## Who wins and who loses? Impact of Privatization of Municipal Solid Waste Management Services on stakeholders

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Keywords: Privatization, Municipal solid waste, Informal, Public, Private, Amritsar

#### **Abstract**

The neo-liberal economic ideology prevailing globally has enabled larger private sector participation in development activities. The logic of private sector participation in municipal solid waste services hinges on the hypothesis of it performing more efficiently on all the fronts and the 'privatization mantra' has been fast adopted by several municipalities across the country. In the Indian context, with the turn to liberalization, the late 1990s onwards has witnessed increasing involvement of the private sector in municipal solid waste management operations.

While its positive impacts particularly on the operational and economic side have been highlighted by several researchers, of equal or more consequence are its impacts on the social side, the stakeholders in particular. As such can privatization of municipal solid waste services be seen as a vanguard of social sustainability, steeped in the faith that it stems positive spillovers on all fronts? In a bid to answer this research question, the Author undertakes an explorative research in Amritsar city, India, examining the impacts on four principle stakeholders, the informal waste sector, the public sector sanitation workers, the private sector sanitation workers and the community in terms of equitable access to the services.

In order to evaluate the impacts of privatization, the author constructs a social sustainability assessment framework that serves as the lens for examination of the impacts of privatization on stakeholders, using the criteria and indicators derived therein. The findings of the study reports adverse impacts for the informal waste sector in particular. The level of analysis aims to offer a deeper understanding of the social outcomes of privatization of municipal solid waste services The data for analysis is largely sourced from archival and documentary evidences, semi structured interviews of the target stakeholders as well as supplemented by household survey and direct observations by the researcher.

#### 1.0 Introduction

Privatization can be seen as one of the prime outcomes of the neo-liberal economic order that has found deep roots since its gradual initiation in the late 1980s and early 1990s. Almost all sectors of development and service delivery have been influenced by this paradigm and municipal solid waste management has been no exception. In fact global think tanks like the World Bank have encouraged private sector participation in waste management in the developing countries where weak and under capacititated municipalities have since long under performed on the waste management front. Privatization was advocated as an essential component of structural adjustment programmes in response to the public debt crisis in the developing countries and also

made a condition for renewed lending (Kessler and Alexander, 2005, p. 253, Weizsacker et al. 2005, p. Batley, 2001, p.359). An important question that arises is what happens to the role of the important stakeholders after privatization take over waste management operations. The social sustainability dimension of privatization is often sidelined in such endeavours wherein researchers as Koppenjan and Enserink (2009, p.291) feel that displacement of the existing informal institutions, the reduction of local job opportunities and destruction of the feeling of local ownership may result as an adverse outfall of privatization. In context of India, the turn to liberalization of economy since 1991 opened the doors for privatization of urban services. Resultantly the waste sector found favour with private companies facilitated by the local governments aiming towards creating an image of progressive cities demonstrated most visibly through apt management of solid waste. As a consequence the long important stakeholder as the informal sector has been sidelined and left to face the adverse and harsh impacts of privatization, left largely unrecognized and therefore often considered illegal (Medina, 2007, Sembiring and Nitivattananon, 2010, Masood and Barlow, 2013, Velis, et.al, 2012).

This research focuses on the impact on four stakeholders post privatization of municipal solid waste management service in one of the Indian cities, Amritsar, i.e., informal waste sector, public sector employees, private sector employees and the community. In attempting to do so, this research paper seeks to offer a deeper understanding of the social outcomes of privatization of municipal solid waste (MSW) services in the case study and in general, particularly in context of Indian cities.

The data for analysis is largely sourced from archival and documentary evidences, semi structured interviews of the target stakeholders as well as supplemented by household survey and direct observations by the researcher.

#### 2.0 A theoretical review and framework for analysis

In order to examine and analyze the impact of privatization on the stakeholders in the case study, it becomes important to devise a theoretical framework that would guide the impact data capture and analysis. The social dimension emphasizes upon increasing social cohesion in terms of equity in incomes, employment and access to resources and infrastructure (Hans-Bockles-Stiftung, 2001 in Omann, 2004, p.73). In context of sustainability and privatization, Koppenjan and Enserink (2009, p.284) suggest that social sustainability refers to the impacts of privatization

on affordability of and access to public service to the poor. However Koppenjan and Enserink fail to include the impact on stakeholders as one of the salient impacts within the gamut of social sustainability. Similarly other researchers (Dorvil, 2006, Cointreau-Levine, 2000) do not give emphasis on social sustainability issues. The Integrated Sustainable Waste Management (ISWM) framework propounded by Klundert and Anshutz (2001,p.13) mentions consideration to informal sector as one of the important stakeholders in waste management in developing countries. Coming specifically to India, the Ministry of Urban Development service level benchmarks (MoUD, 2010,p.40-41) list eight indicators to evaluate private sector participation or municipal performance in municipal solid waste management. However the benchmarks do not go by beyond evaluating the operational and broad economic efficiency and completely ignore the social side of municipal solid waste management in terms of impact on stakeholders.

Moving on to the implications for the stakeholders, Klundert and Anschutz (2001.p.13) Samson (2010.p.79), Sandhu and Dhillon (2009,p.240) regard the informal waste sector as important to developing a system of integrated and sustainable solid waste management in developing countries as India. Coming next to the case of workforce, both in the public and private waste management sector, a statement that is reverberated often is that cost cutting takes place at the level of the labour workforce (Samson, 2010, p.24, 91). Schubeler (1996,p. 37) argues that both public sector waste workers and private sector workers are subjected to unhealthy working conditions and poor social security post privatization and their access to social security, proper equipment and protective clothing should be ensured to reduce health risks.

Lastly, the community (households) as one of the key stakeholders cannot be ignored .Waste generated by a population is primarily a function of their consumption patterns and socioeconomic characteristics. Simultaneously, the community's attitude, awareness and interest in waste segregation and minimization and waste segregation behaviour contributes to the status of MSW management (Schubeler, 1996, p.35). Based upon the understandings generated by theoretical deliberations and also a systematic evaluation of the performance domain frameworks in literature as discussed above, an assessment framework for case study evaluation of the impact of privatization of waste management on said stakeholders is derived as per table 1 below.

Table 1 Social sustainability dimensions of waste management

| stakeholders             | Impact Indicators                                      |
|--------------------------|--|
| Informal waste sector    | Loss of employment and income                          |
|                          |  |
| Public sector employees  | Employee retrenchment and change in working conditions |
| Private sector employees | Working conditions and adherence to labour laws        |
| Community                | Distributive equity                                    |

# 3.0 Municipal solid waste management in Amritsar; from municipal to privatized operations

Amritsar is the second largest City in Punjab in India, located 27 kilometers from the international border with Pakistan with a population of 1,132,761 and areal extent of 14237.2 hectares. Being the seat of the sikh religion and owning to the location of the golden temple, the city attracts tourists from all over the world and has also witnessed a spate in development activities in the last two decades owing largely to the liberalization measures and a proactive political economic scenario leading to planning and implementations of a large number of infrastructure, commercial and residential development projects in the city.

Coming specifically to the MSW scenario, the city generates about 600 metric tonnes of MSW per day. It is observed that the organic waste is highest in the city. The Amritsar Municipal Corporation (AMC) is the concerned urban local body responsible for MSW management in the city but was found wanting on all fronts from inadequacy in storage infrastructure, collection and transportation when it came to discharging the responsibility efficiently looking at the piles of accumulated garbage in the city. The collection levels were only about 50-60% and no provision or effort was made to segregate the waste or recycle it and dispose of the remaining in a scientific manner. Consequently the city displayed poor hygiene condition and was a negative factor for a holy city known for its tourist capabilities. Looking at the state of affairs in terms of waste management and the inability of the AMC to handle by itself and also the same issues in the other cities of Punjab State, led the Government of Punjab to take initiative to go in for private sector participation in MSW management services in the State. The initiation of the JNNURM¹ and inclusion of Amritsar city also gave a much needed impetus towards appropriate management of MSW in the city.

<sup>&</sup>lt;sup>1</sup> The thrust of JNNURM (Jawaharlal Nehru National Urban Renewal Mission) is on building efficiency in infrastructure and service delivery mechanisms, community participation and accountability of urban local bodies

The AMC did nothing in the city in context of waste recycling and this important task has historically been managed by the informal waste sector as playing a significant role in recovering recyclable waste and resending it into the production and consumption process as a part of a complex and well organized chain starting from the waste pickers, small scrap dealers, medium scrap dealers and reprocessors. However both the state and the local government turned a blind eye towards these key stakeholders and went on to push for entry of corporate private players in the citys waste management operations.

The resolution for effective MSW management and its scientific disposal was passed by the AMC on 27/03/06 and in September 2008, M/S Antony Waste Handling Cell, Private Limited was allocated the work to be undertaken in Phase I i.e. collection, storage and transportation of waste to the disposal site. The project was initiated under the JNNURM with a total capital cost of 72.49 crores with 50% Central Government, 20% from Government of Punjab & 30 % from AMC. The model emerging from this PPP entailed that the private party would manage in 41 wards<sup>2</sup> and the remaining 24 wards would be handled by the AMC including street sweeping activities for the entire city.

The company would handle at least 300 tonnes of waste per day and would be paid an amount of Rs 500 per tonne of waste. Accordingly the company invested Rs 10 crores in procuring equipments and its manpower comprised of 250 inclusive of drivers, helpers, repair and management staff. The company continued service delivery for three and a half years years before it withdrew its operations in August 2012 citing the non-payment of dues by the AMC to a tune of 1.8 crores as the primary reason for withdrawal. Thereafter the AMC had no option but to deploy its own meager resources to manage the city garbage and the results are far from satisfactory. The informal waste sector continues to operate and perform its customary recycling operations. However the AMC is again in the process of privatizing the waste and in this context bids have already been invited again by private companies and the intention of the city government to privatize against all odds appears clear.

and parastatal agencies towards the citizens. In a bid to augment and improve infrastructure the mission was launched in 2005 in 64 cities with a provision of Rs 50,000 crores over a seven year period

<sup>&</sup>lt;sup>2</sup> A ward is the lowest administrative unit for city governance.

## 3.1 Impact of privatized waste management operations on stakeholders

As mentioned, four prominent stakeholders i.e, informal waste collectors, employees in the public sector, employees in the private company and the local community were considered as the main stakeholders and the selected indicators for impact assessment was applied. The results of the same are presented herein. Coming specifically to the context of privatization, the research considers the three and a half years when the private company was engaged in managing waste operations in the city from February 2009 to August 2012.

#### 3.1.1 Impact of privatization on the informal waste sector stakeholders

All recycling operations in Amritsar city are undertaken by the informal sector. This sector is arranged in a pyramid with waste pickers at the bottom rung and forming the backbone of waste collection. There is no formal count available but it is estimated (January, 2014) that there were 2500-3000 waste pickers engaged in informal waste collection and recycling operations in the city. There is also an informal operation where the itinerant waste buyer buys directly from a household by paying a small amount for the recyclable waste and their number is estimated to be around 2500. Next are the small scrap dealers who buy the waste from these waste pickers/itinerant buyers and sell it to larger scrap dealers who deal with specific items and materials who then supply waste to the recycling units or the reprocessors. The waste is collected from various sources; landfill, illegal dumping sites in the city, secondary storage bins and also in some localities, directly from the households. It is then sorted through manually in the areas where the waste pickers reside. The waste pickers can be broadly divided into three groups including those who collect waste door to door, from the roadside and municipal bins, and at the city landfill.

The design of privatization followed by the city has been one of alienation wherein waste collection was to be undertaken at door step of households in the 41 wards of the city contracted to the private company. This design left no room for the waste pickers to access the waste they wanted. The local government did not regard the work done by the informal sector as significant or as a value adding social enterprise that could be tapped and mobilized to play a formalized role in the city's waste management operations. In case of the private company, they also did not attach any weight to the work of the informal sector and rather spoke of it as being "primitive and non-scientific."

Those most severely impacted from privatized operations were the waste pickers collecting at households who were asked by the households not to come for waste collection after the private company began operations in their areas. However since in phase I the company's contract was only for collection and transportation, waste pickers did not completely lose their right as customary owners to waste but rather were limited to the potential locations from where waste could be accessed by them i.e., only the landfill. However, the fact remains that when it came to door to door employment, the waste pickers were badly hit and had to look for alternative means of livelihood within or outside the informal waste sector.

The loss of door to door employment led to a substantial loss of income for the door to door waste pickers who became suddenly unemployed and cut off from access to domestic recyclables (Table 2).

Table 2 Income losses incurred post privatization

| Waste picker categories                     | Income before<br>private operations<br>began (average<br>earnings/month in<br>Rupees) | Income after private operations began (average earnings/month in Rupees) | Average decline<br>(Rupees) | Average decline in % |
|---|---|--|-----------------------------|----------------------|
| Waste pickers (landfill)                    | 5500  | 4000   | 1500                        | 27                   |
| Waste pickers (roadside and secondary bins) | 5000  | 3500   | 1500                        | 30                   |
| Waste pickers (households)                  | 6000  | 2000   | 4000                        | 60                   |
| Itinerant waste buyers                      | 10,000  | 9000   | 1000                        | 10                   |

Source: Constructed by researcher based on interviews of informal waste stakeholders

The waste pickers operating at the secondary bins and landfill also reported a drop of income primarily due to the competition for recyclables becoming more intense at the landfill, with more waste pickers moving there for accessing recyclables since the previously decentralized collection mode was now concentrated and confined spatially to the city landfill.

While the itinerant buyers were not significantly impacted they did mention a drop of income due to the endeavour of the private company staff to ask the households for recyclables that were traditionally given to the itinerant buyers.

## 3.1.2 Impact on Municipal sanitary workers

The pursuit of sanitation and health were the major drivers historically leading to the establishment of the municipalities in the country by the colonial rulers. Traditionally the work comprising of street sweeping, waste collection and disposal has been done by permanent sanitation workers of the municipalities across the country, almost always organized in unions under political patronage. However other then the permanent employees, a trend that can be traced to the early 1990's is hiring of contract sanitation workers by municipalities (Vyas, 2009, p.326) largely to cut down costs of a full time employee as these contract workers are paid much less<sup>3</sup> than a permanent sanitation employee. The case of Amritsar is no different than the above mentioned. The management cadre from the health officer to the sanitary supervisors comprises of permanent staff. While in the lower hierarchy constitutes sanitary workers (drivers, sweepers, waste handlers), the staff has been recruited both on permanent and temporary basis. Prior to the AMC operations, there were 1360 permanent sanitation workers and 1050 contract workers hired under the MSC scheme of the AMC. While the permanent staff earn a salary of Rupees 14000, the temporary workers were employed for a meager Rupees 1200 since year 2000 with a marginal increase up to Rupees 2850 till 2009, an amount which was lower than the Government of Punjab minimum notified wages for 2009 (Labour Department Punjab, 2015).

According to Khan (et.al, 2012, p.123, 124) politically, the most difficult and feared impact of privatization is employee layoffs and retrenchment. Labour force restructuring before and after privatization is expected as usually public enterprises are overstaffed and often used as instruments of job creation. In this context, the case of privatization of MSW operations in the city presents a slightly divergent view. Going back to the compromise with the unions, 175 contract employees were made permanent in 2009 to symbolize that privatization would not harm the interests of the sanitation workers. However with the protests erupting again<sup>4</sup> and also in the wake of state elections in 2011, another round of permanency took place. The condition laid was that only those who had worked continuously without any break of service since the day of appointment would be considered. Meanwhile the local area committees for sanitation were dissolved and at least 500 contract workers were made redundant under this criterion. While it

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<sup>&</sup>lt;sup>3</sup> Usually a third of the salary of permanent municipal sanitation employees.

<sup>&</sup>lt;sup>4</sup> In the wake of state government elections in 2011, not wanting to lose sanitation union support the AMC made permanent the services of additional 375 sanitation employees

can be affirmed that employee lay off and retrenchment per say did not take place for the permanent staff but a gradual layoff using a compromise formula to retain some (to appease the unions) and lay off the remaining contract employees did take place post privatization.

## 3.1.3 Impacts on sanitation workers of the private waste management company

The private company began operations in the city on 2<sup>nd</sup> February 2009 and hired workers by giving advertisements in the local dailies in Jan 2009. Based upon information gauged from the interviews cutting across managerial staff and workers, it is evident that previous skill or work experience in the waste sector was not a mandatory condition imposed by the private company. The managerial staff (Manager and Deputy Manager) were paid a lump sum salary of Rupees 40,000 and Rupees 30,000 respectively with provision of leave on Sundays and an annual paid

40,000 and Rupees 30,000 respectively with provision of leave on Sundays and an annual paid leave of two weeks. The supervisory staff was paid Rupees 7000 with one weekly leave but no annual leave. The technical repairs staff (Mechanics) were paid between Rupees 6000-8000 depending upon their skill, again with a weekly leave but no annual leave. The worker class (drivers and helpers) were employed on a salary of Rupees 3900 with no provisions of any leave per week or annual leave. While the wages complied with the norms in unskilled and semi-skilled categories they were lower for skilled and high skilled worker categories of the minimum wage regulations. Annual increments were given to the managers and supervisors but no increments was there for the workers and drivers. Besides no leave, pay deductions were made in case a leave was taken on any account including sickness.

The private company indulged in exploitation and cost saving tactics in the process trigging dissatisfaction amongst lower hierarchy employees that led to work strike downs and labour court litigations that actually would have added to the transaction courts of the private company. Interviews with employees revealed that labour turnover was high and labour downsizing was practiced by the private company to reduce costs. While in February 2009, at the beginning of operations, the worker strength stood at 248 but from 2011 onwards the strength hovered between 170 to 200. The workers were not given any terms of reference and neither a contract agreement was signed. Hence exploitary and arbitrary practices marred managerial and labour relations. The working conditions were not conducive to the lower hierarchy workers of the private company. Unclear service rules, lack of transparency and unfair methods of cost reduction led to hostile service condition for the workers.

### 3.1.4 Equitable access of service to the community

An analysis of equal access to the service was made by dividing households into four categories based on their disclosed incomes and visual observation of the residential locality and housing structures. The income based categories are classified as economically weaker sections (EWS), low income groups (LIG), middle income groups (MIG), and higher income groups (HIG)<sup>5</sup>. Besides the AMC notified list of 65 slums locations in the city was also considered in choice of selection of areas for household survey, with 13 of the 33 locations being notified slum areas. The result of survey in context of equity revealed that in terms of collection of waste from doorstep, 51.39% of the EWS and 43.75% of LIG category received no door to door collection where as this dropped to 34.04% in MIG and just 6.5% in HIG category. A majority of the HIG households rated the door to door service by private company as excellent whereas this figure dropped down the line to 7.3% in EWS households. This reveals a bias wherein the HIG households appeared to be much better serviced than low income households. Besides the door to door collection, there appeared to be a variation even in distribution and access to the secondary waste bin wherein 81.3% of EWS and 65.9% in LIG households found the containers inaccessible from their homes. Whereas this dropped to 32.6% and 35.5% in MIG and HIG households respectively. This is an indication that less number of secondary containers were placed in low income areas leading them to be at a greater distance and hence inaccessible to most households in low income locations.

#### 4.0 Findings and discussion

This research paper aimed to comprehend privatization from a social sustainability perspective applying the indicators set out to guide and situate the analysis. Based upon the discussion therein, it is possible to sieve out major inferences.

Research by Samson (2010) and Mishra (n.d) points to negative impacts of privatization on the informal waste sector. Based upon the deductions from the analysis, this research also validates

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<sup>&</sup>lt;sup>5</sup> This categorization in is based upon the Monthly Per Capita Expenditure (MPCE) given by the Indian National Sample Survey Report (2004) the Ministry of Housing and Urban Poverty Alleviation (2007) categorizes the households as EWS, LIG, MIG and HIG based on income. Accordingly the income specification for EWS and LIG is Rupees 1 lakh and 1-2 lakh respectively (The Hindu, 2012).

their contestation. It is quite ironic that the informal waste sector as the traditional stakeholder was not recognized while considering privatization as an approach as well as during its design. The services and benefits rendered by them to the city are not acknowledged and there seems to be unwillingness to recognize them as efficient service providers even though they have been performing this task for at least three decades now. In conclusion it can be inferred that privatization of waste management services impacted the informal sector stakeholders, specifically the waste pickers adversely reducing their meager incomes further and forcing them to adapt alternate survival measures.

In terms of the impact of privatization on municipal sanitation workers the case of Amritsar demonstrates that the impacts do not completely match the wider beliefs from privatization emanating from theory and other case studies (Khan et.al, 2012, Chandler and Ferielle, 1994). In the current municipal structure as described, it is extremely difficult to lay off or retrench permanent municipal workers. Despite the advent of privatized operations two recruitment drives were initiated albeit under political support and union pressures. The case of the sanitation workers of the private company substantiates claims by researchers as (Martin, 2001, Bach, 2000), that down the hierarchy, worker conditions in the private sector declines and most cost saving takes places in that category. Disregard of labour laws, exploitation tactics and ambiguity around working norms is noticeable. Additionally the private company did not consider it necessary to provide appropriate safety gear to the field staff or improve their working conditions to target and enhance its own operational efficiency.

Coming to the case of distributive equity and access to services the case of Amritsar substantiates the lack of equity the reason being the need for compulsive cost cutting by resorting to lower door to door collection as well as reduced level of service in low income locations while the higher income areas received better. In summation, based upon the analysis, figure 1 presents a graphic view of the social sustainability impacts and indicates low levels of social sustainability performance of privatization in context of the stakeholders; informal waste sector, private company sanitation workers, inequitable access to waste services by the community. Coming to the AMC workers considering the fact that no retrenchment of permanent employees took place but some contract workers lost jobs, a medium scale impact is visualized.

Status of social sustainablity

equity

households

informal waste sector

high

AMC sanitary private company...

status of social sustainability

Figure:1 Status of social sustainability post privatization of municipal solid waste

#### 5.0 Conclusions

The case of privatization in Amritsar city brings out some pertinent points for deeper analysis.

Under the current macro-economic circumstances it seems that privatization of waste is going to be inevitable. The glamour and the tags of higher efficiency attached with the corporate sector will not fade away soon rather it will get more embedded into urban service delivery systems looking at the neo-liberal paradigms and policies that continue to widen rather than recede with the passage of time. On the other hand there is certainly, within the framework of pragmatic neo-liberalism, a paradigm shift of national policy to focus on inclusive growth and poverty eradication. The latest Government policy, National Urban Livelihoods Mission (NULM), 2013 emphasizes upon poverty and vulnerability reduction of the urban poor by enabling them access to gainful employment and skilled wage opportunities resulting in appreciable improvement of their standards (GOI, 2013, p.7).

In fact the NULM recognizes the waste pickers (ibid, p.16) as vulnerable and seeks to focus on them along with the other identified vulnerable urban poor to enhance their capacity for self employment and salaried employment. In the light of this policy, it becomes imperative to also absorb the same in the practices of waste privatization in the city. Further, in case of privatization, as the study indicates, retrenchment and layoff policies are politically difficult if not impossible to implement. Therefore the process of natural attrition without retrenchment

might be a more workable solution. Exploitation and disrespect for labour laws as in case of this study indicates a need for strict monitoring and evaluation of the labour rights of private waste managing companies so that it does not pose a negative impact on this important section of stakeholders. Also, the waste operations will always assume the element of public good looking at its larger purpose of better quality of civic life for the citizens. In that sense distributive equity must be ensured, again by effective monitoring of the service by the local government. Further it is also important to involve the citizens in the waste managing operations such as at source segregation so that the operations become further productive and the community feels a sense of owing and involvement and thereby mutual benefit in the entire system of solid waste management. Finally the operational structure within the gamut of privatization must ensure that social sustainability of operations are not compromised in a bid to achieve economic or environmental objectives.

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