

## THE INFORMAL SECTOR – AN ESSENTIAL BUT OFTEN UNRECOGNISED COMPONENT OF SOLID WASTE MANAGEMENT

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### ABSTRACT

*Today, the provision of good solid waste management is a tremendous challenge. This challenge is going to aggravate in the developing countries because of future population growth and increasing urbanisation. About 90% of the future growth in world population will occur in Africa, and 83% of the world population will be concentrated in the developing countries in Asia and Africa. The developing countries have also been witnessing rapid urbanisation, which adds to their waste management challenges because urban populations generate more waste than rural populations. Research on the current waste management practices shows the crucial dependence of the municipal authorities on the informal sector waste-pickers, who earn their livelihood by extracting recyclables from the waste stream. Waste-pickers help the municipal authorities affect savings on the collection/transportation of waste, landfill space and landfill management costs. By making available recyclable materials made from natural resources, waste-pickers also help local and national economies draw benefits by the substitution of primary raw materials. However, the attitude of municipal authorities towards waste-pickers varies from hostility or indifference, to treating them as a useful segment of the waste management system. This paper analyses the work of the informal sector waste-pickers, based on individual research and the available literature.*

**Keywords:** Informal Sector, Waste Picker, Solid Waste Management

### 1. INTRODUCTION

#### 1.1 Background of Waste Management System in India

India's urban population is 377 million, that is, 31% of the country's total population (Census, 2011). The number of Indians residing in cities is projected to reach 600 million by 2031. People are coming to cities for better opportunities. The rising urban population is beneficial in terms of the country's development. However, the unbridled growth of the urban population creates wealth discrepancies, ghettos and high-class areas (Gupta, 2015). Solid waste, generated by households, has increased over the years, owing to rapid urbanisation, rising consumerism, and popularisation of the use and throw culture. It has been observed that urban local bodies (ULBs) are unable to handle huge quantities of solid waste, due to financial and institutional debilities. The average daily collection efficiency of ULBs is around 50-60%. In some exceptional cases, it goes up to 90%. However, only 10% of the collected waste receives treatment and virtually nothing is scientifically disposed of in engineered landfills (National Institute of Urban Affairs, 2013). This leads to us overburdening our landfills and creating mountains of poison. In view of the prevailing adverse scenario, waste management is going to be a daunting task for India. On 2 October 2014, the Government of India launched the country-wide cleanliness drive –Swachh Bharat Abhiyan (SBA). The aim of the SBA was to have a clean India by 2 October 2019, as a tribute to Mahatma Gandhi on his 150th birth anniversary, by eliminating the unhealthy practice of open defecation and providing sanitation and solid waste management facilities to all. The nation-wide SBA is considered a paradigm shift in India's strategy for solid waste management and cleanliness. It covers 4041 statutory towns, with the objective of cleaning their streets, roads and infrastructure. Some SBA objectives directly address waste management such as 100% collection and scientific disposal/processing/recycling/reuse of municipal solid waste (MSW) by bringing a behavioural change in people's sanitation practices, spreading awareness about sanitation and its linkage with public health, upskilling urban local bodies to design, execute and operate waste management systems and also includes assistance from the private sector.

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## **1.2 Informal Sector Waste-Pickers**

The informal sector waste-pickers have made a valuable contribution towards the efficient management of urban waste, though their contribution remains unrecognised, by both the authorities and the people. To earn a living, these waste-pickers segregate recyclables from the mixed waste disposed of carelessly by most people, brought to the local dumping sites by the municipal authorities. The municipal corporation benefits immensely from the work of waste-pickers, as they segregate recyclables, thereby reducing the cost of waste transportation, and also saving the landfill space. For the purpose of our study, we define the informal sector waste-pickers as individuals or small enterprises that aid the waste management process. These workers are not formally registered or mandated to provide waste management services. They collect recyclables from the waste stream including houses, collection points, disposal sites and garbage vans and bins, to earn a living. They segregate and sell recyclables that have a high intrinsic value, enabling them to make some profit. Some waste-pickers also provide waste collection services. The informal waste recycling trade is structured hierarchically. At the bottom of the waste recycling trade hierarchy is the waste picker who collects waste from houses, municipal garbage bins and vans, streets, and waste disposal sites, free of cost. Unfortunately, waste-pickers face high occupational risk and are socially stigmatised. Above them in the hierarchy are scrap buyers or kabadi-walas, who purchase or collect recyclables in small quantities from households. Next to the scrap buyers are different levels of traders, including retailers, stockists and wholesalers. Many of these traders operate informally because they do not get registered as businesses.

Apart from occupational hazards, waste-pickers also endure exploitation by government officials and private waste buyers. As stated earlier, there is no recognition of their work by the authorities and people. The German Society for International Corporation (GIZ, 2015) conducted a study on solid waste management, to assess the importance and contribution of the informal sector in major cities around the world. It was found that the cost savings brought to the municipality by the informal sector range between 1 and 16 million euros per year. The credit for these savings goes to the informal sector waste-pickers, who collect recyclables before they are sent to the landfills. This leads to saving of space and extends the life of landfills.

## **1.3 Government Policies and Informal Sector Waste-Pickers**

On October 2 2014, the Government of India launched a country-wide cleanliness drive— Swachh Bharat Abhiyan (SBA). The aim of the SBA was to have a clean India by 2 October 2 2019, as a tribute to Mahatma Gandhi on his 150th birth anniversary, by eliminating the unhealthy practice of open defecation and providing sanitation and solid waste management facilities to all. The government undoubtedly launched the SBA with the laudable and essential vision of making India clean and healthy. However, its policies have neglected the informal sector waste-pickers whose work is crucial for realizing the SBA vision. India tops the countries whose informal sector collects the maximum waste. The informal sector waste-pickers in India come from the poor sections of society. In the absence of other job avenues, they are compelled to take up waste picking for a living. The informal waste sector in Delhi provides a crucial source of income to some of the city's poorest sections (Chintan, India). It recycles over 2,000 tons per day waste in Delhi. Across India, 15 lakh waste-pickers save municipalities over INR (Indian Rupees) 54.75 crores annually. In Delhi alone, waste-pickers save the municipal corporation at least INR 1.7 crore a day in terms of labour cost only, because of their free civic services and no minimum wage from the civic body (Scheinberg, Anne, Michael H. Simpson et al, 2010). Though they serve society free of cost, waste-pickers are often targeted and harassed by the police and anti-social elements. Sometimes they are wrongly branded as thieves. Shockingly, waste-pickers are not legally permitted by municipalities to collect, segregate and sell waste from garbage dumps. Their act of waste collection is considered theft under the Indian Penal Code, 1860 (Mani, 2015).

Today, municipal vans have replaced the erstwhile door-to-door waste collection system that was run by waste-pickers on behalf of the local jamadarins. It has been observed that increasing the privatisation of waste management has led to waste-pickers losing their jobs. Chintan, a non-profit

organisation advocating for the rights of waste-pickers in Delhi, in their study (2011) found that after waste collection privatisation by the MCD, 50% of waste-pickers lost their jobs or experienced a drastic fall in their earnings. A 2016 study in Punjab found similar results—privatisation had a negative impact on waste-pickers' access to waste as well as their capacity to earn a livelihood (Down to Earth). In this background, we take up the present study to understand the condition of the informal sector waste-pickers in Delhi.

## **2. METHODOLOGY**

The most vulnerable and exploited component of the waste management system are the informal sector waste-pickers. They render a crucial but often unrecognised service in the waste management system. This study focuses on the contribution of waste-pickers in enhancing the efficiency of municipal waste management and the challenges faced by them. To get a holistic perspective about the situation of the informal sector waste-pickers, we interviewed them as well as municipal corporation officers, waste entrepreneurs, NGO staffers and residents in Delhi. The major research questions that guide the present study are: How does a typical informal sector waste picker conduct their day-to-day work? In what way does the formal waste management system benefit from the work of waste-pickers? What problem/hassles are faced by the informal sector waste-pickers?

### **2.1 Design**

For the purpose of the study, we have used the qualitative method of data collection, as waste management studies should have a qualitative component. Though the quantitative method is useful in research, its over-emphasis to move from statements of correlation to causal statements tells us nothing about the social context of the phenomenon (Apuke, 2017). A topic such as waste management cannot be studied by ignoring the larger social and cultural context. Many times, it might also be difficult to measure some aspects of human behaviour in numerical terms (Marvasti, 2018). However, researchers like Bertrand and Fransoo (2002) term qualitative research as small-scale and non-representative, which can't be generalised to a broader context. Some researchers are also of the view that research must flexibly mix the qualitative and quantitative traditions to overcome the limitation of both the methods (Amaratunga et al, 2002). Bryman (2006) finds that quantitative research is concerned with the researcher's view and qualitative research is conducted through the eyes of stakeholders involved. The following paper largely follows a qualitative tradition of research. This paper is a part of the larger mix method research project.

### **2.2 Sample**

The present study uses the interview method, with all stakeholders related to waste management. A total of 10 interviews were conducted and a focus group discussion with waste-pickers was held. The interviewees were: four waste-pickers, two municipal corporation officers, a waste entrepreneur, an NGO founder, a private waste management company employee, and one resident. It was ensured that our research followed a standard social science ethical procedure. Before starting the interview, informed consent and confidentiality were discussed. The study uses a semi-structured interview format for eliciting responses from the participants. The participants were seen as the co-creators of knowledge and were not restricted in any way from talking about their experiences and stories related to waste management. The interview schedule was formulated after reading the latest policies regarding solid waste management. Purposive non-random sampling was used for the current study.

### **2.3 Results**

All the 10 interviews were transcribed and read twice for insights, following which the study themes were selected and the portions highlighting these themes were drawn out from the interview texts. Then, a thematic table was formulated based on the research questions, and the researcher analysed all the interview transcriptions to find common themes. Table 1 represents the themes.

**Table 1: The Theme on the Informal Sector of Waste Management.**

Questions	Theme and Dimension	Quotes
<p><b>How does a typical informal sector waste picker conduct their day-to-day work?</b></p>	<p><b>Picking only Valuable Recyclables</b></p> <ul style="list-style-type: none"> <li>• Picking clean recyclables</li> <li>• Grouping the recyclables into categories</li> <li>• Avoiding thin aluminium wrappers</li> <li>• Avoiding waste that has no value</li> </ul>	<p>Normally waste-pickers avoid collecting the aluminium packing of medicines, chocolates and biscuits, which have very few takers in the recyclables market (Mr. Dharmendra, Lok Adhikar, waste management NGO).</p> <p>We pick polythene, cardboard, paper, glass, and iron. We take only those recyclables that are clean, because dirty or soiled items are difficult to sell. We separate these items into different groups (waste-pickers 2, 3, 4).</p> <p>We do not collect chocolate and biscuit aluminium wrappers because there are no buyers for these. However, we collect aluminium cans which are saleable (waste-pickers 1, 2, 3, 4).</p>
	<p><b>Change in the Work Mode</b></p> <ul style="list-style-type: none"> <li>• Was tough to work for the jamadarin</li> <li>• No longer work for the jamadarin; no door-to-door collection</li> <li>• Now collect waste from municipal vans</li> <li>• Better-off as independent workers</li> <li>• No savings for a rainy day</li> </ul>	<p>Earlier while working for jamadarins, we had to fulfil their requirements. If we did not collect waste even for one day, the jamadarin would make it a big issue. She/he would not understand the problem. Even if we ourselves, or our children had been ill, she/he would not care. Nor would she/he help with Rs 50 or 100 to buy medicine. The jamadarin's only concern was timely waste collection by us (waste-pickers 1, 2).</p> <p>Now the municipal corporation van has taken over the household waste collection from jamadarin. We are free from jamadarin. Now we work as independent waste-pickers as per our will (waste-pickers 2, 3).</p> <p>While working for the jamadarin, we would find it difficult to make both ends meet. Though our earning is still not very good, we are able to run our home and educate our children in government schools. However, we are not able to save anything for the rainy day (waste-pickers 1, 2, 3, 4)</p>
	<p><b>The Downside of the New Work Mode</b></p> <ul style="list-style-type: none"> <li>• Collecting waste from municipal van is the only option</li> <li>• Sometimes collect waste from the municipal waste transfer site.</li> <li>• Top-level officers object to the presence of waste-pickers at the municipal waste transfer site</li> <li>• Waste-pickers have to flee the municipal waste transfer sites when top-level officers arrive</li> </ul>	<p>Now, we do not collect waste door-to-door. We sit in the municipal van and segregate the recyclables from the waste disposed of by people in the van (waste-pickers 1, 2,). </p> <p>Waste collection by the municipal van has rendered most of the door-to-door waste-pickers jobless, except those who are able to sit in the van and segregate waste. Earlier if waste collection provided jobs to 100 people, now only 20 people are able to collect and sell waste. The people, unable to sit in a municipal van, mostly collect waste lying on colony roads (waste-pickers 3, 4).</p> <p>If a top-level officer or the inspection staff happens to visit municipal waste transfer site, we have to run away with our boras (huge bags) to escape their wrath. They have this false notion that we carelessly scatter the garbage, making the place dirtier. But the truth is that by segregating recyclables we substantially reduce the waste that is taken for dumping in the city outskirts (waste-pickers 2, 3, 4).</p>
	<p><b>No Fixed Working Hours</b></p> <ul style="list-style-type: none"> <li>• Satisfaction after working long hours</li> <li>• Independent earners</li> </ul>	<p>No fixed hours for our waste picking work. Normally, we start our work at five in the morning. On normal days our work finishes by 3 or 4 p.m. in the afternoon (Waste picker 1)</p> <p>On some days we work till 8 or 10 p.m. in the night. The incentive for working long hours is the satisfaction that whatever recyclables we collect becomes a part of our own earning. We need not share it with somebody (waste-pickers 1, 2, 3).</p>
	<p><b>Categorisation of Segregated Items</b></p> <ul style="list-style-type: none"> <li>• Based on quality</li> <li>• Saleable or non-saleable</li> </ul>	<p>The number of recyclables, segregated on the basis of quality, ranges between 200 and 250. We are able to segregate recyclables into only 22-23 categories. We do not have proper knowledge about the quality and categories of recyclables.</p>

- Waste dealer more aware of recyclables

Waste dealers to whom we sell or those who take recyclables to the factories have a better understanding of the quality and category of recyclables. We collect five types of polythene bags which we can sell. We segregate cardboard and paper into two types based on quality, and plastic things into six-seven types (waste-pickers 1, 2, 3, 4).

**In what ways does the formal waste management system benefit from the informal sector waste-pickers?**

**Valuable Segregation Effort**

- Decentralised segregation
- Reduction in waste transportation cost
- Less landfill space required
- Reduction in waste management cost
- Segregate waste before it gets to the dhalaos
- Filling gaps in the formal waste management system

Waste-pickers segregate about 30-40% of the recyclables from the dhalaos waste and earn their livelihood by selling this waste (Mr. Dharmendra, Lok Adhikar)

The informal sector waste-pickers reduce the waste management cost for the government, as they segregate recyclables before the waste reaches the dhalaos. So, less transportation and landfill space are required. Mr. (Rohit, waste entrepreneur; Mr. Dharmendra, Lok Adhikar)

Households usually don't segregate waste. Waste-pickers diligently segregate recyclables from the mixed household waste. Credit goes to the informal sector waste-pickers for preventing waste overflow in the dhalaos and landfills (Santosh, employee of waste management firm)

We witness the disgusting sight of waste-pickers standing in the moving municipal van and segregating recyclables from the foul-smelling mixed waste being thrown by people. There is no recognition of the indispensable work of waste-pickers who are exposed to hazardous work. (Resident 1)

Today we can't expect that the MCD would hire waste workers on its own because it is unable to fill its various vacancies due to the financial crunch (Mr. Dharmendra, Lok Adhikar)

I feel the MCD does not have adequate staff to discharge its day-to-day duties. Waste-pickers have played a crucial role in waste management, but are not acknowledged for their efforts (MCD official)

**Formal Sector Support to Informal Sector**

- Education for health, hygiene and safety
- Training informal sector workers

We take good care of our own staff as well as the informal sector waste-pickers who work with us. We have conducted a survey of about 750 informal sector waste-pickers. We teach them about hygiene and provide appropriate amenities and take safety measures to safeguard their health and life. We help them get waste picker identity cards. We train them and also the MCD staff in waste collection methods. We educate them about the government's waste management policies and guidelines and how they have to adhere to them (Santosh, employee of waste management firm)

**What problems/hassles are faced by informal sector waste-pickers?**

**Lack of Social Security Net**

- No identity
- No insurance
- No basic amenities

The main task of our NGO is to protect the job of waste-pickers and get social security for them. The waste-pickers should also be brought under the social security net like the other workers of the unorganised sector, such as construction workers, rickshaw-pullers and domestic workers (Mr. Dharmendra, Lok Adhikar).

Though waste-pickers are doing an important work for the society, they are not paid either by the government or the people who generate waste. They should be given identity, insurance and basic amenities to live a healthy life (Mr. Santosh, employee of waste management firm).

Waste-pickers don't seem to exist for the government. They work for a living at a great risk to their life, with no social security, insurance and education for kids. They remain unknown (Mr. Rohit, waste entrepreneur).

**Not getting fair price for recyclables**

Informal sector waste-pickers neither receive any formal payment for their work nor do they get a fair price from waste dealers. (Mr. Dharmendra, Lok Adhikar)

- Difficulty in getting the right price from waste dealers
- Companies pay fair prices
- Seasonal variation in the prices of recyclables

#### **Extortion from Waste-Pickers**

- Extortion bid by waste contractor
- Attack by goons
- Common people condemn goons

#### **Bias Against Muslims**

- Discrimination due to the Muslim tag
- NGOs aim to protect their rights as Indian citizens

#### **Unjust distribution in the Recyclable Value Chain**

- Waste generators corner the lion's share of a recyclable's market price
- Waste pickers are left with an unfair share of a recyclable's market price
- Need to enable waste-pickers to get their due

#### **Waste Management is Hazardous**

- Hazardous nature of waste
- Health of waste-pickers and animals is at stake

Waste-pickers do not get the right price for recyclables from waste dealers. Payment is also delayed. We strive to pay them the right price without delay, so they prefer to bring recyclables to us instead of going to waste dealers. (Santosh, employee of waste management firm).

Our earning is limited to making both ends meet. We just can't share our hard-earned money with anyone. But sometimes the area goons, waste contractors or politically connected persons try to extort money from us (waste-pickers 1, 2)

Recently a friend of mine got into trouble when a garbage site in Delhi, from where he has been collecting recyclables for 15 years, was given to a garbage contractor. The contractor gave two options to my friend – either sell the segregated waste to him at INR 3-4 per kilo or give him INR 30,000 per month collecting recyclables from the site. (Waste picker- 3).

My friend was thrashed in the Gokalpuri area of Delhi by a local goon who was demanding money for allowing him to continue his work. Residents have condemned the attack. My friend has stopped waste collection, fearing for his life. The goon also threaten the waste-pickers in Seemapuri, who ply their trade on carts (Waste picker 2).

One problematic issue is that most of the waste-pickers come from the state of West Bengal and belong to the minority community. The police and the MCD believe that they are Bangladeshis. Due to their minority community tag, waste-pickers often become the target of people's adverse behaviour. We strive to protect their rights that they are entitled to as Indian citizens. We tell the authorities that if any waste picker does not have documents to prove their Indian citizenship, then you can detain them. We do not provide protection to any Bangladeshi person. (Mr. Dharmendra, Lok Adhikar)

Waste-pickers mostly belong to the lower classes and are Muslims. Since they are from a backward community, they face discrimination (Santosh, employee of waste management firm).

Where we live, there about 80% people who do the work of waste collection. Since we are Muslims, nobody gives a job even to the educated among us. We do not even get the job of a sweeper (waste-pickers 1, 2, 3).

The value chain of an old newspaper, from a household to a recycler, has varying rates going up to INR 14 per kg. The householder, who generates the newspaper waste, gets INR 12. The newspaper reaches the recycler at a slightly higher rate of INR 14. The funny party is that the householder has cornered the lion's share in the value chain, while the rest of the players are left to share only INR 2 among themselves. Ideally, the householder as the waste generator should not be getting anything. We strive to shift the recyclable price dynamics in favour of waste-pickers, so as to redistribute the value realisation across the entire value chain. The ideal situation in the value chain is: the waste generator gets INR 4-5 and the remaining INR 8-9 should be distributed among the other players in the value chain (Rohit, waste entrepreneur).

People think that they have the right to earn from their waste. Due to this waste-pickers get less money. The waste picker should earn more from the waste generator (Santosh).

Waste-pickers even do not get a proper jhadu (broom), so getting the safety gear is a dream for them. Since these people work in hazardous conditions, someone among them often dies a sudden death (Mr. Dharmendra, Lok Adhikar).

- Lack of safety gear
- Frequent deaths
- Training needed to face occupational hazard
- Educating residents

#### **Joblessness due to the COVID-19 Lockdown**

- Borrowing money
- Risking life for work
- Better to die while working than from hunger

#### **Preference for Independent Work**

- Wages offered by the contractors are too low
- Contractor not adhering to terms and conditions
- Contractor threat of police action

I meet a waste picker and then two days later I get the sad news of his sudden death. They face immense hazards even from domestic waste, which also contains sanitary pads, diapers, condoms and expired medicines (Santosh, employee of waste management firm).

Waste management is hazardous mainly because people do not segregate their household waste. We should be careful about proper waste disposal (Residents 1,2).

During the first COVID-19 lockdown, municipal authorities did not allow us to collect waste. We borrowed money to run our household. We started repaying the loans when we resumed work after the lifting of the lockdown (waste-pickers 1, 2). When the second lockdown was announced, we still had not repaid the borrowed money, so more borrowing was out of question (waste-pickers 1, 2, 3, 4).

Some contractors want to hire us and provide us waste collector identity cards, they offer us only INR 2-3 per kg for our segregated waste. We don't want to work under contractors and are happy to earn as independent waste collectors (waste-pickers 1, 2, 3). Contractors say that as a social service they will bear the expenses related to our health and demand monthly charge up to INR 10,000 for allowing us to segregate waste (waste-pickers 1, 2, 3).

If we don't want to pay the monthly charge, then the contractor asks us to sell him our segregated waste at very low prices. For example, if we sell something at INR 10 per kg, he offers only INR 2 per kg (waste-pickers 3, 4). To escape exploitation, we pleaded before the Nagar Ayukt to allow us keep working independently. So far, no contractor has been hired for this site. (Waste-pickers 1, 2, 3, 4).

**Source:** Themes resulting from the interviews conducted in the present study with stakeholders of waste management industry.

### **3. DISCUSSION**

The informal sector waste-pickers have been embedded in our waste management system for a very long time. The attitude of the municipal authorities as well as common people towards these waste-pickers, may differ from place to place. Some view them with hostility, others with indifference, and some see them as a useful part of the waste management system and provide them with an opportunity to enhance their livelihoods. From the interviews, it is clear that most participants acknowledge the hazardous nature of the waste picker's work. However, no efforts are made at the national or the local level to lessen the occupational hazards faced by the waste-pickers. The Government of India launched the Swachh Bharat Abhiyan, which gathered a lot of attention nationally and internationally. We are facing a dire need for policies related to waste management, as India is going to experience an unbridled urban growth (Gupta, 2015) which will lead to an increase in waste generation.

In our interviews, we found that experts in the field of waste management recognise the role of the informal sector waste-pickers in effective waste management. The majority view is that urban local bodies will find it tough to manage waste in the absence of the service rendered by the informal sector waste-pickers, who segregate waste at the source of waste creation, thereby reducing the cost of waste transportation and saving the landfill space. Despite the dependence of urban local bodies on waste-pickers, the government's current door-to-door waste collection plan via municipal vans largely ignores the informal sector waste workers. The waste-pickers we interviewed informed us that waste collection by the municipal van has proved to be harmful for most of the waste collectors (who earlier used to collect household waste on behalf of the jamadarin), except those who are able to sit in the van and segregate waste. Earlier if waste collection provided jobs to 100 people, now only 20 people are able to collect and sell waste. Those, unable to sit in the municipal van, collect then waste lying on the colony roads. Sometimes, waste-pickers have to run from the waste disposal sites if a senior municipal officer arrives for inspection.

Some waste segregation sites allow waste-pickers to bring the segregated waste, although they have to ensure that proper segregation has been done. Most households in Delhi still do not segregate their waste before disposing it off. Waste-pickers tell us that there are no fixed hours for their waste collection work. They start their work at 5 a.m. in the morning and finish by 3 or 4 p.m. in the afternoon. Some days they work till 8 or 10 p.m. in the night. The incentive for working long hours is the satisfaction that whatever recyclables they gather from waste is their own earning. Mr. Dharmendra, who runs an NGO for protecting rights of waste-pickers, shared with us that waste workers segregate about 30-40% of the recyclables from the dhalao waste and earn their livelihood by selling these recyclables. Mr. Santosh, an employee of a waste management firm, the largest waste management company in Delhi, also credits the informal sector waste-pickers for keeping the dhalaos and landfills from overflowing. The informal sector waste-pickers are actually filling gaps in the formal waste management system, as Mr. Dharmendra says, “Today we can’t expect that the MCD would hire waste workers on its own because it is unable to fill its various vacancies due to the financial crunch.” We further discussed the difficulties faced by waste-pickers in doing their task. It was shocking to discover that these workers are not included in the government’s policy framework on waste management, and are on their own without any social security.

### **3.1 Private Players - A Mixed Response**

A lot has changed in the way waste is collected in the present times. There is a considerable presence of private players and contractors in the waste management system. Mr. Santosh (employee of waste management firm) tells us that their company takes good care of the informal sector people who work with them. “We teach them about hygiene and provide appropriate amenities and safety arrangements to safeguard their health and life. We enable individual waste collectors get waste collector identity cards, train them along with the MCD staff in waste collection methods. We educate them about the waste management policies of the government and how they have to adhere to the policy guidelines,” explains Mr. Santosh. This is surely a good example of an effective partnership between the informal sector waste and a private company. However, when we interviewed the informal sector waste-pickers, they were very suspicious and doubtful of some private contractors. They said, “Some contractors want to hire us and provide us waste collector identity cards. But they offer us only INR 2-3 per kg for our segregated waste. We don’t want to work under contractors. Some contractors say that as a social service they will bear the expenses related to our health. But after entering into contract with us, they demand monthly charges up to INR 10,000 for allowing us to segregate waste.”

### **3.2 Unjust Pay for Waste**

As Mr. Dharmendra of Lok Adhikar tells us, “Informal sector waste-pickers neither receive any formal payment for their work nor do they get a fair price from waste dealers.” On the other hand, Mr. Santosh’s company strives to pay waste-pickers the right price without delay. “That’s why waste-pickers opt to deal with us,” says Mr. Santosh. The waste-pickers tell us that prices of recyclable items keep varying. During the rainy season, the prices of some recyclables drop to almost half of their normal prices. During the rainy season, buyers write off about 70% weight of the recyclable cardboard, paying the waste workers only for 30% of the weight of the waste.

Why do waste-pickers receive such less pay for their waste? Waste entrepreneur Mr. Rohit explains the reason, “The value chain of an old newspaper, from a household to a recycler, has varying rates going up to INR 14 per kg. The householder, who generates newspaper waste, gets Rs 12. The newspaper reaches the recycler at a slightly higher rate of INR 14. The funny party is the householder has cornered the lion’s share in the value chain while the rest of the players are left to share only INR 2 among themselves. Ideally, the householder as the waste generator should not be getting anything.” Echoing Mr. Rohit’s views, Mr. Santosh (employee of waste management firm) says, “People think they have the right to earn from their waste. Due to this thinking, waste-pickers usually get less money. Ideally, the waste picker should earn more from the waste generator.”

### **3.3 Lack of Social Security Net**

Mr. Dharmendra (Lok Adhikar) expresses concern that there is no social security net available for waste-pickers. He says, “The main task of our NGO is to protect the jobs of waste-pickers and get social security for them. We demand that the waste-pickers should also be brought under the social security net like the other workers of the unorganised sector, such as construction workers, rickshaw-pullers and domestic workers.” Like Mr. Dharmendra, Mr. Santosh (employee of waste management firm) also feels that waste-pickers should be given identity, insurance and basic amenities to live a healthy life. Waste entrepreneur Mr. Rohit rues, “Waste-pickers just don’t seem to exist for the government. They work for a living at a great risk to their life. They get no social security, insurance, education for kids. They remain unknown.”

### **3.4 Extortion from Waste-Pickers**

Waste-pickers often face harassment and threats from goons and contractors. Sharing their concerns in this regard, waste-pickers tell us, “Our earning is limited to making both ends meet. We just can’t share our hard-earned money with anyone. But sometimes the area goons, waste contractors or politically connected persons try to extort money from us.” In one instance, a garbage contractor gave a waste picker, who was picking waste from a dump site for 15 years, two options – either sell the segregated waste to him at INR 3-4 per kg or give him INR 30,000 per month collecting recyclables from the site. In another instance, a waste picker in an East Delhi colony was thrashed by a local goon who was demanding money for allowing him to continue his work. Though the area residents condemned the attack, the waste picker stopped waste collection, fearing for his life.

### **3.5 Bias against Muslims**

Waste-pickers mostly come from the marginal sections of society and most of them are Muslims. Waste-pickers complain that they are discriminated on the basis of their religion. They recount, “Where we live, there about 80% people engaged in waste collection work. Since we are Muslims, nobody gives job even to the educated among us. Even we do not get the job of a sweeper (Waste-picker-1, 2, 3).” Regarding the bias against Muslim waste-pickers, Mr. Dharmendra tells, “Most of the waste-pickers are from West Bengal and belong to the minority community. The police and the MCD believe that they are Bangladeshis. Due to their minority community tag, waste-pickers often become the target of people’s adverse behaviour. We strive to protect their rights that they are entitled to as Indian citizens. We tell the authorities that if any waste picker does not have documents to prove their Indian citizenship, then you can detain them. We do not provide protection to any Bangladeshi person.” Mr. Santosh (employee of waste management firm) supports Mr. Dharmendra’s views in these words, “Waste-pickers mostly are Muslims. Since they are from a backward community, they face discrimination.”

### **3.6 Waste management is hazardous**

Waste management is a hazardous activity and waste-pickers have been adversely affected by it. The government should make policies to take care of the health of the informal sector waste-pickers. Mr. Santosh explains the hazards faced by these pickers, “Sometimes it happens that I meet a waste picker and then two days later I get the sad news of his sudden death. Waste-pickers face immense hazards even from domestic waste which also contains sanitary pads, diapers, condoms and expired medicines. Animals too fall ill by eating the leftover food mixed with this hazardous waste.” Residents also feel that waste management is hazardous mainly because people do not segregate their household waste. They say, “We should be careful about proper waste disposal.”

### **3.7 Integrating the informal sector as a solution**

There is an urgent need for integrating the informal sector waste-pickers into the city's formal waste management master plan. They should be involved in collection of the waste at the source, with the right over the recyclables that they collect and a guarantee of regular access to waste. To make this happen, the municipal authorities have to play a leading role. Giving waste-pickers a formal role is also financially viable for the government. Waste management experts feel that the waste management system in India is highly centralised, which is one of the causes making waste management inefficient.

The government should take initiative to decentralise waste management by encouraging NGOs, cooperatives and private players to help the informal sector waste-pickers.

Belo Horizonte, a Brazilian city, is a good example of the successful integration of the informal sector into formal waste management. In 1993, the city authorities started promoting waste segregation at the source. They encouraged by helping in the development of cooperatives and guided them towards material recovery close to households, instead of waste scavenging at the landfill. There are an estimated 2700 informal waste workers in Belo Horizonte. With the assistance of the urban local body, eight cooperatives were created. For these cooperatives, warehouses were provided by the municipality. Here, the materials were processed, before moving up the recycling chain. The cooperatives were assisted with scales, personal protection equipment, and big bags for storage. In 2001, to encourage waste management, Brazil announced "catador de material reciclado", which stands for collector of recyclables, as a formal profession in the Brazilian occupation classification. The Brazilian initiative can be replicated in India. In fact, such an occupation classification in our country can help waste workers overcome marginalisation and take pride in their work.

There have also been initiatives in India which led to successful integration of the informal sector waste-pickers into formal waste management. One such example is of the SWACH cooperative in Pune. SWACH is a wholly-owned cooperative of waste-pickers. In 2008, SWACH entered into a Memorandum of Understanding with the Pune Municipal Corporation to collect waste, door to door. This was an important milestone for the waste-pickers in the city. Today, the cooperative is overseen by a governing board that has 14 waste picker members on the board, 2 representatives of the Pune Municipal Corporation, and 2 members of the trade union of waste-pickers. SWACH works to collect waste, recover recyclables, trade and waste processing. It is in close contact with the clients and residents by providing them services they need. It also operates a helpline for feedback and complaints. Currently, through its 1867 members, it provides service to 1.5 million residents of Pune. Among its members, 80% are women. Data has shown that thanks to the work done by SWACH, waste reaching the landfills has been reduced by more than 55%, or 320 tonnes per day, which is a big achievement. The cooperative has also ensured regular employment for waste-pickers. The entire system has become accountable and efficient. Some other successful initiatives in this regard include Hasiru Dala in Bengaluru and SEWA in Gujarat. The Government's policy for waste management should not neglect the informal sector waste-pickers. Though privatisation of the waste management system has its advantages, we must acknowledge the fact that the informal sector waste-pickers are the backbone of waste management. Private players, cooperatives, and NGOs should respect the rights of waste-pickers. Representatives of the waste-pickers must be included in such committees whose decisions can affect their future.

### **3.8 Suggestions for Government Policy**

- a. All waste-pickers should get a free identification card that acknowledges their right to access, collect and sell waste in the country, so that they don't get harassed by goons or contractors.
- b. Availability of subsidised waste picking gear such as gloves, masks, protective and sorting tools and shoes with metal-plated soles should be made accessible through a public distribution system.
- c. Creation of an independent body that takes care of the rights and welfare of waste-pickers.
- d. Trade unions and cooperatives should be formed for the waste workers so that they can remain independent and can work on their terms such as Hasiru Dala in Bengaluru, SWACH in Pune and SEWA in Gujarat.
- e. Inclusion of waste-pickers in all social welfare schemes and creation of a cooperative bank for marginalised workers on the lines of the Brazilian Bank for Economic and Social Development for subsidised credit facilities.

## **4. CONCLUSION**

The waste-pickers who are a part of the informal sector, have contributed to the formal waste management in numerous ways such as saving transportation cost and keeping landfills from being

overburdened. Despite their valuable contribution, the government, municipal authorities, and the public remain indifferent to the problems and challenges faced by these waste-pickers. The challenges before these workers include occupational hazards, health problems, job-loss in the new waste management system, lack of a social security net, danger of extortion by contractors, not getting fair prices for recyclables, and facing bias and discrimination. The informal sector waste-pickers have been an important but unrecognised component of the Swachh Bharat Abhiyan. To give them their due and make our waste management system more efficient, it is time that they be integrated into the formal waste management system. There is a dire need of formulating policies at the national level, to protect the rights of waste-pickers, help them lead a quality life and consider their immense contribution in effective waste management.

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