So close to the city, so far from the pipes

Service provision governance in the peri-urban interface of metropolitan areas

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Service provision governance in the peri-urban interface of metropolitan areas

Project aim

“Improved guidance on governance and management of water and sanitation in metropolitan peri-urban areas to increase access by the poor and to promote environmental sustainability”.
The five case studies

FLACSO, Mexico
CENDES, Caracas
SUSTAIN, Chennai
UTI, Cairo
UCLAS, Dar es Salaam
OUTLINE OF PROJECT METHODOLOGY
## Overview of the five metropolitan area/regions under study

<table>
<thead>
<tr>
<th>Region</th>
<th>Pop. (2000)</th>
<th>Area (km²)</th>
<th>Annual population growth rate (%)</th>
<th>Metropolitan administrative structure</th>
<th>WSS metropolitan formal system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chennai Metropolitan Area</td>
<td>7 million</td>
<td>1,177</td>
<td>0.9</td>
<td>Chennai Metropolitan Area composed by Chennai City, 8 Municipal towns, 27 Town Panchayats, 18 Census Towns and 1 Cantonment area</td>
<td>Public agencies at state, metropolitan and local level</td>
</tr>
<tr>
<td>Dar es Salaam</td>
<td>2.5 million</td>
<td>1,350</td>
<td>7.2</td>
<td>Metropolitan Dar es Salaam: three semi-autonomous municipalities under the Greater Dar es Salaam Council</td>
<td>Public-private partnership with a community component</td>
</tr>
<tr>
<td>Greater Cairo Region</td>
<td>17 million</td>
<td>3,400</td>
<td>2</td>
<td>Greater Cairo Region: Governorate of Cairo and parts of the Governorates of Giza and Qualiobia</td>
<td>Two separate public agencies for water and sanitation at provincial level to be reformed</td>
</tr>
<tr>
<td>Mexico D.F.</td>
<td>8.6 million</td>
<td>7,622</td>
<td>1.8</td>
<td>Federal District of Mexico City: 16 delegations</td>
<td>Increasingly decentralised metropolitan public system with private concessions</td>
</tr>
<tr>
<td>Caracas Metropolitan Region</td>
<td>4.2 million</td>
<td>6,207</td>
<td>Not available</td>
<td>Caracas Metropolitan Region: 17 municipalities belonging to three political/administrative entities (states)</td>
<td>Regional public agency to be devolved by 2007</td>
</tr>
</tbody>
</table>

### Characteristics of peri-urban localities examined in the five case studies

<table>
<thead>
<tr>
<th>Peri-urban localities</th>
<th>Population (inhabitants)</th>
<th>Area (km²)</th>
<th>Location/Distance to city centre</th>
<th>Annual population growth rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chennai</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valasaravakkam &amp; surroundings</td>
<td>112,479</td>
<td>16.7 5</td>
<td>West of Chennai city centre</td>
<td>5.3</td>
</tr>
<tr>
<td>Kotivakkam &amp; surroundings</td>
<td>54,055</td>
<td>12.5 2</td>
<td>South of Chennai city centre</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Dar es Salaam</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tungi</td>
<td>17,500</td>
<td>0.84</td>
<td>5 km south-west of city centre</td>
<td></td>
</tr>
<tr>
<td>Stakishari</td>
<td>15,000</td>
<td>1</td>
<td>10 km west of the city centre</td>
<td></td>
</tr>
<tr>
<td><strong>Greater Cairo Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abou El-Noumrus City</td>
<td>41,212</td>
<td>7.99</td>
<td>South of Giza Governorate, 7km from Giza City</td>
<td>2.4</td>
</tr>
<tr>
<td>Abou-El-Geitt</td>
<td>92,900</td>
<td>15.9 3</td>
<td>South-West of Qualiobia Governorate</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Mexico D.F.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Bartolomé Xicomulco</td>
<td>3,423</td>
<td>N/A</td>
<td>South-east of the city centre, in Milpa Alta Delegation</td>
<td>N/A</td>
</tr>
<tr>
<td>San Salvador Cuauhtenco</td>
<td>10,323</td>
<td>N/A</td>
<td>South-east of the city centre, in Milpa Alta Delegation</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Caracas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachaquero</td>
<td>3,664</td>
<td>N/A</td>
<td>38 km south of Caracas centre</td>
<td>3.5</td>
</tr>
<tr>
<td>Paso Real 2000</td>
<td>4,122</td>
<td>N/A</td>
<td>25 km south of Caracas centre</td>
<td>3.5</td>
</tr>
</tbody>
</table>

The peri-urban interface often plays a key role in the extraction and replenishment of water resources or as an ‘environmental sink’ for liquid and solid waste from the urban core.

**Mexico & Chennai**

- PUI exporter of water while experiencing deficits for PUI
- Saltwater intrusion

**Greater Cairo Region**

- Waste accumulation in PUI
- Industrial waste discharge
In relation to water and sanitation the rights and entitlements of the peri-urban poor are usually ill-defined.

**Dar es Salaam**
- Informal water vendors
  - Flexibility
  - Livelihoods
- Experiments with community-managed schemes

**Caracas**
- Rights and duties in accessing water
Governance in the peri-urban interface is severely fragmented, with a multitude of actors and no single organisation (public or private) providing guidance or leadership.

**Chennai**

- Fragmentation of public sector responsibilities
- Private sector involvement (formal and informal)

**Greater Cairo Region**

- Multitude of actors involved in WSS
- Separate public institutions for water supply and sanitation
Main government and non-government bodies involved in WSS in Egypt

**Ministries**
- Ministry of Housing
  - NOPWSD
  - CAC
  - EAGCSDP
  - NUCA
- Ministry of Local Administration

**Mega governorate**
- GCR
- GOGCPW
- GOGCSD
- Alexandria
- GOAPW
- GOASD

**Other governorate**
- Local Units
- Housing and infra. Directorate/ Potable water and sanitary drainage dept.

**Corporate companies**
- Economic Agencies (7)
- Stock companies (3)
- Private companies

**Others**
- Beneficiaries
- SFD
- Donor agencies
- Other ministries
- Informal private sector
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Dar es Salaam

- 2 branches of formal system
- CWSSP - decentralised public kiosks

Mexico D.F.

- Obstacles to main network extension
  - Low density
  - Distance to mains
  - Topography
### Overview of policy-driven and needs-driven water supply practices in the five case studies

<table>
<thead>
<tr>
<th>Provider</th>
<th>Policy-driven water supply practices</th>
<th>Needs-driven water supply practices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public (state) sector</strong></td>
<td>- Piped network (Household connections and public standpipes)</td>
<td>- Public provision distorted by bribery practices</td>
</tr>
<tr>
<td></td>
<td>- Wells and bore-wells (not Mexico)</td>
<td>- Water kiosks (Dar es Salaam)</td>
</tr>
<tr>
<td></td>
<td>- Provision by tankers</td>
<td>- Negotiation with communities through ‘technical water boards’ (Caracas)</td>
</tr>
<tr>
<td><strong>Private sector</strong></td>
<td>- Buying from licensed tankers (not in Cairo)</td>
<td>- Buying from tankers</td>
</tr>
<tr>
<td></td>
<td>- Buying packaged water (cans, bottles, sachets)</td>
<td>- Private vendors drawing from own site piped connections/own boreholes or wells sold directly by bucket or through push carts and bicycle vendors (Dar)</td>
</tr>
<tr>
<td><strong>Community</strong></td>
<td></td>
<td>- Sales from private boreholes or wells (Cairo)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Rainwater harvesting (not Caracas)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Water theft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Gifts or paid provision from neighbours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Clandestine connections</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Own individual wells and bore-wells (not Mexico or Caracas)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Piped network (community organisation agreement with local authority (Mexico) or public water company (Caracas)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Piped network kiosks and taps run by the community with NGO support (Dar es Salaam)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Boreholes and kiosks run by the community (Dar)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Horizontal condominiums (Caracas)</td>
</tr>
</tbody>
</table>

Source: Case study reports.
The peri-urban poor rely on a wide spectrum of informal practices to access water supply and sanitation that often remain ‘invisible’ to policy makers and lie outside formal supportive strategies.

Dar es Salaam

- Specific mechanism to serve peri-urban poor with marginal financial support
- Action against informal water vendors

Greater Cairo Region

- Action against informal water vendors
- Informal wastewater management filling the gap of the public sector
Peri-urban dwellers are exposed to a combination of rural and urban health hazards associated with water consumption and waterborne sanitation.

**Chennai & Dar es Salaam**
- Mix of urban and rural livelihood activities
  - Water-intensive income activities

**Greater Cairo Region**
- Diseases related to problem of waste management, lack of sanitation & clean water
- Sewage irrigation for agriculture