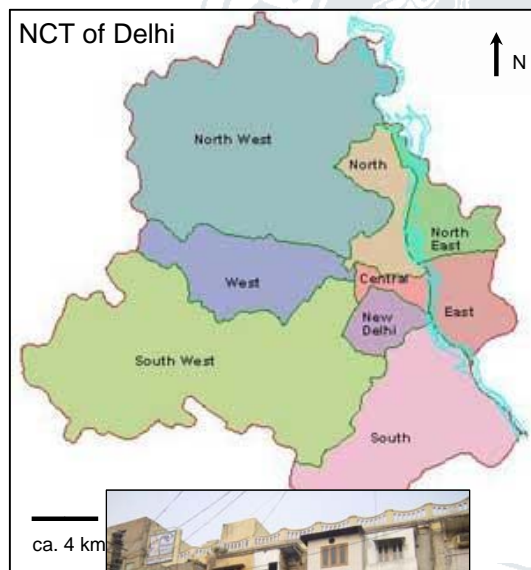




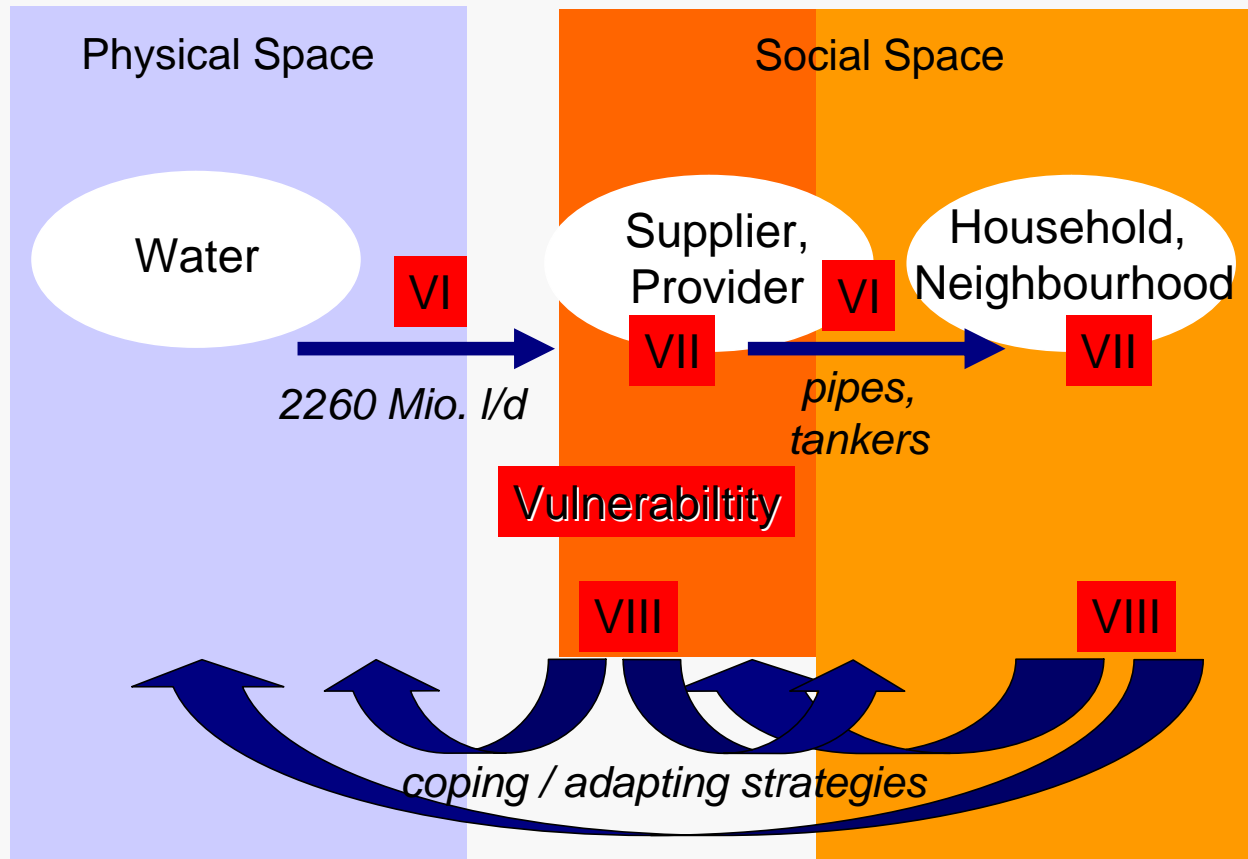
Living with water shortage – supply strategies in different neighbourhoods of Delhi



Fragmentation of urban fabric and population



Risk - Vulnerability - Scenario



draft: V. Selbach

Introduction — risk - vulnerability approach — water supply / strategies — concluding remarks





Greater Kailash II (South, authorized):

household connected to piped network

- twice – thrice a day, problems during summers
- in addition: private tanker if needed, own well, motors, overhead and underground tank, rain water harvesting,
- problem: wasting of water, increase pressure on resource
- 195 l per day

= municipal supply + individual



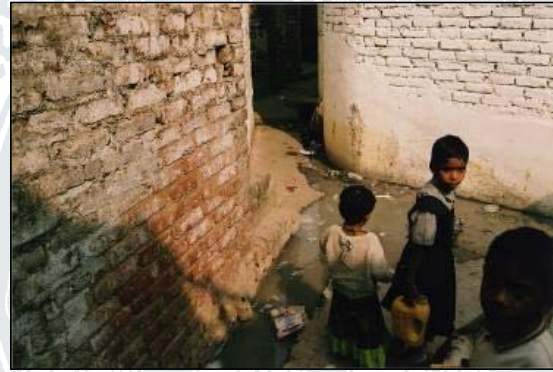
Bhoomiheen Camp (JJ Colony, South, unauthorized):

community tap

- no fixed timing
- in addition: tanker, community has set up own tap:
every household contributed 600 Rs., illegal c.
- postponing of activities like washing clothes
- 50 l per day

= municipal supply + community initiative (networks)





Navjeevan Camp (JJ Colony, South, unauthorized):

- community tap, private tubewell, fetch water from other places, tanker,
- competition of Political Parties
- complaining to MLA
- 50 l per day

²¹
M = less municipal supply + no community initiative
Veronika Selbach

Department of Geography



settlement types

planned, upper and middle class neighbourhoods	urban villages resettlement colonies unauthorized colonies	jj colonies, shelters	(pavement dwellers)
--	--	-----------------------	---------------------



individual strategies prevail importance of social networks increases

competent

conditional

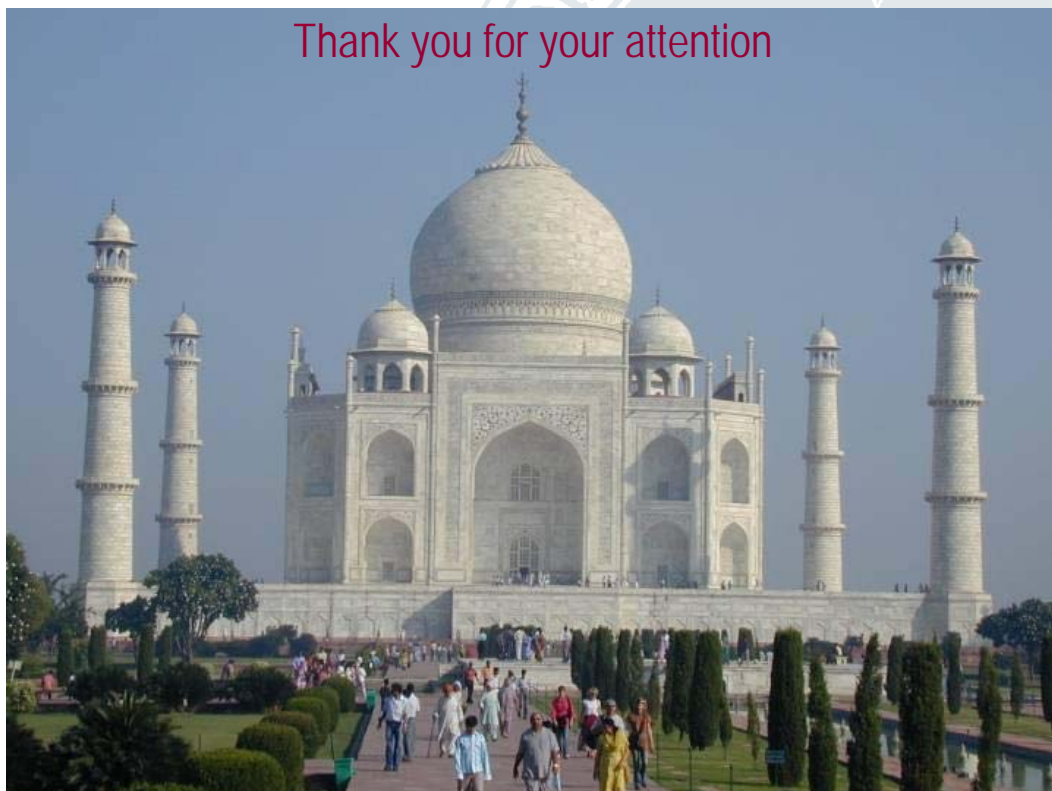


Some Questions for Discussion:

- Can we call people who waste water and use motors „ignorant“ as they contribute to an increase of pressure on the scarce water resources?
- Are people who are “content” with approx. 50 lpcd “defenceless / helpless” as it is less than required in international standards and they are not aware of it? Or are they “competent” as they have adjusted themselves to the situation and in respect to their opportunities?
- As the DJB is not able to provide for a sufficient supply, is it advisable to strengthen „informal networks“ instead and how to make sure, that the consumer is not financially exploited?

Further Topics:

- The role of the DJB as public provider
- The question of water quality
- Future scenarios: how to get more water for more people?



Vulnerability in Mega Cities: New approaches to analyse the urban water system in Delhi / India

Project Partners and contacts:

Prof. Dr. Frauke Kraas (Co-Chair)¹, Prof. Dr. Wolfram Mauser (Co-Chair)², Prof. Surinder Aggarwal³,
Dr. Thomas Krafft¹, Dr. Alexander Löw²

Dipl. Geogr. Veronika Selbach¹, Reena Singh, MA, MPhil¹, Dipl. Geogr. Susan Niebergall²

¹ Department of Geography, University of Cologne – Albertus-Magnus-Platz – 50923 Cologne

² Department of Earth and Environmental Sciences, Geography and Remote Sensing – University of Munich – Luisenstr. 37
80333 Munich

³ Department of Geography, Delhi School of Economics – Delhi University – Delhi 110007

2007 Summer Academy:
Megacities: Social Vulnerability and Resilience Building
Veronika Selbach

University of Cologne
Department of Geography



Trilokpuri (East, Resettlement Colony):

- household and community tap
- twice a day
- in addition: tanker, handpumps, motors, overhead tank
- 156 l per day

= municipal supply

2007 Summer Academy:
Megacities: Social Vulnerability and Resilience Building
Veronika Selbach

University of Cologne
Department of Geography





Deoli (South, Urban Village):

- household tap
- twice a day
- in addition: tanker, illegal connections, motors, overhead tank
- 93 l per day

= municipal supply, own initiatives



Sainik Farm (South, unauthorized):

- own borewell, booster pump, „no problem at all“
- > 200 l per day

= no municipal supply, own infrastructure





New Ashok Nagar (East, unauthorized):

- recently connected to piped network (booster station of DJB)
- twice a day
- in addition: tanker, who can afford it: submersible pump, motor, buy / get water from neighbour, overhead tank
- 146 l per day

= municipal supply + own wells (networks)

