

THE STORY OF WASTE AND ITS RECLAIMERS: ORGANISING WASTE COLLECTORS FOR BETTER LIVES AND LIVELIHOODS

Anjor Bhaskar and Poornima Chikarmane*

Villagers living around the metropolitan cities are no longer amenable to allowing the waste to be collected and dumped on them (EPW, 2012). City governments prefer the route of privatisation of waste management to direct service provision. Contracted parties do not incorporate informal workers and enterprises that are already engaged in materials recovery and recycling. The consequence is exclusion, dispossession and destitution among waste workers. The city of Pune is, however, an exception. The unionisation of waste pickers into the Kagad Kach Patra Kashtakari Panchayat (KKPKP) in Pune has ensured that waste pickers are recognised as workers and as important contributors to the process of solid waste management (SWM) and recycling. KKPKP, along with the Pune Municipal Corporation (PMC), promoted the SWaCH cooperative of waste pickers in 2007 for providing door-to-door collection services in the city. Since then, 2100 members of SWaCH have been serving 3,50,000 households, shops and offices in the city, and recover user fees for their services. In this paper, the authors reflect on SWaCH as a model of inclusive development, which hinges on the empowerment of informal workers and challenges the traditional capitalist corporate model of development.

I. INTRODUCTION

According to estimates, in 2011, urban India produced 68.8 million tonnes of municipal solid waste (MSW). MSW is usually collected, transported and dumped on the outskirts of cities. As if dumping were not enough, incineration-based waste-to-energy plants have gained in popularity, prompting a new saga of complaints and protests about the pollution caused by the burning of waste (Crushing, 2010). Thiruvananthapuram, Ernakulam, Thrissur, Kozhikode, Kannur, Kottayam, Alapuzha, Thalassery, Bangalore, Mumbai and Pune are among the increasing list of cities where residents battle the municipal governments over the issue of solid waste management (EPW, 2012). Beleaguered municipal and state governments across the country look upon privatisation of waste management as a one-point solution to the problem of dealing with mountains of waste. Public-private partnership is the favoured form in the privatisation of municipal services including solid waste management. The smaller

* Associated with the Kagad Kach Patra Kashtakari Panchayat (KKPKP), Pune; Emails: anjorbhaskar@gmail.com and pchikarmane1@gmail.com, respectively. This article is dedicated to the indomitable spirit of the informal waste workers, who have struggled against all odds to transform their lives and livelihoods, and to many others who, over the years, have helped bring them together in their struggles.

multiple contracts for collection and transportation are giving way to integrated contracts that extend from collection to processing and disposal managed by large companies.

Alongside, urban informal waste workers, that is, waste pickers, itinerant waste buyers, waste collectors and scrap dealers continue to reclaim and recycle whatever they can. The informal waste sector recycles nearly 56 per cent of all recyclables in our waste and nearly 9.6 per cent of our total MSW. Annepu (2012), Chikarmane and Narayan (2006), and Gupta, *et al.* (2010) analyse in detail the economic contributions of the informal waste sector to the economy. Despite their massive contributions towards environmental sustainability, informal waste workers and waste pickers, in particular, are among the most vulnerable and marginalised communities because they are rarely included amongst workers. Chikarmane and Narayan (2009), Medina (2007), Chikarmane, Deshpande and Narayan (2001), Cointreau (2006), Hayami, *et al.* (2003), and Gill (2009) describe the conditions of work of informal waste workers. They discuss how waste pickers occupy the bottom of the socio-economic ladder in terms of incomes and respect. They are often harassed by the police and bullied by municipal workers and residents. Following the lead given by other informal worker organisations and particularly the *hamals* (headloaders), which had organised under the hamal panchayat¹ (Deshpande, 1999), waste pickers too began organising to have a collective voice and collectively struggle for their rights. SEWA Union was registered in 1974 as a union of informal workers, including waste pickers (Dave, Shah, and Parikh, 2009). In 1993, Kagad Kach Patra Kashtakari Panchayat (KKPKP) was registered in Pune as the first union with only informal waste workers, mostly waste pickers, as its members (Chikarmane and Narayan, 2011). Unionisation and sustained campaigns pertaining to their critical issues led to significant changes in the way society perceived waste pickers and the way in which they perceived themselves. However, it still did not bring about any tangible change in their physical working conditions, nor in securing for them access to waste in the face of the looming threat of privatisation. In order to achieve these ends, a new form of organisation was initiated. SWaCH (Solid Waste Collection and Handling), a cooperative of waste pickers, was born out of KKPKP. It offered waste pickers the opportunity to provide waste collection and management services with user fee recovery (Chikarmane, 2012).

The waste pickers of Pune thus set an example which waste pickers in the rest of the country have begun to follow, especially in terms of gaining recognition for their work (Chikarmane, Deshpande and Narayan, 2001; Chikarmane and Narayan, 2006), securing their rights as citizens (Chikarmane and Narayan, 2006), integration into the formal waste management system (Chikarmane and Narayan, 2009; Chikarmane 2012), eliminating child labour and ensuring children's education (Chikarmane and Narayan, 2000a), improving working conditions, ensuring access to healthcare (Scott, 2010) and establishing a political identity and voice.

The last two decades have witnessed immense changes in the perceptions of society towards waste pickers in Pune. They have also witnessed changes in the relationship that the government, the society and the municipality share with them. This study attempts to trace these changes in perception over time in Section II.

In Section III, the specific local level factors that have brought about these changes have been discussed. The changes have been driven by a variety of factors. And the drivers of these changes—events, organisations, policies, and national and international changes, have been discussed. The future direction of the movement for securing the rights of informal waste workers in the light of the changing requirements and demands of waste pickers, as well as the changes taking place in the economy and society, are highlighted in Section IV.

The study also addresses broader questions about marginalisation of the waste pickers by the State and society, the rights of informal workers, forms of organisation for obtaining rights and entitlements, and models of development and pathways for achieving sustainable development, poverty alleviation and environmental preservation.

II. HOW STAKEHOLDERS PERCEIVE INFORMAL SECTOR WASTE WORKERS IN PUNE

This analysis tries to chart the way in which the public, the governments at various levels, and the police, among others, perceive informal workers involved in waste collection and handling. It is based on a wide array of information sources ranging from official letters, dockets and agreements to newspaper articles, interviews and group discussions.

The analysis reveals a significant change in perceptions about waste pickers over time, and the several factors that have played a major role in bringing about this change. It traces the evolution in perception of waste pickers during three stages, that is, pre-1993 (before KKPKP was formed), between 1993 and 2008 (after the advent of KKPKP but before SWaCH was formed), and finally post-SWaCH.

1. Stage 1: The Initial Phase—Pre-KKPKP (Before 1993)

In the absence of any organisation, the informal sector waste workers of the city were largely invisible. Waste pickers, who had the least interaction with the citizens, were among the least visible. Accounts of waste pickers have been recorded and documented by KKPKP in various studies [see KKPKP case study (Chikarmane and Narayan, 2011), KKPKP study commissioned by ILO (Chikarmane, Deshpande and Narayan, 2001), KKPKP study commissioned by GTZ (Chikarmane and Narayan, 2006)]. While these studies were focused on Pune, studies in several other parts of India and other countries also showed how the living and working conditions of waste pickers were similar across the board (Hayami, *et al.*, 2003; Silva, *et al.*, 2006; Huysman, 1994). These studies brought out the following facts: The conditions in which waste pickers lived on the fringes of society with little acceptance from any other section of society;

- The subsistence nature of waste picking, with its ease of entry (requiring no education, no investment and few skills picked up from other pickers on the job), relative autonomy and daily income, making it an attractive option in comparison with other wage employments;
- Lack of voice and representation among waste pickers;
- Distrust and suspicion aimed at waste pickers from other sections of society which believed that waste pickers were scavengers and thieves who did not do any productive work;

- Perception that waste pickers were unclean disease carriers as they had chosen to live such a dirty life amongst rats, pigs and dogs;
- Perception that waste pickers spread waste and make the city dirty while carrying out their work of retrieving and sorting waste; and
- Citizens' sympathy for waste pickers.

'Scavengers', 'dirty' and 'thieves' are the words that best describe how different sections of society looked upon waste pickers. Coupled with that was also a note of 'sympathy' elicited by the conditions in which waste pickers worked. "They are at the lowest rung of the ladder, the poorest of the poor. Discarded by society, they barely keep body and soul together with their meagre earnings. They are the ragpickers of Pune. Exploited by wholesale dealers and looked down upon by society, their lot is hardly an envious one" is how a newspaper article in 1991 refers to waste pickers during the early years of organising (Murlidhar, 1991).

Mohan Savlaram Nanavre, President of KKPKP, recalls his childhood when he would often accompany his mother and mother's sister, both waste pickers, as they went out in search of pieces of scrap in drains, containers and the city dumps, "My mother and aunt were extremely hard working women of high morals. They would never ever attempt to steal anything. Yet, they [people] would always look at them as if they were thieves. My aunt was taken in thrice by the police on charges of theft. In fact, each and every single waste picker has, at some point of time, [had] to face the ire of the police. And even if they haven't done anything wrong, waste pickers still feel afraid of the police, unsure of whether they have stolen something and what they would be blamed for next."

The fact that the waste pickers hailed from the lowest among the hierarchy of caste groups—that is, those referred to as untouchables—and fell within the Scheduled Caste (SC) category (as defined by the Government of India) gave society additional reason to look down upon them. Nearly all waste pickers belong to 'dalit' (hitherto untouchable) communities and specifically fall within the Mahar, Matang and Neo-Buddhist caste groups (most waste pickers in Pune belong to these caste groups that live in the most deplorable conditions). Studies describe how the most menial jobs in society have traditionally been reserved for these caste groups, how they have lived by accepting their marginalised existence in society, the social customs and traditions ascribed to these castes, the struggles of social reformers such as B.R. Ambedkar to overthrow these social customs and traditions, and their consequences (see Chikarmane, Deshpande and Narayan, 2001). Chikarmane and Narayan (2011) describe how the Mahars were responsible for cleaning and removing carcasses from villages (and would also act as guides and watchmen) whereas the Matangs were responsible for making leather products from the skins of cattle. Neo-Buddhists on the other hand, were the Mahars who embraced Buddhism at Ambedkar's call as the only avenue for emancipating themselves from the clutches of the caste hierarchy.

Activists trying to enrol child waste pickers in their effort to eliminate child labour faced tremendous resistance from the municipal schools. The latter were unwilling to allow these children to sit and study alongside other children because they were considered to be 'dirty

and unkempt'. The traditional social status of waste pickers thus made their inclusion into the mainstream extremely difficult.

"First generation learners were often sent back home for not being neatly dressed or for wearing torn clothes. They were the first to be shouted at and the last to receive the textbooks and uniforms due to them from the municipal school system" (Chikarmane and Narayan, 2011).

Waste pickers faced similar resistance when trying to avail of other public services such as health and medical care. The situation of other informal sector waste workers, that is, *dabba-batliwalis*, *bhangarwalas*, scrap shop owners, scrap wholesalers, and scrap re-processors was progressively better off.

Informal waste workers were largely invisible to policy makers and were missing from the local and state levels as well as from national discussions, budgets, laws and regulations, and policies. They were absent from the city plans, the Municipal Budgets, the waste management rules notified by the state (the Bombay Provincial Municipal Corporation Act), and the waste management plans of the city.

2. Stage 2: Formation of KKPKP

The organisation of informal waste workers and the evolution of KKPKP led to a significant change in the perceptions about them. The activists' first task was to raise awareness about the existence of informal waste workers. These efforts helped create awareness among the civic authorities and citizens about the existence and the working conditions of these informal waste workers, and were complemented by studies, campaigns and advocacy describing their massive contribution to environmental preservation by providing the quintessential link between the waste generators and recyclers. Gradually, informal waste workers came to be recognised among policy circles as a large and substantial workforce that was providing an essential service to society. The external (uncompensated) benefits of their work to society were also brought to light.

An article in the *Maharashtra Herald* (a regional newspaper) reported in 1995:

"There could be few worthy ideas for the uplift of a community that does precious work in miserable dumps. A high-powered committee of the Planning Commission, headed by Prof. J.S. Bajaj, says ragpickers contribute substantially to the recovery of recyclable material from 'garbage' dignified by officials as 'urban solid waste'. Though they perform invaluable public service, the waste disposers, mostly women and children, live and work in deplorable conditions. Considering the high cost of waste disposal in big cities, the Bajaj Committee said the ragpickers 'contribute' to this urban economy by providing unpaid labour 'to cleanse the city of utilisable and recyclable material', like plastic, metal and paper. It also called for the formation of cooperatives of such workers for carrying out door to door collection of waste" (*Maharashtra Herald*, 1995).

Research by KKPKP showed how the waste pickers' unpaid labour saved millions of dollars for civic authorities in waste handling costs (Chikarmane and Narayan, 2006). The actual quantification of the economic savings to the PMC due to the waste pickers' efforts

further helped convince civic authorities of the need to provide recognition and social assistance to waste pickers. The recognition was provided in various forms including:

- Provision of municipality-endorsed identity cards which described waste pickers as ‘self employed workers’;
- Allocation of space for sorting and selling dry waste;
- Allocation of space for co-operative scrap stores;
- Appreciation and felicitation of waste pickers by political representatives in public forums;
- Engaging waste pickers in user-fee-based door-to-door collection of segregated waste from citizens;
- Provision of social assistance by the municipal corporation for waste pickers in the form of health insurance under the Jan Arogya Policy of the Central Government, the premium for which is paid by PMC; and
- Access to life insurance cover for waste pickers under Centrally-sponsored schemes meant for the urban poor.

This increase in awareness also generated sympathy for waste pickers among citizens and policy-makers. Informal waste workers, including waste pickers, itinerant waste buyers and scrap shop owners came to be perceived as dynamic, skilled and resilient self-employed entrepreneurs. KKPKP’s efforts helped its members’ children gain admission in government schools, secure loans and scholarships for higher education, and attain vocational skills, which helped them diversify into various professions. The local media played a significant role in spreading awareness about the achievements of the KKPKP members at every stage. KKPKP also assisted a number of waste pickers in finding employment in the door-to-door collection of waste from the relatively well-off housing complexes and societies. The user fees collected from citizens added to the waste pickers’ income. Further, since the citizens directly benefited from the waste pickers’ services, the latter’s work was recognised as socially useful and productive.

Mangal Rajput, a KKPKP activist, who has been working with the union since 1995, reminisces:

“When we used to visit the *bais*’ (waste pickers) houses in those initial days, their situation was very different from what it is today. They had no conception of hygiene. To add to it, they had little access to utilities like water and electricity. When they went out to work, they would of necessity wear their worst clothes and hope to be as inconspicuous as possible. Now, many of them have *pucca* (cemented) houses, have taken loans from the union to construct their houses and also have their own toilets inside their house. Most of them also have electricity connections now. Their children are so well educated that they can teach us now (she quips). They take good care of their hygiene and sanitation and it shows on their health and looks as well. When they go out to work now, even if they are still doing the same job of waste picking, they still go out dressed in nice *saris* and jewellery.”

However, as the threat of society’s customs, traditions and prejudices towards informal waste workers began diminishing, the threat of privatisation of waste began. Perhaps the economic value of waste suddenly became clear to others. Private business entities began eyeing the waste sector as a potentially lucrative and untapped sector, and government policy also favoured the privatisation of public services in order to promote efficiency and productivity through competition and greater freedom to hire and fire workers.

At the same time, the pressure on the municipalities to manage the burgeoning waste of expanding cities grew. An increasingly active and watchful civil society began criticising the municipality for its inefficiency in managing the city's waste. Environmental concerns were also growing globally as well as nationally. All these factors worked to push municipalities towards contracting out the task of waste management initially to individual contractors who worked in small pockets, and later to private companies. This trend in India and in several other parts of the world was perceived as a threat to the livelihoods of informal waste workers. Privatisation often led to a prohibition of their access to waste. However, in Pune, the unionisation and organisation of waste pickers successfully warded off this threat, and ensured that the waste pickers retained their rights over waste and continued to earn their livelihoods. In the process, formal establishments, such as waste management companies, and other contractors, began viewing the informal waste workers, particularly waste pickers, as competition and a hindrance to their entry into this lucrative business.

Several sections of society hailed the work of the union in protecting the livelihoods of its members. However, there was a section of the population which criticised it as well. They claimed that the union's work encouraged waste pickers to live in filth instead of abolishing the 'inhuman' and hazardous practice of waste picking. Their ideal picture consisted of a world where all waste was handled by machines rather than waste pickers. There were also people who claimed that waste pickers dirtied up the city instead of cleaning it. They claimed that waste pickers entered the waste bins and, in their search for recyclables, scattered all the waste around the bins. The following are extracts from the minutes of a meeting of the National Society for Clean Cities (NSCC), Pune (a citizens' organisation), held on 5 October 2007:

"NSCC is not against ragpickers but is anti-ragpicking and scavenging as unnecessary social evils and like social evils of the past, like carrying of night soil and child labour, this too has to be banned."²

"Shyamala Desai and Jayawantrao Mohite of Model Colony Parisar Samiti informed the members that their mohalla committee along with their ward officers, have started on a zero garbage scheme without the ragpickers and are confident that they will achieve it shortly."

(i) Integrating Waste Pickers into an Improved SWM System

KKPKP realised that the entry of private agencies (companies as well as contractors) into waste management could be stalled only temporarily because the pressures to privatise waste management were too strong. Further, waste picking as it was carried out in dumpsters and landfills, was an affront to the dignity of waste pickers. The only sustainable way to upgrade and protect the livelihoods of the informal waste workers was to involve them in a formal waste management system. What was needed was a model of waste management which integrated the informal waste workers, while at the same time offering better accountability and cheaper services to the citizens. Such a model would not only help the informal sector waste workers retain their livelihoods, but also improve their working conditions and the respectability of their work.

In 1995, a High-powered Committee was set up by the Planning Commission to suggest reforms in waste management. Its report stated, "In the long run, it might be worthwhile to organise ragpickers' cooperatives, so that besides getting a fair wage for their work, they can benefit from the non-formal education and learn skills that will be of use as they grow older" (*Maharashtra Herald*, 1995). Later on, the Supreme Court of India constituted an expert committee on waste management, which had proposed the same for all cities in the country. However, these recommendations remained largely on paper as municipalities failed to actually put them into action. It is with this background that the idea of creating a cooperative of waste pickers who would provide door-to-door collection services evolved.

The early experience of involving waste pickers in door-to-door collection had been very positive as residents greatly appreciated their services. The idea received great support from citizens as well as local representatives. During the initial years before the formation of SWaCH, several municipal councillors wrote letters to KKP, appreciating its work in keeping their wards clean. KKP members were already actively serving people as door-to-door waste collectors. By 2008, 1200 members were already servicing over a 100,000 households.

All this, however, was on an informal basis, made possible with the support of an academic institution, sympathetic councillors and a very motivated Municipal Commissioner. The move to institutionalise service provision and get recognition and allocation from government policy was the next logical step. Despite the various socio-political roadblocks, the PMC passed a resolution and signed an MoU with SWaCH for undertaking door-to-door collection of segregated waste in Pune.

(ii) Opposition to SWaCH

However, once the Municipality had agreed to create the cooperative and use its services for waste collection, the citizens' organisation referred to earlier, that is, NSCC, bitterly opposed the agreement on the grounds that there was enough money in waste for waste handling to be a profitable venture and thus, there was no need for the corporation to spend any public money on SWaCH.

The following is an extract from the minutes of the same NSCC meeting wherein members addressed their concerns in front of the Municipal Commissioner:

"Aneeta Gokhale Benninger said that the ragpickers society is a Trade Union masquerading as a Co-operative Society. Her students have done studies on the Solid Waste Management in Pune and say that the money to be generated is plentiful. It was surprising that instead of paying the PMC to collect garbage from the city, PMC is spending its funds to promote and build up the assets of the cooperative. It would be far better if a Public-Private Partnership [were to] be evolved. A corporate body should be formed with PMC holding equity as well as all the ragpickers' associations. In addition, citizens could also subscribe. This Corporate body could then enter into a contract with PMC to collect and handle garbage."

(iii) The Creation of SWaCH

Sustained efforts and extensive campaigning on the part of KKP KP activists, however, ensured that the contract was implemented. The contract between the municipality and SWaCH meant that the Corporation now had to allocate a substantial part of its budget for waste pickers. This included expenditure on equipment like push carts, coats, gloves, raincoats, buckets, etc. as well as on services such as supervision, surveying, data collection, management, etc., which would be provided by SWaCH and paid for by PMC.

The second stage, which had begun with the formation of the waste pickers' union, thus witnessed a change in society's perception of waste pickers—they were now seen as people working in harsh conditions but making a significant contribution towards society. The society in Pune and the city administration, therefore, felt increased responsibility towards waste pickers. They fulfilled this responsibility in small steps by reducing harassment, providing social security and allocating a budget for them, as waste pickers were integrated into a formal waste management system. Nonetheless, there were, and continue to be, a significant proportion of citizens who harbour the old negative perception of waste pickers.

3. Stage 3: Waste Pickers' Formalised Engagement into MSW Management with the Creation of SWaCH

The signing of the contract resulted in a dramatic change in the nature of the relationship between the municipality and the city's informal waste workers. For the first time, the corporation was spending a substantial sum of money in organising waste pickers through SWaCH. In return, the cooperative had the *responsibility* of providing a service—regular, timely, customer-friendly, door-to-door-collection of separate wet and dry waste. Waste pickers in SWaCH thus became answerable to both citizens and the corporation.

With the onset of SWaCH, waste pickers became a part of the citizens' daily lives. They depended on the former to take their waste away, complained to them when they were irregular, negotiated with them about the precise amount of the user fees, and deliberated with them about the timings and procedure for collection. They also had to listen to waste pickers' complaints when citizens did not bring out their waste in time or when they gave mixed wet and dry waste.

Earlier, KKP KP members would only provide door-to-door services to households and societies that were willing to cooperate and supported the idea. With the contract in place, there was a need for SWaCH to provide door-to-door collection services to all establishments within a given area, and eventually to cover the whole city.

(i) The Challenge of Increasing Coverage

Expansion across the city required SWaCH members to go beyond providing service to only supportive citizens. This was a major challenge. At every step, SWaCH faced what economists might call 'increasing marginal costs' of expansion.

The big and posh apartment complexes were the first and easiest to cover. This was because of the level of awareness and sensitivity among the citizens, their willingness to

pay for the service, the existence of an elected body which is responsible for cleanliness and sanitation within the complex, and the relative difficulty that residents have in accessing municipal containers and open plots for waste disposal. Similarly, industries generating large amounts of waste were also easier to convince.

However, middle- and low-income residential areas and commercial complexes with small shops and traders were more difficult to cover. Here, the marginal effort was higher while the returns were lower. In order to expand coverage and convince people to pay for the door-to-door waste collection service in these areas, SWaCH staff and members would need to convince citizens about paying over and above the taxes that they were paying to the Municipal Corporation, why they should not dump mixed waste in the municipal container, and why they should not burn it or throw their waste out in the open spaces. The local Municipal Councillors often assisted SWaCH staff through notices, announcements, and sometimes even manpower. Further, it was in these low-income residential areas that SWaCH members also found it difficult to sustain themselves because of the non-timely user fee payment or even the outright refusal to pay by some citizens. However, over time, it was found that it was precisely in these areas that SWaCH members developed their best relationships with the citizens. Several SWaCH members happily recount how they find citizens to be their 'extended family'. Others recount how citizens serve them 'tea and food happily'. Bajrang Misal, a SWaCH member working in the Katraj Ward in South Pune, recounts:

"When we visit the various households, residents treat us as a family member. They offer us tea and breakfast. We have no one but we consider the residents our extended family. I feel proud of the fact that I have such a large family. These people are like my sons and grandchildren. Every family of Anand Nagar (a locality within the ward) knows us personally" (Gadkari, 2011).

In their letters to the PMC Commissioner in support of SWaCH, several citizens and elected representatives spoke of the importance of waste pickers in 'segregating wet and dry waste' and how they were a great help in solving the city's garbage menace.

SWaCH members have often been praised for going beyond their role of simply collecting garbage. Source segregation of waste is mandatory by law in Maharashtra. Yet citizens rarely perform this necessary function. Household surveys have found the level of source segregation to be somewhere around 10-15 per cent. It is left to the SWaCH waste pickers to manually segregate the organic and inorganic waste from the mixed waste bundle.

(ii) Problems in Organising

However, the transition from informal to semi-formal workers and from scavenging to service provision is a challenging one. Waste pickers are traditionally used to a highly independent, threat-filled, competitive and informal work culture. In order to survive, they have to be fiercely independent and aggressive. Transition to a semi-formal occupation also required challenging behaviour changes—from being defensive and aggressive, in turns, to being regular and friendly with citizens.

(iii) Problems with Citizens and Certain Citizens' Groups

Behavioural transitions were difficult and time-consuming. There were citizens who complained of SWaCH members being 'rude', 'abusive' and 'irregular'. A certain group of citizens, mostly members of the NSCC, claimed that the SWaCH members actually spread dirt by leaving their sacks of recyclable waste on the streets or by sorting waste on the streets. Meanwhile, there are others who are simply opposed to the idea of having to deal with 'waste pickers' and have thus campaigned long and hard against SWaCH. SWaCH staff perceives both a caste and class angle in such responses: 'higher class' citizens may find it below their dignity to deal with 'waste pickers' belonging to 'lower castes and classes'.

(iv) Operational Challenges before SWaCH

SWaCH representatives are putting in all energies towards making the system more professional and removing its weaknesses. The three main weaknesses that have been identified are:

- Absenteeism and the difficulty of finding replacements for absentee SWaCH members;
- SWaCH members not showing up for work on time; and
- Difficulty of increasing coverage in low-income areas or slums.

The first two factors, that is, absenteeism and irregularity, are common problems. In waste picking, these are often caused by the hazardous nature of the work and difficult family situations. However, since the service provided by SWaCH is an important one, a pair of members being absent may create a problem for around 300 households that have come to rely on the waste collectors for disposing of their waste. Irregularity is also a problem for citizens who are pressed for time in the mornings. Finally, the difficulty of extending coverage in slums arises because of the lack of demand for sanitation services, in general, by the residents, their inability and unwillingness to pay for such services, poor roads leading to difficulty in using push carts, and low quantities of dry, recyclable waste generated in these areas, making it monetarily unrewarding to work in such areas.

Recognising that user fee-based models would lead to the exclusion of the poor, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) proposes the subsidised provision of basic services to the urban poor in slums and low-income areas. SWaCH had proposed to the PMC to pay Rs. 5 per household per month. SWaCH could then subsidise members working in slums. However, the proposal was rejected by the General Body of the PMC on the grounds that SWaCH staff appropriate the money being allocated for its members. Further, some members of the General Body claimed that SWaCH members were irregular and that other organisations must also be given the chance and the support to provide waste collection services in Pune. In an interview, the chairman of the PMC's Standing Committee stated: "Citizens have frequently complained that these ragpickers demand more than the stipulated amount for rendering their services. Also, there are other similar organisations that could benefit from such financial assistance." Another Standing Committee member stated, "The layered administration uses it for other purposes, like foreign tours" (TNN, 2010). In the absence of external support, it becomes difficult for SWaCH members to expand their coverage to slums and other low-income residential and commercial areas.

(v) Sustainability

The question of sustainability is another major issue facing SWaCH. The organisation receives time-bound support from the PMC after which it is supposed to become self-sustainable. While the members earn their income from user fees and sale of scrap, they also contribute 5 per cent of their monthly earnings from user fees towards meeting the cooperative's managerial and administrative costs. In this way, the cooperative aims to become self-sustainable by the year 2013. However, becoming completely self-sustainable would be a challenge that would not be easy to meet. Till June 2011, SWaCH was able to collect nearly Rs. 26 lakhs (or 7 per cent of its operational expenses since its formation) from members' contribution. Money thus collected would act as a buffer to help sustain SWaCH after the PMC funding stops.

(vi) Perception of SWaCH Members Regarding Their Contribution

SWaCH members vary greatly in their perception about the 5 per cent contribution taken by SWaCH. While many of them are well aware of the SWaCH model and are happy to contribute towards its sustenance, others claim to feel cheated out of their already meagre earnings. Yet others do not mind giving the 5 per cent, but say that the cooperative should do more for them such as ensuring that they get a regular salary and pension for old age. When asked what they get from the cooperative in return for their 5 per cent contribution, most mention that they get equipment such as push carts, buckets, uniforms, and slippers, among other things. Hardly anybody says that their contribution would help sustain the cooperative and help meet expenses such as salaries, training, outreach, administration, and computers and peripherals. Thus, despite being owners of the cooperative, members often fail to grasp the functional logistics of its management. However, it also points towards a tendency among the poor to equate the value of 'material' goods received against the payments made by them. This does not, however, mean that women 'value' only 'material goods'. Several women describe the reasons for their opting to work in SWaCH as 'greater respect in society' and 'more time for family and home' despite the income remaining the same or even being lower in comparison to their incomes as waste pickers.

(vii) Perceptions of PMC Staff and Officials

As a result of the change in working relationships, the perceptions of PMC officials regarding waste pickers have witnessed the most dramatic transformation. Earlier, waste pickers were largely inconsequential characters while they had the responsibility of keeping the city clean; but after the formation of SWaCH, the same waste pickers became equal partners, working hand in hand with municipal officials. By undertaking door-to-door (primary) collection of waste and handing it over to the Municipal Secondary Collection vehicle, SWaCH workers are operating in a mutually interdependent system and their timing and efforts need to be highly coordinated to create an efficient functioning waste collection system. Municipal workers are also responsible for cleaning the streets in the same areas.

An area's cleanliness is highly dependent on both the PMC and SWaCH members performing their functions properly. If either of them fail to perform their duties, it taints the image of both. Often, however, since SWaCH members are more in direct contact with citizens, they tend to face the ire of citizens in case of inefficiency of either.

(viii) Competition

Having entered a fairly competitive space, SWaCH has had to face sharp criticisms from both competitors as well as policy makers. In Pimpri-Chinchwad, SWaCH was perceived as competition for other councillors who run their own collection system. Similarly, both KKP and SWaCH have always been seen as a problem for corporate entities as well as other interests wanting to take over waste management through mechanisation (companies such as Hanjer Biotech Ltd. and BVG Kshitij Pvt. Ltd. have tried to enter into waste management contracts with the PMC and PCMC, respectively). While being silent themselves, some of these companies have managed to use their political connections to criticise SWaCH and make allegations against its members from time to time.

On enquiring about his views about the displacement of the waste pickers, Sohail Furniturewala, head of Hanjer Biotech Ltd., Pune, says that "they will find a job elsewhere. But their work had to stop because of the immense damage they were causing. They would only pick up what they want and burn the rest. That practice was causing immense environmental damage". Furniturewala claims to employ 600 people at the plant, which recycles nearly 80 per cent of all the municipal solid waste coming out of the city. Further, he claims that they are improving every day on what they are doing and the proportion of waste that is landfilled is reducing continuously.

Furniturewala says that while setting up the plant, he offered the women picking waste at the landfill jobs as construction labourers, but they refused because the wage he offered was much lower than what they were earning from waste picking. He recounts:

"It was very difficult to find labour to work at the site at that time. Nobody would want to work here because of the filth and the stink of the garbage, no matter what price I gave. So I approached the waste pickers and offered them work at Rs. 250 a day. The women, on the other hand, told me to wear their dress and do their work, and they would pay me Rs. 500 per day for the job".

Further, he claimed that women are prohibited by law to work at these plants and, therefore, he cannot employ the displaced waste pickers at the site. He also claimed that the male waste pickers are used to much higher wages from waste picking and, therefore, do not find it worthwhile to work at the plant.

(ix) Overview of the Change in Perceptions over Time

The two decades following 1990 clearly saw a massive transition in the way the informal waste workers were perceived in Pune. From being perceived as inconsequential 'anti-social' elements, the waste pickers moved towards gaining sympathy and appreciation before finally gaining acceptance into mainstream society as important actors in the city's daily life and

functioning. However, the same cannot be said for the whole of India. Time and again, the policies and actions of national agencies have raised serious questions regarding the nation's sensitivity towards them. For instance, waste pickers were not included amongst those engaged in 'unclean occupations', according to the Government, which included people employed in manual scavenging, tanning and flaying. They were, therefore, not eligible for Indian Government-sponsored scholarships meant for children of people engaged in 'unclean occupations'. A newspaper report in 2002 pointed out:

“Is ragpicking unclean enough? Apparently not for the Government of India. So the children of ragpickers, who invariably follow their parents into the profession, will be denied a scholarship instituted by the Union Government in 1998 for those who earn their daily bread by performing unclean jobs.” (Saikat, 2002).

Further, the questionnaire prepared for the Socio-Economic and Caste Census (MoHUPA, 2011) put ragpickers and beggars as a single option under the 'occupations' question, thereby assuming that ragpicking and begging were both similar in their nature as well as economic non-productivity.

While the organisation of informal waste workers played a key role in bringing about the transformation in perceptions in Pune, there were other factors as well. The following section addresses the question of 'what caused' this transformation in Pune or 'what were the major drivers of change in the sector'.

III. MAJOR CHANGES AND DRIVERS OF CHANGE

The past five or six years have possibly been the most eventful for SWM in Pune. The following section captures some of the action and our perceptions of the drivers of those changes. While we do refer to a five-year period, we necessarily allude to earlier periods to contextualise the change. Some of the initiatives that came to fruition and some of the changes that took place have their roots in the last two decades for which a timeline has been provided in a separate attachment (for the drivers of change before this period, see Chikarmane, 2012).

1. Government of India Initiative: JNNURM

The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) shaped many of the changes taking place in urban India today, including those in the city of Pune.

Pune was among the first few cities to prepare and submit an (inclusive) City Development Plan (CDP)— one of the requirements for funding under the JNNURM. KKPKP was represented in the process and, in fact, played a rather active role. The Pune CDP (PMC, 2006) documented the attempt to integrate waste pickers into door-to-door waste collection and did not make any alternative proposal for primary solid waste collection. The PCMC CDP, however, included a proposal for a mechanised primary waste collection system. At a practical level, the implementation of some of the reforms mentioned under JNNURM has resulted in greater decentralisation of governance (more powers to Municipal Ward Offices) and enhanced citizens' participation in planning and monitoring of SWM.

2. Law as a Driver of Change in Pune

The Pune and Pimpri–Chinchwad Municipal Corporations were constituted under the Bombay Provincial Municipal Corporations Act, 1949. The civic bodies in these cities are mandated by the Act to provide for public receptacles for garbage, transport of garbage, and its final disposal in such manner that is not detrimental in the interests of public health. Citizens are required to deposit garbage in the receptacles provided by the municipalities and placed in public areas. The municipalities are also required to undertake sweeping of public areas such as roads, markets and other open spaces; cleaning of gutters, drains and the sewage channels; and fumigation (as per the Bombay Provincial Municipal Corporations Act, 1949).

The deadline for implementing the *Municipal Solid Waste Management and Handling Rules*, 2000, as per the Supreme Court judgement, was 31 December 2003. The pungent observations of the Supreme Court and Mumbai High Court in SWM-related cases and the unprecedented havoc caused by the Mumbai floods in 2005, galvanised the Maharashtra government in 2006 to issue the Maharashtra Non-biodegradable Garbage (Control) Ordinance that later became an Act. Waste segregation by generators was made mandatory by this Act. Thereafter, the Maharashtra government issued guidelines that set out how waste was to be collected, transported, treated and disposed by urban local bodies in the state. Neither the Pune nor the Pimpri–Chinchwad Municipal Corporations made any attempt to draft and adopt by-laws in respect of SWM.

The Maharashtra Plastic Carry Bags (Manufacture and Usage) Rules, 2006, were modified in 2011 under the provisions of the Maharashtra Non-biodegradable Garbage (Control) Act, 2006, making the manufacturers liable for scientific disposal of plastic carry bags, containers, pouches and sachets. The Rules also ban the burning of plastic and state that the regulators may adopt innovative ways of implementing the rules through the involvement of NGOs. The same rules issued by the Government of India make a special mention of waste pickers in stating that the municipal government may “engage agencies or groups working in waste management including waste pickers.”³

The Bombay Provincial Municipal Corporations Act, 1949, was amended in 2009 to provide for Area *Sabhas* (area committees) with a view to increasing community participation in local governance. The amendments have not been implemented as yet but there is growing recognition that civil society organisations and neighbourhood committees would play a greater role in municipal matters. Deepening democracy has not been welcomed by elected representatives, who would much prefer to continue to mediate citizens’ interface with the municipality. “Who are these groups?” “Who do they think they are?” “Who do they represent?” “We are the elected representatives of the people so we speak for them and look after their interests”, are words often heard in the corridors of PMC and PCMC. It cannot be denied that there is a shred of truth in what the municipal councillors say. Most neighbourhood groups and NGOs represent citizens but are not the representatives of citizens. Moreover, they usually consist of members of the middle and upper classes whose interests are more often than not at variance with those of slum dwellers. Gill (2009) presents a detailed critique of a class environmental activism, which she refers to as ‘bourgeoisie environmentalism.’

The book presents a detailed study of the conflict between citizens who used courts (which she calls 'judicial activism') to drive plastic recycling enterprises (polluting enterprises) out of Delhi. In Pune, the interface of slum dwellers with the municipalities continues to be mediated by municipal councillors, which makes them their true representative as opposed to most NGOs.

3. Energy

The energy plan for Maharashtra states:

“Recent technological advances have proven that waste-to-energy projects are commercially viable. The national potential of power from waste has been assessed to be 1700 MW which is likely to be increased to 2500 MW by the end of tenth five-year plan. In Maharashtra, the potential is estimated to be more than 100 MW.⁴ The state therefore grants approval to waste to energy projects.”

The decision of the government of Maharashtra to grant approval for waste-to-energy projects has implications for the livelihoods of waste pickers as well as scrap traders/aggregators in the sector. Waste-to-energy projects that produce Refuse Derived Fuel (RDF) compete with recyclers for recyclable waste. Such projects disincentivise waste segregation because they not only accept but also prefer co-mingled waste because it has higher calorific value. Irrespective of the technology, waste processing projects that accept co-mingled waste also have exclusive access to recover and sell recyclables that are part of the co-mingled waste, which is supplied free to them. The earnings from the sale of recyclable scrap are never factored into the company's revenues, at least in the public arena. The companies are housed on land provided free or at nominal cost by the government. They receive their raw material, which is garbage, free on site. They do not pay any transport costs. As if that were not enough, a tipping fee is also part of the concession agreements. Municipalities are relieved to accept technological solutions without concerning themselves too much with the details. RDF and biomethanation are the other popular waste-to-energy technologies in the state, followed by landfill gas recovery in capped landfills.

At the Pune city level, it has been found that the PMC entered into concession agreements with several private players for running waste-to-energy plants.

IV. PEOPLE'S MOVEMENTS FOR CHANGE IN THE MANAGEMENT OF SOLID WASTE

Having said everything that we have about various changes, the most significant drivers of change in Pune have really been the following three movements of local residents:

1. Organisation of Waste Pickers

Organised waste pickers, that is, KKPKP members, meandered purposefully through the corridors of PMC, sharing the vision of an alternate decentralised, eco-friendly, labour-friendly and pocket-friendly model of SWM that it would help institutionalise. KKPKP members also lobbied municipal councillors and strategically came onto the streets in protest and demonstrated their numerical strength in various forms.

Starting by conducting a study on solid waste generation and collection in Pune jointly with the PMC, KKPKP then used that data to propose a pro-poor model of decentralised waste collection that would be directly accountable to service users as well as one that would comply with statutory and regulatory requirements. KKPKP led the institutionalisation of a somewhat audacious attempt at integrating waste pickers in the form of a public-private partnership (PPP)—audacious because it cast the integration initiative in the contemporary context of PPPs, user fees, direct accountability to service users and participation of the user community as well as that of the service providers community. KKPKP also pushed for structural, administrative and budgetary changes for restructuring of SWM within the PMC. It participated, and often played a leading role on account of its grounded understanding, in processes that eventually led to the creation of a separate department of SWM. It is only after this that SWM came into its own, while continuing to be located in the Health Department.

We now dwell briefly on the process, ‘Waste Matters’, and the outcome, SWaCH. KKPKP prompted the formation of Waste Matters, a loose collective initiative of four entities to look at the larger canvas of SWM and recycling. The constituents of Waste Matters were the Centre for Environment Education, KKPKP, SNTD Department of Continuing and Adult Education, Janwani⁵ and a few individuals interested in municipal services and participatory governance.

Waste Matters worked on, articulated and advocated for the implementation of decentralised, participatory, sustainable integrated SWM in Pune. The entire SWM system in place at the time was analysed across several parameters of finance, service delivery structure, and compliance with SWM regulations against SWM performance metrics benchmarks. The financials were worked out on the basis of the actual municipal expenditures at the time and the benefits of the proposed model. The proposed model was presented to the then Municipal Commissioner as well as to municipal officers, municipal councillors, municipal workers all along the hierarchy right to the ground; citizens groups, civil society organisations, NGOs; the media and just about anybody who was interested, willing to listen and comment. The key elements of the model were:

- Integration of waste pickers into door-to-door collection of waste;
- Decentralised processing of waste using biomethanation; composting technologies;
- Separate collection of different types of waste, viz. construction and demolition waste; garden waste; hotels and bulk generators; and non-recyclable waste; and
- Restructuring of SWM within the municipality.

It was a combination of factors that led to the initiation of Swacheteche Varkari in 2005 (harbingers of cleanliness), a pilot project that sought to integrate waste pickers in the door-to-door collection of waste. At the time, the PMC was in serious non-compliance with the MSW 2000 rules, which required municipalities to organise for door-to-door collection of waste, promote recycling, divert waste from landfills, and undertake the closure and capping of full landfills. The PMC faced censure from the Mumbai High Court in a matter related to the Uruli landfill, on account of not having devoted enough attention to the implementation of the rules, and the Commissioner was asked to file a personal affidavit in this respect. The

incumbent Municipal Commissioner at the time happened to be a doctor by training, who was interested in public health issues. KKPKP made use of the opportunity and argued for the integration of waste pickers in door-to-door waste collection.

The process of integration within the municipal system was driven by the then Municipal Commissioner, who was convinced enough to persuade municipal councillors to finance the purchase of push carts for waste collection from their discretionary ward budgets. He engaged with residents and civil society organisations, and also gave an impetus to the citizen–municipality interface. By the end of 2006, almost 1200 waste pickers were integrated as service providers, covering over 1,50,000 households and earning through the recovery of user fees and sale of scrap. The pilot also allowed for some real-time testing of several hypotheses related to the behaviour of waste pickers as service providers as well as the behaviour of the users of services.⁶

The Municipal Commissioner's proposal to hand over the task of primary waste collection to an umbrella cooperative of waste pickers, jointly promoted by the PMC and waste picker organisations was unanimously approved by the Municipal General Body.⁷

The municipal body committed to providing support from the municipal budget, equipment, management and welfare costs for a period of five years. The experience of the pilot, the findings of the studies on waste generation and collection and the economic aspects of the informal waste sector that modelled different scenarios, the administrative and political support that KKPKP had managed to garner *en route*, served to move the proposal by due process.

The SWaCH (solid waste collection handling) Cooperative was registered with representatives from four waste picker organisations. It did not formally start operations (MOU) till 2008 on account of elections and subsequent political changes. The new dispensation opposed the concept on account of vested interests but was over-ruled by the state government on grounds of public interest.

Several institutional and structural changes also took place in the PMC from 2007 onwards. A Solid Waste Department was created with separate staff and budgetary provision and infrastructure. Prior to that, solid waste was handled by the public health department. There was a clear approach and focus on decentralised waste processing, composting and biogas plants.

2. Uruli Gram Panchayat vs. PMC

During the last decade and a half, Pune has faced resistance from residents in three landfills, forcing the state government and the civic body to respond and take corrective measures. The residents of Uruli took their fight to the courts and the media, and as a result, villages in the state have united to oppose land acquisition for landfills. The government has found it impossible, ever since, to find space for landfills. The mere hint of an announcement of land reservation for waste causes an eruption of anger from villages in the proposed area. Both in their own ways effectively turned the PMC away from mere waste collection and dumping to do something about the actual management of solid waste.

3. Civil Society Organisations and Neighbourhood Groups

Organisations such as the National Society for Clean Cities, Nagrik Chetna Manch, Sajag Nagrik Manch and others became increasingly vigilant. SWM is one of the issues that they have been pursuing relentlessly through filing applications under the Right to Information (RTI) Act, public debates and programmes. They represent Pune citizens but are representative of only specific classes of Pune citizens. They enjoy media standing more than they do political standing. Politicians see themselves as the legitimate representatives of the people and have no patience with these groups, except when they have been instrumental in promoting the groups themselves.

4. Corporate Interests in Waste Management

Recent corporate interest in waste management threatens to queer the pitch for waste pickers in Pune. It is only their long years of organised effort and the fact that SWaCH is operational and delivering, despite the gaps, that have kept corporate interests at bay till now.

V. FUTURE DIRECTIONS

This section describes the future possibilities for informal waste workers within Pune. It talks about the aspirations of the sector workers, the possibilities lying ahead for them, and the visible opportunities and threats for the sector.

1. Demands of the Sector

The demands of the sector vary hugely amongst sector participants. Broadly, the historical background of the sector participants and their specific role within the sector at the moment, play a large role in defining their demands.

SWaCH waste pickers such as Gokula Srirang Adagale, Kalu Ramdev Bhalerao, Ganga Sandip Chakhale, and Alka Ramdas Chakhale, who are engaged in the door-to-door collection of waste and get their income from user fees, would like SWaCH to give them formalised employment and a fixed salary. According to Baby Mohite, treasurer of SWaCH, “It is time that the waste pickers were given formalised employment like Municipal Corporation employees whereby the organisation gave them a salary”.

Old KKPKP members, on the other hand, mention the need for pension to support them. They say that they have spent all their lives since childhood picking up waste. Therefore, at least in their old age, they should have some support from the corporation to lean on. They also mention that times have changed and that children do not want to support their parents anymore. So they cannot depend upon their children for their old age. Other younger KKPKP members support the view that they should get a pension to support them in times when they would not be able to work any more. Given the near unanimity regarding the need for pensions, KKPKP took up the issue to campaign for Universal Pensions with the state and Central governments. Several members have travelled to Delhi twice, along with other informal sector workers from across the country, to demand Universal Pensions. Their demands are rooted within the larger demands for social security for unorganised workers.

Scrap dealers are confident about their future and say that the city cannot survive without them. Usman Rashid Sheikh, a large scrap dealer and wholesaler of paper, cartons, iron and tin says:

“The police today survives because of the scrap trade and the liquor trade, 80 per cent of their incomes are because of us. No matter what, we have to pay them a fixed sum of money every month. If we don’t, then they will harass us to no end. They will ask us to show receipts for all the scrap that we have got. How is that possible? The waste picker who collects scrap from municipal containers and brings it to us, is not going to get a receipt for the scrap from the container or from the corporation. Similarly, women who collect scrap from dumps are not going to get a receipt for their scrap. The police will catch us on that and harass us. To save ourselves from that harassment, we have to pay them a bribe. And this is the same for each and every scrap dealer across the city.”

Scrap dealers, however, face the threat of displacement as the city develops and wishes to get rid of the ‘eye sores’ such as slums and scrap shops.

2. Politics and Plans of the City

The City Development Plan for Pune stressed upon promoting systems of decentralised and integrated SWM. In order to achieve this, it talked about shifting the burden of management of solid waste to the wards (that is, sub-units or lower administrative units within the PMC) while the central body should play the role of regulating, monitoring and coordinating the activities of different wards. The plan stressed upon integrating waste pickers to increase door-to-door coverage to all establishments within the city, generating revenue from user fees, providing space for segregation to waste pickers in all wards, and creating wet waste recycling facilities in all wards to reduce the cost of transportation of wet waste. It led to the creation of a separate cell for SWM within the PMC as well.

While the city has progressed to some extent in that direction, it remains far from the level of decentralisation that was envisaged in the City Development Plan. Instead, the PMC actually gave the contract to centrally process nearly 1000 tonnes of waste to a company called Hanjer Biotech Ltd. This company currently takes in nearly 1000 tonnes (or two-thirds) of the city’s garbage, out of which it produces things like Reduce Derived Fuel (RDF), compost, carbon and, recently, diesel. The project appears to be the greatest point of pride for the corporation since by assigning the project, the corporation claims that it has “fulfilled its promise to the High Court and the villagers of Devachi Urali and Fursungi of stopping open dumping’.

The PMC, in its budget for 2011-12, allocated only around 14 per cent of its budget towards decentralised waste collection and recycling. This expenditure is allocated between the purchase and repair of waste collection equipment such as buckets and pushcarts, and the setting up of recycling facilities such as biogas and composting plants. A much greater proportion has been allocated towards capping of the previous landfill (nearly 26 per cent of the overall capital expenditures in the year). The other major capital expenditures are concretisation of ramps (transfer stations), undertaking development works at Devachi Urali

and Fursungi (the villages which host the landfill and hence, nearly all of Pune's waste) and the purchase of *ghanta* trucks (secondary waste collection vehicles). Together, these three expenses account for nearly 56 per cent of PMC's capital expenses.

Centralised processes, particularly those which deal with mixed waste, can be thought of as waste picker-unfriendly since they reduce the demand for segregated waste—a critical unique selling proposition (USP) of waste pickers. Centralised processes also reduce the need for labour. Decentralised processes require more labour, providing employment opportunities to waste pickers. In Pune, SWaCH efforts have led to the employment of several waste pickers at decentralised biogas plants and composting facilities. Workers at these facilities get salaries that are equal to or higher than their wages from waste picking. However, decentralised processes generally require more effort on the part of the corporation since it has to identify land, select appropriate technologies, find appropriate private partners to build and operate the system, and work out the form of partnership with the private player as well as the burden of having to deal with issues of several small facilities simultaneously. More importantly, the political economy of infrastructure and service delivery, making use of the PPP model, is heavily biased towards centralised large-scale, mechanised and labour un-friendly projects (detailed analysis of such policies will be presented in another paper). Chintan (2011), therefore, finds how all across the country, municipalities are blatantly flouting the MSW Rules (MoEF, 2000), particularly with respect to the integration of waste pickers into formal waste management.

3. Other Promising Examples of Good Policies and Practices—From the Study City and Other Cities

Despite the political economy bias towards centralised, costly, mechanised models, there is recognition of the advantages of an alternative model, which includes waste pickers in a decentralised, recycling-focused economy. Wolf and Schroth (2011) compare Pune (which follows a waste picker-friendly model) and Varanasi (where waste management is outsourced to a corporate entity) and find much greater socio-economic and political spin-offs arising out of the Pune model. Baud, *et al.* (2001) do a similar comparison by studying models across several countries but finds the same results Chaturvedi (1998), and Chikarmane and Narayan (2000b; 2009) also talk about the benefits and challenges as well as opportunities for waste picker-inclusive waste management. Some of the other policies and practices in this direction, which are worth mentioning, are discussed below.

- Katraj Zero Waste project is an initiative of Janwani, which attempts to bring together various stakeholders in creating a model zero waste ward within Pune city. The initiative has been thoroughly supported by the PMC and all other stakeholders, and is showing positive results in terms of improved cleanliness and hygiene in the area, better income for waste pickers, a higher proportion of waste being recycled and a hugely improved status of waste pickers. The model received an ISO certification (the first of its kind) in 2012 and was slated to be replicated in 25 more wards as of November 2012 (see Bhaskar, 2011).

- The PMC has allocated a substantial chunk of money towards door-to-door collection and local, decentralised processing of waste, which are likely to promote the interests of informal waste workers. The 2011-12 PMC budget allocates nearly 25 per cent of the capital expenses for the purpose. Thus, out of the Rs. 664.6 million allocated for capital investments into solid waste management, nearly Rs. 36.35 million have been allocated for the purchase of equipment for door-to-door collection and for establishing decentralised waste processing plants.
- SWaCH has been working towards engaging waste pickers in other economically and socially productive activities. Under the SWaCH+ programme, several waste pickers have been engaged in allied waste services such as housekeeping, decentralised composting, working at biogas plants and making recycled material such as ST Dispo Bags out of waste. The engagements have enabled them to earn fixed wages and other benefits of formal/semi-formal employment such as leave, and access to mainstream services.
- The Bangalore Municipal Corporation (called the Bruhat Bangalore Mahanagara Palike) has issued identity cards to all waste pickers in the city and re-christened them as 'Green Workers'. They would also get employed at dry waste collection centres in all wards in the city. Following the closure of landfills in the city in August 2012, the city enforced source segregation of waste, integration of waste pickers into collection and recycling, and mandatory composting for housing societies.
- Similarly, at the insistence of Chintan, an environmental NGO in Delhi, Delhi's revised 2020 Master Plan states the need to incorporate waste pickers in its waste management plans and provide space for segregation to them.
- Several micro level recycling initiatives by individuals also promote the interests of waste pickers. For instance, a recent mobile composting initiative by a resident of Pune and founder of Myco-Compost, involves waste pickers in the collection of wet waste and on-site composting. Other similar initiatives supporting domestic recycling of wet waste include the 'daily dump pots', 'rolly polly composters', biogas plants developed by the Appropriate Rural Technologies Institute (ARTI), terrace farming by using bio-culture and innumerable such initiatives which have gained some acceptance as well.
- The PMC has started nearly 14 biogas plants, which process almost 300 tonnes of wet waste daily. Additionally, PMC runs a separate collection system for organic waste from hotels. PMC vehicles collect wet waste from hotels and deposit them at the biogas plants, which produce electricity from the waste. SWaCH waste pickers have been employed at many of these biogas plants.

4. Gaps in Knowledge of the Sector as Identified by MBO (Membership-based Organisation) Leaders

In conclusion, we reflect on what integration has meant for the relationship between waste pickers and the municipal government. Collective bargaining power has been somewhat

eroded by integration. While earlier the waste pickers could justifiably argue that they were helping the municipality without getting anything in return, now the PMC and PCMC are in a position to demand accountability from SWaCH on the basis of the terms of the formal agreement. The waste pickers who have become service providers have to follow rules that could be seen to curtail the entrepreneurial independence that they were used to.

In the end, the future of waste management will, to a large extent, determine the future of informal waste workers. However, organisations of informal waste workers such as KKPKP and SWaCH will play a major role in not only moving waste management in a favourable direction, but also in ensuring that regardless of its final shape, it allocates a decent space for the informal waste workers.

Notes

1. The Mathadi Act refers to the Hamal Mathadi and Other Unprotected Manual Workers (Regulation of Employment and Welfare) Act, 1969, Available at: <http://www.vakilno1.com/bareacts/maharashtramathadiact/maharashtramathadiact.htm>.
2. Manual scavenging/carrying of night soil is unclean, inhuman and degrading, and a violation of human rights. It is not productive work and has no place in societies that call themselves civilised. Waste picking is carried out in unclean conditions on account of which it is undignified and inhuman though the work of recovery/collection of raw materials for recycling is productive work, apart from being environmentally and financially beneficial. Change in the way recovery is carried out and according the status of workers with everything that it entails, to waste pickers, will transform them into green workers. Clubbing waste picking with sanitation work in a single legislation often carries the risk of treating both occupations on par and as undesirable.
3. Government of India, Plastic Waste (Management and Handling) Rules, 2011.
4. Maharashtra Energy Development Authority.
5. Janwani is an initiative of the Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA). It was formed in 2006 to advocate and promote equitable and sustainable development in the city for the benefit of its citizens. This, in turn, stems from the fact that the city would not be an attractive destination unless it is a truly liveable city. See <http://www.janwani.org/>, Accessed on 17 February 2013.
6. Some of the propositions put forth by the KKPKP were tested and validated during this process:
 - Citizens, including those living in slums, paid user fees for the door-to-door collection service.
 - The service providers were more accountable to the user if the user fee was directly collected from the user.
 - It was possible for waste pickers to become service providers and to follow service norms.
 - Door-to-door collection through waste pickers ensured higher levels of recovery of recyclables.
 - Door-to-door collection through waste pickers was low-cost, labour-intensive and less polluting in comparison with collection through motorised vehicles.
7. Resolution No. 476 of the 2006 Pune Municipal Corporation General Body.

References

- Annepu, R.K. (2012), *Sustainable Solid Waste Management in India*, Waste-to-Energy Research and Technology Council (WTERT), Earth Engineering Centre, Columbia University, New York.
- Baud, I., S. Grafakos, M. Hordijk and J. Post (2001), "Quality of Life and Alliances in Solid Waste Management: Contributions to Urban Sustainable Development", *Cities*, Vol. 18, No. 1, pp. 3-12.

- Bhaskar, A. (2011), "Zero Waste Electoral Ward in Katraj Gaon, Pune", *The Better India*, 24 June, Available at: <http://www.thebetterindia.com/3531/zero-waste-electoral-ward-initiative-at-katraj-gaon-pune/>, Accessed on 17 February 2013.
- Chaturvedi, B. (1998), *Public Waste Private Enterprise—An Enquiry into the Issue of Integrating Ragpickers into Formal Solid Waste Management System*, IBF, Berlin.
- Chikarmane, P. (2012), *Integrating Waste Pickers into Municipal Solid Waste Management in Pune, India, Women in Informal Employment: Globalising and Organising (WIEGO)*, Cambridge, MA.
- Chikarmane, P., M. Deshpande and L. Narayan (2001), *Report of Scrap Collectors, Scrap Traders and Recycling Enterprises in Pune City*, Prepared by SNDT University with support from International Labour Organisation (ILO), Germany, and United Nations Development Programme (UNDP), New York.
- Chikarmane, P. and L. Narayan (2000a), "Beyond Literacy: Education for Empowerment", Paper presented at the International Conference titled "Lens on Literacy", Organised by the Australian Council for Adult Education, Perth.
- (2000b), "Formalising Livelihoods: The Case of Wastepickers in Pune", *Economic and Political Weekly*, Vol. XXXV, No. 41, 7 October, pp. 7-13.
- (2006), *Study of Economic Aspects of the Waste Informal Sector in Pune*, GTZ, Berlin.
- (2009), *Rising from the Waste—Organising Wastepickers in India, Thailand and the Philippines*, Committee for Asian Women, Bangkok.
- (2011), *Organising the Unorganised: A Case Study of the Kagad Kach Patra Kashtakari Panchayat*, KKPKP, Pune.
- Chintan (2011), *Failing the Grade: How Cities across India Are Breaking the Rules, Ignoring the Informal*, Chintan Environmental Research and Action Group, New Delhi.
- Cointreau, S. (2006), *Occupational and Environmental Health Issues of Solid Waste Management: Special Emphasis on Middle- and Lower-Income Countries*, The World Bank Group, Washington DC.
- Crushing, L. (2010), *Waste-to-Energy or Wasted Opportunity? Informal Sector Recycling for Climate Change Mitigation in India*, Energy and Resources Group, University of California, Berkeley.
- Dave, J., M. Shah and Y. Parikh (2009), "The Self Employed Women's Association—Organising through Union and Cooperative in India", in M. Samson, *Refusing to be Cast Aside: Waste Pickers Organising Around the World*, WIEGO, Cambridge, MA., pp. 27-33.
- Deshpande, R. (1999), "Organising the Unorganised: The Case of Hamal Panchayat", *Economic and Political Weekly*, Vol. XXXIV, No. 39, 25 September, pp. L19-L26.
- EPW (2012), "Not in My Backyard", Editorial, *Economic and Political Weekly*, Vol. XLVII, No. 29, p. 8.
- Gadkari, S. (2011), "Residents Are Extended Family, Say Trash Collectors", *Pune Mirror*, Pune, 24 February.
- Gill, K. (2009), *Of Poverty and Plastic: Scavenging and Scrap Trading Enterprises in India's Urban Informal Economy*, Oxford University Press, India.
- Gupt, Y., A. Scheinberg and M.H. Simpson (2010), *Economic Aspects of the Informal Sector in Solid Waste*, German Technical Cooperation (GTZ), Eschborn.
- Hayami, Y., A. Dikshit and S. Mishra (2003), *Waste Pickers and Collectors in Delhi: Poverty and Environment in an Urban Informal Sector*, Foundation for Advanced Studies in International Development, Tokyo, and Society for Economic and Social Research, Delhi.
- Huysman, M. (1994), "Waste Picking as a Survival Strategy for Women in Indian Cities", *Environment and Urbanisation*, Vol. 6, No. 2. pp. 155-74.
- Maharashtra Herald* (1995), "Co-ops for Ragpickers", Editorial, Pune, 4 October.
- Medina, M. (2007), *The World's Scavengers: Salvaging for Sustainable Consumption and Production*, AltaMira Press, Lanham, Maryland.

- MoEF (2000), *Municipal Solid Waste (Management and Handling) Rules, 2000*, Ministry of Environment and Forests, Government of India, New Delhi.
- MoHUPA (2011), *Socio-economic and Caste Census 2011—Urban: Instruction Manual For Enumerators*, Ministry of Housing and Urban Poverty Alleviation, Government of India, New Delhi.
- Murlidhar, N. (1991), “Wealth from Waste”, *Times of India*, Pune, 12 March.
- PMC (2006), *City Development Plan for Pune 2006-2012*, Plan prepared by CRISIL Infrastructure Advisory and USAID FIRE (D) [1] for the Pune Municipal Corporation, Pune, pp. 81-83.
- Saikat, Datta (2002), “Government Finds Ragpicking Too Clean”, Pune Newline, *The Indian Express*, Pune, 4 March.
- Scott, K. (2010), *Five Health Insurance Schemes in India and a Note on Financing*, SATHI, Pune.
- Silva, M.C., A.G. Fassa and D. Kriebel (2006), Minor Psychiatric Disorders among Brazilian Ragpickers: A Cross-sectional Study”, *Environmental Health: A Global Access Science Source*, BioMed Central Ltd., London, 30 May.
- TNN (2010), “Civic Panel Opposes Financial Aid Proposal for SwaCH”, Times News Network, *The Times of India*, Pune, 15 December.
- Wolf, J. and F. Schroth (2011), *Tracing Back the Choice: Implementation of Municipal Solid Waste Collection in Two Indian Cities*, Project Report for the Environmental Policy Research Centre, FU Berlin, Berlin.

Economic & Political WEEKLY

"Discussions of economics in India — in matters of theory as well as empirical and policy issues — have been much facilitated by a remarkable Indian weekly, *The Economic Weekly*, established in 1949, and renamed in 1966" — **Amartya Sen, Nobel Laureate**

Popularly known as EPW, the journal began its existence in 1949 as *The Economic Weekly* and since 1966 as the *Economic & Political Weekly*. Today EPW, published from Mumbai by the Sameeksha Trust, is an institution that enjoys a reputation globally for its independent scholarship and its fostering of critical inquiry.

There are a number of features, which make EPW special, not just in India or Asia but also in the world:

- It is the only publication in the world that publishes both research in social sciences and informed commentaries on current affairs. In this manner it appeals to both the reader looking for analysis of contemporary issues and the researcher looking for new developments in her field.
- EPW's influence on the social sciences in India has been in catalysing debates and disseminating research output. Seminal debates that have proved a turning point for their respective disciplines have featured first in EPW. These debates continue in the EPW's 'review' issues.
- Once a year, EPW brings out a *special issue* on **Money, Banking and Finance**. Other special issues published every year are: Review of Industry and Management, Review of Women's Studies, Review of Agriculture and Review of Labour.
- There are also well-researched studies by the EPW Research Foundation (EPWRF) on the money market and financial sector that appear in the third issue of every month.

Who writes for the EPW?

A galaxy of scholars in India and abroad have written for the EPW, to name a few, Manmohan Singh, Amartya Sen, C. Rangarajan, Bimal Jalan, Jean Dreze, Romila Thapar and M N Srinivas. Contributions by young research scholars, the specialist as well as the generalist make the EPW a varied and interesting read.

Who reads the EPW?

The EPW then, is a must read for all those interested in a close look at events in India, south Asia and even globally. As we live in an increasingly inter-linked and inter-dependent world, the EPW's pages bring together crucial debates on matters that affect the world today.

To know more about the Economic and Political Weekly visit www.epw.in

Postal Address:
Economic & Political Weekly,
320-321, A to Z Industrial Estate, G K Marg,
Lower Parel, Mumbai 400 013, India.
Tel: 91 22-40638282