Pathways to SDG: Macro to Micro Perspectives

November 20, 2016, New Delhi
Sanitation Challenges of the Poor in Urban and Rural Settings

Case studies of Bengaluru City and Rural North Karnataka

S. Manasi, N. Latha, B.R. Hemalatha
Centre for Research in Urban Affairs, Institute for Social and Economic Change, Bangalore

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Increased urbanization – by 2030

590 million people – Indian cities – challenge – infrastructural facilities

Sanitation – ranks among first 12 countries, 51% open defecation

‘Provision of facilities and services for safe disposal of human urine and faeces. Also maintenance of hygienic conditions through services such as garbage collection and waste water disposal (WHO)’.

Safe sanitation linked to human and ecosystem health
PART - 1
URBAN SANITATION WITH FOCUS ON URBAN POOR- THE BENGALURU EXPERIENCE
Objectives

- To assess the current situation, identify knowledge gaps in sanitation management
- To examine the institutional and governance aspects in provision of sanitation to slum dwellers
- A critical review of best practices across cities and contextualize the learning’s to Bengaluru city
- To understand the socio-economic and cultural contexts in sanitation coverage, access and usage to formulate customized solutions and standards
- To develop strategies and policy for promoting interface between the government, scientists and communities
Qualitative and quantitative data collection

Review of literature and secondary data collection and Discussions with officials, NGOs

Structured and semi structured Tools

Pilot survey

10 Notified and 10 Non-notified slums (Respondents - 20 households each)

Primary survey: Random sampling of Individual households and FGDs (Age and gender)

Data analysis and interpretation

Criteria of selecting Slums

- Physical location
  - Close to Drain, Railway tracks, Lakes etc

- Status of sanitation
  - Prevalence of open defecation

- Access to toilets
  - Community toilets or public toilets

- Developed Slum
  - Housing by KSDB

- Zone-wise selection of slums in proportion to the total number of slums in each zone

Source: Survey
House holds access to toilets in urban areas
65% in 1991, 76% in 2001 and 81% in 2011
Urban Sanitation – Karnataka

House holds having access to toilets in urban areas
1991 – 47.13%, 2001 – 75.23%, 2011 census 84%
Toilet Access in Slums India

Source: 2011 Census
Augmenting Toilet Structures

Schemes – Housing with Toilets – 28758
- Valmiki Ambedkar Awaz Yojana, HUDCO Funding, JnNURM – BSUP, Rajiv Awas Yojana
- BWSSB initiated toilets (1466 constructed, 1031 yet to construct, Required – 2642,

Reasons for increase in individual toilet construction
- Lack of open space – everyday challenge
- Affordability motivates – do not want to suffer inconveniences – (45% own 21% received funds)

Public Toilets – Pay and Use Toilets – Welcome
- e-toilets
- Sulabh Souchalay s
- Nirmala toilets

Source: Primary survey

Urban Sanitation – Bengaluru

1991 2001 2011
81.44 91.07 96.8

13 41 48 42.25
3.25 10.25 12 166

Type of Toilets and practice of Open Defecation

Source: Primary Survey
Constraints in eradicating OD

- Increased Number of Toilets but problems in accessing toilets remains
- Type of toilets, infrastructure and quality of toilets – important
- 10 slums practiced OD
- No access/partial access to toilets – (50% hhs – practice OD)
- Supported – survey 2013 – Bengaluru Urban zilla panchayat – 34,656 hhs in Bengaluru Urban district – no access to toilets – resort to OD
Technical problems affecting Toilet usage – Pit latrines

- Construction quality affecting toilet access and usage
- Operation and Maintenance neglected
- Toilet design

Source: Primary Survey
# Problems in Flush Toilets

<table>
<thead>
<tr>
<th>Problems</th>
<th>Percentage</th>
<th>Notified</th>
<th>Non-notified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over flowing of UGD</td>
<td>20</td>
<td>15.5</td>
<td>24.5</td>
</tr>
<tr>
<td>Drain Blockage</td>
<td>36</td>
<td>33</td>
<td>39</td>
</tr>
<tr>
<td>Rodent problem</td>
<td>3</td>
<td>1.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Bad odour</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Multiple problems</td>
<td>15</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>None</td>
<td>24</td>
<td>34</td>
<td>14</td>
</tr>
</tbody>
</table>

Leakage of sanitary pipes common 2–3 houses/week

Source: Primary Survey
Space Constraints

- Lack of space within toilets (1.5x1.5 feet)
- Lack of space to construct toilets
- Self constructed toilets in common areas and over drains
- Restriction to construct toilets in slums located on private land
Water Scarcity

- 45 per cent (9 slums) affected with water scarcity
  - Inadequate supply
  - Irregular supply
Inadequate Ventilation

All dwellings have toilets – **But**

- Bad odor menace – cook and eat outside
- Leakage of UGD pipes causes bad smell
- Suffer from nausea, headaches, depression
Poor maintenance of public toilets – OD

Total Number – 587
– Sulabh International, Nirmala Bengaluru, e-toilets – well received

All public toilets in use. But, people not completely satisfied

- Poor Operation and Maintenance – No defined protocol – 74%
- Water scarcity – 24 %
- Lack of safety/security for women
- Poor lighting – 45 %
- Restricted timings – 50 %
- Not user friendly – children/physically challenged
- Inadequate number – to meet demands
- Non-payment in public toilets – issue for managers
Beavourial issues – overall sanitation

- Poor Awareness – Toilets and cooking space in close proximity
- Belief that soak pits gets full when used often, hence practice OD
- Cultural constraints – People of different communities have objections to use public/shared toilets
- Poor maintenance of water storage tank/water stand posts
- Common areas neglected
- Poor Garbage management
## Public Toilets – Dependency and Reasons

### Table: No. of families using one public toilet

<table>
<thead>
<tr>
<th>No. of families using one public toilet</th>
<th>Percentage</th>
<th>Notified</th>
<th>Non-notified</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–25 Families</td>
<td>1.0</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>25–50 families</td>
<td>1.2</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>50–75 families</td>
<td>1.5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>75–100 families</td>
<td>2.8</td>
<td>5</td>
<td>0.5</td>
</tr>
<tr>
<td>Not Applicable*</td>
<td>93.6</td>
<td>91.5</td>
<td>95.5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Primary Survey

### Diagram: Percentage of families

- Financial constraints: 36%
- Space constraints for: 52%
- Maintained hygienically: 8%
- Water constraints: 4%

*Note: 6% in our sample prefer public toilets Source: Primary Survey*
Shared Toilets and Open defecation

- Sharing one toilet by 2HHs – most common
- Space constraints – 4 HHs share one toilet – Vasanthapura slum
- Extreme cases – one toilet shared by 15 HHs – LBS nagar slum
- Inadequate access to shared toilets – less number – inconvenience – long queues – forcing them to opt for OD
- Poor maintenance and accessibility on time, men opt for OD
- 400 HHs, 12.2 %, 10 slums – used shared toilets
- Dependency was more in non-notified slums
- 2 % of HHs, two families, 6 % of HHs, three families, 3 % of HHs, 4 families share a single toilet
Poor Quality of Individual Toilets

- Toilets built to meet emergency situations
  - ill health,
  - safety for women,
  - Use during night

- Financial constraints to construct quality toilets

- Finance
  - By contribution – 44%
  - Self – 23%
  - Govt – 33%

Venkateshwara Slum at Deepanjalinagar
PART - 2
RURAL SANITATION - THE NORTH KARNATAKA EXPERIENCE
Objectives

- To document the processes of Parishudh Initiative model and experiences at the field level
- To analyze Parishudh Initiative model
- To capture users’ perceptions on satisfaction with reference to health, maintenance costs, access and convenience
- To document lessons learnt from success/failures across the villages
- To deduce critical issues that would facilitate sustainability of the project
Methodology and sample selection

- **Field survey**: 6 districts, 8 taluks, 23 villages - pilot field visit findings and secondary data analysis – 500 households
- No. of Toilets constructed was the major criteria - in the selection of villages
- Districts - segregated and chosen according to High, Medium and Low construction
  - *Highest Representation* - Yadgir, Gulbarga and Bidar districts
  - *Medium Representation* - Raichur and Bijapur districts
  - *Low Representation* - Koppal district
- Based on the Land holdings, the samples was divided into 4 categories - Landless, Small farmers, Medium and Large Farmer
  - **Structured Instrument**: Questionnaire - cover socio-economic, physical, financial, user satisfaction and environmental aspects
  - **Semi Structured Instrument**: Checklist - case study/FGDs

<table>
<thead>
<tr>
<th>Toilet Construction</th>
<th>Districts</th>
<th>No. of HHs</th>
<th>No. of villages</th>
<th>No. of HHs -survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>Yadgir</td>
<td>135</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Gulbarga</td>
<td>100</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Bidar</td>
<td>100</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>335</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>Raichur</td>
<td>68</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Minimum</td>
<td>Bijapur</td>
<td>33</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Koppal</td>
<td>69</td>
<td>3</td>
<td>23</td>
</tr>
</tbody>
</table>
Open Defecation – Causes

- Traditional practice of open defecation – cultural
- Non acceptance of toilet usage – urban feature
- Having toilets inside the house – against cultural practice – bad luck
- Designated places for defecation – so did not see the need
- Discomfort to use toilets – closed rooms
- Did not occur – OD is considered normal
Constraints to construct Toilets

Source: Primary survey
Note: Percentage figures do not add up to hundred due to Multiple Responses
Lack of Water Availability Affected Toilet Usage

- **Seasonal usage** – depending on water supply
- 28.29 % HHs – failed bore wells and lack of alternative sources
- Adequate water but **inadequate power supply**
  (Suntanur Village, Gulbarga – severe scarcity summer, average family devote 12 hours a day to fetch water)

Misconceptions

- **Soak pits would get filled up** soon if used everyday
- **Speculation water leakage/overflow** caused while flushing toilets
- **Increased construction cost** – **pits thrice in size than prescribed**

Neighbors’ Objections

- Odour from toilet would make their living difficult
- Mosquitoes
- Vasthu
Adapting to new habits was a challenge

- Used to OD and difficult to change habit
- Felt restricted in a closed environment
- Felt self-conscious to enter a toilet
- Felt scared – elders and children
- Men felt OD was more comfortable
- Younger women objected – free time for peer sharing and interactions

Constructed toilets for other reasons
/wasted construction

- Constructed private toilets since neighbours constructed toilets
- Speculation use during emergencies (nights, sickness)
- make use of funds provided and can be used for storage purposes
Gradual increase in Toilet Usage

<table>
<thead>
<tr>
<th>Place</th>
<th>Usage</th>
<th>Non usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bidar</td>
<td>17.88</td>
<td>1.18</td>
</tr>
<tr>
<td>Bijapur</td>
<td>5.89</td>
<td>0.98</td>
</tr>
<tr>
<td>Gulbarga</td>
<td>14.15</td>
<td>4.13</td>
</tr>
<tr>
<td>Koppal</td>
<td>12.57</td>
<td>1.57</td>
</tr>
<tr>
<td>Raichur</td>
<td>9.63</td>
<td>2.36</td>
</tr>
<tr>
<td>Yadgir</td>
<td>25.74</td>
<td>3.93</td>
</tr>
<tr>
<td>Total</td>
<td>85.85</td>
<td>14.15</td>
</tr>
</tbody>
</table>
Toilet Models, Preferences, Satisfaction

Technology - to suit locality, climatic and socio-economic, cultural conditions - user-friendly

• Soil conditions
• Durability
• Cost
• Style
• Water availability

Technology - to suit locality, climatic and socio-economic, cultural conditions - user-friendly

Technology - to suit locality, climatic and socio-economic, cultural conditions - user-friendly

Technology - to suit locality, climatic and socio-economic, cultural conditions - user-friendly

Technology - to suit locality, climatic and socio-economic, cultural conditions - user-friendly
Biogas model

- Important to discuss models and involve household members prior implementation - all stages - influences usage

- Some households – Raichur villages complained of mosquitoes and foul smell

- Although ecosan toilets - not acceptable - high costs and design

- Biogas model - socially acceptable and successful - role of strong/influential SHGs
Parishudh Approach

- Ensuring stakeholder participation - inception

- Well planned implementation process – identification of villages, feasible design options, finances, coalition, time frames, bank procedures, coverage

- Progress tracking & monitoring strategies for transparency and accountability – GIS, Sales force, Poimapper

- Advisory Committee

- Legal MoUs for conflict-free management and quality work assurance

- Schedules and Formats designed - ensure clarity work progress, construction, finance and quality

- Orientation - Parishudh Staff met regularly - aided introspect, communicate, understand resolve field issues
Awareness Creation and follow up sessions

- IEC team – door-to-door visits & follow up sessions
- House listing – interested persons – provided applications
- Tentative plan/time – place identification, technology specifics
- Volunteerism and promotion – enrolled persons to encourage 5 new persons to construct toilets, Nirmal Gram Samithis – volunteers, Infosys employees – weekends
- Children competition – Massive – 1200 schools, 10,000 students

Innovativeness in Convincing the Beneficiaries

- Construction of toilets as a status symbol – caste
- Dignity and Safety – grooms and young wives
- Special awareness drives – local Gurujis and associates
- All public meetings – significance of sanitation

Team involvement

- Team involved at all stages
- Problems rectified with guidance
- Ensured confidence among beneficiaries – increased enrolments
- Exposure Visits to Model Villages – village leaders – motivation
Toilet Summits

- 3 summits, 55 villages, 300 participants
- Motivational speeches, brainstorming sessions, showcasing best practices, experience sharing

Mass media

Participation in government program
Press release of PI – popular

Volunteers network

1000 volunteers - existing institutions - village leaders, religious heads, youth, SHGs, etc

Loan Repayment Approach

SPREAD, Raichur – funds from Parishudh – worked out sustainable model

Cost Effective Model

Indus Foundation - fabricated toilet models – cost - PI and NBA scheme – no contribution
Key Concerns and Implications
<table>
<thead>
<tr>
<th>SN</th>
<th>Notified Slums</th>
<th>Type of Access</th>
<th>Open defecation /Free of OD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Individual toilet</td>
<td>Shared toilet</td>
</tr>
<tr>
<td>1</td>
<td>Vasanthpura</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2</td>
<td>Gangodnalli</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Govindrajnagar (DN)</strong></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4</td>
<td>Pullakeshinagar</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><strong>Deshiya Nagar (DN)</strong></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Jayram slum</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>7</td>
<td>Gulbarga</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Priyankanagar</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Yelhanka old town</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>10</td>
<td><strong>Nayanda halli Slum (DN)</strong></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Notified slums</strong></td>
<td>100%</td>
<td>40%</td>
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<tr>
<td></td>
<td><strong>Non Notified Slums</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Bandepalya slum</td>
<td>+</td>
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<tr>
<td>12</td>
<td><strong>Yarabnagar Slum (N)</strong></td>
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<td>13</td>
<td>Gandhigrama Slum</td>
<td>+</td>
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<td>14</td>
<td>Andracolony Slum</td>
<td>+</td>
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<tr>
<td>15</td>
<td>Swathanthrapalya</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>16</td>
<td>Shivapura Slum</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>17</td>
<td>Babusa Palya Colony</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>18</td>
<td>Bhoovi colony</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>19</td>
<td><strong>LBS nagar (N)</strong></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>20</td>
<td><strong>Hakkipikki colony (N)</strong></td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td><strong>Total Non notified slums</strong></td>
<td>90%</td>
<td>60%</td>
</tr>
</tbody>
</table>
Health problems affecting quality of life
Health problems

Total % of households
- Non-notified
- Notified

Source: Primary Survey

<table>
<thead>
<tr>
<th>Category</th>
<th>Men</th>
<th>Women</th>
<th>Infants</th>
<th>Children</th>
<th>Senior Citizen</th>
<th>All</th>
<th>None</th>
<th>More than one</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF</td>
<td>8.25</td>
<td>5</td>
<td>11.5</td>
<td>15.5</td>
<td>5.5</td>
<td>16</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>BF</td>
<td>15.25</td>
<td>15.25</td>
<td>3.25</td>
<td>1</td>
<td>13</td>
<td>2.25</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Men: 15.52
Women: 38.31
Infants: 2.75
Children: 6.88
Senior Citizen: 4.13
Women, Elderly and Children suffer

Women
- Safety and challenge everyday
- Privacy and Dignity
- Travel long distance late evenings
- Inconvenience – Pregnancy, menstruation, post child birth and during health ailments
- Time poor – conflicts within family
- Immense stress

Elders
- Walking long distances
- Risk of injury, medical expenses and family burden
- Skipped dinner or consumed minimum food
- Faced neglect by caretakers

Children concerns
- Pig attacks cause trauma
- Injuries
- Walk long distances
More difficult during nights
- Poor or no lights on streets
- Searching for open space was difficult – roadside option
- Fear of snake bites and mosquitoes

Rainy Days extra challenge
- Open spaces were unhygienic
- Diseases and infections
- Stagnant water – mosquitoes and flies
- Lakes and ponds were contaminated

Space constraints in peri-urban areas
- newer challenge – travel long distances
- Designated areas for open defecation converted into cultivable lands/roads/buildings
- Farmers restrict usage of lands for OD – electric wires
Governance Issues

- Inadequate and insufficient data

- As per the KSDB – Survey of slums conducted in 1995–96, new slums not listed – 587

- Data on de-notified slums – not updated although 61 are de-notified (40 slums in 1997, 39 in 1999, 15 in 2015)

- Land title unclear (Hakku Patra) – not secure to invest on own toilets

- Wasted investments – closure of toilet complexes/non usage

- Poor Integration between Departments

- Holistic approach and vision – not prevalent
<table>
<thead>
<tr>
<th>Slum Name</th>
<th>Type of Conflict</th>
<th>Conflicts Situation</th>
<th>Implication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yelhanka A K Colony</td>
<td>Local Government and Contractor</td>
<td>Investments made on construction of Public toilet but not in working condition</td>
<td>Open defecation and misuse of abandoned toilet complex</td>
</tr>
<tr>
<td>Nayandahalli Slum</td>
<td>Across neighbours</td>
<td>Ground floor residents object usage of toilets to residents living on upper floors – technical problems</td>
<td>Restricted use of individual toilets</td>
</tr>
<tr>
<td>Shivapura Slum</td>
<td>Residents and Department</td>
<td>Intervention by LDA in developing the lake has restricted the flow of sewage by blocking UGD. Complaints to LDA &amp; KSDB to provide proper UGD/provision of public toilets</td>
<td>Non usage of toilets forcing them to go for open defecation</td>
</tr>
<tr>
<td>Jayaram Slum</td>
<td>Residents and KSDB/BBMP</td>
<td>Expansion of road for flyover construction and rehabilitation opposed by residents</td>
<td>Temporary shelter constructed for 40 families</td>
</tr>
</tbody>
</table>
POLICY OPTIONS FOR IMPROVING GOVERNANCE
Policy Options for improving Governance

- Need for vision towards improving toilet access and eradicate open defecation
- Improving data and information systems
- Improving inter/intra Integration between Departments and other stakeholders
- Improving supportive infrastructure and standardizing processes
- Improved legal frameworks to avoid/handle Conflicts
- Trainings - Toilet Cleaners, Toilet Complex Managers, Contractors
- Ensuring approaches for sustainability of initiatives
Stakeholder Participation

- Community involvement
- Women SHGs
- NGO involvement
- Political will
- Involving Volunteers (YFS)

Education and Awareness

- Effective dissemination of knowledge and information
- Rewards Approach
- Making Toilets Fashionable like mobiles
- Sharing facts innovatively
Community Empowerment
- Leadership development
- Tie up with SHG’s and Toilet maintenance
- Trainings people to operate systems and handling simple technical problems
- Using existing networks for upgrading water and sanitation systems
- Dynamics of neighbourhoods

Improving Financial management
- Transparency and Accountability
- Banking Facilities
- Financial contribution for O and M
- Support credit to build low cost individual toilets
- Defining contributions – finance or labour
Innovative Value Added Benefits

- **Wealth from waste**
  - Biogas for common cooking
  - Rooftop rainwater harvesting
  - Solar panels for energy
  - Creating infrastructure and trainings – water testing facility

- **Computer Centre** – terrace – community toilet, imparts training – slum youth – job-oriented computer skills – nominal fees

- **Community flour-mill and kitchen** – that prepares nutritious midday meals – Anganwadi Programme.

- **Self-employment training courses** for economically deprived women by Women’s SHGs
Design is Vital

- Prior to designing understanding landscape of the slum is important – severely congested/small lanes/unplanned

- Adopting region specific type of toilets

- Improving UGD systems, designs addressing issues in undulated landscape

- Need for improved toilet designs – low cost lighting, ventilation, user friendly options for children and physically challenged

- Innovative equipments in cleaning toilets

- Alternate options/preferences like e-toilets

- Providing alternate water options – rain water harvesting, recycled water usage

- Low cost options using local material during construction
Preferences matter

- Acceptance of technology type
- Identifying location of toilet – individual and public toilets
- People mostly prefer the toilet to be outside the house culturally
- Cultural dimensions – constraints in using public/community toilets, communities, caste, gender
- Prefer individual toilets to public and shared toilets
Stand up for those who can't sit down!
<table>
<thead>
<tr>
<th>No</th>
<th>Initiative</th>
<th>Slums</th>
<th>City, State</th>
</tr>
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<tr>
<td>1</td>
<td>Local NGO (Parivartan), CMC and Slum Community</td>
<td>834 Slums</td>
<td>Ahmedabad, Gujarat</td>
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<td>2</td>
<td>CMC, NGO, Slum Community</td>
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<td>Sahakar Nagar, Vasai Virar, Maharashtra</td>
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<td>3</td>
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<td>Khotwadi, Santacruz, Mumbai, Maharashtra</td>
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<td>Passengers</td>
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<td>8</td>
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<td>CMC, Public Toilets and Biodigester technology</td>
<td>Bharath Nagar</td>
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