

Navigating Waste Challenges: The Role of Training in Hebbagodi's Sanitation Efforts

Note: The terms pourakarmika, sanitation workers, and collection staff have been interchangeably used.

Consumer behaviour has shifted dramatically in the last two decades due to evolving needs of a common person. While this convenience enhances our lifestyles, it often drives higher consumption and increased waste. In urban areas, many privileged individuals remain unaware of the impact of their waste or the workers who manage it, lacking concern for where their waste ultimately ends up. The value chain system ultimately relies on waste collection workers to handle the waste rightfully. Collection workers are essential for the effective operation of solid waste management systems across India. Typically, they are hired without specific prerequisites, with the common belief that waste picking requires no special skills. However, adequate training is often necessary to facilitate efficient collection, segregation, and disposal of various types of waste. The government of Karnataka has initiated the National Rural Livelihood Mission (NRLM) under which 18000 rural women from Karnataka's SHG's are trained in SWM and Solar energy utilization (Economic times, 2021). This training involves classroom teachings along with exposure visits. However, there is still a dearth of skilled sanitation staff, a challenge that needs to be addressed immediately.

Hebbagodi, a suburb in urban Bengaluru, faces tremendous solid waste management challenges today. It is a self-governing suburb with its own municipality, spread across 31 wards with a population of 80,810 (Census 2011). The locality predominantly is inhabited by a migrant workforce employed in nearby factories and industries. With a rising population in the suburb, the amount of waste that accumulates is most often enormous to handle. The multiple blackspots/ open dumpsites and the lack of segregation of waste in many wards of the suburb are a testament to the existing waste crisis. The waste collection workers also known locally as pourakarmikas shoulder the tedious responsibility of collecting, segregating, and finally disposing of the waste.

Following the problem stated, Saahas with the support from Society Generale, launched a project named: Kasa Muktha Hebbagodi which aims at addressing the waste management issues of Hebbagodi. This case study focuses on empowering pourakarmikas through effective capacity building in solid waste management and addressing the associated challenges.

Addressing Waste Management Challenges through Training and Empowerment Initiatives

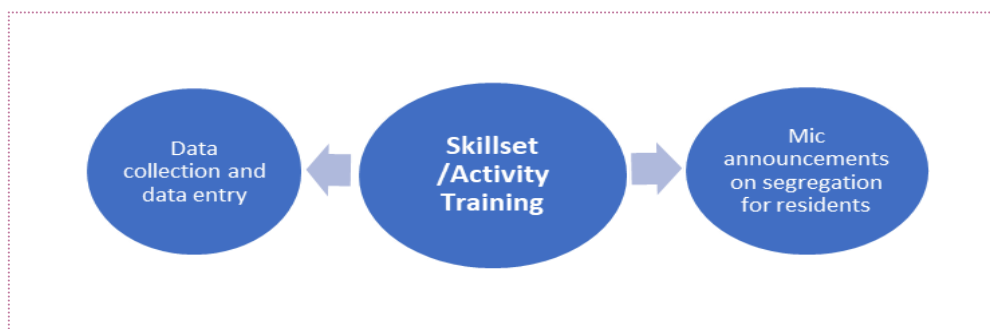
There are a total of around 120 sanitation staff members in Hebbagodi out of which 15 are women, with each of them being allocated 1-3 wards for waste collection. They generally work in shifts - from 6 am to 2pm on all days except Wednesdays and Sundays when the timings are from 6 am to 10 am.

Among the various challenges they encounter, one of the most significant issues pourakarmikas face daily is dealing with mixed waste. Surveys and key informant interviews with pourakarmikas revealed that migrant workers frequently collect a week's worth of waste and hand it over all at once, rather than disposing of it daily in a segregated manner. The pourakarmikas, due to a lack of sufficient knowledge on the different types of waste streams, struggled to segregate appropriately.

The migrant population also tends to dump their waste in open spaces/black spots because of different work shift timings from the collection staff. The bulk mixed waste received is unhygienic and challenging to handle, creating difficult working conditions. The sanitation staff are expected to segregate this mixed waste correctly. This creates challenges as the pourakarmikas would then require more time to handle the waste. Prolonged exposure to waste implies a greater risk of contracting infections/diseases. Apart from this, the disposal of unsegregated waste impacts the environment in many ways. Many a time, there is a lack of awareness among them regarding the impact of dumping waste in landfills or the harmful consequences of burning plastic or hazardous waste. This, at times results in improper handling of waste.

Initially, the collection staff in Hebbagodi collected waste without following a designated route or tracking the amount of waste gathered each day. The absence of a systematic approach contributed to a lack of urgency in managing waste effectively.

To address these challenges, under the Kasa Mukta Hebbagodi project, training sessions and workshops were organized to enable and empower the pourakarmikas and collection vehicle drivers to carry out their tasks effectively and safely. The themes covered can be broadly categorized into the following:



The training sessions for the sanitation staff are organized in meeting halls and utilize PowerPoint presentations. These sessions are conducted with the assistance of the City Municipal Council (CMC)



Knowledge Dissemination

The knowledge dissemination sessions begin with covering the basics of identification and understanding the 3 broad categories of solid waste – dry, wet, and domestic hazardous waste. The 3-way segregation method is demonstrated to the sanitation workers using placards along with color-coded dustbins. Apart from this, information on e-waste and methods to dispose or recycle is also provided. The Kasa Mukta Hebbagodi team often involves the sanitation workers in their awareness rally campaigns, to educate them as well as to enable them to carry out such campaigns on their own within their locality. In addition to rallies, a variety of engaging activities were organized, including segregation games, musical chairs, memory challenges, and synchronized clapping games. A sports day was also held as a team-building exercise for the pourakarmikas. During these events, pourakarmikas were recognized and rewarded for their outstanding contributions in their respective wards.



Collecting waste with inappropriate or no equipment/safety gear can prove hazardous to sanitation workers. The importance of wearing protective gear is explained in detail in the training sessions. Protective and essential gear such as jackets, caps, gloves, steel bottles, and masks are also provided in the process.

As a part of the Menstrual Health and Hygiene Management (MHMH) session, knowledge on sustainable menstruation practices such as menstrual cups and cloth pads is frequently shared with the collection staff.

Skillset Training

Sanitation workers receive training in data entry and collection, equipping them to gather information on mixed waste generation and waste segregation from residents. They utilize logbooks to record this data consistently. Additionally, they are trained in conducting mic announcements to raise awareness about waste segregation and encourage timely waste disposal. These announcements also include information about penalties for non-compliance with solid waste management regulations.



Along with the pourakarmikas, the collection vehicle drivers undergo similar training as well. The collection vehicle drivers use TATA Ace vehicles with a capacity of 1.5 and 2 tons in Hebbagodi to collect waste from designated wards. The collection vehicles consist of crates or in-built dividers to help segregate the waste in the vehicle itself. The vehicles traverse through the wards with ease through accessible roads. The drivers are trained to segregate and understand how safe or unsafe a certain disposal method is. On interviewing one of the collection drivers, It was noted that domestic hazardous waste is disposed of in vacant areas, away from residential zones, with the councillor's permission. Previously, domestic hazardous waste was mixed with dry waste and would end up in landfills.



Progress & Impact of training

Since Saahas's intervention, there has been a 60% hike in waste collection and overall cleanliness according to the pourakarmikas. The training sessions conducted by the Kasa Mukta Hebbagodi team have proved beneficial for the pourakarmikas and their comprehension of waste management along with their skills have improved over time. They are better equipped to handle e-waste which is now sent to the nearest Dry Waste Collection Centre (DWCC) in Hebbagodi which was otherwise mixed with dry waste previously. In certain wards, the collection and segregation percentages have grown to become the same over time owing to the consistent work of pourakarmikas. The training also helped some of them attain a certain level of confidence while dealing with difficult residents who would refuse to segregate and give their waste otherwise. The collection drivers and pourakarmikas have been successfully trained to take note of those who don't segregate to facilitate official action/penalties on them if needed.

Ongoing challenges & scope for Improvement:

Despite adequate training given to the pourakarmikas, many areas of concern are yet to be explored. At times, the language gap between the collection worker and the resident poses a barrier to a smooth collection process, and at times even demonstration of accurate segregation practices does not translate into the adoption of the same by residents.

A recurring issue highlighted during interviews is the Dry Waste Collection Centre's refusal to accept soiled or contaminated packets and containers. This limitation creates considerable obstacles for pourakarmikas in their segregation and disposal efforts, resulting in more waste being sent directly to landfills.

Furthermore, there is an absence of a systematic process for disposing of domestic hazardous waste, leaving collection workers uncertain about the correct procedures. Many migrants tend to hand over mixed waste and resist segregation, believing their tax payments grant them this right. This sometimes leads to aggressive reactions from residents when asked to segregate their waste, with complaints about insufficient dustbin availability.

In Hebbagodi, a collection vehicle driver noted that waste from other wards is often dumped in areas that are otherwise cleaner, exacerbating the situation.

Although the pourakarmikas receive training, they encounter persistent challenges, primarily due to understaffing in Hebbagodi. The lack of sufficient personnel limits the effectiveness of the training. Additionally, long absences caused by delayed salary payments, the demanding nature of the work, and inadequate time off further exacerbate the staffing shortages. Consequently, even as trained professionals, pourakarmikas struggle to influence residents' attitudes toward waste segregation, as many remain resistant to change.

Path Forward

The training sessions have improved the efficiency and understanding of the pourakarmikas about SWM. However, pourakarmikas often believe that further training is needed to effectively persuade residents and provide clearer information about solid waste management (SWM) laws. The residents also require sufficient education in disposing of their waste correctly. While pourakarmikas play a vital role in cleaning the city, active citizen involvement is crucial too as everyone has a part to play in ensuring that the waste management processes run smoothly.

One of the collection workers recounted how the litter around a blackspot near Hebbagodi Lake significantly decreased after the CMC appointed security personnel to monitor the area. This highlights the importance of regular oversight in managing littering. Smaller suburbs would definitely benefit more from a stricter surveillance and better infrastructure for SWM sustenance in addition to skills training.

While some pourakarmikas expressed confidence in sustaining the efforts initiated by the Kasa Mukta Hebbagodi project team after their intervention ended, others voiced feelings of helplessness. This highlights the pressing need for extended training sessions to maximize their effectiveness. A longer duration of training would not only enhance its impact but also empower pourakarmikas, boosting their confidence to take charge of waste management initiatives.

The collection staff highlighted the challenges they may encounter in raising awareness and collecting waste. Many mentioned that managing a crowd becomes significantly easier when there is an authority figure or official present.

Moving forward, there is a need to advocate for additional cleaning machinery to ensure safer and more hygienic working conditions for sanitation staff.

As noted earlier, pourakarmikas work throughout the week without adequate rest days, which leads to an unhealthy work routine, ultimately reducing their efficiency and motivation to return each day. Given the physically demanding nature of their job, sufficient rest days are crucial. Additionally, to empower collection staff to work effectively and with dignity, continuous efforts from the government are needed to recognize and respect their vital contributions to the society, along with enhanced financial support.