<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ABSTRACT</td>
</tr>
<tr>
<td>2. FORMAL SOLID WASTE MANAGEMENT SYSTEM</td>
</tr>
<tr>
<td>3. THE PROBLEMS OF WASTE MANAGEMENT IN INDIA</td>
</tr>
<tr>
<td>4. THE ROLE OF INFORMAL WASTE WORKERS</td>
</tr>
<tr>
<td>5. CHALLENGES FACED BY INFORMAL WASTE WORKERS</td>
</tr>
<tr>
<td>6. INTERVENTIONS TO PROVIDE SUSTAINABLE LIVELIHOODS TO INFORMAL WASTE WORKERS</td>
</tr>
<tr>
<td>7. BIBLIOGRAPHY</td>
</tr>
</tbody>
</table>

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There are approximately 4 million informal waste pickers in India today (Dandapani 2017). These workers engage in recycling activities that are crucial to the health of our ecosystem, as well as help in significantly reducing the waste collection costs for the government. However, they face multiple, overlapping shocks and stresses while trying to build a sustainable livelihood for themselves, which puts them in an extremely vulnerable position. The informal nature of their job, and the undue prejudice and stigma around it, pose distinct challenges related to recognition of their work, their acceptance in the society, as well as their legal and economic status. The paper attempts to propose systematic interventions to overcome these challenges and integrate informal waste workers in the formal solid waste management system of our country, to help them achieve sustainable livelihoods.

Rising solid waste generation is a troublesome and expensive issue, particularly for low and middle-income countries. Economic development, rapid population growth, and urbanisation has led to increased resource consumption, subsequently causing the rate of waste generation to rise exponentially in the last few decades. Not only is the amount of waste generated directly proportional to per capita income (Kaushal, Varghese and Chabukdhara 2012), studies have also suggested that the amount of waste generated in urban areas is almost double of that in rural areas (Hoornweg and Bhada-Tata 2012). In India alone, 377 million people living in cities were responsible for the generation of 62 million tonnes of municipal solid waste in 2018 (Lahiry 2019).

Source: Report on Sustainable Solid Waste Management in India, 2012, Columbia University, USA.
Taking into consideration waste collection and disposal, India has an average collection rate efficiency of 50 to 60%. However, only 10% of the waste receives safe treatment, owing to a dearth of disposal sites (Swaminathan 2018). India’s Urban Local Bodies (ULBs, hereafter) have not been successful in managing the huge amount of waste generated due to the financial gaps, institutional debilities and long-term under-investment, which has reinforced a poor infrastructure to manage waste (Mani and Singh 2016; National Institute of Urban Affairs 2015: 4).

When looking at budgetary allocations, it is clear that while 80 to 90% of the resources are dedicated for waste collection processes, only 10% remains for waste treatment and disposal (National Institute of Urban Affairs 2015). An assessment done by the Comptroller and Auditor General of India in 2018 on ULBs in Karnataka, suggested that municipal bodies were unable to implement an effective waste management system on time due to scant coordination with the state government, as well as inadequate infrastructure and planning (Upadhyaya 2019).

THE PROBLEMS OF WASTE MANAGEMENT IN INDIA

To address the problem of waste management in India, the Ministry of Environment, Forest and Climate Change proposed a revision to the Solid Waste Management Rules in 2016. Its prominent change was to apply the rules to not only municipal areas, but also to urban and industrial areas such as urban agglomerations, census towns, and notified industrial townships, among others. The Rules direct the
segregation of waste to be done at the source, by generators themselves, divided into three streams: biodegradable, non-biodegradable, and hazardous. Bulk waste generators such as hotels and hospitals must deal with waste onsite, or in collaboration with the ULBs, which may charge the users a fee.

The Rules have also implemented a fine to be levied on garbage being burnt or thrown in public places. Further, this was the first time that informal waste workers were included in any administrative framework of the formal waste management system; the Ministry expressed a keen interest in integrating ragpickers belonging to the informal sector, as their inclusion in the formal system would bring forth an opportunity to streamline the workforce, as well as the functioning, while simultaneously providing them with more desirable income options. In addition, duties of municipal and other local units were clarified, in order to assist in the appropriate management of waste (Press Information Bureau 2016).

In India, the formal waste management system is of critical importance, owing to the great population growth and density. As such, it is a stepping stone in the maintenance of public health, and thus factors into the Human Development Index, which characterises India’s status as a developing country. The major problems impacting the smooth operation of solid waste management in India involve unscientific treatment of waste and its improper and careless collection techniques. Poor infrastructure and lack of systematic guidelines to ensure appropriate handling of waste, in turn, cause environmental degradation. The open dumping of garbage into landfills as well as negligent waste disposal practices pose innumerable health hazards to, not just waste workers, but all people living in the vicinity, contributing to the contamination of surface and groundwater, thus furthering the Indian environmental crisis (Flores, United Nations University 2017).

THE ROLE OF INFORMAL WASTE WORKERS

The poor state of the formal Waste Management System in India, as illustrated above, has meant that the informal waste collection and recycling sector has become indispensable to the larger waste management system. Informal waste workers handle the processes of waste segregation, collection, handling and disposal, acting as a bridge between the ULBs and the community (Coffey and Coad 2010). The informal sector comprises of small-scale groups engaged in labour intensive work which are generally unregulated and unregistered, associated with lower rates of utilisation of technology, and with fewer provisions of financial security. These groups earn primarily from the resource value of waste, which is the amount earned by selling the waste.

According to the International Labour Organization, waste collection is a ‘green job’ which should be promoted and facilitated as it contributes to a global green economy by meeting the goal of environmental sustainability (Wasteaid 2016; International Labour Office 2012; ILO Partnership Agreement 2015). As such, waste workers’ environmental contributions are enormous in that they partake in reducing carbon emissions by undertaking recycling activities which strengthen the decrease in the size of landfills, and increase the rate of reuse of biodegradable and non-biodegradable waste.

Broadly, these practices fall under the umbrella of environmental sustainability, significantly committing to a greener and cleaner India.
Even though the Solid Waste Management Rules, 2016 have acknowledged the above highlighted role of informal waste workers, the system at large has failed to recognise them as key stakeholders in the waste management process (Joseph 2006: 867; Masood and Barlow 2013; Velis et al. 2012: 47). As such, their work is ranked lowest along the hierarchy of informal occupations, making them more vulnerable to financial crises and serious health deterioration (Marello and Helwege 2018: 109-111; Madhav, 2010). Further, the environment of work of waste workers is extremely dangerous for their health and involves high risk of infections and communicable diseases.

According to Dias (2016), their informal organisation in the workforce renders them invisible in most cities, and their contributions are undervalued by urban planners who tend to favour capital-intensive technology to implement the waste management process.

Further entrenching them in this vulnerability, the Indian legal framework (Indian Penal Code 1860) considers waste-pickers to be committing theft. As waste is considered to be the property of the municipality, its handling and collection by waste workers who are not recognised in the system puts them at risk for prosecution, adding to their plight (Reddy 2018).

Another barrier to waste workers’ sustainable livelihoods is privatisation, which has negative implications on the recycling activities undertaken by waste workers. A study conducted by Chintan, a Delhi based NGO, found that approximately 50% of waste workers lost their jobs or experienced a drastic fall in their incomes after the Municipal Corporation of Delhi privatised waste collection (Sandhu et al. 2017: 2-5; Chintan n.d).

Taking stock of the above mentioned problems, all efforts taken to ensure sustainable livelihoods for waste workers need to be holistic in nature, taking into account not just their income status, but also issues related to their health and living conditions, illiteracy level amongst these workers, and gender disparities (Krantz 2001: 12-20). An integrated approach will focus on their recognition, social security, integration and inclusion in the system (Velis et al. 2012; Masood and Barlow 2013).

The inclusion of informal waste workers in the system of waste management, as well as formalising the nature of their work, is crucial. Legal recognition is a prerequisite to ensuring their financial and social security. Efforts towards formal inclusion must be strengthened through policies at both the national and state levels.

In addition, the position of waste workers in Indian society, which is permeated by institutions of caste and gender, has to be factored in to improve their social inclusivity. Most of these workers belong to lower castes or are considered to be ‘untouchables’ and as such are subject to rampant discrimination by officials and administrators along the higher rungs of authority. Certain safeguards must be introduced to regulate their interactions and ensure equality. In addition, formal training in methods of waste collection,
efforts at capacity building and extensive skill enhancement have to be undertaken in order to facilitate waste workers’ access to waste.

With regards to safety at work, there must be policies oriented towards tackling the lack of resources to prevent contamination that may occur due to the mixing of different types of waste. Considerable attention needs to be paid to developing safer methods of waste collection. It must be ensured that these workers are provided with appropriate equipment for storage of waste as well as adequate protective gear. Communications with other stakeholders in the system must be facilitated in order to promote the efficiency of practices followed in the waste management system.

To improve their financial standing, taxation policies must be revised in favor of recycling activities, as the taxation rate affects the prices earned by waste workers as well as small and large scrap dealers. This may be highlighted by considering the GST, which has corresponded to high taxation rates of up to 18% on all scrap items, significantly affected the wages earned by waste workers as well as small and large scrap dealers (Down to Earth 2017). Further, the process of applying for and availing loans and incentives must be eased through implementation of proper schemes to maximise financial viability.

The protection of the financial and social security of the waste workers will be achieved better through their representation in NGOs and trade unions, as workers’ organisations possess great capability to bargain for rights. Establishing a thorough network of various stakeholders involved in the waste management system plays a significant role in their representation, as well as dialogue with administrative authorities. For example, in Pune, a registered trade union called Kagad Kach Patra Kashtakari Panchayat (KKPKP) approached the Pune Municipal Corporation (PMC) for the recognition and inclusion of informal waste workers in waste management. PMC, in collaboration with KKPKP, launched a pilot program of door to door collection of waste, which received great success and appreciation, and thus was expanded to the entire city of Pune. KKPKP, with an increasing number of waste pickers registered itself as ‘SwaCH’, a large cooperative of self-employed waste pickers, has 3541 waste pickers covering 8 lakh households daily, and recycle 1000 tonnes of waste, thereby saving a substantial part of the municipality’s 15 crore budget annually through the practice of waste handling, transportation, leading to reducing the environmental cost of carbon emissions (National Institute of Urban Affairs 2015; Dias 2016). Thus, unionisation would provide support to workers who may not even be aware of exploitation faced by them. For this, adequate funding is required to sustain these unions and to make them work smoothly.

All of the aforementioned interventions interpenetrate each other, and thus, have to be considered under a comprehensive policy framework. The interventions for the current waste management system and the welfare of informal waste workers have to, not only be constantly revised, but warrant strong on-ground implementation to balance financial, social, as well as developmental aspects.
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