

Gendered Precarity in Urban Sanitation Work: The Invisibility of Women Waste Pickers and Sweepers

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Abstract: Women sanitation workers, especially waste pickers and sweepers, experience gendered precarity which is determined by caste-based discrimination, working conditions, and lack of legal protection. This literature review paper focuses on the subject of gender, caste and informal labour by looking at how the three forms of labour are both involved in order to create marginalization and invisibility of the workers within the city labour market. The paper examines the institutional forces behind this precarity using thematic analysis of scholarly literature, policy reports and feminist theoretical literature. The results indicate that caste-based marginalization, work in the informal sector, and sexist practices are all the factors that lead to exploitative labour, such as low pay, risky conditions, and stigma. The paper also suggests a new conceptual frame to think about and respond to such inequalities and require reimagined approaches to place intersectionality in the limelight. It questions prevailing labour discourses as ignoring stratified oppressions and points to the much-needed immediate policy changes, social awareness and legal protection that would make women sanitation workers in the city of India feel an equitable and just society.

Keywords: gendered precarity; urban sanitation; intersectionality; informal labor; caste-based exclusion

1 INTRODUCTION

India is also a signatory state to the United Nations Sustainable Development Agenda 2030 and is pledged to meet a variety of Sustainable Development Goals (SDGs). They are as follows: gender equality (Goal 5), reduced inequalities (Goal 10), decent work and economic development (Goal 8), peace, justice and strong institutions (Goal 16), clean water and sanitation (Goal 6). Nevertheless, a painful gap exists between these political promises and the reality on the ground of sanitation workers more so women as manifested by the still existing manual scavenging and risky sanitation work. Although the scavenging activity is unlawful in the country, 377 individuals lost their lives due to its-related activity between 2019 and 2023 (The Hindu, 2024). This contradiction brings out endemic social inequalities, structural unfairness of infrastructure, and organizational failures in policy implementation.

Historically, Dalits and other disadvantaged castes had to work in manual scavenging and this reinforced the status of untouchables and structural marginalization (Saldanha et al., 2022). This profession is often inheritable since it does not have other income options, which is often even justified under the pretext of tradition or religion due to the presence of caste systems

(Mala et al., 2022; Kumar and R, 2021). The tradition is alive; it is rather often carried out without the simplest safety measures, thus having been banned by a variety of laws, including the 2013 Prohibition of Employment as Manual Scavengers Act (Prasad and Ray, 2018; Kahle and Hammerslev, 2023). The 1990s have also seen the growth of the informal labor market in India due to globalization and economic liberalization. As a result of deregulation, outsourcing, and contractualization, nearly 90 percent of the labor force in the country now operates in informal labor, and the sanitation work is one of the most unstable ones (Mehta and Awasthi, 2022).

Estimates indicate that India has approximately 5 million sanitation workers with an estimated 2 million working in the hazardous, manual environment cleaning human waste (Raghavendra & Kumar, 2022). Most of them belong to the Dalit sub-castes, which are marginalized, and this is the consequence of systemic neglect and stigmatized work together with their caste exclusion (Bose, 2019). Sanitation workers lives and working conditions have not been altered much in terms of increased urbanization and policy-level efforts such as the Swachh Bharat Abhiyan (SBA) and NAMASTE program. The issues raised by the National Human Rights Commission (NHRC) regarding insufficient health protection measures, insufficient mechanization, and poor rehabilitation measures have not been properly discussed (The Hindu, 2024).

In this review paper we arrive at the conclusion that women sanitation workers in informal urban economies are too affected by gendered precarity which is a systematically produced state of labor and life instability. Precarity is a term in the area of labor studies that is used to describe the state of lacking a secure job, uneven income, and reduction in social benefits among individuals (Standing, 2011). On a broader context social theory, precariousness refers to vulnerability that is not evenly distributed and is determined by power hierarchies (Butler, 2004). Gendered precarity in this paper includes precarity of unstable or contractual employment, precarity of wages, working in hazardous environments, lack of social protection, and institutional invisibility. Precarity, unlike poverty, is being subject to instability that is based on the division of labor, caste system, and informal governmental structures which make some people socially and economically dispensable.

Regardless of the fact that the industry is often framed to be gender-neutral, women, especially the waste pickers and sweepers, do most of the unofficial, risky, and socially undesired jobs in Sanitation in cities. Their omission in labor statistics and city planning systems undermine them and go directly against the constitutional pledges of India and the principles of equality, dignity, and inclusion of the Sustainable Development Goals. Although the caste marginalization, gender inequality, and informal sanitation labor have recently been studied together, these areas are often discussed individually. Studies of the precarious working conditions of women sanitation workers in metropolitan India through an intersectional, integrative, and policy-related lens are deficient to a great extent. This review critically examines the integration of caste, gender and class and how the three factors play a role in systemic neglect and invisibility of labor discourse and urban sanitation governance. The research advocates participatory models that emphasize rights, voice, and dignity of women who are marginalized as sanitation workers using the intersectional feminist and labor concepts.

2 METHOD

To integrate the results of the scholarly literature, policy reports, and feminist theoretical sources that cover the intersectional aspects of gendered precarity in urban-, sanitation-related labor in India, specifically taking into consideration the women waste pickers and sweepers, this conceptual review is based upon the method of thematic analysis. The systematic review

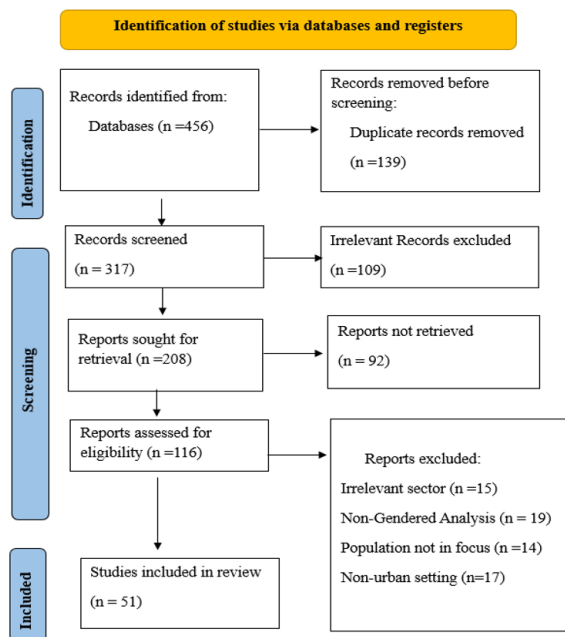
and meta-analysis Preferred Reporting Items (PRISMA) criteria were followed during the review process to ensure transparency and quality. The primary center of the analysis is the way in which systematic marginalization of urban labor economies is strengthened by a combination of caste hierarchies, gender norms and informal labor systems.

The sources used in this assessment were selected according to their relevance to some key issues like intersectionality, caste-based marginalization, gendered labor invisibility, occupational health risks, and the official ignorance towards informal sanitation work. The initial pool of 456 results was obtained with database and manual searches, and the screening of the records by title and abstract was done after the removal of 139 duplicates and the removal of 109 irrelevant results. There were 208 whole texts that were requested to be retrieved but 92 of them were not in avail. Out of the 116 papers that were located, eighty-two were disqualified due to various reasons: fifteen were not gender-focused, nineteen were not focused on the target audience, and seventeen were not in urban areas. Finally, the thematic analysis included in the final analysis comprised 51 studies that had all the conditions to satisfy the inclusion criteria. To facilitate inclusive, right based labor policy in urban India, the review tries to offer a conceptual model that would create concern about the exploitation and invisibility of women that work in sanitation.

3 SEARCH STRATEGY

A comprehensive literature search was conducted in June 2025 in two large academic databases, which are Web of Science and Scopus (through Elsevier). To enhance the search, further searches were made on Google Scholar and UK libraries were checked to include relevant grey literature. The review revealed three major themes, namely (1) gendered precarity in the informal labour; (2) caste and gender-based occupational segregation; and (3) the invisibility of sanitation workers in health, social and policy discourses. Some of the keywords that were selected to align with these themes included women waste pickers, sanitation workers, caste and occupation, urban informal work, occupational health, manual scavenging, precarious work, intersectionality, and feminist urbanism. The Boolean operators AND and OR were used to arrange the search queries. As an additional measure to facilitate the analysis, both definitional and statistical data were borrowed in credible sources in the Indian government and international bodies such as ILO and UN-Habitat.

Figure 1: PRISMA flowchart for selectin of articles (Page MJ.et al., 2021)



4 RESULTS

4.1 Intersectionality of Caste, Gender and Class

The unprivileged castes in the past, especially the Dalits, have been assigned the responsibility of sanitation, which is considered polluting. The hierarchies of the caste and gender are strengthened when it is the women of these castes who are disproportionately selected to take up the most stigmatized and least rewarded jobs. The most physically exhausting, lowest paying and least recognized jobs in the sanitation industry are often given to women. Besides other household and work-related duties on taking care of the home and children, their work is invisible and feminine (Mirchandani and Mukherjee, 2022) (Monteiro, 2022).

Most of the female sanitation workers are of hapless, marginalized groups which limits their access to social mobility, other jobs in employment and education. This economic precarity increases the effects of caste and gender inequality (Shekhar & Dwivedi, 2024) (Shekhar, 2023).

The caste, class and gender junction makes sanitation labor organization strictly gendered. The position of male and female employees in both urban garbage industry is fringe, yet their roles, risks, and changes of insecurity are defined in a systematic manner. Some of the major comparison patterns in literature are summarized in the following table.

Table 1: Contrasting Urban Sanitation Workers by Gender and Associated Challenges

Dimension	Male Sanitation Workers	Female Sanitation Workers
Type of work	Mechanized waste operations, drain maintenance, and sewer cleaning (ILO,2019).	Manual sorting, street sweeping, and informal rubbish collection (Chikarmane, 2012; Kaza et al., 2018).

Employment status	Municipal or contract-based work is more likely (ILO,2019).	Mostly self-employed, daily wage, and informal (Kaza et al., 2018).
Nature of Risk	Deaths in confined spaces and exposure to hazardous gases are examples of acute and life-threatening risks (WHO, 2014).	Chronic health hazards include respiratory problems, reproductive vulnerabilities, and musculoskeletal strain (Chikarmane, 2012).
Income pattern	Earnings in structured roles that are comparatively higher and more steady (ILO, 2019).	Irregular income according to changes in the recyclables market (Kaza et al., 2018).
Institutional Recognition & Social Protection	Access to protective gear and municipal benefits is restricted but somewhat increased (ILO, 2019).	Low institutional visibility, little social security coverage, and exclusion from official sanitation policy (Chikarmane, 2012).

Even though the comparison above demonstrates that precarity is faced by all genders of workers in the field of sanitation, some of the aspects of vulnerability are investigated by the fact that women are concentrated in the low-paid, informal, and socially non-recognized segments. These male and female attributes are discussed in the sections that follow.

4.2 Dimensions of Gendered Precarity

Invisibility and Social Erasure

The sanitation workers, particularly the manual scavenging workers, are restricted by highly stigmatized work of the Dalit women. They supply the labor that is an indispensable part of the world and yet makes little or no impact on the discourse and policy of the state, which strengthens caste and gender structures in the city (Patil, 2024).

However, despite being of vital importance, women sanitation workers are seldom captured in the discourse of labor rights and even in urban planning. Their particular issues like being exposed to health hazards, being stigmatized, and being socially insecure are usually unrecorded and unnoticed. In the media, the challenges, the actual work, and the daily challenges of the women sanitation workers are rarely mentioned, and thus, they are once again removed from the memory of the population, and their invisibility to society is strengthened (Dery et al., 2023).

In certain environments, women do formal though exploitative work in the sanitation settings together with other work resulting in an add-on effect on significant family earnings. This structure is able to stabilize the finances at the household level, though also imprisons informality and constrains the claims to higher wages or conditions (Zhang and Friedman, 2018).

Their wages, even in the urban informal sector, such as sanitation, are always low, less than their male counterparts. The low job choices, mobility, and dependence on informal contacts to find jobs also decrease their bargaining power (Dery et al., 2023).

The informal women sanitation workers do not have health insurance, paid leaves, pensions and other social safeguards. This leaves them exposed to health risks, injuries and financial shocks. Women are vulnerable to work-related risks such as injuries, infections, sexual

harassment, and have a low chance of redress, as they do not have formal safeguards (Dery et al., 2023).

Informality: Lack of Contracts and Job Security

Women who practice garbage collection and sweeping the streets in the urban setting usually work in an unofficial contract or job status. Such informality exposes them to sudden dismissal, arbitrary dismissal, and inadequate protection of the law. They often depend on their employment based on daily conversations and unofficial agreements, and there are no guarantees of continued employment or economic support (Panchang, 2021; Bhatia social& Joshi 2020).

Wage Disparities and Economic Exploitation

Most of these women take up the least-paying jobs in sanitation, which often pay less than men and give them no chances to bargain on salaries and career advancement. It gives them minimal credit on their work, which is seen as a continuum of caste and gender rules. The convergence of gender, caste and classes disrupt their warm-up to improve jobs and secure ones, which reinforces the cycle of dependency and poverty (Dery et al., 2023; Monteiro, 2022).

Absence of Social Security and Protections

Women working in sanitation hardly get health insurance, paid leaves, pensions, and other social covers. This lack increases their vulnerability to illnesses, injuries and economic catastrophes. Lacking formal safeguards, these workers lack a source of support and have no escape in the face of high-risk occupations, such as sexual harassment, diseases, and exposure to trash (Dery et al., 2023; Monteiro, 2022).

4.3 Health Hazards and Unsafe Work Environments

Women waste pickers and sweepers are more exposed to sharp objects, which increases their risk of getting cuts, lacerations, and musculoskeletal injuries. Due to the unstable work environments, falls, stumbles and slips are common (Cruvinel et al., 2019; Thakur et al., 2018; Zolnikov et al., 2021). Exposure to dust, heavy metal, hazardous chemicals, and biological agents (such waste-derived diseases) is very high. This gives rise to numerous health issues, including gastrointestinal infections, skin diseases, and respiratory diseases (Cruvinel et al 2019; Zolnikov et al., 2021; Thakur et al., 2018; Wilson et al 2019).

The female waste pickers are more susceptible to intestinal worms, bronchitis, diarrhoea, HIV, diabetes, and hypertension than their male counterparts (Cruvinel et al 2019; Thakur et al., 2018; Wilson et al., 2021; Marques et al., 2020). The high levels of psychosocial stress, stigma, and isolation that women are facing have a detrimental impact on both their mental health and overall wellbeing (Wittmer, 2020; Biswas et al., 2021). Women do not have access to protective equipment and medical care, and employers and the legal community often neglect the health needs of females, even though the outcomes of their health deteriorate (Thakur et al., 2018; Wilson et al 2019; Marques et al., 2020).

Table 2: Health Outcomes and Risks Faced by Women Sanitation Workers

Domain	Health Outcome	Cause/Exposure
Occupational Health	Musculoskeletal disorders, joint pain, chronic fatigue	Repetitive movements, long hours of sweeping, bending, lifting, no ergonomic support
Infectious Diseases	Gastroenteritis, respiratory infections, skin diseases	Contact with solid/liquid waste, exposure to pathogens, poor hygiene infrastructure
Reproductive Health	Menstrual health issues, urinary infections, complications	Lack of sanitation facilities, shame/stigma, unsafe working environments
Mental Health	Stress, anxiety, depression, psychological burnout	Social stigma, invisibility, caste discrimination, workplace harassment
Occupational Health	Musculoskeletal disorders, joint pain, chronic fatigue	Repetitive movements, long hours of sweeping, bending, lifting, no ergonomic support

SOURCES:(Oza et al., 2021; Tolera et al., 2023)

4.4 Gendered Double Burden

Household chores and menial house cleaning

Women are the ones who do more unpaid household work than men regardless of them being involved in paid work or in low paying jobs such as sanitation. Such a tendency can be observed in all countries and even during such social disruptions as the COVID-19 pandemic (Farre et al., 2021; Sarker, 2020; Kurowska, 2018; Chauhan, 2020).

In addition to physical labor, unpaid employment entails a substantial amount of "mental labor"—the mental strain of planning, coordinating, and overseeing care and household duties. This mental work is disproportionately performed by women, which increases stress and has detrimental effects on wellbeing and job advancement (Reich-Stiebert, 2023; Thennakoon, 2022; Kwak, 2022). Women sanitation workers in metropolitan settings, such as rubbish pickers and sweepers, bear two burdens: extended periods of low-wage, hazardous labor are exacerbated by demands to continue performing the majority of unpaid care and household duties (Sarker, 2020; Chauhan, 2020).

A vital but frequently overlooked part of urban waste management systems is played by female sanitation workers. Focused mostly on manual segregation, street sweeping, and informal rubbish collecting, they help towns recover their resources, facilitate recycling, and lessen landfill accumulation (Dias, 2016; Kaza et al., 2018). Their work maintains environmental health and civic cleanliness, especially in low-income urban communities with inadequate or nonexistent official garbage systems. Despite their crucial contribution, their labor is nevertheless institutionally unknown, underappreciated, and poorly paid (Chikarmane, 2012).

4.5 Role of Female Sanitation Workers in Urban Environmental and Climate Contexts

Female sanitation workers constitute a vital component of the city environmental management by recycling, waste separation, and street-level sanitation services that reduce the strain of landfills and enhance the health of people (Dias, 2016; Kaza et al., 2018). Climate change however increases the conditions under which this labor is performed. Exposure to waterborne

pathogen and contaminated waste is aggravated by extreme rainfall and flooding, and heat stress is exacerbated by an increase in temperature (ILO, 2019; IPCC, 2022). The precarity experienced in relation to climate change is limited by their concentration on unprotected and informal labor, which limits access to adaptive infrastructure.

4.6 Responsive Mechanism: Need for inclusive, gender-responsive, caste-aware urban policy

The gender, caste, and class axes bind together, and women are invisibly and dangerously primitive urban sanitation workers. The caste and gendered stratifications are maintained by the fact that women who belong to lower castes are overrepresented in the sanitation sector as their work is stigmatized, poorly paid, and often overlooked (Monteiro, 2022; Dery et al., 2023). These workers are exposed to health hazards, violence, and marginalization in society on a day-to-day basis and the issues and lives of these workers are largely overlooked by the urban policy and infrastructure planning. The views of women are not taken into consideration when sanitation systems are planned and managed, thus leading to poor facilities and risky working environments, especially in informal settlements (Panchang, 2021; Alda-Vidal et al., 2023). Gendered power dynamics and constraining social norms also limit the involvement of women in the process of making sanitation decisions both at home and at the community level (Ashraf et al., 2022; Pakhtigian and Pattanayak, 2024). Such vulnerabilities are perpetuated by the lack of inclusive, gender-responsive, and caste-aware urban policy defining the scenario, as the current alternatives often do not recognize the structural factors of precarity and the exceptional challenges of the female sanitation workers. To overcome these issues, policies that recognize and protect the labour rights of women and involve them, especially those who belong to underrepresented populations, in urban sanitation planning, development, and management, are required. The reasons include (Monteiro, 2022; Khanna and Das, 2016; Ashraf et al., 2022).

Such measures are required to both break the cycles of exploitation and invisibility that define the lives of women-rubbish pickers and sweepers as well as to develop safer and more equal cities (Alda-Vidal et al., 2023; Dery et al., 2023).

4.7 Covid-19 and Sanitation Work

The precarity and obscurity of women as rubbish pickers and sweepers in the urban sanitation sector had been gendered and aggravated by the COVID-19 pandemic. In front of the workers, personal protection was not available, which exposed them to higher risks of infection due to direct contact with dangerous material and lack of access to personal protection equipment; women were especially vulnerable since they were disproportionately represented in unpaid, unprotected, and informal jobs. Because female sanitation workers lacked both health insurance, job security, and union representation, many of them, many of whom were members of the marginalized social groups, were even more exposed during the crisis (Salve & Jungari 2020; Monteiro, 2023). The urban slums are the location where a significant portion of women work in the sanitation sector, and the pandemic also revealed the lack of adequate sanitation facilities and services, which further complicated following the recommendations of the public health concerning social distancing and hand hygiene (Shermin and Rahaman 2021; Donde et al., 2020). These were vital contributions of women that went largely unnoticed in labor policies and legislations, and fortified caste-based and gender-related inequalities that already existed. Whereas intervention techniques such as targeted training, PPE, and increased measures on occupational health proved to be promising in reducing hazards, they were not always maintained and fairly distributed. The COVID-19 experience underscores the urgent need of gender-sensitive policies, social protection, and recognition of the rights of women sanitation

workers to reduce the level of their continuous precarity and invisibility (Salve and Jungari 2020; Monteiro, 2023; Shoaib et al., 2023).

4.8 Government Interventions in Women Sanitation Work

Government Agencies

Despite the fact that governments are in the business of setting rules, developing infrastructure, and ensuring protections to workers, they often overlook the specific needs of female sanitation workers and, therefore, do not provide enough social security, health, and safety measures (Misra, 2022; Wilson et al., 2021; Josyula et al., 2022). Women trash pickers are not officially acknowledged or incorporated into urban systems, which makes them remain invisible and deprives them of access to protections and benefits (Mirchandani and Mukherjee, Women trash pickers were additionally disfavoured in disjointed and insufficient government policies that restricted their opportunities to both livelihood and healthcare at times of crisis, such as during the COVID-19 (Misra, 2022; Josyula et al., 2022).

Non-Government Agencies

NGOs are known to be leading in the provision of water, sanitation, and hygiene (WASH) services, particularly in underserved or conflict-prone regions and targeting women and children who are the most susceptible to this problem (Radhakrishnan, 2020). They increase the involvement in the household and community level sanitation decisions, and deploy programs to create agency, leadership and empowerment among women (Nansi, 2021; Bisung, 2020). Through training, information and education on human rights, NGOs can assist women sanitation workers in acquiring new skills, improving self-confidence, and going through systemic stigma. They enable women to spearhead WASH initiatives regardless of the difficulties such as inadequate resources and marginalization (Birken, 2021). The advocacy that NGO can also perform is by raising awareness about the gender-specific sanitation needs and securing that the voice of women determines the gender-sensitive policies that would prioritize the safety, dignity, and health considerations (Shukla, 2018). NGOs facilitate the organization of women waste pickers, better working conditions, and participation in the local government with the help of capacity building, cooperative formation, and partnerships, including the SWaCH initiative in Pune (Ogando et al., 2017; Estrada et al., 2023). Nevertheless, they are usually limited by the structural restrictions and inadequate state conditions (Wittmer, 2020).

4.9 Role of Social Workers and Urban Governance

One of the most important roles of a social worker is to discuss the gendered precarity and invisibility women waste pickers and sweepers undergo when working in urban sanitation systems. These are Dalit and other vulnerable women who are often neglected in a systematic way, stigmatized, and exposed to hazardous working environments. By organizing in their communities, social workers can empower these women, provide them with a voice and make them included in the labor, legal, and policy paradigms. By adopting an intersectional and rights-based approach, social workers will be able to fight against gender and caste inequalities deeply rooted in exploitative division of labor, also referred to as the feminine caste contract (Monteiro, 2022). They also build leadership, become stronger, and help such workers to be involved in the decision process which may influence their everyday life, besides lobbying.

One of the most crucial additions by social workers is mapping invisible labour. This involves the identification and documentation of the often overlooked work that women carry out in the field of sanitation, such as care giving, emotional and manual labor that are carried out in

dangerous areas and remain unrecognized due to cultural, legal and geographical marginalization. By providing an opportunity to observe this invisible work as a part of a broader rights agenda and participating in research and narration of the study, social workers can help bring this invisible work to the attention of the population. This will also help in seeking equal pay, safety in the work place, and recognition of the policy (Hatton, 2017; Kosny and MacEachen, 2009).

The social workers are also important in the rights-based campaigning, as they can advocate changes in legislation that would ensure full protection and sanitation work is a precious labor. They promote improved occupational health conditions, social security and legal security, particularly in the unorganized industry, where women, despite the disproportionate, still remain underrepresented. They also desire to get rid of stigma, worker solidarity, and demand that women should be fully included in the urban governance systems related to sanitation (Monteiro, 2022; Ashraf et al., 2022).

Another important factor is the acquisition of skills. Social workers combat the notion that sanitation work is unskilled by recognizing the many competencies that women acquire which include the sorting of garbage, risk management and coping with social discrimination. They assist women in boosting their economic bargaining capacity and seek other less risky or more noble job opportunities by funding peer-based training and upskilling initiatives. Also, the capacity building initiatives encourage group identity that enhances an ability of females to structure and assert their rights more efficiently. Furthermore, by ensuring that these capabilities are formally recognized in employment regulations and legislations, the presence and significance of their utilization increase (Rajendra, 2022).

Social workers can be used in a nutshell to facilitate structural change by engaging people on the ground level as well as institutions. Along with the empowerment of women sanitation workers, their organizing, lobbying, documentation and capacity building activities advocate inclusive urban governance that is aware and respectful of rights, well being and dignity of people at the margins.

5 PATH FORWARD

The review shows how the location of waste pickers and sweepers in cities as the structurally insecure position of women becomes defined by hierarchies in the caste system, division of labour by gender, and informal labour arrangements. Their inability to remain stable is due to wider movements in the labor market which involve subcontracting, outsourcing and deregulation. The labor precarity theory can be a valuable way of understanding this condition. According to Standing (2011), one of the effects of increasing precarious and unprotected employment is the emergence of precariat that lacks both vocational identity and social citizenship. On the same note, Kalleberg (2009) is of the opinion that precarious employment is not an individual weakness but more of a structural effect of changed institutions. Urban sanitation contracts and municipal outsourcing eliminate the state sense of responsibility and acclimatize insecurity.

A more critical analytical prism created based on Dalit feminist voices enhances the interpretation of these results by underlining the intersection of caste and patriarchy to organize sanitation labour (Rege, 2006). According to Ambedkar (1936/2014), not only the informal workers in low caste groups but also disadvantaged women in the underprivileged caste groups are facing precarity due to the caste-based occupation division and gendered subordination etched in the hierarchical caste system. Although labor rights and sanitary systems are formal,

the ability to avail both statutory and occupational benefits and safeguards is restricted in outsourced and informal types of municipal arrangements. Such difference between the intent of the law and its practical implementation keeps the female precarity within the institution.

Nevertheless, economic insecurity is not the sole cause that explains the susceptibility of female sanitation workers. Feminist political economy centres on the dynamics of the labor market defined by gendered inequalities that continually devalue women in the labor market (Elson, 1999; Federici, 2012). Women rubbish pickers and sweepers are overrepresented in low-paid, physical, stigmatized work aside from doing unpaid housework. This is an added weight that restricts their mobility and makes them ever more precarious.

Caste also should be considered when it comes to the analysis of the continuation of sanitation work among vulnerable populations. Based on the concept of caste as a form of graded inequality and fixity of occupation, as interpreted by B. R. Ambedkar (Ambedkar, 1936/2014), the work of sanitation can be discussed as historically forced labor, as opposed to neutral employment. The concepts of contamination and purity discriminated by caste still impact labor distribution and limit intergenerational mobility and shame. Thus, instead of informal labor, sanitation work is a caste coded work hidden within extensive hierarchies in the society.

Marginalization of female sanitation workers is not additive but rather compound in nature according to the intersectionality theory (Crenshaw, 1989; Collins, 2000). Caste plus gender intertwined with informal labor status result in doubled exclusion. This intersectional position often changes women sanitation workers since they are often underrepresented in official labor, they are absent in policy meetings, and they are not sufficiently covered by welfare systems all these factors making them become institutional invisibility.

The governmental ideas of enlarging infrastructure and efficiency have been put at the forefront of urban sanitation, at the expense of labor rights and dignity. Sometimes, the growth of the private waste management systems leads to greater contractualization without improving the protection of workers. Although rules to safeguard sanitation workers exist, they are undermined by impoverished implementation, lack of oversight and lax enforcement. Precarity is therefore undone in spite of policy promises.

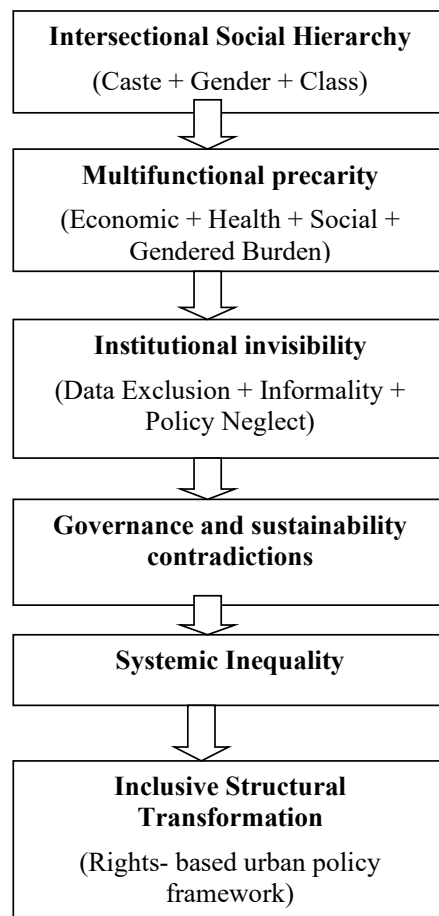
Moving Towards Inclusion, Dignity and Structural Change

To counter gendered precarity, we should no longer be concerned with welfare-based inclusion and we have to initiate structural changes that ground themselves on redistribution and recognition (Fraser, 2000). As part of the principles of decent work, sanitation labor should be recognized as one of the urban jobs that should receive stable employment, occupational safety and a broad range of social protection (International Labor Organization [ILO], 2013). Dignity acknowledgement does not exist on paper only, but requires enforceable labor regulations, as well as company responsibility (Sayer, 2007).

Instead of treating the process of sanitation labor as a technical task of a technical neutral category, the policy frames need to be directed at the caste-based occupational segregation. Transformative inclusion will require participatory governance structures that will involve women sanitation workers in decision making (Cornwall, 2008). The problem of precarity will persist even with welfare programs as long as there is not structural change that addresses informalization and deregulated working conditions (Standing, 2011; Chen, 2012).

6 CONCEPTUAL FRAMEWORK

Figure 2: Conceptual framework flow diagram



Based on the conceptual framework, caste, gender, and class structure come together to render invisible female rubbish pickers. These intersecting inequalities produce invisibility into systemic relations of the urban government in the institutional processes of informality, policy neglect, and omission of labor data. This institutional exclusion leads to many types of precarity such as economic exploitation, lack of social security, dangerous working environments and gendered working responsibilities. Women rubbish pickers, although playing an important role in ensuring clean cities and preserving the environment, are still not discussed in terms of governance and policy. Thus, with a right based, gender responsive and caste sensitive approach to urban development, the framework enhances the must in the structural reform that is inclusive.

7 CONCLUSION

The structural insecurity of urban sanitation systems in India is caste based, is very gendered with its day-to-day reality of women sanitation workers, when the refuse pickers, and the sweepers in particular. It is evident that the invisibility of these women is not incidental to the long-established socio-political processes that govern urban work as the definition of precarity as a situation created by the social forces suggests by Judith Butler. A further explanation that women and specifically those in historically marginalized caste groups are disproportionately

affected by informal, precarious and unprotected labor is the theory of the precariat explained by Guy Standing. Through an analysis of the sexual and fertilizing sides of labor, which these women have to handle, the feminist political economics prism of Silvia Federici brings out the gendered dualism of hazardous labor in the marketplace and household care giving, in which these women have no pay. Bina Agarwal also focuses on the importance of the recognition of intersectionality, in particular, how caste, gender, and class intersect and organize access to resources, voice and dignity.

The review has shown that the historical caste-based occupational duties are transferred to the current informal labor systems to continue a regime of economic exploitation and social obliteration. The presence of non-written contracts, institutionalized failures in salary alignments, health hazards, and absence of social securities are only some of the ways that women in the sanitation professions experience precarity, as per thematic analysis. Women are overrepresented in informal and invisible jobs which further increase institutional exclusion and economic insecurity, which have contributed to gender-organized sanitation precarity. The COVID-19 epidemic has worsened with these vulnerabilities by displaying the fact that the state has not valued and supported their efforts despite the fact that the role of sanitation work is considered essential. This paper has explored the gendered precarity that female sanitation workers face with special attention to how social workers could address their marginalization. It included community organizing, rights-based advocacy, mapping of invisible labor and facilitation of skills in order to promote dignity, visibility and justice in inclusive and revolutionary urban governance.

Notably, although there are both governmental and non-governmental interventions, they are often ineffective to offer long term gender responsive interventions or solve the structural cause of exclusion. To further the ideas of inclusive framework policies that acknowledge and emphasize the concerns of women sanitation workers, the functions of social workers, urban administration, and community organizing would be essential. In addition to tokenistic inclusion, caste-conscious and gender-sensitive urban policy needs to transform the system by recognizing sanitation work as dignified work and ensuring that the work has access to formal labor, healthcare and personal protective equipment and livable wages.

Ultimately, the social, economic, and political systems that render these women invisible need to be broken in order to advance. It proposes the necessary reconsideration of urban labor policy based on the feminist, anti-caste, and rights-based approaches to promote restorative justice, redistribution, and recognition. It would be then, and only then, possible to render visible, honourable, and right the invisible organization of urban cleanliness, which is achieved through the work of marginalized women.

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