Sanitation Workers in India

An urgent call for action

May 2021
In India, Dalberg Advisors has engaged extensively on the topic of Sanitation Workers in recent years. Commencing with a comprehensive landscaping and solutioning study in 2017, we conducted a Sanitation Workers Summit in 2018, which brought together stakeholders to prioritize solutions, and subsequently piloted solutions in Warangal, Telangana. Our findings have been presented at the World Water Week in Stockholm (2018) and featured in several articles in popular media.

A summary of insights from our work can be found at www.sanitationworkers.org

Building on this work, in 2021, we decided to conduct rapid research on the state of sanitation workers in India with a focus on understanding what had been done in the last 3 years – at the national, state, and sub-state levels – and to gauge the success of these initiatives along with the identification of key bottlenecks and priorities for the future.

This brief note captures findings from this rapid research exercise.
CURRENT STATE OF SANITATION WORKERS IN INDIA
There are ~5 million sanitation workers across the country but they remain “invisible”.

As per Dalberg estimates from 2017, there are about 5 million sanitation workers (SW) in India who handle faecal sludge; ~2 million of these are engaged in “high-risk” sanitation work. They span nine types of work: latrine cleaning, sewer cleaning, faecal sludge handling, drain cleaning, school toilet cleaning, public toilet cleaning, railway track cleaning, sewage treatment plant work, and domestic work. About 40% of workers are in urban areas and roughly half of those are women.

The government, which, largely due to definitional reasons, does not fully track the number of sanitation workers, estimates the number of “manual scavengers”2—those who manually handle human excreta—at 67,0003, down by 90% from 770,000 in 2008.4

Data on manual scavengers, a subset of sanitation workers, is also inconsistent across government sources creating further confusion. For example, there were 12,742 manual scavengers in 13 states in early 20176 as per the National Safai Karamchari Finance and Development Corporation (NSKFDC), while there were 42,203 such workers in 2018 as per the Self Employment Scheme for Rehabilitation of Manual Scavengers (SRMS).

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1 World Water Week 2018
2 As per the MS Act 2013, manual scavengers are “persons engaged or employed, at the commencement of this Act or at any time thereafter, by an individual or a local authority or an agency or a contractor, for manually cleaning, carrying, disposing of, or otherwise handling in any manner, human excreta in an insanitary latrine or an open drain or pit into which the human excreta from the insanitary latrines is disposed of, or on a railway track or in such other spaces or premises, as the Central Government or a State Government may notify before the excreta fully decomposes in such manner as may be prescribed.” Government of India
3 The Hindu, 2021
4 Down to Earth, 2021
5 The Hindu, 2019
6 National Safai Karamchari Finance and Development Corporation’s 20th Annual Report (2016-2017), there are 26 lakh insanitary latrines in the country. The report states that as of 31st March 2017, 12,742 manual scavengers have been identified in 13 states. It is inconceivable that 13,000 manual scavengers can excavate 26 lakh insanitary latrines.
Sanitation workers continue to suffer significantly on multiple fronts. Mainly, health, social, and financial. Even during the COVID-19 pandemic, they were denied their rights to health, safety, and dignity.

The average life expectancy of sanitation workers, at 40-45 years, is significantly lower than the national average of 70 years, and they experience high rates of prolonged illness and mortality. Moreover, the occupation has a high-rate of work related mortality; 375-475 manual scavengers died on the job in the last 5 years, mostly due to asphyxiation while cleaning sewers and septic tanks. Unfortunately, these incidents receive attention but not adequate action – among the registered deaths, a significant proportion of victim’s families have not received compensation as provided for in the Prohibition of Employment as Manual Scavengers and Their Rehabilitation Act 2013 (MS Act). FIRs too are not filed; for instance, according to the 57th Standing Committee of Social Justice and Empowerment 2017-18, not a single FIR was filed in 2014. Even in states with higher reported deaths like Uttar Pradesh, Tamil Nadu, Gujarat, and Karnataka, ongoing cases are under investigation or pending in courts and none have resulted in a conviction.  

Sanitation workers struggled even during COVID-19 as they were deprived of basic protective gear and training. A survey conducted...
by Darshan and Dubey in June 2020 revealed that over 90% of sanitation workers in Assam, Madhya Pradesh, Delhi, and Mumbai, lacked the right cleaning tools, health insurance, healthcare facilities, and check-ups for Covid. And two-thirds of the surveyed sanitation workers had not received instructions or training for Covid safety or received basic masks, gloves, soap, and a sanitizer, contrary to Central Government guidelines.

Sanitation workers who typically come from the lowest caste communities, are socially ostracized, and often not given fair access to education, health, land, housing, jobs, and financing. A recent study conducted by WaterAid, the World Bank, and WHO found that a third of sanitation workers experience violence, and half of them still experience untouchability and discrimination.

Most workers earn meagre and unpredictable incomes of INR 100-600 ($1.5 - $8) per day as daily wagers and contractors, and therefore are prone to financial shocks. Moreover, to be able to do this work, they resort to alcoholism and drugs which further taxes their incomes. And often a large part of their savings goes into tackling health issues and diseases caused due to the nature of their work.

Even when it comes to rehabilitation, the picture is grim. Of the ~40,000 manual scavengers identified under the SRMS in 2018, skilling was imparted to 1,682 in 2018-19 and 978 in 2019-20. They are also eligible for one-time cash assistance of INR 40,000 ($550), loans up to INR 15 lakhs ($20,000) at a concessional rate, and scholarships for their children – but only 27,268 have been given cash assistance so far.8

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7 Deccan Herald, 2020
8 The Print, 2020
PROMINENT INITIATIVES BY ECOSYSTEM ACTORS
Several initiatives have been put in place by the government, development, and private sectors – from policy amendments (proposed) to mechanization to increased budget allocations – but they are recent and lack scale and outcome related evidence.

The Central Government proposed a few amendments to the MS Act in late 2020, the major ones being a) An increase in the imprisonment term and fines for those contravening the Act, b) modernization of sewage systems and addressing the problem of non-sewered areas, c) establishing faecal sludge management systems for mechanized cleaning of septic tanks, and d) setting up of sanitation response units at the district level to ensure mechanical conveyance for desludging as well as cleaning of sewers and septic tanks. While these amendments are yet to be passed, experts believe that they are unlikely to move the needle without enabling justice mechanisms.

The Centre also drew up a significant INR 1.25 lakh crore ($17B) national action plan in March 2020, for mechanizing sewer cleaning, transport, and treatment in 500 cities and major Gram Panchayats, to be spent over the next four years. However, this is not reflected in the 2021 budget. Moreover, governance challenges are likely to come in the way – as this requires the combined effort of several ministries (housing and urban affairs, drinking water and sanitation, social justice and empowerment) as well as state governments.

Allocation towards the Self Employment Scheme for Rehabilitation of Manual Scavengers (SRMS) has remained stable at ~INR 100 Crore ($13.5M) over the last three years, but unfortunately, this has gone under-utilized. In 2020-21, for example, the Revised Estimate is ~30% of the original budget.

9 National Action for Mechanised Sanitation Ecosystem
Some states have been proactive in tackling the issue, mostly through infrastructure, technology, and training. The GARIMA scheme launched by the Odisha government in late 2020 seems to be the most comprehensive and holds promise. However, many of these initiatives are new, with limited information on progress and outcomes in the public domain.

- The Delhi government, in 2017, announced an INR 3,000 crore ($400M) plan for 100% mechanized sewer cleaning and in early 2019, flagged off 200 sewer cleaning machines. A follow-on study conducted in mid-2019 revealed that only 77 machines were operational by then. The efficacy of the plan is also stymied by governance challenges driven partly the involvement of multiple government bodies including the Public Works Department and Municipal Corporation of Delhi.10

- The Telangana government has reduced the need for manual intervention by piloting two faecal sludge treatment plants and decentralized wastewater treatment systems, and efforts are being made to utilize the spare capacity of existing STPs. It is also in the process of setting up an incubator “S-Hub”, with a seed fund of INR 25 crore ($3.5M), to support WASH start-ups.

- Odisha, in September 2020, launched GARIMA, a comprehensive scheme to provide social security, health, and financial support, skills training, counselling, housing, and educational support to 20,000 sanitation workers and their families across all 114 Urban Local Bodies (ULBs) in the state. An initial corpus of INR 50 crore ($7M) has been created for this purpose. As of Feb 2021, the government had initiated a survey of eligible SWs and also notified SWs as “highly skilled” which will raise their incomes by ~50%.

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9 National Action for Mechanised Sanitation Ecosystem
10 The Newslaundry, 2019
Some urban local bodies (ULBs) and municipalities, such as Surat, Pune, Hyderabad, Warangal, Kochi, Coimbatore, and Chennai, are also doing exemplary work in the sanitation workers’ domain, largely driven by the passion of government leaders (e.g., Amrapali Kata, ex-District Collector and District Magistrate of Warangal). Some examples include:

• The Greater Warangal Municipal Corporation has improved conditions across the sanitation value chain, from increasing access to toilets to containment, treatment, and transport of toilet waste. It recently set up a Faecal Sludge Treatment Plant (FSTP), with positive effects on sanitation workers’ lives.

• In a first-of-its-kind initiative, the Surat Municipal Corporation provides free annual check-ups to its 6,500 sanitation workers and their families. During the onset of Covid-19, PPEs were provided to workers and they were trained on how to handle waste and associated habits such as handwashing with soap, disinfecting their attire etc. The Corporation is also well-equipped with modern mechanized equipment to resolve sewer overflows and blockages with minimal human intervention.

• The Hyderabad Municipal Water Supply and Sewerage Board implemented a micro-entrepreneurship model in 2017, wherein sanitation workers could own and operate custom-designed sewer cleaning machines for a guaranteed income and with the support of a private services company.

• The development sector—which is relatively thin and unorganized on this theme—has been building awareness amongst SWs and ecosystem actors, advocating for change, and supporting governments in their efforts.

• Grassroots organizations such as SKA and Jan Sahas track and report the number and deaths of sanitation workers, support families in claiming entitlements, mobilize and organize local communities, and advocate for change with the government.

• International NGO WaterAid, along with ILO and WHO, published a comprehensive study on the safety, health, and dignity of sanitation workers in 2018, and continues to conduct research on the theme. It helped organize the India SaniTech Forum to promote technology innovation. Moreover, the organization has run public awareness campaigns and is building awareness amongst SWs on alternate livelihoods.

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11 India Sanitation Coalition
12 Telangana Today, 2019
13 Surat Municipality Sewer Cleaning Action Plan
The private sector, on its part, has put in place some promising initiatives, albeit on a smaller scale.

- Equipment manufacturers/assemblers like Kam-Avida have been proactive in redesigning machines and vehicles to suit Indian conditions (e.g., narrow lanes). Some promising hardware innovations have also emerged over the years; these include robot sewer and septic tank cleaners (e.g., Jalodbust, Bandicoot) and sewage detection tools, which not only mitigate the need for manual intervention but also upskill SWs to become entrepreneurs.

- Reckitt Benckiser, among the few corporates with a keen interest in the theme, setup the Harpic World Toilet College in Aurangabad, Maharashtra, in mid-2018. By late 2019, it had trained more than 4,000 workers and helped them secure employment opportunities in 90 public and private sector organizations, and also formed Self Help Groups (SHG) for micro-entrepreneurship.14

- There are few donors who actively focus on the SW theme. One of them is the Azim Premji Philanthropic Initiatives (APPI), which is helping rehabilitate SWs and provides them with legal aid through its “urban poor” portfolio. Others include the Bill and Melinda Gates Foundation, which has funded research studies and pilots, and Tata Trusts, which operates Mission Garima, a program to improve the lives of sanitation workers in Mumbai.

- Industry body Dalit Indian Chamber of Commerce & Industry (DICCI) has supported Hyderabad, Delhi, and other governments design and implement entrepreneurship schemes for sanitation workers.
KEY ISSUES AND BOTTLENECKS
While there is increased momentum in the last few years, several underlying systemic and structural issues continue to plague the SW ecosystem. We have outlined these across four dimensions: Policy & Governance, Social & Behavioural, Infrastructure & Technology and Financing.

There are four dimensions across the sanitation worker value chain that needs intervention

<table>
<thead>
<tr>
<th>Key Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy and Governance</strong></td>
</tr>
<tr>
<td>Denialism: Workers not recognized</td>
</tr>
<tr>
<td>SW policy not fit-for-purpose</td>
</tr>
<tr>
<td>Weak governance/ ‘anchor’ ministry</td>
</tr>
<tr>
<td>Lack of access to justice for SWs</td>
</tr>
<tr>
<td><strong>Social and Behavioral</strong></td>
</tr>
<tr>
<td>Lack of awareness w.r.t legal rights &amp; justice mechanisms</td>
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<tr>
<td>Social stigma and discrimination due to caste</td>
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<tr>
<td>Skewed risk perception of safety</td>
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<tr>
<td>Lack of collective voice</td>
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<tr>
<td><strong>Infrastructure &amp; Technology</strong></td>
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<tr>
<td>Lack of suitable, good quality &amp; customized safety gear</td>
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<td>Government’s risk aversion to new technologies/ innovation</td>
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<tr>
<td><strong>Financing</strong></td>
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<tr>
<td>Fragmented budgets across ministries, departments and levels; lack of visibility into money flows</td>
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<tr>
<td>Limited development and private sector spends</td>
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</tbody>
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Policy & Governance

- **Denialism:** Public bodies continue to deny the existence of unsafe sanitation work as there are perverse incentives to report the incidence of manual scavenging.

- **Policies are not fit-for-purpose:** Policies for the rehabilitation of manual scavengers are not suited to the different types of work and personas of workers, and the processes to claim them are tedious and cumbersome, driving low uptake. For example, several personal documents are required to claim benefit, but SWs typically do not have these handy.

- **Principal-agent problem:** Since there are usually several layers between governments and workers, governments tend to deflect issues (deaths, injuries, etc.) to contractors and sub-contractors, who go missing or exploit loopholes in the Act.

- **Weak governance:** There are several ministries that employ SWs, but they operate in silos, resulting in a lack of joint problem-solving and standardization. The ministry of social justice, which is supposed to anchor the theme, is not perceived to have enough teeth to enforce adherence or drive coordination.

- **Lack of access to justice:** There is limited legal aid for SWs, resulting in low claims and convictions under the Act.
Social and Behavioural

- **Lack of awareness**: SWs lack awareness and understanding of penal consequences and their legal rights under the Act. Most of them are illiterate or semi-literate and find it challenging to interpret the legal language or understand what they are signing up for with contractors.

- **Social stigma**: SWs are systematically denied access to basic services such as education, healthcare, and housing, due to the social stigma associated with their lower castes. They also refrain from taking up jobs or starting enterprises (e.g., tea stalls) that interface with the wider community due to fear of discrimination.

- **Skewed risk perceptions**: Their mental models/perceptions of risk and safety are heuristics-driven because of years of internalizing a certain way of working.

- **Lack of collective voice**: Due to caste-based segregation, a strong collective voice or network to demand justice doesn’t exist. Current worker unions are not very representative (e.g., due to the exclusion of contract workers) or effective.
Infrastructure & Technology

- **Lack of suitability:** PPE is not necessarily suited to the different types of sanitation work and diverse operating environments, and therefore oftentimes workers choose to not use them even if they are available. For example, the same PPE kit is used for all work even though each work has distinct characteristics. Quality and the periodic provision of safety gear is also an issue.

- **Government risk-aversion:** Even where innovative technologies exist, governments have been averse to adopting them as do not want to disrupt the status quo.

Financing

- **Fragmented government budgets:** Government budgets for SWs are distributed across several ministries—housing and urban affairs, drinking water and sanitation, urban development, rural development, social justice, railways, education, etc.—as well as levels (central, state, and sub-state), making it challenging to decipher how much is being truly allocated and spent towards the betterment of SWs.

- **Limited development sector spends:** With SBM1.0 focusing on toilet provision, most donors channelized their funding in that direction. However, this might change with the second avatar of the mission focusing on waste management and user behaviour.

- **Lack of private sector investment:** Lack of government incentives for innovation, lack of investment in infrastructure that makes private sector innovation viable, untimely payments by governments to private sector entities, etc. have held back private sector investment.
PRIORITIES FOR THE FUTURE
There are 5 high-level priorities to address the challenges outlined earlier. These should not be looked at in isolation as they are closely linked to and reinforce one another.

**Top priority areas for the future**

1. **Priority 1**
   - Stop the “denialism

2. **Priority 2**
   - Drive multi-pronged innovation to improve SW safety and livelihoods

3. **Priority 3**
   - Enhance awareness of risks & rights, and improve access to justice amongst SWs

4. **Priority 4**
   - Strengthen governance structures and data systems for better coordination and accountability

5. **Priority 5**
   - Break the inter-generational trap
Several initiatives can be undertaken within each priority area, each with differing impact potential, operational feasibility, budgetary requirements, etc. – and therefore should be systematically evaluated and prioritized.

Priority #1 End the denial

- There is need to create the right incentives for governments to identify and report the number of SWs (not just manual scavengers) so they can be tracked and supported.

- It is also important to not club workers under a single amorphous category but to understand the nuances of the different types of work and the people who engage in them.
Priority #2 Drive innovation solutions

• Since many of the traditional solutions have not delivered the desired results, there is a need to rapidly test and scale new solutions across dimensions to improve SW safety and livelihoods. E.g.,

Policy & Governance: Worker-friendly contracting so SWs understand what they are signing up for

Infrastructure & Technology: Contextualized safety gear which workers see value in using.

Social & Behavioural: Nudges (e.g., incentives) to change worker as well as society’s behaviours towards the workers.

Financing: Innovative mechanisms (e.g., results-based financing) to crowd-in financing from the development and private sectors

• There is need for government to recognize and promote successful innovations to drive scale and adoption in the community.

Priority #3 Enhance awareness of risks and worker rights

• There is need to increase awareness amongst workers (and their families) on the risks of sanitation work and measures to mitigate them, their legal rights under the MS Act, and available resources and enforcement mechanisms.

• This should be supplemented with the provision of legal aid, which workers can access if they are denied access to their rights and entitlements.

There is need to increase awareness amongst workers (and their families) on the risks of sanitation work
Priority #4 Strengthen governance structures

• Since SWs cut across ministries/departments, there is need for a strong “anchor” and governance framework that can bring everyone together and hold them accountable to their commitments. This needs to be done at the central, state, and sub-state levels. For example, while states are supposed to set up State Safai Karamchari Commissions under the MS Act, only 8 commissions and 7 agencies are established so far.  

• Stern rules and regulations should be developed for hiring and contracting SWs to ensure employers’ responsibility and accountability towards their safety and livelihoods.

• There is need for a unified data system that can serve as a “single source of truth” on SWs, be it on the number and spread of SWs, budget allocations, and spends, or progress on SW-related programs. This will help improve decision making as well as enhance visibility in the broader ecosystem.

Priority #5 Break the inter-generational trap

• “Whole community” approaches should be adopted for rehabilitation, including education for children, skilling for youth (e.g., in caste-neutral occupations), and entrepreneurial opportunities for spouses -- with inbuilt follow-up processes to avoid a relapse into sanitation work.

• Employers should be sensitized and incentivized to employ family members of SWs.

Employers should be sensitized and incentivized to employ family members of SWs
Acknowledgements

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<th>Name and Designation</th>
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About Dalberg

Dalberg works to build a more inclusive and sustainable world where all people, everywhere, can reach their fullest potential. We partner with and serve communities, governments, and companies providing an innovative mix of services – advisory, investment, research, analytics, and design – to create impact at scale. Our businesses provide high-level strategic policy and investment advice to the leadership of key institutions, corporations and governments, working collaboratively to address pressing global problems and generate positive social impact.

Dalberg has a dedicated Water and Sanitation practice area, one of our focus areas in international development. We have developed special expertise across the water value-chain, through our work advising a wide variety of actors in the space.

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