



Towards furthering action research for sanitation workers' safety: Discussions from the Workshop



Background

Rise in deaths of sanitation workers in sewers and septic tanks especially in the last couple of years has brought attention to the deplorable working conditions of sanitation workers in the country. According to the database released by National Commission for Safai Karamcharis (NCSK) for 2018, there has been at least one death in sewers in every 5 days due to hazardous cleaning of sewers in the first six months of 2018. This has triggered a series of discussions and actions across the country. The National Capital has announced to move towards complete mechanised cleaning of sewers. In Telangana, the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) has announced that it would purchase 70 new sewer jetting machines as a move to end manual scavenging. While these are welcome steps, there is a need to effectively implement the law on manual scavenging which has stringent provisions on manual cleaning of sewers and septic tanks.

The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act notified in 2013 recognises that manual cleaning of sewers and septic tanks places workers at risk of death and serious injury. The 2013 Act places the onus on the employer to provide safety devices and protective gear to workers. Non-compliance with these restrictions results in "hazardous cleaning", which is an offence under the Act. Besides exposure to harmful gases, this hazardous cleaning of sewers and septic tanks may result in head injury, leg injury, dizziness, fainting spell, burning in eyes, skin allergy, chest pain, and, also death due to asphyxiation. The law mandates mechanical cleaning of sewers as the norm. There are penal provisions for non-compliance of the law. The 2013 Act stipulates a punishment of up to two years' imprisonment and fine of rupees two lakh for the first offence, and five years' imprisonment and fine of rupees five lakh for subsequent offences. Despite these provisions, offences under the Act are visibilised only after the death of the sanitation worker.

Furthermore, Ministry of Housing and Urban Affairs (MoHUA) has released a document titled "Empowering marginalised groups- convergence between Swachh Bharat Mission (SBM) and Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM)" which will help in realising the synergies between the two missions. It adopts a convergence-based approach to enable better utilization of resources, expedite and drive the efforts of the Government towards achieving holistic social development goals by promoting livelihoods options for women's Self-Help Groups (SHGs), informal workers, and other marginalised communities.

While the law has extensive provisions to restrict manual cleaning of sewers and septic tanks, it has to be effectively implemented. Current policy framework on sanitation further exacerbates the situation. While there is a policy thrust towards toilet construction, it is crucial to understand what implication it has on sanitation workers if they continue to engage in hazardous cleaning of these infrastructures. Additionally, there is limited action based research that explores the issues and challenges that the sanitation worker faces. Given that these workers are often informally employed, it is difficult to ascertain the numbers of workers employed for hazardous cleaning of sewers and septic tanks.

Against this background, the Centre for Policy Research (CPR) organised a half daylong seminar titled "Towards furthering action research for sanitation workers' safety" on 4 December 2018. Through this seminar, we aim to build a shared understanding of the issues and challenges faced by sanitation workers' and develop robust research agenda for furthering action research in order to identify gaps and strengthen evidence to improve sanitation workers' safety. The seminar opened with an Inaugural Address delivered by Anju Dwivedi from CPR followed by two thematic sessions.



Session 1

Socio-legal, technical and financial knowledge base: Evidence and practice

The first session was moderated by Marie-HélèneZérah, Senior Visiting Fellow, CPR. The session discussed insights from the field on social, legal, technical and financial issues and challenges sanitation workers face, and also deliberated on the ground challenges of bringing sanitation workers into alternative livelihood options. Speakers of the session included Ravikant Joshi, Urban Management Centre (UMC); Raj Bhushan Roy, WaterAid India (WAI); Nirat Bhatnagar, Dalberg Advisors; Tripti Singh, CPR; Manish, CPR; Devashish Deshpande, CPR and Nilanjana Bhattacharjee, Participatory Research in Asia (PRIA). This was followed by an open discussion. Summary of the presentation is detailed below.

Ravikant Joshi, Senior Expert-Urban Management and Urban Finance, Urban Mamagement Centre (UMC)



Joshi's presentation was titled "Towards furthering action research for sanitation workers' safety — learnings". Drawing from his learnings from the National Urban Livelihood Mission convergence project under the Ministry of Housing and Urban Affairs, he laid the foundational understanding of sanitation workers' safety landscape in India. Joshi argued that rise in number of toilets has meant that there are more toilets now that will need to be emptied. This has resulted in increased workload for existing sanitation workers. Additionally, most of this work is outsourced to a large number of unregulated private players and/or contractual workers.

Joshi argues that the death of a sanitation worker in the formal sector is rare. This is because there is some sort of monitoring and regulation at the ULB level for the formally employed sanitation worker. The chief challenge lies when people are informally employed. Although the current set of regulations are designed to authorize local bodies to stop violators, the implementation of the same is complicated due to a lack of capacity and practical remedial measures. Moreover, the sanitation systems that are built are not conducive for mechanised operations. There is Inadequate incentive for mechanization. Recently, Hyderabad announced purchase of 70 sewer jetting machines. While this is a welcome step it is crucial to note that it will benefit workers present only in the formal sector. Micro and medium size sanitation enterprises are usually labor intensive and there is limited incentive available for mechanizing sanitation operations specifically in the informal sector. Given the economic, occupational and social vulnerability, the manual scavenger and/or sanitation worker is not in a position to refuse work. Additionally, they also lack alternative skillset to take on other work.

Furthermore, there is lack of vocationalisation or standardization of sanitation job. Joshi points out that sanitation work continues to be seen as unskilled work. Some efforts have been made under the NULM convergence project to develop Qualification Packs (QPs) and modules to enable skilling of sanitation workers. Going forward, the critical issue is to identify agencies that would train sanitation workers. Joshi suggested that a large training of trainers (ToTs) would help to develop a network of skill training provider in this field. While Recognition of prior learning (RPL) introduced by MSDE is a welcome step that evaluate a person's existing skill sets, knowledge and experience gained either by formal, nonformal or informal learning but, the chief concern remains that there is lack of skilling network and capacity building of the same. To improve the condition of sanitation workers, Joshi recommends that the entire ecosystem needs to be addressed simultaneously. It cannot be addressed in a piece-meal manner. In his concluding remarks, he suggested action-based research alone will not make sanitation work safe, but there is a need to look at how a well-functioning sanitation ecosystem can be ensured so that there is no room for manual scavenging and unsafe sanitation work.

Raj Bhushan Roy, Manager Policy, WaterAid India (WAI)



Roy in his presentation discusses the social question of-discrimination, exclusion and deprivation. His presentation was titled "The Need for Rule of Law to advance Rights and Freedoms of the Sanitation Workers". In his presentation, he highlighted that manual scavenging is a caste and descent-based occupation construed in misplaced socio-cultural and ideological basis. The study looks at various interventions on manual scavenging beginning from 1933, when the first prohibitory law was initiated, followed by the The Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993 and Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013. The third and the fourth parliamentary report highlighted that

the 1993 Act is not effective. Subsequently, after a fair amount of criticism against this practice, a new 2013 law came into place. Despite the existing legal framework which has broadened the scope of the law to include hazardous cleaning, Roy points out that there exists a clear misconception amongst the local bodies for whom merely manual scavengers- i.e., workers who are involved in cleaning human excreta lie under the ambit of the law. Roy points out that besides 2013 Act, other laws like the labor law, land acquisition law, the child labor prohibition law also come into play to safeguard the interest of sanitation workers. The recent sewer deaths have triggered a lot of protests and campaign. Resultantly, for the first time, the National Commission for Safai Karamchari (NCSK) took cognizance of the matter and officially disclosed the number of sewer deaths. There have been fatalities and health hazards common amongst sanitation workers.

Additionally, the Socio-Economic Caste Census (SECC), 2011 states that there are almost 1,80,657 manual scavengers but according, to the 2002-03 survey of the Ministry of Social Justice and Empowerment there are almost 6,76,000 manual scavengers. Roy claims that as both surveys report different numbers there seems to be a discrepancy in these surveys. He further argues that most inter-ministerial commissioned surveys only count urban sanitation workers thereby leaving out a large chunk of rural sanitation workers. Roy explains that there is a strong focus on women under the project. He states that approximately 95% of people who are engaged in sanitation work especially those who are engaged in cleaning dry latrines are women. He points out that although the government claims to have rehabilitated 88% of women involved in manual scavenging but, the ground reality differs. The Supreme Court, in its last case verdict on manual scavenging, clearly differentiation between liberation and rehabilitation. The new law has also acknowledges that manual scavengers need to be not only be rehabilitated but also liberated. However, there has been no budget allocation has been made for rehabilitation of manual scavengers.

Furthermore, manual scavenging has not been addressed in the National Urban Sanitation Policy (NUSP) 2008. There has been a major policy push towards construction of toilets under Swachh Bharat Mission. However, this is leading to more manual scavengers both in rural and urban areas. The assumption is that various policies and programmes will lead to subsequent elimination of manual scavenging. However, it is crucial to note that eradication of manual scavenging goes beyond demolition of insanitary latrines and also includes use of safety equipment and protective gears. Drawing from field insights Roy, highlights that some ULBs have provision for giving protective gears but, they claim that these gears are hardly used by sanitation workers. Hence, he argues that the idea of sanitation work without manual handling of human excreta is dismal.

The study undertaken by WaterAid India in partnership with Centre for Equity Studies and Safai Karamchari Andolan is based on community-led action on a rights based approach. The strategy of the project is to empower dalit women leadership, work with elected representatives and state institutions. This community largely misses out on the social capital, the idea is to mobilize and organize these communities and engage with relevant state institutions thereby contributing to achievement of SDG targets.

The project has two research components. Firstly, an extensive review of the 2013 Act would be conducted. The study is being conducted in 12 districts spread across 4 states (Bihar, Jharkhand, Madhya Pradesh, and Uttar Pradesh). These districts were selected based on which district has the highest number of dry latrines and persons employed as manual scavengers. Roy states that a large number of institutions are at crossroads and resultantly it is crucial to work closely with institutions like NITI Aayog, NSKFDC, MOSPI, MHUA, and NHRC so that they take the advocacy and collective actions at the national and also at the international level with United Nations and explore alternative livelihoods for rehabilitation of women manual scavengers. Given that it is a new project, currently, baseline study is close to completion. Knowledge and evidence on current situation and insights for addressing bottlenecks in implementation of the 2013 Act are expected as outcomes.

Nirat Bhatnagar, Partner, Dalberg Advisors



Bhatnagar in his presentation titled, "Sanitation workers safety & livelihood: A five million people strong blind spot in sanitation" argues that sanitation workers have been a blindspot in India's march towards sanitation. Bhatnagar points out that so far sanitation workers have been studied solely from a human rights perspective. Often, different types of work that these workers do is conflated into a bucket called "manual scavenging". To address this gap, the "Sanitation workers project" was undertaken by Dalberg. The study tries to explore who these sanitation workers are? What challenges do they face and what kind of solution (i.e., hardware, behavior, policy and finance) is required to improve their condition?

As part of the project, a four to five-month long study was initiated. The study has two parts. The first part focused on understanding the problem by mapping the ecosystem, mapping different types of work and then going deep into the lives of these workers. The second part of the study focused on solutioning i.e., what kinds of solution across policy, finance, hardware and behavior would solve some of these problems. Based on the findings, Dalberg help develop strategies both at city and national level to take this forward. Under the study, 27 macro level solution were identified. Of these, 15 were prioritized. Following this, a budget estimate was calculated for implementing these solutions at scale across India and for piloting it. In the second phase of the study, some of these pilots are being implemented. For instance, in Warangal, Dalberg is working with ASCI and the government to implement some of these pilots.

Bhatnagar argues that in the last 10 years, and specifically in the last four years, there has been a dramatic progress in sanitation in the country particularly related to finance, hardware, behavior and IEC. However, sanitation workers continue to be on the fringe of the dialogue despite efforts of notable individuals like Bezwada Wilson. These workers have not been the front and center of the dialogue.

Against this background, the study aims to unpack the term "sanitation workers". Bhatnagar paoints out that sanitation workers are not a homogeneous group. There are different types of work that they engage in. However, the term manual scavengers" is used quite loosely by the media, academicians and development community, almost as a blanket phrase to refer to these workers. Bhatnagar further points out that "manual scavengers" form merely one segment of those engaged in sanitation related work. To understand these nuances, the study mapped various kind of sanitation work across the value chain and found that there are broadly nine types of sanitation work and workers do a combination of these types of work. These works range from cleaning sewers, railway stations, septic tanks, public and community toilets, insanitary latrines, school toilets, domestic work, sewage treatment plants, and sweeping and drain cleaning.

Bhatnagar claims that so far, the number of sanitation workers has been underreported. The study estimates that there are approximately 5 million sanitation workers in total, of these, more than half of them are domestic workers. They

clean toilets in the household both in urban and rural areas. Additionally, two million people work in hazardous setting. The study also examined at what stage or from where does health risk and livelihood risk for each of the identified (9) sanitation work originate from? Findings reveal that there is heterogeneity in terms of risk faced by these workers depending on the work they do. Furthermore, findings reveal that there are six types of people who do a combination of the 9 types of work. Bhatnagar explains that the characteristics of these people have been distilled into 6 thematic "personas"- reluctant inheritors, complacent part timer, caged bird, trapped traditionalists, and first amongst equals. These personas differ in terms of backgrounds, motivations, aspirations, and personalities, and will therefore require customized solutions and pathways.

Field insights are abstracted into four drivers—behavioral, social, hardware and governance. Explanatorily, behavior driver is determined where familial legacy seems to influence entry into sanitation work with the worksite lacking a formal culture of safety, social driver where the rigidity of caste biases systematically denies other livelihood opportunities, hardware driver where current infrastructure regularly puts workers in hazardous conditions and governance driver where acknowledgement from civic agencies is required to monitor unsafe sanitation work more closely. Furthermore, 16 opportunity areas are identified to improve sanitation workers' safety as per the lifecycle of a sewer worker - entry, on-the-job, progression and cross-cutting enablers. Illustratively, registration of a sanitation worker's ID which in turn linked to an adhaar card, technology enabled revolutions such as sanitation worker's sandbox that helps in deployment of machines, entrepreneurship, breaking the family legacy, re-imagining city level hardware, awareness campaigns, institutional strengthening to name a few. In due course, four pilots are identified — behavior change programme for safety, sanitation workers acknowledgement and registration in terms of visual contract, sanitation workers effective contract design and sanitation workers enabling entrepreneurship. To conclude, Nirat encourages widening of the research that opens a dialogue for rich action research agenda and see this problem through multiple lenses.

Marie-Helene, the session moderator points out the contradiction between two presentations made by Bhatnagar and Joshi where Bhatnagar estimates a decline in number of workers by 2022 while Joshi had pointed that more workers would be employed as we move forward.

Tripti Singh, Research Associate, Centre for Policy Research (CPR)

Singh's presentation was titled "Sanitation work: A case study of Ekta Vihar". She presented findings from the study of sanitation workers in Ekta Vihar. Ekta Vihar in Meethapur Extension is an un-authorized colony in South-East Delhi. The settlement has grown on what was previously agricultural land of Meethapur Village. Over the years, the land was

sold to a number of builders and it was further sub-divided into 'plots'. Interestingly, the settlement is surrounded by a wastewater pond where it also shares municipal boundaries with the state of Haryana. Over the last couple of years due to urbanisation, the settlement has been growing towards Haryana. Given the contested municipal boundary situation, the study microsite was decided keeping in mind the existing precarious governance situation in Ekta Vihar. Therefore, Galli 1, 2, 3 were selected as microsites where in, Gali 1 and part of Gali 2 were not serviced by MCD sanitation workers as it lay on the contested boundary between Delhi and Haryana.



The fieldwork for the study was conducted between April, 2017 to March, 2018. Multiple reconnaissance visits to various informal settlements in Delhi was undertaken for site selection. A combination of methods like transect walks and field mapping, field observations, semi-structured personal interviews with 13 Households, structured Focus Group Discussion (FGDs) with sanitation workers were used to collect data.

Drawing from field anecdotes, Singh highlights that municipal sanitation workers did not service Gali 1. During the interview, households informed that although sanitation workers service other parts of the settlement but, they do not service Gali 1 as this lane is considered to fall in Haryana. Residents mention that although electricity is provided by the Delhi government but, MCD workers refuse to service this area. Study findings reveal that each resident cleans a section of the drain in front of their houses themselves, and in this way the entire drain gets cleaned. In Gali 1 women residents often use bare hands, mudguard, seekh jhaadoo, kolchi, scraper, to remove the content of the drain in a tasla, which is later thrown in Durga builder's land on the periphery of the settlement.

Although household clean drains outside their houses but, there is an aversion among women residents to clean drains due to presence of human excreta in the drain. It is crucial to note that Ekta Vihar settlement is completely non-sewered. Additionally, there are no community / public toilet in the settlement. Most IHHLs are connected to "tanks". Some have "soaktas" or leach pits. The outlet from the "tanks" is directed to open drains outside the house or to the wastewater pond behind the settlement. During a FGD with MCD sanitation workers who service Ekta Vihar, the workers reveal that there are many "illegal settlement" in this area. It is often difficult to service these areas. Workers clean the drain which has "latrine water". Although residents can be fined for releasing latrine water into the tank but, so far, no resident has been fined. Furthermore, few workers have been designated for each settlement. Consequently, each karamchari is assigned many galis. This was corroborated by Sanitation Inspector who also agreed that karamcharis in this region are over worked. Moreover, three years ago karamcharis were given uniform including four sets of pant-shirt, two for summers, two for winters, and a pair of shoe. Some karamcharis report that they did not receive the uniform. Those who received the uniform complaint that it tears easily. Resultantly, Ekta Vihar is considered a punishment posting by workers.

Additionally, sanitation workers face social discrimination at work. Drawing from the literature and fieldwork conducted in Ekta Vihar, Singh argues that the term "Bhangi" is used as an occupational descriptive term for manual scavengers as well as for sanitation workers. This term is also applied to Muslim, Sikh, Neo-Budhist or Christian scavenging communities. In Ekta Vihar sanitation workers are referred as "जमादार, "भंगी", "नीची जाती के लोग" by residents. Singh further points out that sanitation workers are from caste groups customarily relegated to the bottom of the hierarchy and confined to livelihood tasks viewed as deplorable. Their caste-designated occupation reinforces the social stigma that they are 'unclean' and 'untouchable'. Discrimination extends to all facets of their lives. Rules of purity and pollution affect their everyday interactions. Ekta Vihar residents refuse to give water to sanitation workers. In rare instances when they do, it is offered in broken utensil or "latrine का mug", or separate glasses which is not used by other household members. Residents give them food or water from afar as if almost afraid of "touching" them.

Manish, Research Associate, Centre for Policy Research (CPR)

Manish's presentation was titled "Manual Scavenging: What does the law say?" Manish begins his presentation by focusing on how the term manual scavenging" has been broadened from 1993 to 2013 MS Act. Manish explained that as per the 1993 Act, manual scavenger was defined as "a person engaged in or employed for manually carrying human excreta and the expression manual scavenging shall be construed accordingly". He further points out that manual scavengers were earlier referred as "night soil" or "head load" carriers. He explains that at that point of time, the practice of dry latrines was fairly prevalent. Resultantly, latrines could not be flushed by water instead the night soil after each use needed to be cleaned



manually by a person. Essentially, the 1993 Act triggered a shift from dry latrines to water seal latrines. The 1993 Act had provision to demolish all the dry latrines and/or convert them into water-seal latrines. However, the Act was not effectively implemented. Resultantly, there was a long movement involving activism at the Supreme Court, with the Government and in the Parliament and various other bodies. Eventually twenty years later, the Government passed 2013 MS Act.

The MS Act 2013, broadens the definition of manual scavenging. The new Act introduces the concept of "insanitary latrines" and provides for conversion of insanitary latrines to sanitary ones. Recognising the fact that water flush latrines will not necessarily eliminate manual scavenging, as the waste still has to go somewhere. Resultantly the Act covers new spaces under its ambit that are beyond the toilet like open drains, pits, railway tracks and any other premises where excreta is disposed. The essence is that any handling of human excreta before it fully decomposes in any of the above-mentioned spaces constitutes manual scavenging.

In the MS Act, 2013, insanitary latrines are referred as a latrine which requires human excreta to be cleaned or otherwise handled manually, either in situ, or in an open drain or pit into which the excreta is discharged or flushed, before the excreta fully decomposes. Sanitary latrine refers to a latrine which is not an insanitary. Manish points out that as a result toilet design, Railways are one of the largest employers of people who are engaged in unsafe handling of human waste and they largely fit in the definition of insanitary toilets. However, an exception has been created stating that latrines in railway coaches when cleaned using protective gears are not categorized as insanitary latrines. The central government has issued a notification under this section where the protective gear for cleaning railway latrine includes uniform with apron, face/nose mask, gloves and boots and devices which include long handled broom and toilet commode brush. Manish points out that there is an ongoing litigation currently in Delhi High Court with respect to the safety of sanitation workers. The earlier paradigm of dry latrines (1993 Act) did not recognize any space beyond the toilet itself, while the 2013 MS Act acknowledges that the waste requires to be handled beyond the latrine space. Therefore, it recognizes septic tank and sewers as well. The official definition of septic tank is explained as a water-tight settling tank or chamber, normally located underground, which is used to receive and hold human excreta, allowing it to decompose through bacterial activity and sewer means an underground conduit or pipe for carrying off human excreta, besides other waste matter and drainage wastes.

The law recognizes that cleaning of septic tanks and sewers without protective gear is a hazardous exercise, hence, it creates a slightly convoluted definition explaining if a septic tank or a sewer is cleaned without using protective gear or without following the process that is prescribed for safe cleaning then such a cleaning is categorized as hazardous cleaning. Consequently, under the Act, both 'manual scavenging' and 'hazardous cleaning' is prohibited, all insanitary latrines need to be converted to sanitary ones and sewers and septic tanks needs to be regulated. Under Section 33 of the MS Act, 2013 local authorities are obligated to use appropriate technological appliances for cleaning sewers, septic tanks and other spaces. In case of sewers, manual cleaning is restricted to five specified circumstances. Manish points out that one of the circumstances is rather interesting it states that manual cleaning is permissible when it is absolutely necessary to have manual sewage cleaning, after the CEO of the local authority has permitted to do so after recording in writing the specific valid reasons for allowing such cleaning. There are several safety precautions in place which include forty-four pieces of safety equipment provided by employer and 27-step process to be followed before, during and after cleaning. Violation of any of these conditions results in hazardous cleaning. There is a higher penalty for hazardous cleaning than for manual scavenging based on the recognition that unlike manual scavenging, hazardous cleaning can possibly lead to death. However, it constitutes as an offence with a punishment of up to two years to send someone in a sewer without protective gear even if no death or injury is caused. It accounts for cognizable offence wherein registration of FIR becomes mandatory. If the victim belongs to the scheduled castes and scheduled tribes, the provisions of the Prevention of Atrocities Act, 1989 also becomes valid in which case the punishment is more stringent with no provision of anticipatory bail.

On the institutional mechanisms, Manish points out that the primary responsibility for implementation of the Act lies with the District Magistrate in every district who also heads District level vigilance committee which has representation from ULBs and civil societies. The committee primarily monitors the registration of offences and their investigation and subsequent prosecution. Manish points out that it remains to be seen how many of such committees are actually active and in place. To conclude, Manish argues that as per Census 2011, less than half of the total households had in-house latrines. He notes that interestingly, majority of these in-house latrines are not connected to either sewers or septic tanks. Rural and smaller urban areas are primarily covered by septic tanks. Even in the ten biggest urban cities in India, sewerage coverage is limited to seventy-one percent. Therefore, Manish argues that applicability of these legal provisions and regulations of septic tanks becomes an important thrust going forward.

Devashish Deshpande, Senior Research Associate, Accountability Initiative, CPR



Deshpande's presentation was titled "Assessment of Self Employment Scheme for Rehabilitation of Manual Scavengers (SRMS)". He begins by explaining how Self Employment Scheme for Rehabilitation of Manual Scavengers (SRMS) attempts to tackle the problem of manual scavenging by elucidating key provisions of the scheme. SRMS is a Central Sector Scheme of the Ministry of Social Justice and Empowerment (MSJE) introduced in January 2007 to rehabilitate the identified manual scavengers in alternative professions by 2010. Subsequently it was revised in November 2013. It is implemented by the National Safai Karmacharis Finance and Development

Corporation (NSKFDC), a GoI owned, not for profit, formed in 1997 with the sole objective of ending manual scavenging.

SRMS changed after the 2013 Act came into place. In line with the new MS Act 2013, the current SRMS has also broadened the definition of manual scavenger. Besides covering those who clean dry latrine, SRMS also covers all those who fall under the gambit of the new understanding of manual scavengers including those who clean single pits and septic tanks without protective gear. He highlights that there are three mechanisms through which SRMS attempts to bring out manual scavengers out of their profession. Firstly, one-time cash assistance (OTCA) of Rs 40,000 is provided. Instead of giving a lump sum amount, the manual scavenger receives this in instalments spread over 7 months. Secondly, loan for self-employment projects is provided to identified manual scavengers. A loan of upto Rs 10,00,000 for setting up a business is admissible under the scheme. In case the beneficiary takes up sanitation related projects then a loan of up to Rs 15,00,000 is given. Additionally, a credit linked-backend capital subsidy is also provided. Finally, skills training is the third key provision of the scheme. The dependents of the manual scavenger who do not want to set up their own businesses are provided skill training. Along with the training a stipend is also given.

Against this background, using government data, He tries to explore trends in budget allocations and release, to understand the coverage of SRMS. SRMS is a central sector scheme, 100% of the scheme is funded by the central government of India. State government do not make any contribution to it. He argues that on close examination of budget allocation made by GoI for SRMS, it is evident that over the years the funding for SRMS has substantially reduced. For FY 2012-13, 98 crores were allocated for SRMS. In 2013, the new Act was notified and there was also a simultaneous jump in budget estimates which increased to 557 crores for FY 2013-14. However, this was reduced to 439 crores in 2014-15. For FY 2015-16 it was 461 crores and for FY 2016-17, it was 10 crores. However, this was budget estimates prepared at the beginning of the year, these estimates are revised at the end of the year and the actual budget expenditure for that FY is known only after a few years. So while, 98 crores were allocated at the beginning in 2012 it was reduced to 20 crores in revised estimates. At the start of FY 2014-15, the first complete financial year since the launch of the revised scheme, 439 crores were allocated by GoI. This was however revised to 47 crores in the revised estimates. Similarly, while budget estimates for FY 2015-16 were 461 crores, revised estimates were only 5 crores. Additionally, no expenditure has been incurred by GOI under the programme since FY 2014-15. According to a response to Unstarred question number 594, answered in the Lok Sabha on 19 December 2017, the reduction in budget allocations was due to the existing corpus of funds available with the NSKFDC. However, it is crucial to point out that at the end of FY 2015-16 when the Minister said that enough funds were available, merely 35 crores were available with the NSKFDC to rehabilitate all manual scavengers and their dependents.

It is also crucial to note that in the previous avatar of SRMS, states like Tamil Nadu, Uttar Pradesh, Karnataka and Madhya Pradesh which are massive states having large numbers of manual scavengers had given some form of compensation to merely 33%, 16%, 13% and 5% of the identified manual scavengers, respectively.

He points out that according to Census 2011, there were 26,06,278 insanitary latrines across India, of which 31 per cent (7,94,390) were found to be serviced manually, and another 50 per cent (13,14,562) were found to be emptied into an

open drain. Additionally, SECC 2011 also identified 1,68,066 rural manual scavenger households across the country, which had at least one member involved in manual scavenging. However, when fresh survey was conducted 13,465 manual scavengers were identified till 26 December 2017. This has now increased to approximately 50,000. It is pertinent to note that these are only those who have been identified by the government as manual scavengers. CSOs have presented different estimates of manual scavengers in the country.

A close examination of OTCA, which is one of the mechanisms to rehabilitate manual scavengers, it is evident that disbursement of OTCA is flagging despite the fact that many pending cases exist. There is also a low uptake of self-employment credit. As of July 2017, 1,233 self-employment projects had been sanctioned across the country. Under the revised SRMS, while trainings may be sanctioned for any member of manual scavenger households who are not otherwise employed however, as of November 2017, trainings for 13,587 beneficiaries had been sanctioned under SRMS.

Drawing on insights from the survey conducted in Udaipur in 2017, He examines the process of identifying a manual scavenger. Given that SRMS is based on self-identification method where the government sets up camps and the manual scavenger is supposed to identify themselves as manual scavenger at these camps. However, He argues that it is not so simplistic. The key issue is that not many people seem to be aware about these camps. Additionally, to identify oneself as a manual scavenger the person needs to submit a copy of the Adhar card, a bank account and a written proof that they are a manual scavenger. These procedures are cumbersome.

Additionally, given that there has been a surge in toilet construction since 2014, He argues that this would have serious implications for those who clean these pits and/or septic tanks. The problem of manual scavenging is likely to exacerbate if it is not given attention. There would be more manual scavenger need to empty these pits.

Nilanjana Bhattacharjee, Programme Officer, Participatory Research in Asia (PRIA)

Bhattacharjee's presentation was titled "Unearthing the realities of women sanitation workers - Jhansi, Ajmer, Muzaffarpur". She explains that it is a phenomenological state level study. 206 women sanitation workers were part of the study. She points out that the discussion on sanitation seems to be largely on very conservative numbers, statistics and schemes however, with this study the idea was to expand the discussion and bring to fore the narrative that highlight the lived experiences of these workers.

To set the context for the study, Bhattacharjee points out that 1.1 million sanitation workers keep the Indian cities clean and half of them are women. While the census does not disaggregate the data, the population



of people belonging to Dalit caste engaged in this work is about 13 lakhs. Every state and city have its own history with Dalit community, In each state there are different caste names for sanitation workers like valimikis, Bhangis, Mehatar, Dom, Musahar, Dushadh, Lalbegi, Chuhara, Mira (UP, MP, Bihar, Punjab, Maharashtra) Hadi (West Bengal), Paki (Andhra Pradesh), Thotti (Tamil Nadu) etc. used in daily basis.

Bhattacharjee points out that as per the annual report of the Ministry of Social Justice and Empowerment (Government of India 2009), there are 7,70,338 manual scavengers and their dependents in India. Out of this, the highest number of manual scavengers belongs to Uttar Pradesh. 4, 27,870 manual scavengers have been assisted under the National Scheme of Liberation and Rehabilitation of Scavengers (NSLRS) and therefore ineligible for further assistance. Remaining 3,42,468 are yet to be rehabilitated. Another fresh survey (2014-2017) by MSJE in 2014-17 identified nearly 13,770 manual scavengers. In an even more recent MSJE survey (June, 2018), which has not been published yet, it estimates them to be 53,236. Bhattacharjee argues that these are extremely conservative estimate. She points out that the recent survey (2018)

undertaken by MSJE only includes numbers for 121 districts out of 600 districts which participated. It is crucial to note that it does not include sewer and septic tank workers or the sanitation workers employed by the Indian railways which employs a sizeable number of manual scavengers in India. It is important to note that many states did not participate in the survey by citing that no manual scavengers are employed by them.

It is also important to note that the children of sanitation workers constantly miss school or drop out completely and are forced to take up informal jobs. While SBM has created over a million direct jobs, there is a severe need of a comprehensive excusive policy that looks at sanitation workers engaged in various types of cleaning such as septic tank cleaners, CT/PT cleaners, STP operators, desludging operators.

She discussed the research findings from the study in Jhansi, Ajmer and Muzaffarpur. The study looked at three types of sanitation workers- permanent, contractual and outsourced staff. While all three categories exist in Jhansi, in Ajmer and Muzaffarpur only first two categories are found. The permanent staff dominantly enjoy the perks of a formal staff. They enjoy a salary ranging between Rs 25,000 to 30,000, along with benefits such as EPF, paid casual and earned leaves, medical leaves, maternity leaves, pension contribution, insurance, death claim to name a few. Bhattacharjee points out that death claim is one of the most important aspect for a sense of security for workers in order to pass on their jobs. Contractual staff, barring Jhansi, the only entitlement the sanitation workers get is Rs 5000 per month in Ajmer and Rs 8000 per month in Muzaffarpur. In Jhansi, the situation is relatively better off where contractual workers get EPF, society funds, three month paid maternity leaves and Rs 15,000 per month as salary. Outsource staff is unique to Jhansi. Only benefit they get is similar to contractual staff in Ajmer and Muzaffarpur which is Rs 7000 per month. She emphasizes that this is an extremely disturbing fact as 75 percent of women who participated in the study, and who generally work in the sanitation value chain are contractual workers. Study findings reveal that in months that have 31 days, the 31st day is essentially a day where the worker is not paid for their labor. So, in addition to unpaid leaves, the contractual and outsourced workers also give "unpaid labor" on the 31st day of every other month. There is absolutely no unionization, the only need of women sanitation workers in these unions is to show numbers and crowd. As discussed, the job situation in terms of contractual aspect of employment is an extremely insecure premised on the culture of easy hire and fire. Every worker is replaceable. The contracts are extremely disabling. Interestingly, barring two workers in Ajmer, no worker has ever received a pay slip across three states and across three types of workers during their entire lifetime which is in direct violation with the Minimum Wages Act. Although sanitation work is categorized as a skilled job but, the salary of a contractual and outsourced worker is not in compliance with the Minimum Wages Act. Identification, handling, treatment and disposal of waste is considered as a technical aspect of this work.

Largely the discussion about the occupational health of sanitation workers revolves around the physical aspects. Contrarily, the centuries of caste-based discrimination that sanitation workers or manual scavengers face has a dominant narrative of communal trauma. She suggested that the emotional health of this community needs to be taken under consideration and it becomes essential to look into their mental health. So, in terms of physical aspect of their occupational health, no women sanitation workers ever received any protective gears. The only time they receive protective gear is when VIPs visits their city and later it is taken back from them once the visit is over. According to the workers, the quality of the gear is so poor that it is far more disabling in nature than enabling. None of the women workers received vaccinations. They never received any prior formal training and no blanket medical insurance despite the dangerous nature of their job. There is limited work space along with no provision of first-aid kits despite the fact they all handle non-segregated waste which is an accumulation of various syringes, broken glasses as such. During menstruation, the strenuous physicality of their job guarantees burning thigh rashes constantly for four months in a year. They are required to walk for miles under the scorching heat carrying heavy waste bags for disposal. 6/10 women experience eyes, skin and throat infections, especially during monsoons, skin scrapes, thigh allergies, bruises. Therefore, all of this compounded together feeds into severe lack of dignity, a sense of stress, humiliation and depression leading to substance abuse within the community where most of the men are addicted to drinking and women constantly chew tobacco/gutka to be able to bear the stench of their job.

More than 70 percent women sanitation workers are illiterate and 95 percentage of them belong to scheduled castes and other lower castes and have been in this occupation formally for at least 4 generations. Before that, there were various kinds of patron-client system as suggested in Ajmer - the Rani System which is an ancient system of patron-client

relationship. Across all three cities, there have been no attempts by elected representatives / ULB officials to disseminate information, raise awareness about the rights and responsibilities of sanitation workers.

Sanitation work is seen as unskilled, informal and unsupported with regulatory frameworks to the point where the permanent women sanitation workers have been doing this work since over twenty years. They have never received any promotions although their male counterparts have been promoted to supervisory positions. Sanitation workers experience touch based discrimination on a daily basis in local transport, public spaces and experience it in general attitude and behavior in everyday life. Consequently, Bhattacharjee points out that the entire community is dealing with the question of agency vs access i.e, despite availability of stakeholders' maps, policies, programmes and acts do not necessarily ensure the access to these provisions. Despite being educated, students of Valmiki community do not have access to jobs. Internal political dynamics within the community also complicate matters. It hinders them from mobilizing the community and breaking the caste barriers. Despite wanting to move beyond the caste-based barriers, there is still a resistance of giving jobs outside the community. She concludes her presentation by urging practitioners to not just look at the external sources of limitations but also the internal sources of limitations for women sanitation workers as this would add more fabric to the debate.

Open Discussion

This was followed by a discussion with the audience on the need for upgradation of designs of septic tanks and sewer networks in order to eliminate hazardous cleaning. It was highlighted that in the race to declare the country open defecation free, large number of toilets are being constructed under the Swachh Bharat Mission. Resultantly, more toilets relying on on-site sanitation system would soon need to be emptied. In the context of engaging someone for hazardous cleaning of sewers and septic tanks, Manish pointed out that under the Prohibition of Manual Scavenging Act, 2013 different types of employment either contractual (with pay) or engagement without pay are covered. He further added that the 2013 Act has a regime of strict liability, so when deaths occur in sewer networks which are primarily owned by government undertakings, no deniability by public employees in such cases is possible. A sewerage manager is responsible for the manholes under the designated jurisdiction. Additionally, it was discussed that open dumping of waste is another area that needs to be urgently addressed.

Regarding the projection of sanitation workers as per the Dalberg study, it was discussed that an additional 1.6 million sanitation workers would be needed to meet the demand after SBM. Consequently, it was highlighted that skilling of sanitation workers becomes critical.

Joshi deliberated that the sanitation market would not move towards mechanization in three circumstances-when there are not enough workers, the system does not follow market principles, and when there is no structural transformation. It was stated that, sociologically, there are limited entrepreneurship options available with sanitation workers. Further, it was highlighted that the rehabilitation scheme for sanitation workers cannot be evaluated in terms of success or failure until it gets implemented.

The second session titled 'Solutions and action research agenda for future to improve sanitation workers' safety' was planned as a panel discussion moderated by Anju Dwivedi from CPR. It focused on bringing forth examples of action-based research agenda to improve sanitation workers' safety. The panelists for this session included Raman VR, WAI; Ambarish Karunanithi, CPR; Ravikant Joshi, UMC; Raj Bhushan Roy, WAI; Anahitaa Bakshi, Dalberg Advisors; Shashi Shikha, PRIA; and Devashish Deshpande, CPR. An open discussion followed this session.

Session 2

Solutions and action research agenda for future to improve sanitation workers' safety



Raman VR from WaterAid opened the session by posing a series of questions to discuss further in the panel session and highlighted the need to address the inconsistency across the situation presented and the actual demand from the ground. It was pointed that access to regular healthcare provisions and innovative protective gear in line with the tropical climate of India is required. It was pointed out that while the Ministry of Housing and Urban Affairs (MoHUA) come up with standard operating procedures, but these are not available in the public domain yet. In this context, the panellists expressed that there is a need to disseminate information about these developments at the municipality level. Raman pointed out that structural approach towards mechanization needs to be gradually adapted, and solutions need to be catered specifically to the rural areas. Equity in terms of sanitation worker's pay scale was another key issue that was deliberated. Citing from an experience from a recent Lucknow visit, Raman observed that honey-sucker machine is owned by Brahmins particularly, but the workers operating them are from the Dalit community. Additionally, he argued that gender issue needs to be addressed that amplify the inherent vulnerabilities of the women workers. Furthermore, he suggested that the implementation of entrepreneurship and financing aspects should be critically studied. Finally, he commented on the slow engagement of water sanitation organizations on this issue, and hence, highlighted the need to fill the knowledge gap. Joshi recommended that the government, civil societies, academia, and other organization should come together to answer the above mentioned questions. He further highlighted that sanitation workers face three vulnerabilities – social, occupational, and economic vulnerabilities. To address some aspects of these vulnerabilities, the Swachh Bharat Mission and National Urban livelihood Mission convergence guidelines provide for employment opportunities and further skill development of workers. In order to address this, a standardized course for waste pickers, septic tank technicians, desludging operators, FSTP operators, and supervisors are created. On completion of course, certificates would be issues. These certificate courses would help to elevate workers' stature to skilled labor. However, Joshi argues that, moving forward, the empanelment of skilled trainers needs to be pushed steadily for widening the dissemination of these courses. He suggested there can be a possibility to form women self-help groups, which would improve their skills and financial position. He stated that the first batch of workers from Dhenkanal are already trained, and another set of workers will be trained shortly based on the recognition of prior learning (RPL) model that includes financial assistance, protective gear kit, training to operate desludging



Anju Dwivedi moderating the panel discussion.

vehicle and guidance on that safety standard procedures. He highlighted that mainstreaming sanitation enterprises through women self-help groups is the next critical step. He pointed out that under NULM, there is a provision of free skill training, funding for self-help groups, and subsidized loans for enterprises. The next step is to come out with the compendium of successful macro sanitation enterprises. He highlighted that a new class of sanitary entrepreneurs is in the pipeline who have the capital and subsequent capacity to regulate the payments. These courses would be useful help for those who have no way out, or for workers who want to continue this work by gaining from the skilling interventions.

Shashi Shikha provided her insights from their recent study. According to the study, at the ULB level, city sanitation workers are directly linked with the governance; hence, major convergence at the municipal corporation level is required. There are multiple national level schemes which are implemented through state-level channelization agencies which have provisions on health, scholarships and pension funds but, with limited scope of convergence. She argued that convergence needs to be complemented with capacity building programs. Rolling out schemes is not sufficient, hand holding and continuous follow-up is essential. Policies need to look into several elemental issues such as forced inheritance of the work and irrelevance of the current culture of education. Advocacy of a tangible contract that is fair and enabling can result in better efficiency amongst workers. Additionally, she highlighted that despite the cognizance by NCSK, no proper enforcement on the usage of protective gear can be seen. While it is mandatory to have a sexual harassment committee under the ambient of the 2013 Act, there is a lack of formal redressal mechanism in place. To address this gap, it was suggested that civil societies can play an important role to ensure their mobilization. She shared her experience from Muzaffarpur, wherein a castebased community called master tola had a non-functional community toilet. So, the community-level committee in the area took this up with the Ward Counselor and pushed for arranging cleaning of toilets and ensuring proper operations & maintenance (O&M). Furthermore, there is also a citizen forum engaged in poignant messaging through wall paintings. She suggested that a perception mapping of how middle-class perceives sanitation workers needs to be initiated.

Anahitaa Bakshi from Dalberg evinced implementation-based pilots from their 16 prioritized solutions from a recent study. She emphasised that a behavioral change capacity building camp was organized in Warangal targeting 300 sewer workers and government officials focusing on skill building and entrepreneurship. Additionally, she highlighted that Dalberg has initiated the design of pro-worker contracts. Based on the existing contracts, there would be a provision of illustrative contracts considering the limited educational background of workers. It was highlighted that the provision of government-issued identity cards would allow sanitation workers to access schemes and benefits officially.

Ambarish Karunanithi from CPR deliberated on the technical aspects focusing on the design of the septic tank and the ideal desludging lifecycle. He suggested that abstract designs and limited technical knowledge of septic tanks and sewer networks is the root cause for hazardous cleaning of sewers and septic tanks. He shared his experience from Udaipur the two-way workshop with sanitation workers where the issues around safety protocols and forceful entry of a worker in the sewer networks were deliberated. He highlighted that a bye-law is being developed which gives the power to the sanitation workers to approach the Commissioner directly through any mode of communication. This would safeguard the worker's interests. He suggested that sanitation workers need to be provided with adequate uniform and usage of technical equipment needs to be pushed for. More enabling, climate friendly and customized designs of gear is the way forward.

Raj Bhushan Roy from WaterAid suggested that there is a need to holistically consider the lives of sanitation workers. He highlighted that there is a typical ghettoization of sanitation workers within the community. So, in order for the welfare benefits to reach the workers, a holistic approach should be adopted. He pointed out the knowledge gap amongst the community while availing benefits from the various schemes. While NGOs and agents regularly engage with sanitation workers, government officials shy away. There is a need to break such silos and engage with the community directly. Lack of dignity makes workers also apprehensive of any engagement outside their community. He argued that no identity cards can liberate them and elevate their dignity. Furthermore, he stressed that sanitation workers do not want to be associated with livelihood related to human excreta with or without gear. He pointed out that there is a need to innovate technologies and to look beyond gravitation forces while designing sewer lines. There is a need to break caste politics and reduce the vulnerability of the community.

Devashish Deshpande from CPR suggested that in order to make the government more accountable towards people there is a need to set up systems that allow decentralization and downward accountability. He posed questions on the hierarchical framework of the system centering citizen-state interaction. For instance, he highlighted that if beneficiaries do not benefit from the scheme then there is a need to understand the gaps from those who are supposed to avail such benefits. These are some larger issues, and one cannot question minute aspects such as unionization, comparison between the caste groups, etc. He highlighted that the burden of identity has its own contradictions, and there are only two ways to address it. Firstly, by making the identity redundant, and secondly, by not identifying the 'target' as a person. He further argued that unfortunately, the technocratic solutions would not be able to do that. Technology can certainly take care of manual scavenging, but not manual scavengers. He stated that perhaps, the government can take care of manual scavengers, but for this, manual scavengers have to push for it to do so. He highlighted that our country has not been able to liberate bonded labors for many years, and hence he pointed out that there are multiple facets to collective solutioning.

Post the panel discussion, some questions from participants were invited for further deliberation which centered on themes of mechanization and skill development training of municipalities. It was argued that such provisions can be made available easily if there is a government and municipality will. Venkat from Dalberg suggested that workers take pride when an identity card is issued to them as it makes them government employees- thereby directly linking them to ULBs. Marie-Hélène from CPR asked if there are any provisions of penalties mentioned in the contract if a worker is not treated in a dignified manner. Anahitaa in response highlighted although such mechanisms need to be ensured but, pointed out that it is challenging to incorporate this in a formal contract. Finally, it was also highlighted that inclusion of different stakeholders in such workshops would help in bringing forth different perspectives. Anju Dwivedi from CPR concluded by suggesting that all stakeholders involved in this sector should come together to holistically deliberate on sanitation workers' safety.

Annexure 1: Agenda

TIME	SESSIONS
10:15-10:20	Introduction & setting the context by Anju Dwivedi, Senior Researcher, Centre for Policy Research
10:20 - 11:40	SESSION I: Socio-legal, technical and financial knowledge base: Evidence and practice (Each presentation will be for 10 minutes. These presentations will reflect learnings from the key research undertaken on socio-legal, technical and financial aspects of sanitation in India. This would be followed by an open discussion facilitated by the moderator).
	Moderator: Marie-Hélène Zérah, Senior Visiting Fellow, Centre for Policy Research, Speakers: Ravikant Joshi, Senior Expert-Urban Management and Urban Finance, Urban Management Centre Raj Bhushan Roy, Manager Policy, WaterAid India Nirat Bhatnagar, Partner, Dalberg Advisors Tripti Singh, Research Associate, Centre for Policy Research Manish, Research Associate, Centre for Policy Research Devashish Deshpande, Senior Research Associate, Centre for Policy Research Nilanjana Bhattacharjee, Programme Officer, Participatory Research in Asia Open discussion moderated by the chair (20 mins)
11:40-11:50	Tea Break
11:50 – 13:00	SESSION II: Solutions and action research agenda for future to improve sanitation workers' safety (This session will be in a discussion format beginning with each panelist discussing their ideas about possible solutions. There will be a moderated discussion on what could be done for improving sanitation workers' safety).
	Co-Moderators: Raman VR, Head of Policy, WaterAid India and Anju Dwivedi, Senior Researcher, Centre for Policy Research Panelists: • Ambarish Karunanithi, Senior Research Associate, Centre for Policy Research • Ravikant Joshi, Senior Expert-Urban Management and Urban Finance at Urban Management Centre • Raj Bhushan Roy, Manager Policy, WaterAid India • Nirat Bhatnagar, Partner, Dalberg Advisors • Shashi Shikha, Senior Program Officer, Participatory Research in Asia Open discussion moderated by the chair (20 mins)
	Concluding Remarks and Vote of Thanks
13:00 - 14:00	Lunch

SCALING CITY INSTITUTIONS FOR INDIA: SANITATION (SCI-FI)

Sanitation programme at the Centre for Policy Research (CPR) is a multi-disciplinary research, outreach and policy support initiative. The programme seeks to improve the understanding of the reasons for poor sanitation, and to examine how these might be related to technology and service delivery models, institutions, governance and financial issues, and socioeconomic dimensions. Based on research findings, it seeks to support national, state and city authorities develop policies and programmes for intervention with the goal of increasing access to inclusive, safe and sustainable sanitation. Initiated in 2013, the programme is primarily funded by the Bill and Melinda Gates Foundation (BMGF).



