Water security in periurban South Asia

Adapting to climate change and urbanization

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Overview of presentation

Conceptual groundwork for the study of periurban issues

Research
Objectives
and
conceptual
framing of
the problem

Tools and methods used

Research Sites Approach to intervention and action research



What is periurban?

no consensus meaning but seen as a place, process and concept

peripheral areas around cities

referred to variously as

 urban fringe, urban outgrowth, urban agglomeration grow in significance with processes of urbanization



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)



How we defined periurban

☐ In terms of a process, concept and features rather than a fixed geographical space around the city ☐ Identified by a 'periurbanscape' ☐ Changing land use from rural to urban ☐ Social transition and heterogeneity Periurban livelihoods across rural and urban resources and assets ☐ Flows of goods and services between rural and urban areas ☐ New claimants on water and new rural-urban water flows. periurban as a conceptual lens to study rural-urban relationships and flows of water



Value of a conceptual lens of periurban

Raises
questions
about the
ecological
foot-print of
cities and
the politics
of urban
planning

Gives insight into the nature of urbanization processes

Provides an entry point to study rural-urban relationships

Questions the perception that livelihoods are either 'rural' or 'urban'

Relevant in studies of vulnerability

Rural livelihoods can face stresses from urban expansion

Livelihoods
constructed across
rural and urban
spaces shape
differential
vulnerabilities



Project objectives

Examine changing water availability for periurban residents as a result of urbanization and climate change

multiple stressors on periurban water sources Examine the adaptation strategies of periurban residents and assess their cost-effectiveness

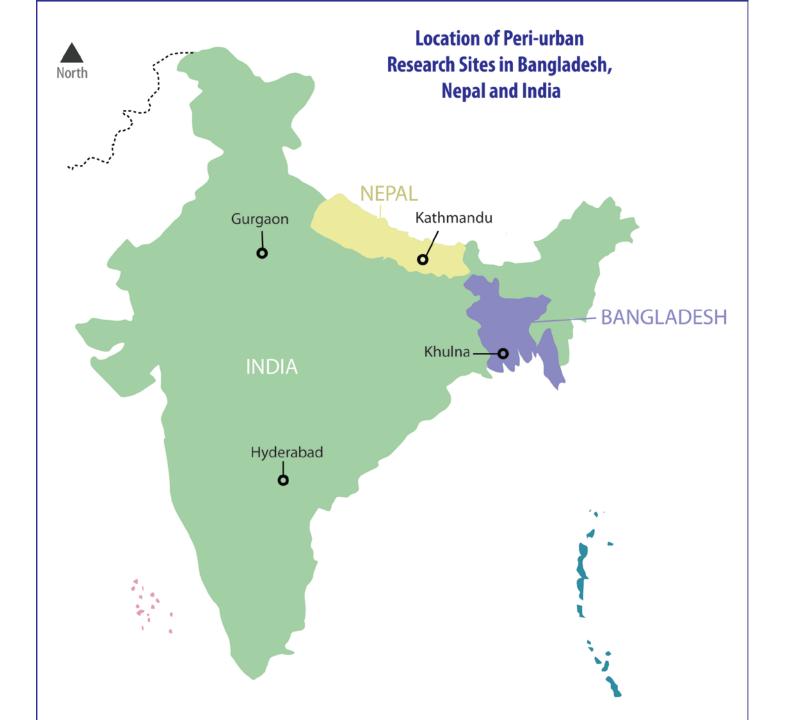
socio-technical mediation of water insecurity Identify the most vulnerable groups

Develop strategies to intervene by mobilizing stakeholders

the socially differentiated and gendered dimensions of vulnerability

rural-urban transformations and gender relations around water





Other Key concepts

Water security

- Access to water of sufficient quality and quantity
- Uncertainty attached to water supply induced by urbanization, climate change or both of them

Adaptation

A process of adjustment to mitigate or exploit harm

Vulnerability

- Susceptibility to harm
- Exposure to negative events, but also capacity to deal with them
- Intersection of multiple stressors
- Chronic phenomenon



Research tools and methods

A mixed methods approach

Assessing climate change and variability

- Analysis of hydro-meteorological data
- PRA tools
- People's narratives of a changing climate

Structured household survey, cost benefit analysis

PRAs, FGDs, ethnographic studies



Intervention approaches.. The basic premise

- Periurban issues need the attention of government agencies
 - A mobilization of stakeholders is needed to overcome periurban inertia
- Improving periurban water security can build community resilience in the face of climate change
- Strengthening civic engagement can build social capital



The intervening approaches

Advocacy and lobbying to protect periurban water bodies (Hyderabad, Khulna)

Building water management committees (Hyderabad, Kathmandu) Providing a forum for dialogue between water users and service providers (Gurgaon)

