create patterns of periurban water insecurity
 - The concept of ‘double exposure’ relevant to periurban locations
 - Urbanization creates new claimants on water
 - Climate variability/ change aggravate the impacts of the above:
 - less and erratic rainfall
 - reduced intensity of rains, shorter duration of seasons and rainfall
 - sea level rise and salinity intrusion

Vulnerability in a periurban perspective

- Most studies of vulnerability focus on purely rural or urban contexts
 - Studies of vulnerability of pastoralists, agriculturists (SAVI)
 - Studies on improving urban/city resilience (ACCCRN, UCCRN)
- Periurban locations are subject both to rural and urban stressors, though livelihoods constructed across rural and urban spaces can build resilience
 - Implications both for inequity and vulnerability
 - Differential vulnerability across elite and less fortunate

Relevance of a periurban conceptual lens to study water security

Gives a greater sense of how the ecological foot-print of urbanization is borne

Notion of a 'periurbanscape' or a periurban waterscape to capture the rural-urban water flows and relationships

Challenges the conventional dichotomy between rural and urban water supply

Raises questions about the equity and sustainability dimensions of urbanization

Approaches to improving periurban water security

- Policy Advocacy
 - Khulna and Hyderabad
 - E.g. work with SOUL, Save the Moyur River campaign
- Institutional
 - Formation of water management committees
 - Kathmandu, Hyderabad,
 - Improving state-water user interface and breaking the anarchy syndrome in water management
 - Gurgaon
- Technological
 - Capacity-building for technical support and interventions
 - Hyderabad, Kathmandu
- Livelihood diversification
 - Promoting livelihood skills so all eggs are not in one basket

So what does that mean for us

- Use a periurban conceptual lens to study rural-urban relationships
- Think of mechanisms to integrate rural and urban planning
- Find ways of involving periurban communities in urban planning and expansion
- Promote dialogue between rural and urban residents