Covid-19 and Informal Settlements: India’s Response

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Majority of confirmed cases confined to highly urban districts; active cases spread out.

**Top 3 states** account for 53% of total confirmed cases

**Major Contributors**
- Maharashtra
- Tamil Nadu
- Delhi

**Top Districts**

<table>
<thead>
<tr>
<th>District</th>
<th>% Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delhi (Total)</td>
<td>98%</td>
</tr>
<tr>
<td>Mumbai</td>
<td>100%</td>
</tr>
<tr>
<td>Chennai</td>
<td>100%</td>
</tr>
<tr>
<td>Thane</td>
<td>77%</td>
</tr>
<tr>
<td>Pune</td>
<td>61%</td>
</tr>
<tr>
<td>Bangalore</td>
<td>91%</td>
</tr>
<tr>
<td>Ahmedabad</td>
<td>84%</td>
</tr>
<tr>
<td>Kolkata</td>
<td>100%</td>
</tr>
<tr>
<td>Kamrup Metropolitan</td>
<td>83%</td>
</tr>
<tr>
<td>Raigarh</td>
<td>37%</td>
</tr>
</tbody>
</table>

*district-level data for Telangana not available

Significant slum population across cities large & small; higher coronavirus exposure

**Urban Population Projections**

- Urban Population
- Rural Population

**Slum Population Density**

- **3977** All urban
- **6200** Slums in Bhubaneshwar
- **200-300k** Dharavi
- **10426** New York City

**Sars-CoV-2 exposure**

- ICMR, June 2020

- **1.09%** All Urban
- **1.89%** Slums
- **0.73%** Overall pop.

**Slum Population in Cities of Different Sizes**

- Proportion of Slum Households (as % of Total)

Source: UN World Urbanization Prospects 2020; Census of India 2011; ICMR; Authors'oped
Quality of WASH services remains a concern

<table>
<thead>
<tr>
<th>Access to WASH Services</th>
<th>Available (Non-Million Cities)</th>
<th>Available (Million Plus Cities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking Water for Exclusive Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piped (Drinking) Water to Dwelling/Yard/Plot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bathing Facility Within Premises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piped (Non-Potable) Water to Dwelling/Yard/Plot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drinking Water Within Premises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilet Facility For Exclusive Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bathing Facility For Exclusive Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both Bathing &amp; Toilet Facility Within Premises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water is Available with Soap/Detergent near Toilet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Undersupply of shared infrastructure** underscored during the pandemic
  - 3 community complexes, each with 20 seats, catering 50,000 people (Delhi)
  - 80 people sharing a single toilet (Dharavi)
  - Per capita water supply of 20 LPCD; reaching 50 LPCD on higher end (Hyderabad)

  Slum households spend ~30 mins on average to fetch water in a day

- 74% & 69% of slum households reliant on PT/CT don’t have access to water with soap/detergent in NM & MP cites resp.

Modeling study shows slum characteristics result in higher infection rates (as much as 44%) during epidemics

Source: National Sample Survey 76th round; Authors’oped; Adiga at al (2017); Authors’ oped
National Government has issued periodic guidance, incl. for informal settlements

Specific Guidance on Informal Settlements

- Guidelines for **Preparedness and Response to COVID-19 in Urban Settlements**’, MoHFW
- Advisory for **Jhuggi Jhopdi Clusters/Slums in view of COVID-19**, NCDC, MoHFW
Economic & migrant relief common across states; WASH interventions less centralized

- Common responses include **cash transfers, in-kind transfers, shelter and food distribution** for migrants and other vulnerable group
- Several states announced **insurance covers/compensations for sanitation workers**
  - Delhi: INR 10mil for Sanitation Workers
  - Gujarat: INR 2.5mil for sanitation workers
  - Nagaland: INR 1mil for frontline workers
  - Sikkim: INR 5mil for safai karamcharis
  - Uttar Pradesh: INR 5mil for sanitation workers
  - West Bengal: Health insurance policy
- Distribution of **masks among urban poor** in Bihar
- **Surcharge waiver on water and sewerage bills** in Haryana
- **Incentives for regular/outsourced waters supply, sewerage, & sanitation workers** in Telangana ranging from 5-7.5k
- Expedited Construction of **PT/CT/She-Toilets**
Capacities and responses for Covid-19 management vary widely

- Leveraging Smart City infrastructure for
  - **Reporting and monitoring** on Covid-19
  - Model **Covid-19 War Room** in Bengaluru; total of 45 across the country
- **Telemedicine**
- **Crowd monitoring** and surveillance
- **Centralized coordination** of relief efforts
- **Biomedical waste management & sanitization**
- **Handwashing stations**

(Photos Courtesy: NFSSM Alliance)
Multi-sectoral collaborators for Covid-19 support

- 15+ Guidelines and IEC Materials on WASH
- Training Support for Sanitation Inspectors and Other Functionaries
- Supply of Protective Equipment for Frontline Workers
- Community Engagement in Informal Settlements
- Installation of handwashing stations
- Food Distribution & Other Relief Efforts
- Personal Hygiene Products Distribution
- Production of Masks and Sanitizers

(Photos Courtesy: NFSSM Alliance)
Key Takeaways

- **Active cases spread out across districts** – whether highly urbanized or not
- **WASH responses vary widely & ad hoc**
- **Informal settlements ubiquitous** across cities varying in
  - ULB capacity and financial resources
  - Local healthcare system capacity
  - Community organizing strengths
- Dharavi’s **quick and heavy resource mobilization** for Covid19 containment **not scalable**
What’s needed going forward?

- **Preemptive action at the subnational and local levels** to prevent and arrest Covid19 in informal settlements

- **Short term:**
  - Scale-up of **emergency WATSAN** to preclude crowding (esp. given reverse migration)
  - **Disaggregated data for diagnosis** - leveraging existing MIS architecture

- **Long term:**
  - **Strengthening community structures**
  - **Better WASH systems** for resilience
  - Mainstreaming **WASH within Disaster Response Frameworks and Vulnerability Assessments** at all levels
The Scaling City Institutions for India (SCI-FI) programme aims to better understand ‘governance scale’ in Indian cities in tandem with ‘sector specific socio-economic scales’. Through research, the programme aims to inform stakeholders, including the three tiers of the government, to develop better informed policies and programmes enabling improved governance and service delivery. It has two key thematic focus in areas of Land, Housing and Planning, and Water and Sanitation. The SCI-FI programme is nested at the Centre for Policy Research (CPR) since 2013.