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# Municipalization for privatization's sake

## Municipal solid waste collection services in urban India

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### Abstract

**Purpose** – Rapid economic growth and urbanization in India have increased demand for municipal services. In response, privatization has emerged as a policy solution to a growing deficit in urban infrastructure and service provision. But, privatization assumes prior state ownership of those services. Certain waste management services, specifically doorstep waste collection, have never been truly public in the sense that private informal actors have historically provided them. The purpose of this paper is to examine the tensions and contradictions between two related policy imperatives – universal service provision and privatization – that appear to be guiding the municipalization of solid waste collection services in urban India.

**Design/methodology/approach** – Research for this paper relies on detailed analysis of key government documents (reports of various committees, regulations and laws) that have been important in defining municipal responsibilities for waste management in India from 1990 to 2016. In addition, where appropriate, research materials from the author's doctoral dissertation fieldwork in Delhi from October 2012 to December 2013 have also been used.

**Findings** – An analysis of key policy documents revealed that the government's efforts to document deficits in service provision ignored, and thus rendered invisible, the work of the informal sector. While a consensus on the need for universal waste collection service had emerged as early as the late 1990s, it was not until 2016 that municipal responsibility for service provision was codified into law. The rules issued in 2016 municipalized this responsibility while simultaneously opening up spaces for the inclusion of the informal sector in waste collection service provision.

**Originality/value** – This paper fills a gap in the existing literature on how policy interventions have brought the space of the doorstep into the ambit of the state such that it allows for the opening up of those spaces for the entry of private capital. Under the guise of universal service provision, the shift to municipalization and outsourcing to private corporations is not in fact privatization – service provision is already private – but involves the dispossession of informal workers and the transfer of their resource to the formal, corporate sector.

**Keywords** Informal sector, Privatization, Urban India, Municipalization, Universal public service, Waste collection

**Paper type** Research paper

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## Introduction

Plagued by inadequate infrastructures, resources and capacities, contemporary Indian cities face a daunting waste management problem (Kumar *et al.*, 2009). As the first step of the waste management value chain, waste collection is crucial. Only once waste is collected at the point of generation, can it be transported, treated and/or disposed of. Indian policymakers widely acknowledge the problem of inadequate waste collection, which has caused a range of public and environmental health problems (MoSPI, 2014; MoUD, 2010a, 2012a, 2014a). Consequently, waste collection has emerged as an urgent policy imperative in contemporary urban India.

The contemporary landscape of doorstep waste collection services in urban India is complex and heterogeneous. A wide range and combination of actors and arrangements – formal and informal, public and private – provide this service in different Indian cities to varying degrees. Typically, municipalities provide secondary collection services. In other words, they collect waste from a common neighborhood disposal point (the community bin) and transport it to the disposal site (open dumps that can barely be categorized as sanitary landfills). Secondary collection has historically been encoded as their formal responsibility in Municipal Corporation Acts. Consequently, primary waste collection (or doorstep waste collection) has mostly been a private affair whereby informal waste collectors, outside the purview of the state, collect waste from the doorstep and transport it to the community bin. Chaturvedi and Gidwani (2011, p. 142) described this as “privatization-from-below.” These informal workers make a living by selling recyclable materials extracted from the waste they collect. Once in the community bin, waste becomes the property and the responsibility of the municipal body. Recently, municipalities across the country have started formally privatizing doorstep waste collection services by enrolling firms, thus displacing the existing informal actors (Schindler *et al.*, 2012). Part of the motivation behind this new wave of formal privatization is to resolve the problem of uncollected wastes. But if doorstep waste collection was not municipal responsibility to begin with, then first it had to be made so. In other words, municipalization is necessary for privatization. Furthermore, the problem of uncollected waste can only be fully resolved if waste collection were to be provided as a universal service for all urban residents. In other words, municipalization is also necessary for universal service provision.

Two distinct imperatives – privatization and universal service provision – appear to be guiding the municipalization of waste management services in contemporary India. On the surface, these two imperatives are not incompatible. In fact, besides cost savings, one of the justifications for privatization of public services has also been providing better and cheaper access to a larger number of consumers of those services (Savas, 2000). Yet, critics have argued that privatization of public services has led to unequal service delivery and higher costs for consumers accessing those services, which are particularly unfavorable to the urban poor (Bayliss, 2002). Privatization in practice then appears to be inimical to the goal of universal service provision. While in theory, privatization and universal service provision are not incompatible, in practice, they often are.

The contradiction between theory and practice in the relationship between privatization and universal provision of public services animates the research focus of this article. The central questions that this paper interrogates are: How does municipalization of solid waste collection services, in policy discourse and practice, reconcile the tension between the goals of universal service provision and privatization of those services? How is municipalization reconfiguring power relations between the public sector (or the state), the formal private sector (waste management firms) and the informal sector?

Research for this paper relies on detailed qualitative analysis of key government documents: reports of two influential committees ([Planning Commission, 1995](#); [Supreme Court, 1999](#)), rules ([MoEF, 2000](#); [MoEFCC, 2016](#)) and laws ([GoI, 1957, 1992](#)). These six documents have been crucial in defining municipal responsibilities for waste management in India and were therefore analyzed in depth as part of the research for this paper. In addition, data from several other government documents dealing with developing benchmarks and assessing the state of solid waste collection services ([CAG, 2008](#); [CPCB, 2015, 2016](#); [Kumar \*et al.\*, 2009](#); [MoF, 2009](#); [MoSPI, 2014](#); [MoUD, 2010a](#); [MoUD, 2012a](#); [MoUD, 2014a](#); [Planning Commission, 2002](#)) and those that articulated the need and justification for privatization of solid waste management services ([GoI, 2018](#); [MoF, 2016](#); [Mohanty \*et al.\*, 2007](#); [MoUD, 2009](#); [MoUD, 2011](#); [Planning Commission, 2011](#); [Thirteenth Finance Commission, 2009](#); [World Bank, 2006, 2016](#)) were also analyzed. The text in each of these documents was coded using MAXQDA. Codes were developed around themes central to the research questions, such as “privatization,” “service coverage,” “informal sector” and “services for the urban poor.” In addition, research for this paper also relies upon the author’s field notes from participant observation research at Chintan Environmental Research and Action Group, an informal waste sector advocacy organization, conducted in Delhi from October 2012 to December 2013, and documents gathered during the course of this fieldwork (e.g. the contract between Safai Sena and Ramky and minutes from municipality meetings that will be examined later in this paper)[1].

Although the findings of this research are applicable to urban India in general, Delhi was chosen as a case study not only because this was the site for the author’s primary research but also because Delhi lends itself to such an examination for the following three reasons. First, Delhi is among the highest per capita and overall producers of waste in the country ([Hoornweg and Bhada-Tata, 2012](#)). Second, as India’s capital city, Delhi’s aspirations to be a world-class city have underpinned its motivations for waste management system improvements ([Dupont, 2011](#); [Ghertner, 2015](#)). Third, Delhi has been at the forefront of experiments with waste management privatization. For instance, in 2005, the erstwhile Municipal Corporation of Delhi assigned contracts to three private firms in six of the city’s 13 zones for collecting and transporting waste from community bins to landfills ([Chaturvedi and Gidwani, 2011](#)). Municipalities in Delhi’s suburbs – Ghaziabad and Faridabad, for example – have also privatized their waste management systems[2]. During the time period of the author’s dissertation fieldwork, Chintan was experimenting with a number of different models for securing livelihoods for informal actors in the urban waste sector. Within Delhi, Chintan had entered into formal contractual relationships with two municipalities (New Delhi Municipal Council [NDMC] and East Delhi Municipal Corporation), one private firm (Ramky in North Delhi and Faridabad) and informally with some Delhi neighborhoods through their Resident Welfare Associations, to provide doorstep waste collection services by the informal sector. The author’s participant observations with service delivery and contractual relationship management between Chintan and its “clients” have informed the research presented in this paper.

In what follows, this paper first engages the relevant literature on the historical and contemporary processes of municipalization and privatization of urban public services. The second section examines how and why universal doorstep waste collection services emerged as a policy imperative and became encoded in a national set of rules that govern urban waste. The third section documents the changes in the regulatory framework in recent history that have led to a reassignment of property rights from the informal to the formal sector (public and private). The fourth and fifth sections describe the emergence of private sector participation for delivering urban services in general and waste management services specifically.

### Between municipal socialism and neoliberal urbanism

This paper examines two simultaneous and interrelated processes that are restructuring waste collection services in urban India. The first of these is a shift toward municipalization driven by an imperative of universal service provision, a process that has historically been described as municipal socialism, or in more contemporary terms as “roll-out” of the state. The second is a drive toward privatization of public infrastructures and services, a process that has been described as neoliberal urbanism or “roll-back” of the state.

Historically, an imperative of universal public services stemmed partly from a recognition of the “collective vulnerability” and a sense of interconnectedness between the lives of all city dwellers in light of public health threats from inadequate service provision (Leopold and McDonald, 2012, p. 1842). Commenting on the urban histories of North America and Europe, Melosi (2005, p. 9) described this “service revolution” as “municipal socialism,” whereby the negative consequences of industrial development in cities undermined public faith in capitalism, particularly with regard to the delivery of basic urban services. Private firms could no longer be trusted with the provision of essential services, such as waste collection. The local state would thus come to assume the responsibility of universal provision of basic services to all city dwellers, rich and poor alike (Bini and Parisi, 2010; Hall *et al.*, 2013; Hoshino, 2008; Leopold and McDonald, 2012; Melosi, 2005; for alternative readings of this history, see Bocquet *et al.*, 2008; Masten, 2011; Millward, 2011; Radford, 2003). In this sense, universal service provision as the motivation for the municipalization of waste collection services in contemporary India could be understood as municipal socialism.

Over half a century after the “service revolution” that had municipalized urban public services, an entirely different kind of a revolution that would privatize those services has been taking place since the early 1980s (Peck and Tickell, 2002). “Entrepreneurial” cities in the neoliberal era require that their municipal governments act as cost-saving business actors by adopting austerity policies that cut or privatize crucial public services (Harvey, 1989; Peck, 2012). Under the aegis of the World Bank and the IMF, developing countries across the world were implementing neoliberal structural economic reforms that required a “roll-back” of the state (Bayliss, 2002). The 1991 IMF bailout economic reforms adopted by the Indian Government mandated public sector restructuring: governmental disinvestment in public sector companies and the opening of public sector industries to private sector participation (Ahluwalia, 1993). In this context, privatization of public services in urban India could be seen as a manifestation of neoliberal urbanism or “roll-back of the state”.

In response to “contradictions/limitations” of the “dogmatic deregulation and marketization” of earlier forms of roll-back neoliberalism of the 1970s and 1990s, Peck and Tickell (2002, p. 384, 389-90) called attention to new modes of “institution-building and governmental intervention” that emerged in the 1990s in the North Atlantic, that they described as “roll-out neoliberalism.” Although Peck and Tickell were concerned with “invasive social policies” around issues such as “crime, immigration, policing, welfare reform, urban order and surveillance, and community regeneration,” their framework could be applied to an understanding of increased governmental intervention in general as not being *contra* neoliberalism but as an “advancement of the neoliberal project” (p. 389). Indeed, recent re-municipalization of public services across the world has been understood in similar ways (Bakker, 2005; Goldfrank and Schrank, 2009; McDonald, 2016; Peck, 2011). In such a conceptualization, however, roll-out assumes roll-back neoliberalism as a historical *precedent*. If we were to understand municipalization of the Indian urban waste management sector as roll-out neoliberalism, the temporality of roll-out and roll-back processes would be the reverse of how these processes have unfolded in the narrative that

Peck and Tickell (2002) provided us. Because doorstep waste collection was never fully assumed as a function of the local state, its municipalization is necessary for its formal privatization. Roll-out of the state, in the case of Indian urban solid waste collection services, needs to *precede* its roll-back. While an imperative of universal service provision is what appears to make the contemporary municipalization of waste collection similar to the “service revolution” in the urban histories of the contemporary developed world, what makes it different is the underlying politico-economic motivation to formally privatize those markets.

Critiques of privatization in the solid waste management sector in contemporary India have focused on the displacement and dispossession of informal workers from their means of subsistence (Chaturvedi and Gidwani, 2011). Schindler *et al.* (2012) argued for seeing the privatization of doorstep waste collection as a part of systematic transformation of waste management systems that extends the reach of private firms into previously untapped markets. Although many scholars have studied the relationship between the formal and informal sectors in waste (Dias, 2016; Gutberlet, 2012; Katusiimeh *et al.*, 2013; Myers, 2005; Zapata Campos and Hall, 2013), the specific policymaking processes, through which doorstep waste collection has been brought into the municipal ambit in urban India, have remained largely unexamined. The work of Samson (2009) in the South African context and Bakker (2003) in the British context provides useful conceptual tools for thinking through this process.

Samson (2009, p. 2) introduced the notion of “privatised expansion of the state” whereby “new services and activities are being brought into the public domain via public-private partnerships.” Samson demonstrated this using the example of a South African landfill which acted as a kind of an urban commons for informal reclaimers, until a contract between the municipality and a private firm “enclosed” the landfill thus dispossessing those who had previously managed recycling operations in that space. Because recycling at the landfill had historically been outside the purview of the local state, the state’s encroachment into that space through a public–private partnership with a private firm represents the privatised expansion of the public sphere, according to Samson. The municipalization and subsequent privatization of doorstep waste collection in urban India could be understood in a similar way. However, landfills are well-defined territories with more or less clearly assigned and assignable property rights. By contrast, the doorstep is a diffuse yet ubiquitous space. The space between the doorstep and the community bin has been liminal; property rights over waste in that space have been ambiguous. While both processes of enclosure – of the landfill and the doorstep – entail a reassignment of property rights, the nature and forms of state intervention and the resulting impact on informal sector differ in scale. In comparison to scavenging at landfills, doorstep waste collection provides not only a livelihood to a much larger number of informal sector actors but also access to better quality recyclable materials. Waste arriving at landfills typically has a lower percentage and lower quality of recyclable materials than that at the doorstep (Luthra, 2017).

Similarly, Bakker (2003, p. 338) urged us to understand commercialization of public utilities as a “mechanism whereby the state progressively expands – in a spatial and institutional sense – regulatory authority.” Examining water supply privatization in the contemporary urban South, Bakker demonstrated how the local state had failed to provide universal services, particularly to the socio-economically marginalized. Water supply privatization, on the other hand, has led to a homogenization of the “urban fabric” with “universal service provisions backed up by the state as regulator” (p. 338). Thus, commercialization and privatization, Bakker suggested, should not merely be thought of as a roll-back neoliberalism but as a “partial retreat and partial expansion” of the state (p. 338)[3].



Kurian and Ray (2009, p. 1671) similarly argued that telecenters run through public–private partnerships in India should not be seen simply as “pure privatization” because the state stays engaged in project implementation and “retains considerable control over its development agenda and strategy.” What remains to be seen in the case of solid waste collection services in urban India is whether the “partial expansion” of the state will indeed lead to universal service delivery. A second issue is whether municipalization merely serves as guise for reassigning property rights to waste from the informal private sector to formal private sector. Most discussions of privatization have dealt with the shift of responsibility for the delivery of public infrastructures and services from the government to the private sector. However, in this case, the shift is from the informal private to the formal private sector with municipalization as an intermediary step in the process.

The works of both these scholars (Bakker, 2003; Samson, 2009) allow us to complicate the relationship between “roll out” and “roll back” neoliberalism, particularly in terms of their temporality. Re-privatization of waste management services cannot simply be explained as a retreat of the state because the state must first expand its regulatory authority in that domain. If we understand the municipalization of doorstep waste collection merely as a swing of the “regulatory pendulum” in the direction of public provision (Hall *et al.*, 2013, p. 193), we fail to see that the swing is in fact in the complete opposite direction – toward a formal privatization of those services.

### **The imperative for universal doorstep waste collection services**

Economic growth in the post economic liberalization period has increased the incomes and consumption potential of the urban upper and middle classes (Kundu, 2011). Cities and the promise of urban economic growth have since come to occupy a central position in the policy narrative of the India’s entry into the developed world (Mohanty *et al.*, 2007). Indian cities are expected to host 40 per cent of the total population and contribute to 70 per cent of India’s GDP by 2030, driving an almost fourfold increase in the average national income (Sankhe *et al.*, 2010). Urban economic growth and an associated increase in income and consumption also imply an accompanying increase in waste, one of the diseconomies of agglomeration. Hoornweg and Bhada-Tata (2012) estimated average per capita waste generation rate at 0.34 kg/capita/day in 2012, predicting that it would double to 0.7 kg/capita/day by 2025. Over the same time period, the total quantity of waste is expected to increase by 250 per cent (*ibid.*). Sankhe *et al.* (2010) estimated the gap between demand for and supply of solid waste services in urban areas in India will increase fourfold between 2007 and 2030. There is little doubt that urban economic growth is putting tremendous pressure on already overwhelmed waste management infrastructures and services.

Ever since waste management became the subject of national policymaking two decades ago, Indian policymakers have held that doorstep waste collection needs to be a universal service, partly because of the environmental and public health problems posed by uncollected waste. In 1994, an outbreak of the bubonic plague in Surat, linked directly to poor waste management highlighted the “inadequate infrastructures manned by an apathetic, indifferent and callous administration” in cities across the country (Qadeer *et al.*, 1994, p. 2982). In the aftermath of the plague, municipal accountability for waste management came squarely into public view as did the failure of cities to provide a conducive environment for urban economic growth.

Middle-class urban activists concerned with poor environmental and public health filed public interest litigations (PILs). Famous among these is *Almitra Patel vs the Union of India* filed in 1996 in the Supreme Court[4]. Although this was not the only such PIL, it was important in determining the trajectory of how urban wastes would come to be governed. A

direct but not immediate result was the issuance of Solid Waste (Management and Handling) Rules 2000 (hereafter, the *2000 Rules*), the first national set of rules that articulated municipal functions and responsibilities for solid waste management (Chaturvedi and Gidwani, 2011).

In the period between the plague, the filing of the PIL and the issuance of the *2000 Rules*, the Government of India (GoI) appointed experts to better understand waste management problems and recommend solutions to address them. Two key committees included a High Power Committee constituted by the Planning Commission in the immediate aftermath of the plague in 1994 and a Supreme Court Committee appointed after the filing of the PIL in 1996 (Planning Commission, 1995; Supreme Court, 1999). The reports of these two powerful committees were partly responsible for the design of the regulatory system governing waste and its collection.

The Planning Commission (1995, p. 5) concluded that doorstep waste collection from “individual houses is not generally practiced.” Four years later, the Supreme Court (1999: Section 2.3.3) Committee highlighted that even though primary collection was “the most important component” of a waste management system, it was “grossly neglected,” “primitive” and “inefficient.” Both reports also noted that while richer city residents had been able to devise their own systems of doorstep waste collection by paying private providers themselves, the poor had been left underserved. The Planning Commission (1995, p. 1) report said, “Over the years, there has been a progressive decline in the availability of essential services as well as in the quality of life in urban areas; urban poor have been the worst affected segment in this change.” Similarly, the Supreme Court (1999) report noted:

The level of SWM services to poor communities is deplorable in all parts of the country and it does not reach the urban poor in small towns. In most urban areas, the services have not been structured to cover urban slum encroachments, as the law does not cast a duty on local bodies to clean private lands. They are thus left to themselves (Section 2.5.4).

To address this problem, both reports recommended universalization of doorstep waste collection services.

The ideal of universal service was subsequently adopted in the *2000 Rules*, which now held municipalities responsible for “organizing” doorstep waste collection in all areas and “devising” systems for collection of waste from “slums and squatter areas” (MoEF, 2000, Schedule II). Similarly, one of the stated objectives of the Jawaharlal Nehru National Urban Renewal Mission (JnNURM), a national urban modernization program launched in 2006 under the Ministry of Urban Development (MoUD), was to “scale-up delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor” (GoI, 2018, p. 5). Of note, 16 years after the issuance of the *2000 Rules*, the Ministry of Environment, Forests and Climate Change (MoEFCC) issued a revised set of rules titled Solid Waste Management Rules 2016 (hereafter, *2016 Rules*), which maintains this spirit of universal service provision, asking that municipalities “arrange” for daily doorstep waste collection from “all households including slums and informal settlements” (MoEFCC, 2016, Section 13(g)). It is important to note, however, that concern for the poor is not the only motivation driving the policy imperative of universal service provision. For instance, Chintan has been providing doorstep collection services to approximately 3,000 households in NDMC since 2007. Minutes from a 2007 NDMC meeting articulated the need for a doorstep waste collection in the municipality, arguing that as NDMC is a “VVIP [Very Very Important Person] area where the Ministerial staff along with big dignitaries (National and International) reside [and] visit regularly,” it therefore needs “sanitation of international standard,” which a doorstep waste collection program can help attain. If delivering services



to the poor was a national imperative for universal service provision, in the seat of the India's capital, the motivations manifested as a concern for the city's image. Regardless of the motivation, however, there was consensus on the need for universal service.

Once the goal of universal service provision had been established, specific performance benchmarks and targets were needed to be developed. The Tenth Five Year Plan established a target of providing sanitation services to 75 per cent of the urban population by 2007 ([Planning Commission, 2002](#)). The Eleventh Five Year Plan went a step further setting a target of "100 per cent population coverage with appropriate solid waste management facilities" ([MoF, 2009](#), p. 17). At around the same time, the Thirteenth Finance Commission mandated that state governments establish performance standards for four service sectors (water supply, sewerage, storm water drainage and solid waste management) ([MoUD, 2010a](#)). As a result, MoUD developed a set of specific performance benchmarks that included 100 per cent collection coverage (percentage of households that receive waste collection service in a given area) and efficiency (percentage of total waste collected in a given area) ([MoUD, 2010a](#)). Prime Minister Modi's cleanliness campaign Swachh Bharat Mission, launched in 2014, has scaled back these expectations to an 80 per cent coverage target by 2019 ([MoUD, 2014a](#), p. 25).

To assess the state of service provision against these benchmarks, a series of government efforts have estimated waste collection efficiency and coverage. Although the measures used in these reports are inconsistent, they nonetheless give us a sense of the state of service provision in urban India. The 1995 Planning Commission committee report had estimated average collection efficiency in urban areas at between 30 and 40 per cent ([Planning Commission, 1995](#), p. 6). The Central Pollution Control Board (CPCB) found that only 6 of the 59 municipalities had collection systems in 2005 ([Kumar \*et al.\*, 2009](#)). A performance audit by the Comptroller and Auditor General of India found that only 9 of the 56 municipalities surveyed had a regular collection system in place ([CAG, 2008](#)). MoUD's 2008-2009 pilot survey of 28 cities revealed average collection coverage of 48 per cent and a collection efficiency of 75 per cent ([MoUD, 2010a](#), p. 46). A follow-up national survey of over 1,400 municipal bodies in 2010-2011 revealed a median collection coverage of 39 per cent and collection efficiency of 80 per cent ([MoUD, 2012a](#), p.104). A 2014 government report found that municipalities across the country provided collection services to only 52 per cent of urban residents, 24 per cent had devised their own systems of collection, whereas the rest had no access to any collection systems ([MoSPI, 2014](#)). Finally, CPCB's annual reports (2015, 2016) tell a different story. Estimates of collection efficiency increased from 83 per cent in 2014 to 90 per cent in 2015, while total waste generated declined over the same period. Not only does collection efficiency appear to be overestimated, a highly unlikely decline in waste generation puts into question the reliability and accuracy of the data.

Despite differences in measures and estimates, two inter-related inferences can be gleaned from these data. First, the wide difference between collection coverage and efficiency points to the continued reliance of waste collection from community bins rather than at source. Municipalities without doorstep collection systems will report high collection efficiencies and low collection coverage. Second, low collection coverage in cities across the country implies that the informal sector, which remains outside the calculative logic and surveying technologies of the state, continues to be important in providing doorstep waste collection services. Even though municipalities have thus far been unable to provide doorstep waste collection services, the fact that collection coverages are low, whereas collection efficiencies are high implies that informal service providers are likely collecting and transporting waste from the doorstep to the community bin. For instance, a 2008-2009 survey found that collection coverage in Delhi was a mere 4 per cent, whereas collection

efficiency was 81 per cent (MoUD, 2010a). This means that even though doorstep waste collection was not formalized in 96 per cent of the city, the municipal corporation was able to collect and account for 81 per cent of the waste, most likely from the numerous community bins that dot the city. With the exception of the slums, informal workers likely provide doorstep waste collection services to much of the city. Nevertheless, in the eyes of the state, informal waste collection systems are outside the state's enumerative logic (Scott, 1998), and thus are rendered invisible and their services deemed inadequate. Their improvement requires the development and implementation of policies that will allow municipalities to ensure universal service provision. The following section provides a history of regulations governing waste that have progressively clarified, and therefore expanded, municipal responsibility in doorstep waste collection.

### From waste as commons to waste as property

Historically, municipal corporation laws have held municipalities responsible for “the scavenging, removal and disposal of filth, rubbish and other obnoxious or polluted matter” (GoI, 1957: Section 42). These laws also allocate property rights over waste materials to the municipality or their contractors:

All matters deposited in public receptacles, depots and places provided or appointed [...] and all matters collected by municipal employees or contractors [...] shall be the property of the Corporation (Section 351).

However, the laws do not clearly assign property rights over waste between the point of waste production (a house for instance) and the point of primary disposal (the community bin), assigning the “owners and occupiers of all premises” the obligation to collect “all filth, rubbish and other polluted and obnoxious matter [...] from their respective premises” and deposit these “in public receptacles, depots or places provided [...] for the temporary deposit or final disposal thereof” (Section 353). While it is the duty of the waste generator to ensure that waste is collected from source, it is only when waste is in a community bin that it becomes the property of the municipality or its contractor.

This lack of clear assignment of property rights allowed solid waste – in its journey from source to sink – to emerge as a kind of an urban commons, to which private actors in the informal sector evolved an elaborate system of customary or squatter rights (Bose and Blore, 1993; Gidwani and Reddy, 2011). Typically, informal sector doorstep waste collectors collect waste from households on a daily basis using a rickshaw (a tricycle with an open cart) or a pushcart (a wheelbarrow). During the daily collection process, waste collectors extract recyclables from waste and transport both to the nearest community bin. Once in the community bin, waste becomes the property and responsibility of the municipality. Waste collectors often also use the space of the community bin to temporarily store recyclables before selling those materials onwards in the recycling value chain. Informal doorstep waste collectors typically earn an income from the sale of recyclables, not from the service of transporting waste from the source to the municipal bin. However, their ability to make a living from recyclables is predicated on the fact that they provide a crucial waste collection and transportation service to the households they collect waste from. This is why the lack of a clear assignment of property rights in the transitional zone between the source and the community bin has historically been crucial for livelihoods of waste collectors.

Shortly after the 1991 economic reforms, GoI passed the 74th Constitutional Amendment Act (CAA) in 1992, devolving functional responsibilities and financial powers to municipalities such that municipalities would be able to “perform effectively as vibrant democratic units of self-government” (GoI, 1992: Sections 1-2). Prior to the passing of this

Act, state governments could exercise direct executive control over the functions of urban local bodies. The Twelfth Schedule of the Act included a list of 18 functions that municipalities would henceforth be responsible for. This list included “public health, sanitation conservancy and solid waste management” (GoI, 1992: Article 243W). Even though the 74th CAA brought solid waste management in the ambit of municipal responsibility, it did not specify exactly what solid waste management entailed and what specific functions municipalities would be responsible for, other than those already defined in the municipal corporation acts. Solid waste management as municipal responsibility was yet an abstraction.

If the 74th CAA had left those responsibilities completely undefined, the *2000 Rules* would come to define them a little more clearly. According to the *2000 Rules*, while municipalities were responsible for “organising house-to-house collection,” they could do so through “any of the methods” such as “community bin collection” (MoEF, 2000: Schedule II). These rules thus allowed municipalities the discretionary ability to decide what the function of waste collection meant. Municipalities could be compliant with the *2000 Rules* even if they did not actually provide doorstep waste collection services. The rights to waste in the space between the doorstep and community bin – crucial for the livelihoods for informal waste collectors – could remain liminal, if municipalities decided not to act otherwise. The power to decide and allocate property rights in that liminal space, however, was now vested in the municipality. Furthermore, the *2000 Rules* did not mention the informal sector at all. In omitting the informal sector, the *2000 Rules* encoded their invisibility into law.

Of note, 16 years later, the *2016 Rules* removed any ambiguity regarding municipal responsibility for doorstep waste collection. Municipal authorities now have the responsibility to “arrange for day to day collection” of waste “from the door step of all households including slums and informal settlements, commercial, institutional and other non-residential premises” (MoEFCC, 2016: Section 15(b)). Doorstep waste collection is now squarely in the municipal realm. Municipalities can no longer collect waste from the community bin and still be compliant with the law; their responsibility begins at the doorstep. There is no question of rights to waste in the space between the doorstep and the community bin. The choice of the phrase “arrange for” instead of a verb such as “provide” is intentional. It implies an acknowledgment that municipalities, unlikely to muster up their own resources to provide these services, will likely need to “arrange for” the provision of these services by enrolling other actors, such as private firms or NGOs. It is municipal responsibility to “arrange for” those services but not necessarily “provide” those services themselves.

Unlike the *2000 Rules* that had rendered the informal sector invisible, the 2016 version leaves the door open for their involvement asking that municipalities:

[...] establish a system to recognise organisations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorised waste-pickers and waste collectors to facilitate their participation in solid waste management including door to door collection of waste (Section 15(c)).

While this regulatory inclusion of the informal sector is commendable, the integration of informal workers in waste management systems is now contingent upon their ability to organize themselves and be subsequently authorized as legitimate service providers by the local state. Although some informal workers in some cities are already organized, this is not the case everywhere in urban India. As pressures to implement the new rules mount, so will the urgency to begin service provision. If informal workers take too long to organize themselves and be authorized by the state, the window of opportunity might close.

Furthermore, if municipalities are not allocated resources (financial or otherwise) for establishing a system to authorize and integrate the informal sector, then actual integration will depend either on the goodwill of state actors and/or advocacy efforts on the part of informal sector organizations. The easier, less messy path is to enroll a different set of private actors in the provision of these services. And such a path has been in the process of being cleared for a relatively long time now.

Following [Harvey \(2003\)](#), many scholars have used the idea of accumulation by dispossession to understand historical and contemporary processes of enclosure of the commons in many different contexts (for a review of this literature, see [Glassman \[2006\]](#)). Specifically, scholars interested in waste have applied this idea to understand not only how waste as a conceptual trope has guided colonial and capitalist expansion ([Gidwani, 2013](#); [Gilmartin, 2003](#); [Goldstein, 2013](#); [Neocleous, 2011](#); [Whitehead, 2010](#)) but also how informal workers in the waste economy have been displaced through such processes ([Gidwani and Reddy, 2011](#); [Inverardi-Ferri, 2018](#); [Samson, 2015](#); [Zapata and Zapata Campos, 2015](#)). In reallocating property rights to waste from the informal to the formal sector, contemporary privatization of waste management services in urban India could be understood as a kind of an enclosure of the urban commons of waste. The following sections examine the privatization as way to meet a general deficit in urban infrastructures and services and a specific deficit in urban waste management services.

### The imperative for private sector participation

If the 1991 economic reforms had paved the way for unprecedented urban economic growth, by mandating public sector restructuring, they had also provided a way for addressing an accompanying problem of diseconomies of agglomeration – a growing deficit in urban infrastructures and services. The passing of the 74th CAA highlighted the need for the implementation of these reforms in urban areas more urgently. While the 74th CAA delineated the functions of municipal governments, it did not ascribe them adequate financial powers to perform these mandated functions ([Mohanty \*et al.\*, 2007](#), p. 2). The provision of urban services in general and solid waste management services in particular requires funding. [Sankhe \*et al.\* \(2010\)](#) suggested that Indian cities will need \$2.2tn investment in capital and operational expenses to meet the growing demand for urban services in general and \$5bn in solid waste management alone over a 20-year period. The [Planning Commission \(2011\)](#) estimated capital investment requirement of INR 39.2tn (approximately \$0.59tn) overall and INR 485.8bn (approximately \$7.3bn) in solid waste alone over a similar 20-year period.

To meet this deficit, local governments were being encouraged to involve private firms in the delivery of those infrastructure assets and services ([Baindur and Kamath, 2009](#)). One such mechanism for fostering private sector entry into urban infrastructures and services markets has been the JnNURM. The purpose of JnNURM was to implement the 74th CAA by providing ULBs access to revenues to perform the functions assigned to them ([Mohanty \*et al.\*, 2007](#), p. 16). Government agencies were “expected to leverage the sanctioned funds under JnNURM to attract greater private sector investment through PPPs [public-private partnerships]” ([GoI, 2018](#), p. 8). Financial assistance from the program in the form of grants from the central government were made available for a range of projects for delivering urban infrastructures and services including improvements in waste management systems through private sector participation. Although JnNURM’s term has since ended, cities can access funds for waste management PPPs through the Swachh Bharat Mission.

Institutional and regulatory capacity for facilitating private sector entry under the rubric of PPPs in urban infrastructure and service markets has been aggressively developed over

the past two decades (MoF, 2016; World Bank, 2006). For instance, MoF's Department of Economic Affairs contains a PPP Cell for developing a regulatory framework conducive to fostering PPPs, which includes the development of national- and state-level PPP policies and rules, ensuring the "speedy appraisal" of projects, providing technical expertise in assessing financial feasibility of proposed projects and publishing guidance and resources such as toolkits for state and local governments (MoF, 2016). This commitment to fostering an environment that is conducive to private sector investment in infrastructure appears to have paid off. Between 1990 and 2015, India ranked second in investment dollars, as well as the number of infrastructure projects with private participation (World Bank, 2016). On its PPP website, MoF boasts: "India ranks first in the world in 'operational maturity' for PPP projects, third for sub-national PPP activity and fifth overall in terms of having an ideal environment for PPP projects" (MoF, 2016). Similar to other urban infrastructure and service sectors, private investment has been deemed necessary for solid waste management:

Under JNNURM, ULBs have to implement obligatory reforms, one of which is encouraging PPPs. Accordingly [...] ULBs should explore the possibility of including PPP in solid waste management projects (MoUD, 2011, p. 5).

The Twelfth Finance Commission "stipulated that at least 50 per cent of the grants provided to each state for ULBs should be earmarked for solid waste management through public-private partnership" (Thirteenth Finance Commission, 2009, p. 151). Just as institutional and regulatory capacity is being developed for PPPs in general, it has also been for solid waste management in particular (MoF, 2010; MoHUA, 2017; MoUD, 2009, 2010a, 2010b, 2011, 2012b, 2014a, 2014b). Legislations such as the solid waste management rules in the post-economic reform period had already set the conditions for municipal ownership of doorstep waste collection. Urban modernization programs and policies such as the JnNURM and Swachh Bharat Mission have enabled and encouraged private sector entry into this urban public service market. Indeed, municipalities across the country have outsourced waste management services, including doorstep waste collection, to private firms over the past two decades (Schindler *et al.*, 2012). An MoUD (2010a) report on 28 cities showed that 23 of those cities had outsourced at least some aspect of their waste management system. Of these, 17 had outsourced doorstep waste collection and transportation services. While the government is expanding the scope of privatized waste management services to include doorstep waste collection in an effort to provide universal service, private service providers are motivated by another imperative – access to higher-quality waste materials (Luthra, 2017). For instance, Irfan Furniturewala (2012), CEO of a waste management firm, noted that collection processes are "are not optimal for processing companies, which receive what is left behind by around 500,000 ragpickers, and hence what remains can be classified as having very low content quality." This formal privatization process is pitting the informal sector against private firms entering the market space and displacing them from their means of subsistence. The following section examines the recent history of waste management privatization and the consequences of this process for the informal sector in Delhi.

### **Private sector entry into solid waste collection markets in the Delhi metropolitan area**

Even before the advent of central government programs for financing urban infrastructure projects such as the JnNURM, cities across the country had already started privatizing their waste management systems to comply with the *2000 Rules*. Although the impacts of privatization on informal sector workers have already been described at length (Chaturvedi and Gidwani, 2011, Schindler *et al.*, 2012), two points are particularly relevant. First, it



appears that privatization of services for collection of waste from the community bin might not affect informal doorstep waste collectors who would continue to retain access to waste materials they collect directly from waste generators as they had in the past. In fact, the contracts were intentionally designed to leave space open for informal sector doorstep waste collectors (MoUD, 2009). However, the control of the community garbage bin – a crucial space for doorstep collectors to store and sort recyclables – was transferred to the private operator, who could now extract rents from doorstep collectors for access to that space. Second, private firms could extract rents from waste collectors where firms had been assigned a service contract. For instance, a private operator in Ghaziabad (a suburb of Delhi) was asking informal doorstep collectors to pay a monthly fee in exchange for retaining access to the doorstep, despite the fact that doorstep waste collection was not in the purview of its contract with the state (Chaturvedi and Gidwani, 2011). When Safai Sena protested, the state sided with the private firm, ruling that extraction of rents by the private operator was permissible. During the course of fieldwork, the author participated in a protest organized by Safai Sena in August 2013 against continuing exploitation by the private operator in Ghaziabad. To voice their concerns, the protestors marched from their communities to the office of the Municipal Commissioner, who took no action. At the time of writing, extortion continues as before.

As evidenced in the case of Ghaziabad, even where doorstep waste collection was not privatized, the state nonetheless transferred property rights to waste to private firms. Informal sector advocates could, however, question the legality of this transfer of property rights arguing that such a transfer was not written in the municipality's contract with the private provider. As the president of another Delhi-based informal waste sector organization said, "They [private operators] have no right to collect waste door-to-door. It's not in their contract [with the municipality]" (Rao, 2013). But once contracts are written to include doorstep waste collection, the issue of who has rights to that waste is no longer in question. Recall that even though the *2000 Rules* did not unconditionally municipalize doorstep waste, they did allow municipalities to assume that responsibility if they so wished. Consequently, some municipalities decided to outsource doorstep waste collection to private firms. The Municipal Corporation of Delhi assigned a contract for doorstep collection, transportation, processing and disposal of waste from four zones to a private firm in 2009 (Schindler *et al.*, 2012). Using funding from JnNURM, Faridabad (another suburb of Delhi) also outsourced doorstep waste collection to the same private firm in 2011 (Municipal Corporation of Faridabad, 2016). The NDMC has long been trying to introduce an "integrated waste management system," which would involve "collecting waste from doorsteps" (Business Standard, 2014).

While the provision of doorstep waste collection services had been a matter of municipal choice in the past, under the *2016 Rules*, it is now a mandatory municipal responsibility. And municipalities have chosen to not exercise this choice in the past. For instance, at a meeting discussing the possibility of using Chintan as a doorstep waste collection service provider, NDMC lawyers argued that doorstep waste collection was "not the responsibility of NDMC as per NDMC Act 1994," and therefore could not be outsourced to Chintan. Both the *2000 Rules* and the NDMC Act 1994 had not mandated doorstep waste collection as a responsibility, even though the former had allowed for the subsumption of that responsibility into the municipal ambit, if municipalities chose to do so. The NDMC lawyers decided it was wise not to do so. Since the issuance of the *2016 Rules*, municipalities' choice is limited to the mode of service provision: they can choose to enroll the informal sector, outsource to a private firm or provide the services in-house. In the absence of financial, technical and administrative capacity to deliver those services in-house or to enroll the



informal sector, municipalities are increasingly turning to the formal private sector for those services. Yet, this is not the case for all municipalities across the country. The city of Pune, for instance, has relied on a cooperative of informal workers (SWaCH) to provide doorstep waste collection services since 2008. The municipality has a contract with the cooperative and pays them as it would a private firm for those services.

Unfortunately, Pune is an exception. Whereas informal workers in Pune have been able to hold their own, in other cities such as Delhi, Faridabad and Ghaziabad, they have had to resort to partnering with private firms. Such a partnership works in the interest of private firms because organizing doorstep waste collection is complex and expensive. In low- and middle-income countries, collection costs can vary between 50 and 90 per cent of the overall municipal solid waste management budget (Hoornweg and Bhada-Tata, 2012, p. 5). In India, firms often underbid for contracts to gain a stronghold in the market (MoF, 2009). Consequently, many have been unable to deliver services they were obligated to provide as part of their contracts. Partnership with the informal sector offers a solution. In Faridabad, Ramky – the firm slated to provide doorstep waste collection services – outsourced those services to Safai Sena from 2011 to 2012. For informal workers, it was business as usual: they provided doorstep waste collection services and earned their livelihood from the sale of recyclable materials. The benefit to them was that the threat of dispossession from their means of subsistence was stalled as long as their partnership with the private firms was in good standing. Ramky did not pay them for their services but was still able to meet the stipulations of its contract with the municipality. Although the municipality was not involved in the relationship between Ramky and Safai Sena, they benefited from the symbolic value of the inclusion of informal workers, thus complying with the spirit of legal discourse that advocates for such inclusion. Now that municipalities across the country are required to provide doorstep waste collection services, such partnerships might become more common.

On the surface, this was a classic “win-win-win” situation for all three parties – the state, formal and informal private sectors. Yet, a deeper analysis shows how relations of power between the local state, the formal and informal private service providers are fundamentally reconfigured. If municipalities do not outsource doorstep waste collection services to formal sector service providers, the informal sector must “organize” and be “recognised” by the state to be considered legitimate service providers. If municipalities do outsource those services, informal workers must rely on the hope that the private firm will enter into a partnership agreement with them so they are able to continue to earn a living. A representative of Ramky re-asserts the company’s property rights to waste, while invoking a notion of goodwill toward the informal sector, “Ragpickers don’t have a right [to waste], *per se*. But we corporations, as well as municipalities, do have a responsibility to take care of them” (Business Standard, 2014). Reconfigured power relations are also reflected in the contractual agreement between Ramky and Safai Sena, which stipulated that Safai Sena be compliant with the terms and conditions of the contract agreement between Ramky and the municipality, a contract that Safai Sena is officially not a party to. Yet, as part of its partnership agreement with Ramky, Safai Sena was responsible for performing the functions/obligations that were stipulated in Ramky’s contract with the municipality. In entering into a partnership agreement with Safai Sena, Ramky was “taking care” of them by permitting them to continue to earn their livelihood. Ramky did not pay Safai Sena for their services. Instead, Safai Sena used the income from the sale of recyclable materials to pay waste collectors. Waste collection as a service remains unpaid as it was in the past. The difference is, however, that this unpaid labor is now encoded as the formal responsibility of Safai Sena in its contract with Ramky. Ramky’s formal responsibility is encoded in its contract with the municipality. And the municipality’s formal responsibility is encoded in the law that governs waste.

Over the past two decades, even though the regulatory framework governing waste management has systematically clarified municipal responsibilities, it has remained elusive on the process and responsibilities that will allow for informal sector's involvement as legitimate waste management service providers. It is not as if the state does not *see* them. Indeed, it does, as witnessed in their inclusion in the *2016 Rules*. Instead, the ambiguity in the state's responsibilities toward the informal sector is *by design*, allowing the state and its private partners to harness their free labor, if and when circumstances allow for it.

## Conclusion

Critical aspects of the value chain in waste management have long been the purview of a collection of actors who enjoy *de facto* – but not *de jure* – property rights in the common pool resource of waste. One might think of these workers as “subsistence entrepreneurs” who own their means of subsistence and provide a much-needed urban service. The shift to municipalization and formal privatization, then, is not in fact privatization in the traditional sense – service provision is already informally private – but involves the dispossession of informal workers and the transfer of their resources to the formal, corporate sector.

An imperative of universal service delivery, particularly for the urban poor, has partly motivated the subsumption of doorstep waste collection under the ambit of the local state in urban India. Yet, a discourse of universal service provision has merely served a rhetorical purpose. In actual practice, most poor neighborhoods in cities across the country continue to be under- and even un-served in waste collection. For instance, when Delhi privatized waste collection in parts of the city, none of those areas were poor neighborhoods. An exception is Pune, where the cooperative of informal workers, as part of its contract with the municipality, serves poor households in the city, and even receives a subsidy from the municipality for doing so (SwaCH-PMC, 2016). Meanwhile, the regulatory apparatus governing the delivery of urban infrastructures and services has also progressively opened up spaces for the entry of private capital into those markets. A rhetorical goal of universal service provision has allowed the state to expand the public sphere by municipalizing doorstep waste collection. Yet, it has done so in order to be able to reassign rights to service provision from the informal to the formal private sector.

While the *2016 Rules* have municipalized doorstep waste collection, they have also simultaneously created an opportunity for informal sector's substantive involvement in the provision of those services. This particular historical conjuncture could offer a space for forging new political imaginaries of “the public” (Samson, 2016, p. 42). Indeed, as Samson showed, informal reclaimers in cities across the world – Belo Horizonte (Brazil), Bogota (Colombia) and Pune (India) – have been successful in challenging the “logic of neoliberalism” and in promoting a “more inclusive, democratic waste management alternative” (p. 43). The case of the Zabaleen, the traditional garbage collectors of Cairo, offers additional hope for informal workers across the world. Although the Mubarak Government had displaced the Zabaleen by outsourcing waste collection to private firms in 2004, a decade later the failure of these firms forced the city to formally integrate the Zabaleen into its waste management system with more favorable work conditions than in the pre-privatization era (Kingsley, 2014; Kuppinger, 2018). As we imagine alternative futures, the history of municipal socialism might offer us guidance in thinking not just about consumers of public service but also service providers. To this end, it is imperative that we imagine a “public management ethos that is committed to clearly articulated forms of equity and sustainability not beholden to market mechanisms” (Leopold and McDonald, 2012, p. 1850). A neoliberal urban future is not pre-ordained. It must be, as it is and has been, actively struggled against.

1. Safai Sena is a registered association of informal waste workers in the Delhi metropolitan area. Chintan helped establish the association with the hope that informal workers would have their own organization and voice in fighting for their livelihoods. Although the association is financed by its members, much of the technical and administrative support is provided by Chintan.
2. The National Capital Territory (NCT) of Delhi is divided into five municipalities: New Delhi Municipal Council, Army Cantonment Board and North, East and South Delhi Municipal Corporations (which were created in 2012 by splitting the erstwhile Municipal Corporation of Delhi into three smaller municipal corporations). The National Capital Region centers around the NCT and includes prominent cities in the metropolitan area such as Faridabad, Ghaziabad, Gurgaon and Noida, each of which also have their own municipal governments. This paper draws on privatization experiences in Delhi's municipalities, as well as the surrounding municipalities of Faridabad and Ghaziabad.
3. In a related vein, Brunsson (2009) showed that organizational forms of public and private institutions are increasingly becoming similar. Public organizations borrow characteristics of private companies and the latter borrows characteristics of the former. Bakker's (2003) notion of commercialization fits within Brunsson's (2009) idea of "institutional confusion" (p. 84).
4. Illegal dumping of waste in her own backyard in 1991, the Surat plague in 1994, and her desires to find solutions to the growing problem of waste across India, led Almitra Patel to file a PIL for "hygienic solid waste management" in 1996 (Patel, 2003). As a result of this PIL, the Supreme Court constituted a committee to investigate and report on the state of waste management in urban India. In collaboration with the Committee, the Central Pollution Control Board drafted the *Municipal Solid Waste (Management and Handling) Rules*, which were issued in 2000.

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