COVID Experiences & Challenges with Sanitation from India

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WRC Webinar:
Dialogue on the need for mainstreaming non-sewered sanitation solutions – lessons from COVID 19 responses
India coronavirus lockdown:

• After a 14-hour voluntary public curfew on 22 March –

• **Since 24 March**, the Govt. ordered a **nationwide lockdown** for 21 days (scheduled to expire on 14\textsuperscript{th} April), limiting movement of the **entire 1.3 billion population** of India as a preventive measure.

• All **transport services** – road, air and rail were suspended with exceptions for transportation of essential goods, fire, police and emergency services.

• Educational institutions, industrial **establishments and hospitality** services were also **suspended**.

• **Essential Services Exempted** - food shops, banks and ATMs, petrol pumps, other essentials and their manufacturing are exempted services **incl. water, electricity, sanitation service provision**.

• **Anyone who fails to follow the restrictions can face up to a year in jail.**
CURRENT COVID-19 UPDATE: INDIA

Source: Ministry Website: https://www.mohfw.gov.in/ dated: 08/04/2020
COVID-19: Growth & Geographical Spread of Cases

Date | Active cases | # of cases | Source: MoHFW
---|--------------|------------|-------------------
2020-03-25 | 419 (+87) | 606 (+17%) |
2020-03-26 | 497 (+88) | 694 (+15%) |
2020-03-27 | 581 (+140) | 834 (+20%) |
2020-03-28 | 665 (+84) | 918 (+10%) |
2020-03-29 | 749 (+106) | 1,024 (+12%) |
2020-03-30 | 833 (+227) | 1,251 (+22%) |
2020-03-31 | 919 (+146) | 1,397 (+12%) |
2020-04-01 | 1,007 (+437) | 1,834 (+31%) |
2020-04-02 | 1,090 (+235) | 2,069 (+13%) |
2020-04-03 | 1,173 (+478) | 2,547 (+23%) |
2020-04-04 | 1,256 (+525) | 3,072 (+21%) |
2020-04-05 | 1,338 (+505) | 3,577 (+16%) |
2020-04-06 | 1,420 (+704) | 4,281 (+20%) |
2020-04-07 | 1,502 (+508) | 4,789 (+12%) |
Testing Capacity for COVID 19: For 1.3 billion 20,000 samples per day, testing till date 104,764. Picking up – April 6: 11795 tests.

With private labs now being allowed to test 100+ testing centres and capacity increased to 50000 samples per day.

Shortage of Ventilators & doctors / healthcare workers and PPE – but govt. and pvt. sector geared up to meet projected demand incl. imports.

COVID 19 cases are projected to rise to 50000 by June 2000 and no vaccine is expected soon – atleast 1 year.
India 100 % Open Defecation Free

100 million toilets in villages & 80,800 no. Community Sanitary Complex, 93 per cent of rural households have access to toilets, and 96 per cent use them
6.3 million toilets in 4324 cities

5,82,573 Community & Public toilets
Urban India – Septage / Sewage: Shit Flow Diagram

<table>
<thead>
<tr>
<th>Sewer coverage</th>
<th>No of Cities</th>
<th>% of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10%</td>
<td>191</td>
<td>16.45%</td>
</tr>
<tr>
<td>10 - 30%</td>
<td>158</td>
<td>20.10%</td>
</tr>
<tr>
<td>30 - 60%</td>
<td>75</td>
<td>24.22%</td>
</tr>
<tr>
<td>&gt;60%</td>
<td>78</td>
<td>39.23%</td>
</tr>
</tbody>
</table>

Containment → Collection → Transport → Treatment → Reuse/disposal

- 50% WC to sewer
- 41% On-site facility (septic tanks, covered pits, VIPs, etc.)
- 9% Open defecation (including open pits)

Source: Census 2011

Local area and beyond, via drains

Receiving Waters

Leakage

Unsafely emptied or discharged

Not treated, but unknown where it goes

Treated

Not treated to standard

81%
Type of Containment Systems
Type of Emptying
Transportation
Emptying OSS - Thriving private business: but where does this go?
Disposal: in garbage dumps
**Disposal:** Over land or Drains - River/ Pond/ Lake or Pilot FS Treatment
COVID-19 Awareness generation and Advisory on Social Distancing & Prevention

COVID-19: Ministry of Health & Family Welfare

Helpline Number / Toll Free: 1075 / Helpline Email ID

Including any technical enquiry with respect to COVID19, one can email on technicalquery.covid19@gov.in

Govt. and Non Govt. using print, TV and other media extensively including social media.

Efforts to curb fake news with daily bulletin and news release with updates
Guidelines for waste generated during Treatment/Diagnosis/ Quarantine of COVID-19 Patients at Healthcare Facilities including Quarantine Camps/ Quarantine-homes/ Home-care and Sample Collection Centres, Laboratories, SPCBs/PCCs, ULBs and CBWTFs. These guidelines include also the responsibilities of Urban Local Bodies

- Biomedical waste at Quarantine Camps / Home-care will comprise of used syringes, date expired or discarded medicines, used masks/gloves and in case of patients with other chronic diseases may also include drain bags, urine bags, body fluid or blood soaked tissues/cotton, empty ampules etc.

- Biomedical waste generated from Quarantine Camps / Quarantine-Home / Home-care would be treated as ‘domestic hazardous waste’ as defined under Solid Waste Management Rules, 2016, and shall be disposed as per provisions under Biomedical Waste Management Rules, 2016 and these guidelines.

- General waste from Quarantine Camps / Quarantine-Home / Home-care shall be disposed as Solid waste as per provisions under SWM Rules, 2016.

In vast country like India enforcement of guidelines poses a challenge - lack of infrastructure and awareness at Urban Local Bodies is concern.
- Advisory on use of PPE for frontline Sanitation Workers & Health workers incl. state and local govt. and law enforcement officials (incl. allowing CSR funds for PPE)

- Advisory on use of Homemade Protective Cover for Face and Mouth

- Directions to concerned departments to pay salary on time or even pay advance salary to sanitation workers
On-site Sanitation challenges

• Not much testing for Covid 19 in wastewater & faeces at present
• Maintaining basic hygiene (handwashing) is major challenge due to lack or inadequate access to water in many areas.
• Toilet connected to underground ‘box’ as design quality of septic tank is unknown – in many cases these are tanks, emptied regularly or simply linked to municipal drain
• Community / Public toilets are high risk areas
• Mostly informal (mafia) collects FS / waste for a price – growing and thriving business. Estimated across country 1,50,000 desludgers / honey suckers (less than 5% registered)
• Personal Protection Equipment (PPE) is not a common practice (or not available).
• 50 + pilot FSTPs (under utilised operation) & Co-treatment FS facilities (already existing STPs struggling to meet regulatory standards) – FS is not being received at many facilities.
• Private desludgers not licensed to operate and getting curfew passes for this essential service they provide is a major challenge
• Untreated 65% of total sewage and 70-75% of treated sewage is dumped on land or water environment (rivers, lakes or sea).
• Greywater treatment (in general and with supernatant from septic tank mainly in urban areas) is major challenge.
• In all cities, waste from septic tanks is ‘dumped’ in open sewers; rivers; municipal sewers; fields...
• Frontline sanitation workers & poor dependent on OSS at higher risk due to COVID 19.
Thank You