

# ARISE

# Study Brief

(Shimla, Himachal Pradesh, India)

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## ARISE at TGI India

The ARISE hub at The George Institute for Global Health India (TGI India) has worked with communities of waste workers in Bengaluru (Karnataka), Shimla (Himachal Pradesh), Guntur and Vijayawada (Andhra Pradesh). Using Participatory Action Research, the hub has sought to understand the challenges of ill-health, inequity, and insecurity among waste workers.

The study brief outlines findings and recommendations from research undertaken on health and wellbeing of door-to-door garbage collectors and sanitation workers in Shimla, Himachal Pradesh.

## About ARISE

The ARISE Hub – Accountability and Responsiveness in Informal Settlements for Equity – is a research consortium, instituted to enhance accountability and improve the health and wellbeing of marginalised populations living in informal urban settlements in low- and middle-income countries. ARISE works closely with the communities themselves; with a particular focus on vulnerable people living in the informal settlements.

ARISE was launched in 2019 as a five-year project. It is implemented in four countries: Bangladesh, Kenya, India and Sierra Leone.

## Rationale

India is home to between 1.5 to 4 million waste pickers and 5 million sanitation workers who mainly work in the informal economy, which contributes to about two thirds of the gross domestic product of the country and comprises over 90 percent of all employment and livelihoods (National Commission on Enterprises in the Unorganised Sector, 2007).

Waste workers are essential for the maintenance of public health, sanitation and hygiene in our cities. They ensure cleanliness in our homes and streets by collecting and disposing garbage, sweeping streets, cleaning drains, cleaning hillsides, cleaning public toilets and ensuring proper disposal of faecal sludge. Their work exposes them to health risks and hazards such as injuries, infections and illness (Salve et al., 2017, 2019). Even though they conduct an essential public function, they remain invisible and marginalised, struggling to meet their basic human needs (World Bank, 2019). Inter-generational poverty combined with a lack of access to quality education, water, sanitation, healthcare, housing and secure employment keeps waste workers trapped in a cycle of poverty, ill health and debt (Kakar et al., 2022).

## Methods

The hub employed qualitative methods such as Focus Group Discussions, In-depth interviews, Non-Participant Observations and community meetings with the workers. In addition, a review of national and state level policies was conducted.

## Findings: Health

- 1. Injuries & burns:** Workers reported that getting injuries and burns from household garbage was common. Workers attribute these to lack of sensitisation among residents about segregating and proper disposal of harmful waste like broken glass, metal, harmful chemicals and other hazardous materials.
- 2. Health problems reported:** Workers reported skin infections, chronic headaches, chronic body aches, respiratory issues, high blood pressure, heart attacks, monkey and dog bites, and stomach issues as health problems faced by many workers. This is consistent with literature on the subject (Oza, et al., 2022).
- 3. Personal Protective Equipment (PPE):** Inadequate quality and insufficient quantities of PPE given to workers.

The PPE is not weather appropriate which makes it difficult for workers to use while working, leading to some not using it.

*"When we wear our uniform, we shake because of the cold. In summers we burn. Municipal Corporation says that they provide gloves, dress etc to us. The gloves and masks are useless. We still get our hands dirty. The gloves should be from a good company and should be provided regularly. Right now, if we lift heavy sacks wearing gloves, they tear. They tear quickly from use and friction."*

*Door-to-door Garbage Collector, Male*

- 4. Stigma & disrespect:** Workers reported that they sometimes face disrespect, aggression and discriminatory language from some residents, such as when trying to enforce the waste segregation mandate of the Municipal Corporation.

*"When we say people should throw their waste responsibly, residents get aggressive with this and get ready for picking fights with us."*

*Door-to-door Garbage Collector, Female*



*"Sanitation workers who are not protected by adequate health and safety measures risk injury, infection, disease, mental health issues, and death. Specifically, the reported physical and medical conditions directly associated with sanitation work include headaches, dizziness, fever, fatigue, asthma, gastroenteritis, cholera, typhoid, hepatitis, polio, cryptosporidiosis, schistosomiasis, eye and skin burn and other skin irritation, musculoskeletal disorders (including back pain), puncture wounds and cuts, blunt force trauma, and fatality."*

*World Health Organisation (2018)*



## 2.2 Occupational risks and hazards

	Category of sanitation workers					Treatment plant workers
	Street sweeper/ Informal Waste Picker	Domestic Waste collector/ Institutional Waste Collector	CT/PT cleaner, latrine cleaners	Open drain cleaner	Septic tank de-sludger/ sewer network maintenance	
Musculoskeletal disorders	✓	✓	✓	✓	✓	✓
Respiratory problems	✓			✓	✓	✓
Dermatological problems	✓	✓	✓	✓	✓	
Gastrointestinal problems	✓			✓	✓	
Biological hazards		✓	✓	✓	✓	✓
Electrical hazards			✓			✓
Chemical hazards			✓	✓	✓	
Mechanical hazards		✓		✓	✓	✓
Injuries due to trips and falls, especially in confined spaces				✓	✓	

Note: Manual cleaning of sewers and septic tanks is banned barring exceptions. While the risks and hazards associated with manual cleaning are same as mechanical, the intensity of them is very high, which may lead to death of sanitation workers.

MoHUA

Ensuring safety of sanitation workers- A ready reckoner for ULBs

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Source: Ministry of Housing and Urban Affairs, Govt. of India

**5. Women’s Health:** Women workers reported difficulties in working during menstruation. They reported experiencing fatigue, back pain, uterine cramps and dizziness during menstruation. Lack of clean and operational public toilets in wards led to women having to sometimes change menstrual products in the open, creating the risk of vaginal and uterine infections. Women workers say that concerns related to their health and wellbeing are often sidelined within collectives.

*“We get more tired. It’s difficult to walk long distances, climb stairs, changing pads outside every few hours, stained clothes and so on. Where do we go to change pads? Stained clothes are shameful. Bathrooms are not available. They are either very far or not clean enough. We also have our dignity. This is embarrassing for us. Women face many difficulties in their lives, but this problem of periods is an additional challenge for us.”*

*Door-to-door Garbage Collector, Female*

**6. Informality:** The majority of the sanitation workforce is outsourced to SEHB society or to private contractors. Informality results in weak legal protection and lack of enforcement of occupational & health standards. There is a wide disparity in salaries of sanitation workers (approx. Rs. 8,000-12,000) compared to tenure workers (approx. Rs. 40,000- Rs. 60,000), despite performing the same tasks of cleanliness. Thus, workers remain in a state of financial insecurity which compounds their precarity with regards to nutrition, education, health and wellbeing needs of them and their families.

*“There are so many expenses with our meagre salaries. Water costs Rs. 300rs, electricity is Rs. 300, cylinder is now Rs. 1500, onion and tomato prices are shooting up. What are we even left with then? We somehow just try to put our children through government schools. But when our children say they want to go to college, we don’t know if we will be able to afford it. We are poor people.”*

*Door- to door Garbage Collector, Female*



*“They say ‘we do not have these tablets. You have to get this from elsewhere.’ It is very hard for us. We borrow money from here and there and manage.”*

*Door-to-door Garbage Collector, Female*

## Findings: Healthcare and other social security entitlements

### 7. Difficulty accessing health & social welfare

**entitlements:** While health and social security measures are available to workers, *they struggle to access these for various reasons -*

- Workers do not have complete knowledge of the schemes, employment benefits and welfare entitlements available to them such as Employee State Insurance (ESI), Employee Provident Fund (EPF), maternity benefits, Pradhan Mantri Jan Arogya Yojana (PMJAY) and Mukhya Mantri Himachal Health Care Scheme (HIMCARE), paid (medical) leave and over-time pay.
- Workers are reliant on supervisors for accessing these schemes. If supervisors are supportive, workers are able to access the schemes. However, if supervisors are not supportive workers face issues accessing their entitlements.
- Workers do not have knowledge of the documentation needed and the process for availing entitlements under available schemes and welfare measures.
- Many workers do not have ESI cards and do not know their ESI numbers. Workers do not receive advance amounts under ESI and end up raising debt to pay for the cost of care.

*“For example, someone came yesterday. His daughter has a fracture, so the supervisor told him about ESI. So, they are trying to get the ESI card made. New people don’t have it, only two of us have.”*

*Door-to-door Garbage Collector, Female*

*“A man’s body can work steadily for one year.. two years. But at some point, he will fall sick. There should be workers to replace those who fall sick. Everyone goes through problems at home for which one has to take leave. My whole life I have spent collecting garbage. There is a saying that my whole life was spent earning but in the end I was still left with nothing.”*

*Door-to-door Garbage Collector, Male*

### 8. Absence of preventive & promotive health care:

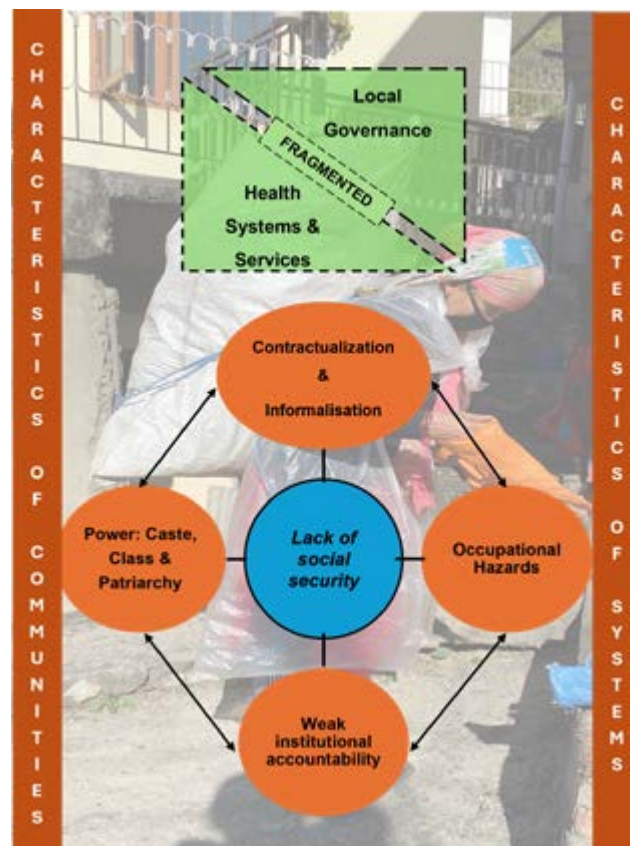
- Urban primary care services are limited in Shimla city. Due to this there is an over reliance on crowded and over-stretched secondary and tertiary care facilities. The long waiting times at these facilities delays care seeking among workers, especially women.
- Unavailability of medicines at public facilities and health camps lead to out-of-pocket expenditure and debt.
- While the Municipal Corporation has conducted health camps, these are inadequate in number and scope. Workers say they are unable to utilise this facility as the camps are conducted far away from their place of stay.

## Recommendations

Recommendations are based on study findings, best practices and suggestions put forth by The National Commission for Safai Karamcharis (NCSK, 2022), Ministry of Housing and Urban Affairs (MoHUA, 2021), international institutions like World Bank and World Health Organisation (World Bank, 2019), and other research studies on health and wellbeing of sanitation workers (Dwivedi, Kumar, & Dasgupta, 2023).

1. **Survey and enumeration of sanitation workers** to assess health problems, access to necessary documentation, extent of linkage to government schemes, requirement of PPE as per each category of sanitation and waste workers, assess workload of workers as per the population growth of the city, risk assessment for different categories of sanitation and waste work and any other information that would assist Urban Local Bodies (ULBs) and the state to plan for protection and welfare of the workers.
2. **Adoption of Standard Operating Procedures (SoPs) and safety guidelines:** Occupational training & capacity building for sanitation workers to follow SoPs and safety guidelines, soft and technical skills.
3. **Mechanisation of sanitation work:** especially for cleaning drains, sewers and septic tanks.
4. **Information, Education, and Communication (IEC) for raising awareness on employment benefits and social security entitlements for workers:** Development of IEC materials and campaigns with the involvement of Non-Governmental Organisations (NGOs), community-based organisations, research institutions, civil society.
5. **Personal Protective Equipment (PPE):** Provision of suitable, good quality and weather appropriate PPE for each category of sanitation and waste work as per The Prohibition of Employment as Manual Scavengers & their Rehabilitation Rules 2013, CPHEEO guidelines and advisories. Training of workers to use and maintain the PPE.
6. **Changing rooms in wards** for workers to wear, remove, sanitise and store PPE. Changing rooms should have separate facilities for men and women that allow workers to ensure their personal hygiene.
7. **Robust monitoring mechanisms to track access to employment benefits and social security measures:** ULBs must ensure that workers (whether tenured, contractual, outsourced or casual) receive employment benefits and social security measures such as minimum wages, health insurance, EPF, ESI, PMJAY/HIMCARE, maternity benefits, overtime pay etc. in a timely and transparent manner.
8. **Health check-ups & immunisation:** Provide regular preventive health check-ups and vaccinations for all workers (whether tenured, contractual, outsourced or casual) in health camps organised with the help of the health department. Health care system under ESIC may be made favourable towards their specific health needs. Extend Health Insurance Scheme Benefits to identified workers and their families under the Ayushman Bharat- Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) as per the National Action for Mechanized Sanitation Ecosystem (NAMASTE) Scheme.
9. **Institutional accountability:** Set up a Safai Karamchari Commission as per the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013. Setting up a grievance redressal mechanism and identify an independent institution to oversee the same.
10. **Ward level campaigns to create public awareness** on good household level waste management practices to ensure safety and dignity of sanitation workers.

11. **New posts be created** and existing vacant posts be filled keeping in view the increasing population and geographical expansion of the city of Shimla. Regularisation of sanitation and waste workers by creating additional posts. Ensure promotional and career development avenues for workers.
12. **Reconsider the practice of contracting and outsourcing** in sanitation work in keeping with the provisions of the Contract Labour (Abolition & Regulation Act,1970) as sanitation work is perennial and essential to the public health functions of the Municipal Corporation.
13. **Financial Assistance:** National Safai Karamcharis Finance & Development Corporation (NSKFDC) financial assistance is routed through State Channelizing agencies and nodal Banks in the States. The National Commission for Safai Karamcharis has observed that these banks and SCAs do not disburse the loans and funds are parked with them. Loans are denied due to procedural lacunae in the loan proposals. NSKFDC may directly supervise the disbursement of loans. Increase awareness about the available financial assistance.



Markers of Health & Wellbeing of door-to-door garbage collectors and sanitation workers in Shimla, Himachal Pradesh, India

## References

- Dwivedi, A., Kumar, A., & Dasgupta, S. (2023). Understanding Enablers and Barriers for Social Protection of Sanitation Workers in Dhenkanal Odisha, India. New Delhi: Centre for Policy Research. doi:10.13140/RG.2.2.32385.63844
- Kakar, I. S., Mallya, A., Whittaker, L., Tolhurst, R., & Garimella, S. (2022). Intersecting Systems of Power Shaping Health and Wellbeing of Urban Waste Workers in the Context of COVID-19 in Vijayawada and Guntur, Andhra Pradesh, India. *Social Sciences*, 11(8):333. doi:https://doi.org/10.3390/socsci11080333
- MoHUA. (2021). Ensuring Safety of Sanitation Workers: A Ready Reckoner for Urban Local Bodies. Ministry of Housing and Urban Affairs, Govt of India. Retrieved from [https://umcasia.org/wp-content/uploads/Ready-reckoner-for-sanitation-workers-safety\\_ULBs-1.pdf](https://umcasia.org/wp-content/uploads/Ready-reckoner-for-sanitation-workers-safety_ULBs-1.pdf)
- National Commission on Enterprises in the Unorganised Sector. (2007). Reports on the Financing of Enterprises in the Unorganised Sector and Creation of a National Fund for the Unorganised Sector. New Delhi: National Commission for Enterprises in the Unorganised Sector. Retrieved from [https://dcmsme.gov.in/Report\\_on\\_NCEUS\\_NAFUS.pdf](https://dcmsme.gov.in/Report_on_NCEUS_NAFUS.pdf)
- NCSK. (2022). Annual Report 2021-22. New Delhi: National Commission for Safai Karamcharis, Ministry of Social Justice & Empowerment, Govt. of India.
- Oza, H. H., Lee, M. G., Boisson, S., Pega, F., Medlicott, K., & Clasen, T. (2022). Occupational health outcomes among sanitation workers: A systematic review and meta-analysis. *International journal of hygiene and environmental health*, 240, 113907. doi:https://doi.org/10.1016/j.ijheh.2021.113907
- Salve, P., Chokhandre, P., & Bansod, D. (2017). Assessing Musculoskeletal Disorders among Municipal Waste Loaders of Mumbai, India. *International Journal of Occupational Medicine and Environmental Health*, 30: 875–86.
- Salve, P., Chokhandre, P., & Bansod, D. (2019). Multiple Morbidities and Health Conditions of Waste-Loaders in Mumbai: A Study of the Burden of Disease and Health Expenditure. *Archives of Environmental & Occupational Health*, 75: 79–87.
- WHO (World Health Organization). (2018). Guidelines on Sanitation and Health. Switzerland: WHO.
- World Bank, I. W. (2019). Health, Safety and Dignity of Sanitation Workers: An Initial Assessment. Washington, DC: World Bank.





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