



**REPORT ON RAPID ASSESSMENT SURVEY
ON SOCIO-ECONOMIC CONDITION OF WASTE PICKERS
IN KOLKATA MUNICIPAL AREA**



**REPORT ON RAPID ASSESSMENT SURVEY
ON SOCIO-ECONOMIC CONDITION OF WASTE PICKERS
IN KOLKATA MUNICIPAL AREA**

**Society for Direct Initiative for Social and Health Action
(DISHA)**

www.dishaearth.org

January 2017

Background

Around 4000 MT of municipal waste is generated in Kolkata Municipal Corporation Area. Around 15% of this waste is recyclable dry waste. In all cases the mixed waste come to the municipal waste stream. Though there is regular service of collection of waste from door to door, there is no practice of source segregation among the waste generators. Few incoherent efforts made for introduction of segregation of dry (recyclable) and wet (organic compostable) waste at source have not yield any marked improvement. The municipal workers collect waste from houses and store them in intermediate garbage stations. A good number of waste pickers collect dry recyclable waste from the street sides and the intermediate stations. Municipal trucks and newly introduced **compactors** collect waste from these intermediate garbage stations to dispose in the dump site. There also, a large number of waste pickers work to collect recyclable waste. Even after that, around 50% of recyclable waste remains dumped in landfill. Waste pickers cannot access those manually. In some cases waste pickers do not like to collect too much soiled dry waste as they do not get enough value of those.

These waste pickers are providing a great service to the society. But the fact is seldom recognized. These pickers, by way of earning their livelihood, are providing basic support to fight against climate change. They help to run the wheel of recycling. More we recycle, more we save resource, more we save energy. All over the world, these waste pickers in various cities are now being considered as **climate volunteers**. Of late, in India, the importance of the role of waste pickers is being acknowledged by the waste managers in various cities.

Municipal Solid Waste Management Rules 2016 notified on 8th April, 2016 mandates to involve informal waste pickers in waste management so that efficient and maximum recycling of waste becomes possible. It clearly states that the dry waste is kept separated at the source and handed over directly to these waste pickers to phase out the practice of waste picking. The new system will stop mixing of waste, devaluation of dry waste, unnecessary carrying of some waste to the dump site (which usually come back to the junk shops in the city) and also facilitate further processing of both dry and wet waste.

A rapid assessment survey was taken up in December 2016 to ascertain the present socio-economic status of the waste pickers in different clusters in KMC area to assess their readiness and capacity to be involved in the city's waste management system. Their individual identity, family introduction, economic situation, income from alternative source, area of operation, working condition, items of collection, material value, sale value, health status, attitude to use of personal protective equipments, living condition, hazards of profession, group identity etc. were probed through this rapid assessment survey.

Acknowledgement

I convey my heartiest gratitude to those who are running the wheel of recycling and helping to conserve the social wealth - the waste pickers, collectors, recycling workers and associated groups.

I would also like to thank all the individual waste pickers who cooperated with the survey team at the time of interviews. They have thrown light to some areas which are generally not known to the citizens.

I sincerely thank **GKW Consult** authorities for providing the support for the study. My special thanks to **Mr. Diptarup Kahali** who has always been supportive to the cause of proper waste management in the city. I thank **Prof. Arunabha Majumder** for providing his deep insight on the issue and valuable inputs for the report. I also thank **Ms. Bidisha Mukherjee** for facilitating the survey since beginning and coming up with a number of valuable suggestions to improve the report. My sincere thanks to **Mr. Vinay Sharma** for reviewing the draft and provide his valuable opinions.

I would also like to thank my friends who are working hand in hand with the waste pickers on the field. Without their support the study could not be shaped. **Mijanur Rehman** of **Tiljala Shed** helped me to understand the present situation of organized activities of waste pickers in Kolkata. **Sudeshna Das** and **Sabyasachi Dutta** of **The Calcutta Samaritan** are raising the issues of social security benefits of waste pickers. They helped to conduct the survey in several pockets.

Survey was conducted by **Swapan Mallick** and **Salim Mallick**, both associated with DISHA and having a long experience of work with waste management issues and especially with the informal workers in the recycling sector.

Sasanka Sekhar Dev
Principal Investigator
20/4 Sil Lane, Kolkata 700015
Date :

Objective

Before three decades, waste pickers in India were considered as public nuisance in the city. They were considered as criminals and outcast. They were made responsible for untidy streets and lanes of the cities and towns. Even now many of the city authorities possess these views. When efforts were made to introduce waste management projects, it was only then, the waste managers recognized that waste pickers contribute a lot in cleaning the city. They also help to reduce pressure on dump site in both ways – reducing the amount of waste taken to landfill and also picking waste from landfill. Existing waste management efforts could not ensure cleaning if the waste pickers would not work in tandem. But, at the same time, it is also observed that waste picking is not a very aesthetic practice for the cities. Not only that, waste picking is associated with many hazards. Waste pickers often suffer from prick injury, infectious diseases and animal attacks.

The awareness regarding global warming and climate change highlighted the necessity of recycling. It was observed that waste pickers are not only cleaning the cities, they are playing the basic role in making recycling successful. So their service is essential for effective implementation of waste management.

But they cannot continue in the same manner. Their role has to be changed. Instead of collecting waste from the streets and dump sites, they may collect those directly from the generators of waste. That may reduce the amount of waste going into the landfills; keep the recyclable waste clean and valued.

Hence there is need for assessing the socio-economic status of the waste pickers of Kolkata to implement an effective waste management programme in the city.

Methodology

Basic information regarding waste picking and waste pickers were collected through a **literature survey**. As the issue of waste pickers cannot be separated of waste management itself, literatures on waste management and waste disposal were studied. Efforts were made to understand the global trend of organizing activities of waste pickers, changing attitude of authorities on waste pickers in India and situation in Kolkata.

Interactive discussions were held with waste managers, waste pickers' organizations, environmental groups concerned on waste management, NGOs engaged in organising waste pickers. The first rally of waste pickers demanding right of recognition as informal workers

from Ramlila Maidan to Esplanade in Kolkata and the following open meeting of waste pickers in Y-Channel on 21st December, 2016 was attended.

A visit to watch the collection system of municipal waste by the municipal staff in two wards and the behavior pattern of waste pickers in relation to such collection were studied. **Two other visits** were conducted – one to watch waste collection by the waste pickers in Dhapa dump site and the other at the processing unit adjacent to that site where organic compost is being prepared.

Field level survey of individual waste pickers was conducted at different spots in the city. Total **111 waste pickers**, whose main livelihood is waste picking, were interviewed. This sample size may not appear enough to get a representative picture of the scenario. However, due to time and resource constraint, field level survey was planned in small scale.

The planning started with the idea of surveying the waste pickers living in Kolkata. Therefore, many of the waste pickers and their groups, who come from distant places, were not interviewed for this study. It was revealed during the survey that a good number of waste pickers even travel 50 Kms to collect waste from Dhapa dump site. Many more of them also live in surrounding villages at the further eastern part of the city. But the survey included only those who live in different wards of Kolkata.

Waste pickers were chosen on the basis of their collection source so that collectors of different varieties of waste items are represented. Waste collectors in Dhapa have access to the waste which are finally taken by the municipal trucks and dumped in the land fill. In other areas collected waste are generally disposed of by households. In Central Kolkata a good amount of waste is generated by offices and commercial enterprises. In most cases the working area of these waste pickers is within 2 to 3 Kms from their residence. In case of Dhapa, waste pickers, who live in Mathpukur, an agglomeration at the western side of the Eastern Metropolitan Bypass inside Kolkata, were interviewed. Another criteria was followed – any waste picker below 18 years was not interviewed. They were not considered as worker. They will not be entitled for any social security benefit. Pickers were selected from 5 zones –

East Kolkata	Dhapa	23
West Kolkata	BNR	21
South Kolkata	Rashbehari	21
Central Kolkata	Park Circus	17
North Kolkata	Bagbazar, Rajabazar	29
Total		111

Table 1

Waste Pickers Role in Waste Management

In **India**, problem of waste management deserves urgent attention. Official figures say around **62 million tonnes of solid waste is produced** in the country every year of which only 43 million tonnes is collected, only 12 million tonnes treated and the rest dumped. Ten million tonnes of garbage is generated in just the metropolitan cities: **Delhi, Mumbai, Chennai, Hyderabad, Bangalore and Kolkata**. The landfills of most of these cities are already overflowing, with no space to accommodate fresh garbage waste.

Municipal Solid Waste Rules 2016 provides a more or less comprehensive solution to this problem, if implemented in proper manner. Salient features of the Rules relevant to this study -

- (a) "waste picker" means a person or groups of persons informally engaged in collection and recovery of reusable and recyclable solid waste from the source of waste generation, the streets, bins, material recovery facilities, process sing and waste disposal facilities for sale to recyclers directly or through intermediaries to earn their livelihood.
- (b) Source segregation of waste at source made compulsory. "Segregate and store the waste generated in three separate streams namely bio-degradable, non biodegradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorised waste pickers or waste collectors."
- (c) Recyclable waste will not be taken to dump site. Most of the recyclable wastes have to be handed over to the waste collectors or pickers at the source point. Rest of the recyclables will be taken by the waste pickers to a secondary facility for sorting to maximize recycling. "**Duties and responsibilities of local authorities** - Setup material recovery facilities or **secondary storage facilities** with sufficient space for sorting of recyclable materials to enable informal or authorised waste pickers and waste collectors to separate recyclables from the waste and provide easy access to waste pickers and recyclers for collection of segregated recyclable waste such as paper, plastic, metal, glass, textile from the source of generation or from material recovery facilities."
- (d) Organic waste should be processed as much as possible at the source point, especially in case of housing associations, institutions. Rest of the waste need to be processed through various technologies like composting, vermin-composting, bio-methenation etc. "Allow only the non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill however, every effort shall be made to recycle or reuse the rejects to achieve the desired objective of zero waste going to landfill"

- (e) Waste pickers need to be involved in waste management to ensure maximum segregation and processing and minimum land filling. “**Duties and responsibilities of local authorities** (i) Establish a system to recognise organisations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorised waste-pickers and waste collectors to facilitate their participation in solid waste management including door to door collection of waste; (ii) Facilitate formation of Self Help Groups, provide identity cards and thereafter encourage integration in solid waste management including door to door collection of waste.”

For effective implementation of the Rules, Swachh Bharat Abhiyaan has allotted the maximum of 29 marks for a city if Municipal Corporation has integrated waste pickers in solid waste management. (Ref: Page 17 Swachh Bharat Marksheet). They have also prescribed the inclusion of waste pickers in the **guidelines** for the upcoming survey on status of waste management in February 2017.

National Safai Karmachari Finance & Development Corporation (NSKFDC), constituted by Swachh Bharat Mission, has decided to include waste pickers as target group for providing financing and self-development skills. This decision was taken on the direction of Union Ministry of Social Justice and Empowerment (MoSJE).



Greater Vishakhapatnam Municipal Corporation Commissioner Harinarayanan presenting identity card to an waste picker at a programme at Gnanapuram in Visakhapatnam

On 1st June, 2016, Ms. Anita Agnihotri, Secretary, MoSJE met the representatives of Alliance of Indian waste pickers, a national coalition of waste pickers organizations, in Delhi. An idea of including waste pickers in the financing and self-development schemes extended to Safai Karmacharis (sanitary/health workers) by the Ministry was floated. Following the workshop, alliance members and representatives of MoSJE and later, NSKFDC interacted continuously with discussion on inclusion. References to Solid and Plastic Waste Management Rules, 2016 notified by Ministry of Environment, Forest and Climate Change (MoEFCC), which prescribe integration of waste pickers in solid waste management of cities, were made.

On 29th August, 2016, waste pickers were included as target group in the Article of Association of NSKFDC, after the approval for amendment in the rules of NSKFDC by the Ministry. The schemes related to financing and skill development was undertaken by NSKFDC, an apex corporation set up by Government of India and channelized through state channelizing agencies nominated by state and union territory governments, nationalised and regional rural banks. In Karnataka and Maharashtra, Dr B. R. Ambedkar Development Corporation and Mahatma Phule Backward Class Development Corporation are respective channelizing agencies. Similar agencies are nominated in other states by the state governments under the aegis of Social Welfare Developments.

Following these decisions waste pickers are being recognised in number of cities by the municipal corporations and municipalities. Till 10th January 2017, 17 cities have started issuing identity cards to the recognized waste pickers. States like Karnataka, Maharashtra, Madhya Pradesh and Andhra Pradesh have been very active with regards to issuance of occupational identity cards. Social Welfare Departments in these states are not only issuing occupational identity cards, but also planning to provide skill training.

List of cities where identity cards have been issued to waste pickers by the city authorities

- Srinagar, Jammu & Kashmir- Chintan
- Muzzafarpur, Bihar- All India Kabadi Mazdoor Mahasangh
- Indore, Madhya Pradesh - Jan Vikas Society
- Navi Mumbai, Maharashtra - Stree Mukti Sangathana Pune, Maharashtra- Kagad Kach Patra Kashtakari Panchayat
- Pimpri Chinchwad, Maharashtra - Kagad Kach Patra Kashtakari Panchayat
- Buldana - Maharashtra, Stree Mukti Sangathana
- Kalyan Dombivali - Maharashtra, Stree Mukti Sangathana
- Kolhapur, Maharashtra- Avani Sanstha
- Eluru, Andhra Pradesh - Dalit Bahujan Resource Center
- Guntur- Andhra Pradesh - Dalit Bahujan Resource Center
- Vijayawada- Andhra Pradesh - Dalit Bahujan Resource Center
- Vishakhapatnam, AP - Association for Urban and Tribal Development
- Bangalore - Karnataka, Hasiru Dala
- Tumkuru - Karnataka, Hasiru Dala
- Nelamangala - Karnataka, Hasiru Dala
- Mysore - Karnataka- Hasiru Dala

Waste Picking in Kolkata

Around 4000 MT of waste is generated in Kolkata. A number of studies on composition in municipal solid waste in Indian cities indicate that 15% of such waste by weight is recyclable. So the figure comes to **600 MT per day**. In a very conservative estimate, value of such waste, considering Rs. 10 per Kg is INR 60 Lakhs. If this waste could be segregated at source, as practiced in many of the cities in the world, these materials would not come to municipal waste stream. If the generators of waste are made conscious to store their dry recyclable waste in clean condition for some time and handed over to some collectors, there was no scope of waste picking. This waste does not rot, does not stink. This can be kept in households or generation point for longer period. Recycling facilities, which are plenty in Kolkata, could receive this waste through collectors in a different waste route from the usual municipal route. If efforts are taken to sincerely **implement** Solid Waste Management Rules, 2016, this would be very much possible.

The current practice of almost all the generators is to mix waste at the source. There is no point in being conscious to segregate waste by individual or group effort if these segregated wastes are handed over to the same municipal waste stream. Ultimately they get mixed up. A holistic approach is to be taken by the waste managers to see that after segregation, the dry recyclable waste are taken through different route (set up by the recyclers) where as the biodegradable waste is taken by municipal vehicles to the processing units viz., composting, bio-methanation etc. The Rules suggests “Allow only the non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill however, every effort shall be made to recycle or reuse the rejects to achieve the desired objective of zero waste going to landfill.”

The need of recognizing the waste pickers is felt here. It is no more a philanthropic act to recognize them as unorganized labours and to provide the social benefits. If they are recognized, authorized to work in particular localities, designated to collect recyclable waste directly from the generators and provided secondary sorting space then the entire recyclable waste could avoid the municipal waste stream. Unaesthetic, unhygienic and hazardous practice of waste picking from street side and dump site could be stopped. Waste pickers would be turned as waste collectors.

Unfortunately the reality is different now. 600 MT of recyclable waste comes in the waste stream. A portion of this, around 25% is collected by the waste pickers from the street sides and intermediate stations where the municipal workers locally dump their waste. Waste pickers start work very early in the morning to pick up as much as possible from the street

sides. When the municipal workers start working, the pickers go to the intermediate stations. Though street scavenging is a nuisance for the city, this is still continuing.

An effort has been made to stop picking from the intermediate stations by introducing compactor machines. These machines are being operated at the place of intermediate stations. Waste pickers are not allowed to pick up waste from the intermediate dumps. Mixed waste is directly being feed into the compactors. Large amount of waste is compacted to reduce the volume and remove moisture content. Such practice is presenting a cleaner view. Transportation of waste has also been much cleaner and safe. But the system does not comply with the mandate of segregated waste collection. Hence all the recyclable waste are mixed up and taken away by the machines to dispose of in the dumping ground. The street waste pickers are not getting access to these wastes. Their pick as well as income is reducing drastically.

In general condition, if the street waste pickers would pick up around 25% of the recyclables. Around 75% of the recyclable waste is usually taken to the dump site in mixed condition. A large number of waste pickers work day and night in the dump site. In spite of their all efforts driven by livelihood needs, one can see that major portion of the recyclable waste in soiled condition remain dumped. Here it may be estimated; around another 25% of the total recyclable waste can be recovered by the pickers. **Therefore, around 50% of the recyclables remain dumped in the land fill.** Apparently, after introduction of the compactors, the amount of recovery of recyclables (which are being taken away from the streets, depriving the street waste pickers) by the pickers at the dump site should have increased. But the waste pickers at the dump site made it a point that mixed waste carried by the compactors are in such pressed condition that the recyclables cannot be easily recovered. They mentioned that their collection has also decreased. So, it is obvious that the proportion of recyclables remaining in the dump site is increasing.

The fact that remains that these recyclable wastes are losing the chance of recycling.

Here we can estimate that the value of 50% recyclable waste, around INR 30 lakhs per day is lost in absence of improper management. But this is not the only loss. There are two other aspects -

- a) **75% of recyclable** waste is being unnecessarily transported from the city to the dump site. They are picked up by waste pickers in hazardous and unhygienic condition and again brought back to the different recycling corners of the city. Had the proper management system exist, all these recyclables could be directly taken by the recognized (if they are recognized by the KMC) waste collectors from the generation points to the recycling corners through intermediate traders. Transportation cost of

450 MT of waste or more than **100 trips** could be avoided by the KMC. Both money and fuel could be saved.

- b) This huge amount of recyclable waste, when get mixed up with organic waste (50 to 55%) turns the whole waste useless. Any processing of organic waste, be it composting, vermin-composting, anaerobic digestion or, waste to energy, cannot be efficiently implemented with such mixed waste.

Number of Waste Pickers in Kolkata

This is a crucial question to answer. Several important studies on socio-economic and health status by recognized institutes and researchers have been conducted at different times. But any specific number, based on some survey or assessment, has not been available.

The present study has also similar **limitation**. It has been designed to study the present socio-economic status in the light of implementation of the new Rules and in terms of waste management. **There is need to conduct a specific study on number with area and clusters in the process of identifying them for providing recognition.**

However we can go through some figures estimated by the experts in the field as well as the waste pickers' organizations. In an estimate, around 5000 waste pickers work in Kolkata city. Livelihood of more than 25000 people is partially or wholly dependent on such picking. Kolkata Municipal Corporation has 144 wards. According to a municipal councilor, average 15 waste pickers work in a ward. Generally they live in specific clusters like canal sides, railway line sides and foot paths but operate throughout the city. Another 3000 pickers work in Dhapa dump site. So, approximately the number of waste pickers, working in the city has been estimated around 5000.

Again, Global Alliance of Waste Pickers, which has mapped the number of waste pickers in the important cities in the world, has claimed that there are 25000 to 50000 waste pickers in Kolkata. They have cited an interview with a representative of Tiljala Shed, a noted NGO working with the waste pickers for a long time. In our direct interview the representative of Tiljala Shed and Waste Pickers Association of Kolkata did not mention any such figure. They also felt the need of a sincere count.

Let us look from another angle. It is estimated that around 50% of the recyclable waste is picked up by the waste pickers. Value of this waste, according to the estimate made in earlier section, is INR 30 Lakhs. If average income of the waste pickers, as revealed from our survey, is INR 200, the number of waste pickers will be around 15000.

Results of the Survey

Personal Information

There is wide range in ages of the waste pickers. The waste pickers interviewed were mainly in working age group between 25 and 60 years. But some of them were above 60 years and one even of 72 years. But their proportion is less than 10% of the work force. At the lower side, there were around 15 % pickers between 18 years and 25 years.

Age Group of Waste Pickers Interviewed	
Age Group	No. of Waste Pickers
18 - 24	16
25 - 40	48
41 - 60	39
61 - 72	8

Table 2

A good number of under-aged boys and girls between 7 to 18 years also are engaged in the profession. Many of them work either alone or with the aged waste pickers of the same family. Some of the middle aged and senior pickers, who were formally interviewed, work with their minor son or daughter or grandson or granddaughter. These under aged pickers were not interviewed as they cannot be and should not be recognized as part of working population.

A probe was made to know the age at which the waste pickers started waste picking. It revealed that almost all of them started the work at their teen-age and some even at below teen age (Chart 1). This clearly reveals that very few waste pickers decide themselves to join the profession. But now the trend is different. Waste pickers are trying to send their children to school. Still around 5 to 10% of them take their children to work.

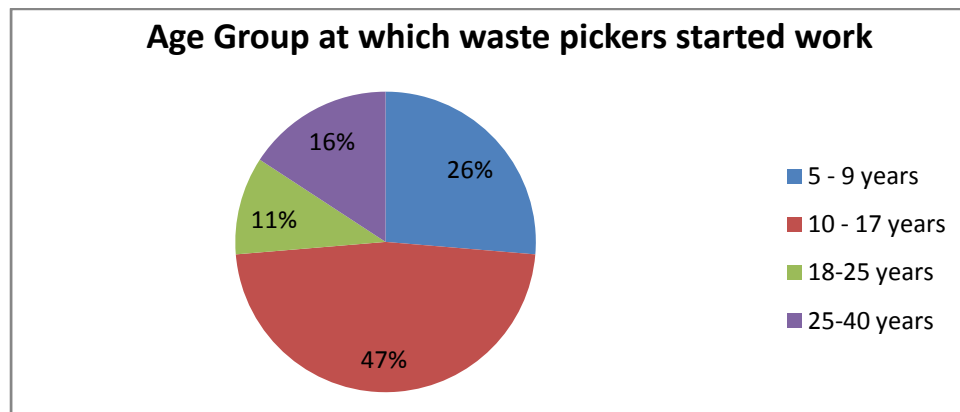


Chart 1

Number of female waste pickers interviewed was at least 75% of the total interviewees. But that does not confirm that practically sex ratio of engagement in waste picking is the same. It is ascertained from the surveyors that male waste pickers were relatively less interested to respond to the survey. In contrast to that the female waste pickers were very much enthusiastic to respond to the survey. They were also providing other female contacts. However a rough estimate was done through discussion with both male and female waste pickers and local people. It has been ascertained that the ratio of female and male waste pickers should be around 60 : 40. At the same time this is to be noted that due to various factors (discussed later), average income of the waste pickers are getting reduced and many of them are partially or wholly shifting from this profession. As more options are available to the male counterparts, they are departing from this profession earlier, reducing the male ratio in proportion. Another important point is that the number of younger male waste pickers between age group of 18 and 25 is almost Nil. Here among the interviewees only 1 male picker was at the age of 19 whereas all other younger pickers were female. This fact also confirms that the female ratio will increase as much as the hazard of the profession increases and income generation decreases.

Mother tongue of these pickers in most cases is Bengali. Around 78% of the interviewees were Bengalis and 22% are of Hindi origin. But interestingly 8 - 10 pickers, particularly working in Rajabazar area are not sure about their mother tongue. They talk both in Bengali and Hindi. Their family members also use both the languages. As most of them were Muslim, identification could not be made from their names.

By religion these waste pickers are either Muslim or Hindu. Around 62% of them were Muslim where as 38% pickers were Hindu. Belonging to religion entirely depends upon the areas where the waste pickers work and reside. In case of BNR in West Kolkata, Park Circus in Central Kolkata and Rajabazar in North Kolkata, almost all the waste pickers are Muslims without exceptions. On the other hand, almost all the pickers in Dhapa, Rashbehari and Rajabazar were Hindu.

Around 86% of the waste pickers were found illiterate. They cannot read and write. Only 14% among them have very little capacity of reading and writing. Illiteracy prevails irrespective of religion and linguistic identity. Only some of the pickers in Dhapa and Rashbehari areas have limited capacity of reading and writing. They also had primary schooling. Pickers of other places did not have any schooling.

58% of these pickers took birth in Kolkata and adjacent areas whereas 42% were born in villages of adjacent districts of Kolkata in West Bengal. None of them comes from other state. Those who speak mostly Hindi have also informed that they took birth in West Bengal.

All the waste pickers interviewed are married with only one exception. Those who are at the age of 18 to 25 are also married. Only exception is the male picker who is at the age of 19. Number of children they are having is really concerning. The data reveals that family welfare or more specifically birth control programs could not touch them at all. More than 35% of them are having 4 - 6 children. There are examples of even having 8 to 9 children. Chart 2 gives an overview -

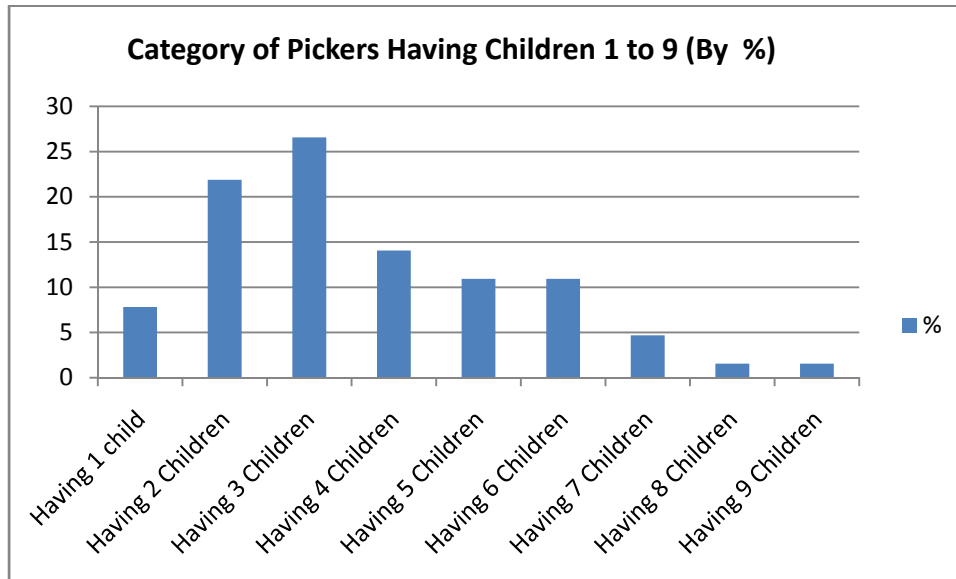


Chart 2

Around 60% of these waste pickers have other waste picker members in their families. Mostly both husband-wife and in areas like BNR, Rajabazar, the children are also engaged in waste picking. Around 40% of them have informed that they took loan of more than Rs. 10000, once or twice in last 5 years but 60% among them could not specifically mention why the loans were taken. Reasons shown were marriage by 9 pickers, medical ground by 5 pickers and running the family by 3 pickers.

Group Identity

Probe was made to understand whether these waste pickers form groups during work. It is ascertained that 70% of the pickers work individually. 20% of them work with their family members. 10% of them form groups among themselves. Those who even form groups (average 3 to 4 in numbers) do not have any practice of collecting and segregating together for more efficient performance in terms of picking. Main reason of formation of groups is to save themselves from harassment by police, local goons and street dogs. Their knowledge about efficacy of group work is very limited. They do not have any such practice of combined picking and segregation.

Only 32% of the pickers, who were interviewed, belong to some organization. NGOs like **Tiljala Shed** and **The Calcutta Samaritans** are organizing them in several pockets. Tiljala Shed has a community platform, since 15 years, namely **The Rag Pickers Association of Calcutta**. Their work mainly concentrated in Central Kolkata. **The Calcutta Samaritan** has started organizing the pickers in South and West Kolkata. But these are yet to be developed as membership based organizations. The waste pickers involved in any organization mainly respond to the call given by the NGOs. Of late their organization activities have increased. During the survey period a rally with assembly and deputation to the Minister-in-Charge of Municipal Affairs Department took place. The issue has been raised with the Social Welfare Department also. Further discussion on this may come later. However, more than 68% of the waste pickers interviewed, do not belong to any organization. According to the impression of the surveyors, proportion of pickers belonging to some organization is even less than that. Some portion of the survey was conducted through these organizational connections. So the proportion of organized pickers shows higher than the actual proportion exist. Surveyors assessed that at least 90% of the waste pickers in the city, if not more, do not belong to any organization. But this is also to be noted that the initiative of organizing them, which was absent so long, is now somehow conspicuous.

Working Schedule

Most of the waste pickers start work since dawn. Their major concern is to collect as much as possible before municipal workers and scavengers start working. They work till early morning. 76% collectors maintain this schedule. Few of them, around 10 - 12%, again come



back to work in the afternoon. In case of Dhapa dumping ground, the schedule is different. Here the work starts much later at around 9 AM. Work continues till next early morning. A good number of waste pickers work in Dhapa throughout the night carrying torch fitted on their foreheads. Similarly there are some waste pickers inside the city, who work in night. They usually work in commercial areas where waste is disposed of after the office hours.

Working hours of these pickers widely vary. There are pickers whose only income is picking and still they work for 3 hours in a day. Again there are pickers who work even for 14 hours.

Duration of picking of many of them is also not the same for all the working days. However average working hours of the picker by per cent is as follows –

Working Hours	% of Waste Pickers
3	3
4	4
5	5
6	8
7	7
8	16
9	12
10	15
11	11
12	12
13	3
14	3

Table 3

Most of them work 6 days in week. Some (around 10%) work 7 days in week.

But all of them informed that during rainy season they cannot work according to this routine. In rainy season they face problem in both ways – their working hours get reduced according to the period of rain and most of the waste they intend to collect get soiled and devalued.

Livelihood

18% of the waste pickers have income source parallel to waste picking. Others do not have any other means of income. 88% of those who have parallel source of income also informed that their major income is earned from waste picking. Still this may be one side of the story. As the interviewees were selected with criteria that their major income should come from waste picking, the observation had been so. Otherwise all the interviewees informed that there are other people who are part time waste pickers. Especially those, who are engaged in low paid jobs such as domestic servants, are part time waste pickers.

Items collected by the waste pickers are varied. It depends upon the way they sell the picked items. Around 35% of the waste pickers sell the complete bags without any segregation. In such cases, the price is determined generally by the weight of the bag. Sometimes the price is determined by the understanding of the kabadiwalas, who are buying these bags from the pickers. Apparently it seems that this is arbitrarily decided. But those who sell the complete bags informed that the experienced eyes of kabadiwalas check the bags physically (taking

side view and top view), verbally quote a price and then a consensus is formed between both parties. Surveyors noted that in such cases the selling price of the collected items is lowest. It seems that these waste pickers are most deprived. But still they sell the complete bags when they (a) do not have space of segregation, (b) do not have segregation skill, (c) do not have time to segregate after collection and (d) do not have any access of any particular category of waste items. Such pickers could not throw any light on the prices of the individual items of waste.

In case of other pickers, who sell their collection by category, exercise their option to choose specific item. All kinds of plastic of consumable materials are collected without exception. But in case of disposable plastic items like poly bag, poly cup, multi layered packaging, satchels etc. choices of the pickers matter. Those who have access to have a good amount of disposable waste items like poly bags or poly cups (in relatively cleaner condition) usually collect those and sell at good prices. But individually scattered and littered disposable items are not picked up. Very small plastic packets like satchels are not picked up at all. Both non-recyclable and non-reusable plastic packaging like polystyrene, styrofoam do not interest the pickers. Some only use these collections for burning. Otherwise these wastes go into landfills. Disposed shoes, most of which now a days are made of PVC, are collected by all waste pickers. But disposed leather shoes or chappals, if cannot be reused, are not collected as they do not have sale value.

Paper, Card board, pitch board, foil are all collected and sold. But glass or generally broken glass is also not collected by 45% pickers. They find these hazardous. Price of broken glass is also not attractive with respect to their weight. Small pieces of cloth also do not attract these pickers as their sell value is insignificant and generally they are available at very much soiled condition. More than 50% pickers do not take interest in collecting such small pieces of soiled cloth. In case of metals in waste stream, all of them are interested but amount of metal received in waste stream is very less. End of life metal consumables are always directly sold to kabadiwalas.

A special effort was given to know whether these pickers collect E-waste (Electric and Electronic) from the waste stream. It was revealed that at the bottom level of the waste chain, where these pickers belong, E-waste is not recognized categorically. These are considered only as plastic and metal waste. They do not get any special price for these.

Waste pickers' interest for collection of major items in waste stream is as follows -



Chart 3

The amount of waste collected by pickers varies in wide range as follows -

% of Waste Pickers	Waste Collected per day
34	5 - 10 Kg
24	10 - 15 Kg
18	20 - 25 Kg
19	25 - 40 Kg
6	40 - 60 Kg

Table 4

Income levels of the waste pickers also vary in wide range. It is logical that the pickers who do not work for more than 3 hours may have less income. But it is observed that the income level varies in accordance to the materials collected also. Around 12% of them earn Rs. 40 - 100 per day. Average income of most of the waste pickers is between Rs. 100 to 250 per day irrespective of their locations. A few earns more than Rs. 300 per day. This is a profession where women waste pickers do not have to face any marked discrimination in terms of price of waste. They earn as per their value of collection. But those who sell complete bags with non-segregated waste at least prices are mostly women. A general picture on waste pickers' average income may be available in the following chart -

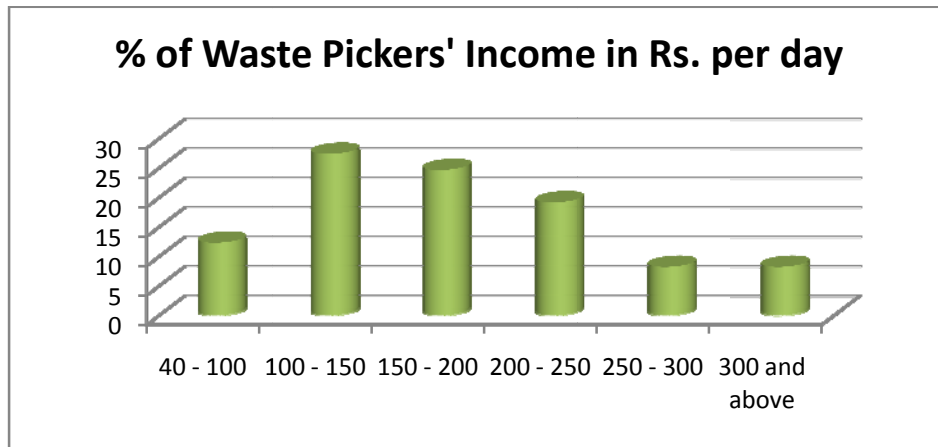


Chart 4

30% of the waste pickers sell their waste at the point of collection. Mainly waste pickers in West Kolkata informed that representatives of kabadiwalas come to them and collect waste in the area of collection. Such example is present in other areas also but much less in number. Generally the pickers themselves take their collection to the junk shops. Particularly those, who have scope to segregate after collection, sell their waste to the junk shops and get available best prices.

Prices of collected waste vary a lot. In case of complete bags sold on the basis of physical assessment of kabadiwals, any pattern could not be drawn. In case of segregated waste also prices vary to some extent. It depends up on the bargaining capacity of the pickers, quality of segregation, amount of collection, area of collection, degree of soiling and many other factors. Still an average price range of each major item has come out from the survey. Still there should be a caution that there is nothing termed as “**market price**” for the waste items. The price ranges mentioned below are to be considered as base-stage price and may not fit in any other stage of transactions -

Waste Items	Average Price in per Kg
White Plastic (Sada Gurya)	Rs. 12 - 16
Black Plastic (Kala Gurya)	Rs. 4 - 6
Paper	Rs. 2 - 5
Pitch Board	Rs. 5 - 7
Broken Glass	Rs. 1 - 2
Iron	Rs. 8 - 12
Tin	Rs. 3 - 5
Poly Bag	Rs 4 - 5
Poly Cup	Rs. 12 - 16
Plastic bottle	Rs. 18 - 22

Table 5

There are many other waste items which are sold in varied arrangements. For example, individual waste pickers do not collect or sell disposed leather but bulk amount of leather waste is sold at some specific corners of the city. This is true for many other items.

When the pickers were asked about the condition of waste (clean or soiled) they collect, only one of them informed that he collects only clean waste. He actually collects waste paper near a printer's workshop. 38% of the pickers informed that they get only dirty and soiled waste. Others informed that they get both dirty and clean waste.

Around 43% of them told that the value of the waste gets reduced when they are dirty. Others seem to be unaware that clean dry waste may fetch them better price. If any clean waste is collected, they even mix up those with soiled dirty waste.

Another concerning issue regarding livelihood is the new system of waste disposal in KMC area. 94% of the waste pickers complained that collection of everyone is decreasing drastically. Introduction of **compactor machines and vehicles** is gradually evicting the waste pickers from this profession. Though the Waste Management Rules 2016 made source segregation compulsory any such practice has not been practically functioning in KMC area. On the contrary, the compactor machines are fed with all the mixed waste in the intermediate stations. Waste pickers are neither getting access to source segregated waste, nor being allowed to collect from the mixed waste as they did earlier. So their collection is getting reduced day by day. On the other end, when the compressed mixed waste is being disposed at Dhapa dumping ground, the same does not leave any scope to the waste pickers to collect the recyclable dry waste from thick compressed mixed waste. Thus, waste pickers' collections in dumping ground are getting reduced day by day and many of them are leaving the profession. This is very concerning from the environmental or more specifically climate change point of view, as opportunity of recycling is being drastically reduced.

Living Condition

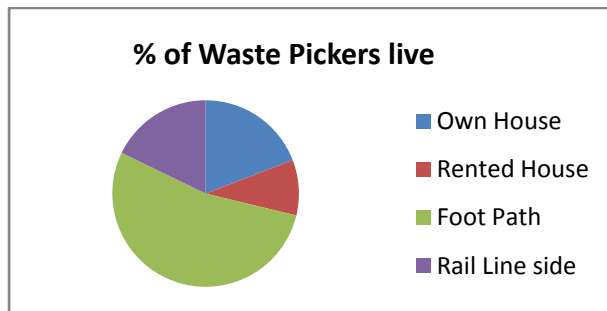


Chart 5

Most of the pickers live in foot path, rail line side and canal side. Only a few of them have their own house or rented residence.

In Dhapa area, the pickers, who are mostly Hindus, have their own homes in colonies. A few in the same area live in rented house in colonies. All others are compelled to live in public place. One of their major concerns is absence of address.

All the pickers interviewed except those who live in Dhapa area, live without boundary walls under plastic shed. They are most vulnerable to natural calamities. In Dhapa 15% of the pickers have brick walls and tin shed.

Though their living condition is precarious, majority of them managed to use electricity through legal or illegal means. 40% of them cannot use electricity in their living place. They manage with street light.

Hygiene and Security

Only 2 of these waste pickers have sanitary latrines in their houses. Even in Dhapa, those who live in own houses, do not have latrines with their houses. They use community latrines available in the colony. Around 55% of the pickers and their families use community or public sanitary latrines. 6% of them use unauthorized latrines. 39% still defecate in open field or road side. They do not have any access to community latrines.

Use of Toilet	
Own Latrine	2
Public Latrine	58
Unauthorized (Khata) Latrine	7
Open defecate (field / drain)	44

Table 6

100% of the waste pickers face problem with bad smell, handling dirty waste and frequent cut and prick injury due to handling of such waste. They do not have clear idea about segregation before collection or picking but when the idea was discussed with them, they readily react that introduction of such system can easily solve the above problems. 65% of the pickers are scared about dog chase and dog bite. Though most of them have accepted this as necessary hazard of the job, still they remain very scared throughout their working hours. In fact they remain under trauma. 45% of them are also scared about harassment of police or local goons. Though waste picking is not banned, they complain that the lowest section of police personnel often harass them for unexplained reasons. Some time local goons also harass them for unexplained and unpredictable reasons.

Waste pickers suffer from various diseases. Most common is low back pain. Almost everyone complained about this symptom. Stomach problem associated with various diseases, cough

and cold with frequent fever are major common diseases, as stated by the pickers. 10% pickers suffer from jaundice and 7% suffer from asthma. TB is not very common among them. As the sample size is small, it cannot be claimed as general feature because elsewhere waste pickers are very susceptible to TB. The following chart shows the pattern of diseases suffered by the pickers.

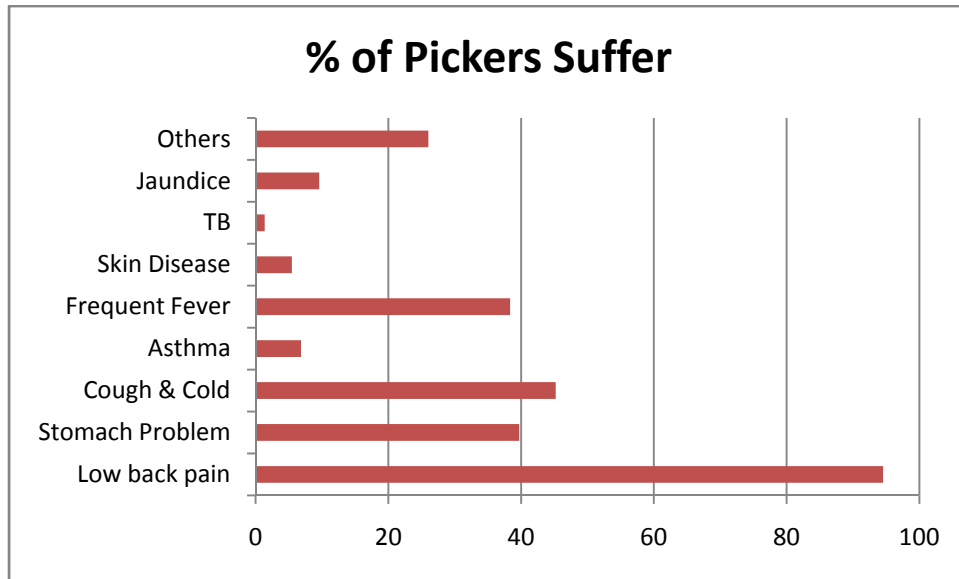


Chart 6

40% of the pickers suffered from one or other major infectious diseases like malaria, dengue, typhoid, hepatitis etc. in last three years. 15% answered that they did not have any such history of disease in recent past. Others did not respond to this question.

Only 18% among them use to take tetanus vaccine, that too, irregularly. This also happens only when some NGO or local authority of Corporation conduct any such vaccination programme. No one among them cares for having vaccine for Hepatitis or any other infectious diseases.

Use of personal protective equipments is completely absent among the pickers in Kolkata. Gloves and masks are not at all used. However most of them work with something to protect their feet. Earlier they even used to work bare foot. But they informed that since last few years they are using either shoes or chappals. Among these waste picker 8% are used to wearing shows during work and all other use chappals.

While asked about reasons for not using gloves and masks, 65% admitted that they are not comfortable with using these equipments. 35% informed that due to poor economic condition and non-availability of these equipments they do not use such equipments. While asked whether they are ready to use such equipments if provided free of cost, 90% of them gladly agreed. But the surveyors by impression are not so optimistic.

Around 63% of the pickers interviewed are addicted to one or more intoxicating items. 12% of them smoke, 15% drink and 4% are addicted to ganja (hemp). Nobody agreed to have drug (narcotic) addiction. But rest 32% pickers have various kinds of addictions like chewing of tobacco, gutkha, betel, khoini etc.

Conclusion

The whole world is now concerned to reduce consumption as well as implement efficient recycling. Effort is being made to break the vicious circle of more consumption – more production – more mining – more resource depletion – more energy consumption. More and more efficient recycling is being considered as the key factor to resist climate change.

Waste pickers are the primary tool in this recycling initiative. For their livelihood they are performing such a work which is essential for sustainability and again which is generally neglected, marginalized. These waste pickers are now considered as **climate volunteers**.

In India, Solid Waste Management Rules 2016 notified on 8th April 2016 clearly states that “all resident welfare and market associations shall ensure segregation of waste at source by the generators as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorised recyclers”.

Article 15 of the Rules also states –

(c) establish a system to recognise organisations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorised waste-pickers and waste collectors to facilitate their participation in solid waste management including door to door collection of waste;

(d) facilitate formation of Self Help Groups, provide identity cards and thereafter encourage integration in solid waste management including door to door collection of waste;

Many of the cities and towns in India are traversing through this path. Areas of work of individual waste pickerws are being identified in consultation with the waste pickers' organizations. Waste pickers are being recognized and enrolled by the city or town authorities, Identity Cards are being issued. They are being allowed to collect segregated dry waste directly from the households in their designated areas.

During the survey period one important event took place in Kolkata. On 21st December, a rally of waste pickers was organized. The rally walked from Ramlila Maidan in Moulali to Y-Channel in Esplanade and held a gathering. A team of representatives submitted a memorandum to the Minister-in-Charge, Municipal Affairs Department. **This is perhaps the first gathering of waste pickers in Kolkata demanding the livelihood rights.** The major demands of the waste pickers were inclusion of waste picking in recognized occupation,

recognize the waste pickers as unorganized labour force under SASPFUW (State Assisted Scheme of Provident Fund for Unrecognized Workers) scheme, legalization of their actual address, ensure segregation of waste before being dumped, scope for removal of recyclable waste materials before the waste is dumped into the garbage compactors. All the waste picker speakers in the gathering in Y-Channel repeatedly mentioned that compactors have adversely affected the income of waste pickers of the city.

This is the high time to draw a plan for involving waste pickers of the city in waste management to ensure maximum possible recycling.

ANNEXURE I

Waste Picking at Dhapa Solid Waste Dump Site

Visit Report of Prof. Arunabha Majumder

- Kolkata City generates around 3800 to 4000 MT of municipal solid waste daily. Organic part of the solid waste ranges between 50 and 55 %. The inorganic recyclable part is approximately 15 % and the said amount is salvaged by the rag-pickers / scavengers from the city as well as dumping ground at Dhapa.
- Uchu Pota in Dhapa area (Rag-picker's Colony- back side of dumping ground) under Ward 58 of KMC was visited on 31st December, 2016 to interact with the rag-pickers.
- Both male and female rag-pickers could be seen to collect recyclables from the waste dumps. Female waste pickers are more than the male waste pickers. Children are also engaged in waste picking. Often children could be seen with their mother collecting recyclable waste.
- Majority of the waste pickers are illiterate. Initially children go to school or take private tuition but discontinue for joining in waste picking activities.
- At Dhapa dumping site recyclable waste salvaging by the rag-pickers continue day and night. In the night only male waste pickers work.
- People from distance places come to Dhapa waste dumping ground for waste picking.
- All waste pickers suffer from occupational health hazards. The occupational health hazards include diarrhea, dysentery, gastro-enteritis, typhoid, Infective hepatitis, worm infestation, respiratory infection, asthma, skin disease, leg / hand cut or injury, cold and fever, sun-stroke etc. Occupational risks also include thunder-struck, snake bite, dog or other animal bite, body-ache etc.
- During discussion with the rag-pickers revealed that there may be around 3000 waste pickers are working at Dhapa dumping ground for their livelihood.

- The daily earning may be between Rs 50/- and Rs 300/- per person per day. Recyclable waste collection varies between 10 kg and 60 kg / person / day.
- At Dhapa rag-pickers work between 4 and 8 hrs per day depending on climatic as well as health condition.
- They work between 18 and 22 days per month to earn their livelihood. Some families earn Rs 10000/- per month collectively.
- Mostly rag-pickers do not like the job of waste picking. If alternate works are available the rag-pickers prefer to opt for that. Many rag-pickers switched over to alternate work leaving waste picking. Thus male rag-pickers leaves waste picking profession compared to women.
- Waste pickers sell recyclable materials to the middle-men and as such they get lesser money compared to the market rate.
- Waste-pickers are unorganized labour. There is no provision of social security for them.
- They spent part of their income for medical expenses. They like to have regular medical camp in their colony.
- Some colonies where rag-pickers reside are very close to the dump site. They suffer from air pollution due to waste burning as well as strong wind.
- Leachate from the waste dump pollutes the surrounding. Pigs and dogs are common animals in and around dump site.
- Rag-pickers stated that they are experiencing difficulty in salvaging recyclable inorganic waste from the disposal of compactor-fitted vehicles.

ANNEXURE II

Letter of NSDFDC to the West Bengal Government

National Safai Karmacharis Finance & Development Corporation (A Government of India Undertaking Under the Ministry of Social Justice and Empowerment)

No. NSKFDC/Rehabilitation of Rag Pickers/56/2016/1600 dated 27 October, 2016

Shri Sanjay K Thade
Principal Secretary
BC Welfare Department
Govt. of West Bengal

Sub ; Request for including waste pickers in various schemes extended to safai karmacharis and detailing out the procedure to identify wastepickers

The State Government is requested to confirm the following

- a) The agency(ies) authorized for declaring a person as waste picker / waste collector

- b) Whether the State Channelizing Agencies (SCAs) nominated by the State Government for implementation of NSKFDC schemes will also disburse funds to the identified waste pickers other than the notified target group of safai karmacharis and manual scavengers

K Narayana
Managing Director

ANNEXURE III

Few health cards issued by various city authorities



नगर पालिक निगम, इन्दौर
प्लास्टिक टोस अपशिष्ट प्रबंधन रैग पीकर्स उन्धान परियोजना

परिचय पत्र

नाम : पार्वती निरगुडे
आयु : 45
पति : चन्दर निरगुडे
पता : चितावद कांकड, इन्दौर

डायरेक्टर
जनविकास सोसायटी, इन्दौर

मुख्य स्वास्थ्य निरीक्षक
नगर पालिक निगम, इन्दौर

Valid from : 1-12-2016 To 30-11-2017 MPW/IMC-310

दिशा-निर्देश

1. यह परिचय-पत्र मात्र पर्यावरण मित्र (रैग पीकर्स) हेतु जारी किया गया है।
2. परिचय-पत्र का उपयोग घर-घर से प्लास्टिक कचरा प्राप्त करने हेतु किया जावे।
3. परिचय-पत्र गुम होने पर तत्काल कार्यालय में लिखित सूचना दी जावे।
4. पुनः परिचय-पत्र बनवाने पर 50/- (पचाय रूपये) अर्थदंड लगेगा।
5. परिचय-पत्र गुम होने पर समीप के थाने पर सूचना दी जावे।
6. कार्यमुक्त होने अथवा कार्य छोड़ने पर परिचय-पत्र कार्यालय में जमा किया जावे।
7. परिचय-पत्र जिस व्यक्ति को जारी किया जा रहा है, उसी के द्वारा उपयोग किया जावेगा।
8. परिचय-पत्र की सुरक्षा की जिम्मेदारी संबंधित की होगी।

नगर निगम, मुजफ्फरपुर
परिचय-पत्र

ID No.- 0004

रामप्रवेश पासवान
पिता का नाम : स्व० गणेश पासवान
उम्र : 27 वर्ष
व्यवसाय : वेस्ट पिकर्स
पता : अखाराघाट, ओ.पी.
मुजफ्फरपुर
मोबाईल नं. : 9504113147
वार्ड नं. : 17

निर्गत तिथि-02.10.2016

नगर आयुक्त
नगर निगम, मुज०

Rapid Assessment Survey on Socio economic Condition of Waste Pickers in KMC
Few Photographs on Waste Pickers' Work and Life



Sorting after the day's collection



Waste collection in Dhapa Dump site



Waste picker's house in Dhapa Mathpukur



Trash disposed



Value returns back





Eating in the Trash



Waste Pickers attending survey



Working in full swing with limited capacity



Waste going beyond access of waste pickers