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SOCIAL IMPLICATIONS OF SOLID WASTE MANAGEMENT: THE EXPERIENCE OF ORGANIZING WASTE RECYCLERS IN ACHIEVING SELECTED MDGs

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Abstract

This paper is divided into three sections, all based upon the interventions by an India-based environmental advocacy group, Chintan. The first section outlines Chintan's work with children wastepickers. The second describes the process of how Chintan has created partnerships with wastepickers to take up diverse waste handling contracts. In the third section the strands from both earlier sections are woven together to discuss how waste management, in this case, an imaginative approach to waste, has resulted in moving towards the Millennium Development Goal no 2, Access to Education (for children wastepickers). Finally, the conclusion suggests a shift in the way waste is perceived.

Introduction

Chintan is an environmental advocacy group working on issues of sustainable, equitable consumption and environmental justice. As part of its work on urban waste issues, it has made multiple interventions to impact various aspects of wastepickers' and small junk dealers' lives and livelihoods, in collaboration with them. Chintan's strategy has been to use the expanding service markets for service delivery as opportunities to derive legitimacy for wastepickers, to counter their increasing marginalization, ensure safer work and find a means of building a sustainable model for weaning off children from waste picking. The entry into these markets has been an important tool to meet sectoral needs and aspirations. Surpluses yielded in the process have been used for collective purposes, viz, wastepicker children's education. This initiative is managed directly by Chintan, instead of the wastepickers.

Section 1: Enabling children wastepickers to access their right to education

Chintan has been working with wastepicker children for four years now. The impulse for this was based on our own understanding of children's work and rights as well as the demand from the community of wastepickers we work with, children and adults.

Initially, Chintan's interventions and meetings with wastepickers included both adult and children. However, as many solutions for problems discussed were not applicable to children, the need for separately addressing children's issues and work began to be clear. It was in this context that Chintan began a distinct programme for wastepicker children.

A survey of the over a hundred children attending Chintan's meetings and involved with the work being undertaken with the wastepicking sector showed that almost none of them had ever attended school in Delhi. However, random cases of attending school in their villages were reported. The first initiative with the children was to form linkages with other NGOs which were already holding classes, to help these children access initial education. One class was initially identified. However, the wastepicker

children did not stay in the class for long. This appeared to be on account of a lack of relationship of the teacher and programme structure to their larger world of work.

One of the lessons learned from this was the need to hold classes directly. The classes were designed to be held in the afternoons, when the children are free from work. They were held out in the open, in an area where several hutments of a wastepicking community also existed. As a result, some of the wastepickers monitored the class and reported back on a weekly basis.

As more children and communities learned of the intervention, they also began to ask for similar classes in their areas. Currently, the work has expanded to include three distinct learning centres with a separate set of teachers.

As the class expanded, new concerns required to be addressed. What was the long-term plan for each child? How would a child be able to be both literate and emotionally catered to? How would the earnings of the child continue? Merely teaching children at the existing level was clearly inadequate and it was critical to upgrade the entire programme.

The need to streamline the activities in order to ensure long term quality education became apparent. Therefore, an education auditor was appointed to audit the education programme and introduce both systems and quality to it. With this, several new components began to be introduced.

The existing teachers have been trained to expand their skills to deal with mixed levels in a single class as well as to undertake outreach activities. The outreach is important because it enables the teacher to make home visits and encourage children to attend class as well as understand difficult or changing circumstances at home. A Bal Panchayat enables children to collectively discuss issues of concern to them and lead aspects of the curriculum. The team also works with the children so that they do not feel inferior to the other, non-working children they will soon meet in schools.

The education audit resulted in the education programme being structured into three components:

- **bridge classes**, which help children to develop the levels required to access mainstream education, viz, municipal schools. This is the first level of education most of the wastepicker children access and they usually stay here for up to a year.
- **support classes**, for children who have already joined municipal schools. In these classes the children are strengthened so that they do not drop out of their classes.
- **open school**, which is part of formal education and allows older children who have passed the stage of bridge classes to access formal education without joining a formal school.

In the last component, we have collaborated with other NGOs to use their facilities as we did not have the resources to run this activity on our own.

Mainstreaming into Municipal Schools is also critical, as the central aim is to mainstream children with existing resources. Children are admitted into municipal schools, based upon a number of factors, such as age and background.

Once a child is admitted, close follow-ups from Chintan's side are undertaken, so that initial concerns can be addressed. For example, a teacher threw out a freshly enrolled child as he did not wear a washed and clean uniform despite her reminders. Through its monitoring, Chintan visited the child's mother. Since the mother was also a wastepicker and left home early, she was unable to supervise the state of the child when he went to school. A simple system was put into place at home, while the teacher was also approached to help her understand the problem.

Fellowships for the most vulnerable children began to be instituted. A fellowship was intended to help free up education time for the most pressured children. The fellowships comprised approximately. Rs. 500 (US\$ 11) worth rice and pulses or an equal amount of paper, which the child could sell to earn.

This also enabled children to understand the importance of education and to experience learning first hand.

In the last year, 67 children have joined municipal schools and 13 have joined the National Open School classes with another NGO. Of these, over 70% have not dropped out despite the harsh conditions they come from.

Section 2: Service delivery by wastepickers

The service delivery programme by wastepickers was undertaken by bidding for contracts for waste handling and housekeeping. It comprised a shift in both site of work and the nature of work, as more skills were required to access waste in these new circumstances. This was initiated as a response to the complaints of the wastepickers. From the nature of the complaints, it was possible to conclude that despite the environmental services provided by the sector, they were not granted the status of service providers with rights over waste through policy or legal ruling, leaving them open to continuous intimidation and vulnerability.

Chintan's approach to these has been through a process of partnership with the sector. This includes creating processes through which the sector can articulate its needs and by which Chintan is able to understand these as well as offer its perspective. This results in creating priorities, leading to defining joint initiatives that can be collaboratively undertaken.

Some of the main collective concerns that emerged were related to the condition of poverty and the quality of work:

- to have formal first rights over waste in general, and recyclable waste in particular.
- to ensure formal inclusion in waste handling systems as they emerged.
- to reduce the hazards of the occupation of recycling.
- to ensure that the wastepickers children started studying and that the next generation of children did not work as waste pickers.

There were extensive discussions over how these issues should be addressed. Of the many strategies that were debated, the critical one was one that addressed the nature of the work itself. Clearly, in order to address the most pressing of these concerns, it was important to create a shift in both the work and in the perception of the work, from unclean/hazardous to an essential professional service that was safe for the workers.

Two of the critical interventions that were identified were:

- a need to seek cleaner jobs within the waste handling sector, given that there was both the know-how about waste and there was the possibility of generating surplus revenue from it.
- waste pickers should be enabled to become waste entrepreneurs. This would facilitate them to make decisions about their lives with greater latitude.

2.1 The Available Options

The challenge that Chintan faced was to find means to convert these aspirations into tangible initiatives that would deliver these results on the ground.

Both global and Indian urban experiences make it clear that there are profits to be made by waste handling. The question before us was how could poverty health, safety, dignity and legitimacy be mainstreamed in this effort?

A SWOT analysis suggested that services, rather than products, would be most suited to our needs.

It also showed that one of the strengths was that wastepickers had already been organized to see themselves as a sector, and as a group, rather than individuals. Group building and collective action by

Chintan clearly impacted the manner in which they dealt with their everyday lives and concerns. This would be conducive to teamwork, essential in any enterprise or service delivery.

2.2 The initiatives

Based on this, Chintan began to identify a range of possible clients on one hand and develop its capacity on the other.

There are two kinds of service delivery options most commonly seen in the market. The first is when the contractor (in this case, Chintan was the contractor) is paid to undertake a defined set of services, such as housekeeping or door-to-door waste collection. Here, a fixed amount is paid each month in exchange for services. The waste is also the responsibility of Chintan and it has the right over the recyclable waste. The second is when waste or scrap is bought from the generator at a determined rate. Chintan undertakes both these. Both these are considered service delivery because they offer a set of waste- and cleaning-related services.

Chintan was able to successfully bid for some projects. This was on account of the add-ons it offered, such as training, composting etc. Chintan staff delivered these add-ons initially, till the skills were passed on. Many components of the training were also included in the daily work of the wastepickers as well. The range of contracts procured was related to purchase of bulk waste, housekeeping and cleaning tasks for one-time events. While Chintan bid for many initiatives, it procured only a few. These included work at hotels, food courts, offices, showrooms etc. Our current clients include the Taj Group of Hotels, Delhi Tourism, several markets and fast food chains, etc.

Models of service delivery typically yield surplus under the following conditions:

- when those working on it can be paid from the contracted amount, leaving dry waste purely as a surplus.
- when the dry waste being purchased is in such large quantities that the per kilo margins yield a profit. In this case, the quantities have to be made available in bulk, to save costs such as transportation and double shifts.
- when there is a market for wet waste. Even if there is no cash payment made by a third party that picks up wet waste, savings of labour and transportation are significant. For every 1.5 to 3 tons of wet waste, the monthly costs of daily disposal (as it cannot be kept for more than a day) in a landfill in Delhi are approximately Rs. 25,000 (US\$ 570). Hence, giving away this waste is actually cost saving, provided all of it can be given away. Typical kinds of wet waste that find a market are uncooked bulk vegetable peels and shreadings, old, hard bread and fruit. Cooked, oily food must be dumped, incurring additional landfill fees.

By shifting from wastepicking to service delivery collectively, wastepickers are assured of a constant income that is at least equal to minimum wages throughout the year, as well as social security. As wastepickers, they must each pick up approximately 60 kg of waste to earn minimum wages, something that is not possible during the monsoon or under other periods of duress. Handling waste from bins has been seen to result in illness or injuries, medical costs and loss of work. It has been estimated that on an average, a wastepicker loses almost Rs. 500 (US\$ 11) for every period of illness lasting between five and seven days. Improved work conditions reduce occupational health problems, thereby also offering concealed gains.

There are therefore two layers of gains to be made – firstly, by the wastepickers themselves and secondly, from the surpluses. The current surpluses generated range from Rs. 3000 to Rs. 18,000 (US\$ 70 to 400) per month, mostly from the sale of recyclable waste. These also include the hidden savings incurred from wet waste transactions.

Section 3: Discussions

Monetary savings leading to increased levels of education is not a new phenomenon. However, the manner by which wastepickers and Chintan have been able to do this collectively is of interest. Wastepickers typically work as individuals. However, this case study shows that if their capacity is built to work collectively, then they can propel a change in their larger community through more savings and revenue generated.

Multiple interventions at different levels in an area can result in a well-laid out path towards achieving some of the MDGs. Although this paper focuses on education, it indicates that other MDGs are also being met. These include goals related to health and sanitation, of the city and for themselves as well as possible poverty reduction.

3.1 Knitting the Strands Together

As the case study described previously shows, Chintan's experience is that these outcomes are possible where forging a collective identity; team building and collective responsibility have been part of the work undertaken with poor communities providing services, in this case, wastepickers. It is likely that one of the reasons for being able to successfully take on, manage and implement such tasks was that there had already been intensive group building and envisioning exercises undertaken, as well many kinds of collective action. This created peer support and peer monitoring, which acted as safeguards. In additionally, collective action also helps an individual to frame himself or herself as representing a larger interest group, enhancing a sense of responsibility.

It also shows that these changes have been made possible by seeing solid waste management as a service that takes into account the informal sector and seeks equity in their participation. By doing this, it also acknowledges the right of the sector for inclusion, and their rights, consequently, over the recyclable waste.

I submit that the case study detailed above shows close linkages between specific approaches to waste management and education for children, offering unexpected synergies to achieve this goal.

Chintan has not received funds for its work with wastepicker children for over three years now. Yet, it is precisely during this time frame that some of our most innovative work with access to education has taken place. An initial analysis shows that this is likely to be linked with the success of the service delivery enterprises. There are various reasons for this.

Firstly, that service delivery creates a direct flow of funds for work. Secondly, there is generated a community pressure and willingness to participate in learning centres funded by their own work, or the work of others in their 'group'. Thirdly, wastepicker children attend such classes as part of their direct and existing interaction with Chintan, making it relatively easier to draw in existing children. The shortcomings of the centres are also shared through existing systems of local meetings etc. as well as the newly set up systems by the education team. Fourthly, and critically, the idea of needing to invest in educating wastepicking children emerged simultaneously (and independently) from the community and Chintan, making it a shared vision.

3.2 Enhancing opportunities through environmental sustainability

The case of Chintan is just one in which solid waste management has been able to meet the goals of the MDGs. How can similar examples be created elsewhere and multiplied where they exist?

From the experience of the last 4 years, it is clear that surpluses are increased only as the numbers of assignments increase, but there is little elasticity within each assignment. We observed that the overall revenue generated from selling waste is not substantial. The largest recurring cost is in transportation, which has only increased with the rising petrol and diesel costs, while the prices and quantity of waste

has remained the same. With the privatization of landfills, this cost is likely to increase. Moreover, leakages in the system also take place. The current rates of waste are fixed according to the highest prevailing market rates at the time of negotiation. Hence, they are already unable to yield profits in low periods or as costs increase. This limits the surplus available for investment in education.

The challenges are to increase the opportunity for wastepickers and to enhance the resources available to feed into children's education. Some principles of environmental sustainability such as *Extended Producer Responsibility* (EPR) can be of use here.

Paying to pick up and handle waste is in contravention to the idea of Extended Producer Responsibility, where the producer takes responsibility for the waste produced. In some cases, the producer pays a service provider to handle the waste on his behalf. Globally, the Green Dot of Germany is the best-known example of this. If, in the Indian context, this is mandated or undertaken through a voluntary agreement, it is possible to partially overcome the problems of high and rising costs of disposal. A re-negotiation of the payments made and received will have to be undertaken with EPR as a focus. The amount paid by the service provider may then be either done away with or fixed not on the basis of a bid, but taking into account the costs incurred annually. Already, selling waste is not a central business proposition for the generator as much as it is for the service provider. For example, in one of Delhi's premium hotels, it was seen to generate just Rs. 300,000 (US\$ 7,000) annually.

Re-framing these transactions through principles of environmental sustainability can create enhanced opportunities for wastepickers. This at once allows for incremental investment into the MDG goals of education.

Contracts given out for such cleaning and waste handling work should also take into account that if surpluses are being invested into any of the MDG objectives, then a tax exemption should be made possible, provided it is demonstrated that it is being used for these purposes. If such waste management models are to contribute to the MDG goals, they must be restructured to yield increased surpluses.

A third and increasingly, important tool for achieving the MDGs lies in privatization of waste handling services. Privatization offers India an opportunity to move towards the twin goals of education and health. However, this requires a shift in trajectory, from its current application as a means of cleaning cities to a system that contains potential for the MDGs.

In fact, one of the greatest challenges to sustainable, equitable cities is that of privatization of waste handling. As picking up waste from dhalaos¹ and its transportation is privatized, waste is seen to be less accessible to wastepickers. Furthermore, the legal right over the waste is passed on from the municipality to the private agency, leaving the informal sector out in the cold. It is also harder to undertake informal transactions in this changing context. This directly impacts earnings and works as a disincentive for children to study, since they must spend longer hours for equivalent earnings. It also puts pressure on the family to encourage children to work, despite their understanding about the importance of education.

Given the sheer wealth in recyclable waste, some of the companies would like to augment their revenues by expanding to collection of waste from bigger bulk generators. This is in direct conflict with the interest of wastepickers and smaller waste buyers. In this case, the waste procurement initiatives could be lost to the sector, with the obvious consequences. It is therefore desirable that any privatization mechanism should mainstream the safe and secure livelihood needs of the informal sector.

1 Masonry enclosures for temporary storage of waste

3.3 Conclusion

Governments in developed states do not have the same obligation towards poverty reduction as in India, where this phenomenon poses severe challenges. In urban India, the scenario is no less grim, and only likely to increase without strategic interventions. Here, governance needs to take into account such models that not only provide clean, healthy cities, but also, focus on poverty reduction.

There will always be a market for waste related services at the levels described. The work of Chintan shows that there is demonstrated potential for solid waste management to impact the MDGs, particularly children's education. Although it also appears to impact poverty, sanitation and health, this can only be ascertained after these initiatives have run for a longer period.

However, achieving some of these MDG goals in a sustainable and long-term manner requires shifts in the way waste is perceived and the way urban governance is prescribed. Instead of being seen as a (potentially) noxious entity that must be removed, it must be recast as a tool that can be imaginatively used to achieve some of the MDGs.