

# Decision-making and Spatial Data Infrastructures in the Public Sector in India

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INTERNATIONAL INSTITUTE FOR GEO-INFORMATION SCIENCE AND EARTH OBSERVATION



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## Structure

- Background
- Introduction to PhD Research
- The Research Question
- Methodology
- Current Status
- Future Work



Next: Background

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## Background

- Part of the NWO/WOTRO research project titled, *"Using spatial information infrastructure in urban governance networks: reducing urban deprivations in Indian cities?"*
- Four partner institutions:
  - UvA, Amsterdam; ITC, Enschede → The Netherlands
  - SAP, New Delhi; TISS, Mumbai → India
- Total 11 researchers
- Three PhDs; one Post-doc
- Total three cities in Western India



Next: Introduction to PhD Research

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## Introduction to PhD Research

- Focus is on the use of spatial information in decision-making
- Individuals and collectives
- Decision-making → Use of information → Cognition → behaviour
  - Verbal (What they say) + Action (What they do) = What they think?!
- One decision environment (i.e. a decision process)
  - (Participatory) resource allocation decision process
- Use will allow us understand institutionalisation and upscaling of SDIs
- Theoretical grounding in across decision science, public policy, information systems



Next: The Case Study

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## The Case Study

- One city in South India
- Recently, a million city (787,000, Census 2001)
- Spread across 195 sq. kms. (approx. 9221 hectares, 2001) and growing
- Historical and cultural city - designated Heritage city
- Part of a major national urban renewal programme
- Recent (2006) governance reforms, eg. Municipal restructuring; Decentralisation of municipal services to newly formed offices)
- Very strong social hierarchy (eg. Casteism)



Next: Research Question

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## Research Question

- Main research question is:  
*How does spatial information influence (participatory) resource allocation decision-making in Indian cities?*



Next: Methodology

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## Methodology

- Interpretive approach
- Case study of a city in south India (using a second city in similar socio-cultural-political environment)
- Ethnographic methods
- Using behaviour to study cognition
  - 'Frames'
- Tools to be used:
  - Participant observation
  - Open-ended interviews
  - Shadowing



Next: Methodology contd.

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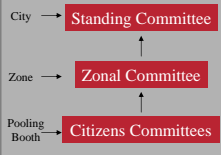
## Methodology (contd...)

- Annual recurring resource allocation (budgeting) decision process
- Committee environment
  - Standing committees in city Council (4)
  - Zonal committees (9)
  - Citizens committees at polling booth level (639)
- Using the concept of 'frames' to follow information use

Unit/s of analysis:

- Individual decision-makers
- Collectives

Organisational unit/s of analysis:



Next: Problems faced/ anticipated

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## Problems faced/ anticipated

- Theoretical
  - Defining 'frames' - almost there!
  - Defining my role - multiple/ shifting roles
  - Choosing a decision environment (which committee!)
  - Identification of spatial information
  - Conceptualisation of Spatial Data Infrastructures - being open!
  - Maintaining focus
- Fieldwork
  - Changing bureaucratic landscapes
  - Accessing bureaucrats and politicians
  - Capturing spatial information - verbal
  - Too many things happening on field - staying focused - keeping track of most if not all



Next: Present Status

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## Present Status

- Pilot Study conducted from 6 to 12 April, 2008
- First fieldwork session - 14 March to 8 June 2009
- A local network set-up
- Decision process identified
- 13 open-ended interviews conducted (NGOs, bureaucrats)



Next: Future Work

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## Future work

- Identify a place with a 'fix' role (which committee, what role?!)
- Strengthen local networks
- In-depth / open-ended interviews of identified participants
- 'Follow/ Shadow' the decision process
- Identify key informants
- Explore possibility of 'decision workshop' - backward and forward tracing of decisions



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Thank you!



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