Privatisation

A Formula for Provision or Perversion of Municipal Solid Waste Management?

Brooks Anderson June 2011



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Clear Impression Documentation Services

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ABBREVIATIONS AND ACRONYMS

BMP Bengaluru Mahanagara Palike

BBMP Bruhat Bengaluru Mahanagara Palike

BOOT Build Own Operate Transfer

CEM Community Environmental Monitoring

CMAM City Managers Association of

Maharashtra

COC Corporation of Chennai

DFID Department for International Development

ESG Environment Support Group

GIZ Deutsche Gesellschaft für Internationale

Zusammenarbeit

IAS Indian Administrative Service

JNNURM Jawaharlal Nehru National Urban

Renewal Mission

KSPCB Karnataka State Pollution Control Board

MDGs Millennium Development Goals

MCH Municipal Corporation of Hyderabad

MoF Ministry of Finance

MoEF Ministry of Environment and Forests

MoUD Ministry of Urban Development

MP Madhya Pradesh

MSW Municipal Solid Waste

MSWM Municipal Solid Waste Management

NGO Non Governmental Organisation

NMF Neel Metal Fanalca

NRW Non Revenue Water

PMSPL Puducherry Municipal Services Private Limited

POPs Persistent Organic Pollutants

PPCC Puducherry Pollution Control Committee

PPIAF Public-Private Infrastructure Advisory

Facility

PPP Public Private Partnership

PSIRU Public Services International Research

Unit

PSP Private Sector Participation

PUDA Puducherry Urban Development Agency

PUPs Public-Public Partnerships

PwC PricewaterhouseCoopers

RIL Ramky Infrastructure Ltd.

SWM Solid Waste Management

TERI The Energy and Resources Institute

TOI The Times of India

UIDSSMT Urban Infrastructure Development

Scheme for Small and Medium Towns

ULB Urban Local Body

UNCED United Nations Conference on

Environment and Development

UNDP United Nations Development Program

USAID United States Agency for International

Development

PREFACE: PRIVATISATION'S OBJECTIVE IS PRIVATISATION

Over the past decade, the Indian government has encouraged localities to privatise municipal solid waste management (MSWM), an essential public service that local bodies have tended to perform inadequately.\(^1\) Surprisingly, the reasons for, and consequences of this major change in governance have been subjected to far less scrutiny than is warranted by its significance. This paper compares the theory and expectations of privatisation with the performance record of privatised public services in several countries in order to inform and stimulate scrutiny of India's determination to privatise MSWM.

Advocates of privatisation of municipal solid waste management promote privatisation as a recently devised solution for many of the problems plaguing government-run services. For example, USAID claims that privatisation offers "cost savings, new technologies, improvements in efficiency and effectiveness and reduction in the need for permanent sanitation staff. . . . This new approach, which emphasizes commercial viability, enables Indian cities and urban authorities to respond more effectively to the greatest needs: increasing access to services and improving service levels. Significant benefits for the poor, in particular, can be achieved through a commercial orientation" (USAID 1999:1 & 4).

Too Good to be True?

When I first encountered such claims, privatisation sounded so benign, beneficent and miraculous that it aroused skepticism.² Several premises of privatisation are questionable:

- Is it truly less expensive for government to hire a for-profit corporation to manage waste, than for government itself to manage waste?
- How could privatisation introduce new waste management technology that the government couldn't otherwise afford?
- Why would any corporation pass cost savings to the government rather than use such savings to increase shareholders' dividends or fatten corporate executives' bonuses?
- What "significant benefits" for the poor would privatisation achieve?
- Is privatisation really a "new approach" to governance?

My search for answers began by asking proponents of privatisation for examples of privatised MSWM that operate in compliance with India's municipal solid waste management regulations, and achieve the government's waste management objective, minimization of waste. All proponents replied identically, assuring me that there are many examples. However, when I subsequently asked them to give specific examples, they failed to provide any. This intensified my skepticism, so I began to collect and review studies and reports about privatisation, in search of evidence of privatisation's purported benefits

What emerged from my research was an account of privatisation that bears no resemblance to its proponents' promises. Books and articles recount centuries of unsuccessful attempts to improve public services through privatisation. The reason for such failure is easy to recognize: privatisation does not primarily intend to improve public services. Rather, privatisation is a strategy of free market enthusiasts to shrink government by transferring public money, work and assets to the private sector. As its name suggests, the objective of privatisation is simply privatisation, or, to generate new business and increase revenue for the private sector.

The track record, political agenda and dubious theoretical integrity of privatisation are cause to question the government's determination to privatise municipal solid waste management. The appropriation of significant funding and dedication of considerable institutional resources to facilitate the privatisation of MSWM commit the nation to a discredited development path, make private profit

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¹ In 2010, the Ministry of Environment and Forests reported that municipal solid waste "collection efficiency is only around 60% and the rest 40% lies uncollected and scattered all over our towns and cities, polluting the surrounding land and water resources" (MoEF 2010:3).

²USAID's depiction of privatisation is especially difficult to reconcile with the sentiment of Canadian labor movement authority, Eugene Forsey: "Privatisation [is] just a fancy name for the biggest international romp ever mounted by the rich for skinning the poor" (Forsey 1980).

a higher priority than public health, waste precious time and resources, and foreclose more promising and logical policy options. The opportunity cost of continued tinkering with privatisation is exorbitant and unaffordable

The empirical record indicates that privatisation is unlikely to assist India's efforts to fulfill its commitments to international agreements, such as the Millennium Development Goals, Agenda 21 and the Stockholm Convention, and does not help localities comply with the government's waste management regulations, namely, the Municipal Solid Wastes (Management and Handling) Rules, 2000. Rather, privatisation undermines and frustrates such imperatives by redefining objectives and reorienting incentives. Just as privatisation of military services has created an extremely powerful industry that has a compelling interest in perpetual war, privatisation of waste management creates and consolidates an industry that thrives on waste and behaves accordingly.

Just as privatisation of military services has created an extremely powerful industry that has a compelling interest in perpetual war, privatisation of waste management creates and consolidates an industry that thrives on waste and behaves accordingly.

Therefore, privatisation does not deserve the government's wholehearted backing, and should be used judiciously and only under stringent regulation. This paper calls for the government to explore and initiate alternatives to privatisation that retain public control over the government's obligations and duties. India's solid waste crisis will be solved only by cooperation between the government and the public around a shared sense of responsibility and determination to leave a cleaner nation for our descendants.

A Few Words about the Meanings of Privatisation and Municipal Solid Waste

When I speak of privatisation, I am referring to the wholesale outsourcing of public work to privately owned, for-profit firms through contracts, concessions, public subscription or franchises. The municipal solid waste discussed in this document refers to commercial and domestic waste—also known as trash, garbage or rubbish—not to industrial, medical or other wastes.



PONDICHERRY STREET CORNER
The private sector has no inherent interest in maintaining clean public spaces



KARUVADIKUPPAM DUMPYARD, PONDICHERRY

EXECUTIVE SUMMARY

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This paper reviews the history, theory and outcomes of public service privatisation in order to weigh its merit and foresee the impact privatisation is likely to have on municipal solid waste management (MSWM)—and thereby upon public welfare—in India.

In 2000, in response to a Supreme Court order, the Government of India formulated and enacted the Municipal Solid Wastes (Management and Handling) Rules (hereafter referred to as the Rules) to mitigate a burgeoning solid waste crisis. Pollution from haphazard municipal solid waste disposal was gravely jeopardizing public health, thereby undermining the nation's development gains. The Rules mandated measures by which local bodies were to minimize waste, in an attempt to avert a projected 500 percent increase in annual waste production in coming decades. The Rules' prime objective was to protect public health and the environment by minimizing disposal of waste in landfills, thereby aligning the government's municipal waste management policy with its commitments to international treaties to reduce greenhouse gas emissions, control the production of persistent organic pollutants, conserve finite resources, and achieve broad development targets.

Had they been implemented assiduously, the Rules stood a strong chance of transforming India into one of the world's cleanest nations. However, in November 2009, nearly a decade after the Rules' enactment, Minister for Environment and Forests Jairam Ramesh publicly declared India's cities the world's dirtiest: the government had done little to bring the Rules into effect.

This paper argues that India's solid waste crisis is now worse than ever because, rather than earnestly implementing and enforcing the Rules, the government instead instituted a policy of privatising solid waste management, a policy promoted aggressively by the World Bank and USAID. Privatisation of MSWM is demonstrating detrimental environmental and public health consequences. Hence, this paper examines the rationale for privatisation, reviews the findings of studies of privatisation, and presents the impacts of privatised MSWM in three Indian cities to

assess whether privatisation is an appropriate instrument for solving the solid waste crisis.

Three major findings emerge from this study:

1. Privatisation's objectives diverge distinctly from the government's objectives.

Privatisation's objective is to transfer public money, work and assets to the private sector, which strives to maximize profit. In the case of municipal solid waste management, such objectives do not serve the government's objectives and obligations, particularly to safeguard public health and protect the environment by minimizing waste.

2. Rather than improving public service performance, privatisation unleashes a plethora of undesirable outcomes.

Privatisation creates incentives that undermine the Rules' objective of minimizing waste. Studies of privatisation in other countries have declared privatised services at best no more efficient than the public alternative, and sometimes worse. Scholars have found instances in which user tariffs after privatisation went up rather than down, and of clients locked into contracts that set prices considerably above market rates. Governments were distressed that, rather than creating greater cost control, privatisation considerably diminished their ability to control costs as privatisation led to monopolistic markets and contractors dictated prices. One finding is especially alarming: privatisation's problems and governments' efforts to rescue privatised services have hampered nations' efforts to achieve the Millennium Development Goals.

3. There is increasing evidence that administrative reforms can dramatically improve municipal solid waste management services.

On the basis of these findings, this paper recommends that the government retain public control over its waste management duties, and institute administrative reforms to vigorously implement and enforce the MSW Rules.



KURUMBAPET DUMPYARD, PONDICHERRY Is privatisation creating a cleaner nation for future generations?

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NEW PURPOSE FOR WASTE MANAGEMENT ON A PLANET IN PERIL

In 2000, the Government of India enacted the Municipal Solid Wastes (Management and Handling) Rules (hereafter referred to as the Rules) to avert a burgeoning municipal solid waste crisis. The increasing production of municipal solid waste—projected to increase nearly fivefold, to 260 million tons per year by 2050 (Singhal and Pandey 2001)³—with widespread littering and indiscriminate dumping were impeding the nation's efforts to achieve the Millennium Development Goals, control the production and spread of persistent organic pollutants (POPs) and reduce the nation's contributions to climate change.4 To halt these destructive trends, the Rules revised the meaning and objectives of solid waste management, thereby aiding the government's efforts to develop the nation sustainably.

The Rules were a relevant, transparently-formulated⁵ response to a perfect storm of problems. The convergence of fossil fuel depletion, climate change, urbanization, population growth, affluence and environmental degradation made it imperative that municipal solid waste management (MSWM) be redefined from a synonym for landfilling to a comprehensive strategy for *minimizing* waste. The Rules clearly

indicated that solid waste management is no longer a matter of only collecting, transporting and dumping garbage. The government's new guidelines directed authorities of local bodies to initiate daily, house-to-house collection of segregated trash, compost biodegradable waste, and recover recyclable materials in order to safeguard public health, protect the environment, conserve finite resources and minimize landfilling.

The government thereby formally and officially established that the objective of MSWM was to safeguard public health and the environment by minimizing waste. Waste management's new objective was acknowledged across ministries:

The Ministry of Finance: "The objective of solid waste management is to reduce the quantity of solid waste disposed of on land by recovery of materials and energy from solid waste in a cost effective and environment friendly manner.

... The goal of any integrated solid waste management plan is the recovery of more valuable products from the waste with the use of less energy and more positive environmental impact" (MoF 2009:5 & 38).

³ The McKinsey Global Insitute (2010:56) projects that MSW production in urban India will reach 377 million tons per year by 2030.

⁴ The nation's smoldering dumpsites are significant producers, reservoirs and emitters of hazardous persistent organic pollutants and climate warming gases (Subramanian and Tanabe 2007). Such sites are also damaging municipal air quality and water supplies (CEM 2007; ESG 2010; Mor et al. 2006; Rawat et al. 2007; Vasanti, Kaliappan and Srinivasaraghavan 2008; WHO 2010).

The MSW Rules were the product of a Supreme Courtordered nationwide study conducted by a panel of eminent
Indian experts on waste management. The panel held public
hearings in India's major metros to devise a solution to the
waste crisis. Privatisation, on the other hand, has become
a policy without such public consultation. In 2006, Sanjay
K. Gupta, an authority on solid waste management in India,
observed: "Private sector participation has been accepted
as a result of advocacy by private parties and forums which
support privatisation. The municipalities alone seldom
decide on plans to privatize a service" (Gupta 2006:6).

The Lok Sabha's Standing Committee on Urban Development: "The most important aspect in solid waste management [is] reduction of waste and the segregation of waste at source" (MoUD 2010:35).

The Ministry of Environment and Forests: "Sustainable waste management needs to be based on the waste management hierarchy of, firstly, avoiding generation of waste, followed by reducing, reusing, recycling, recovering, treating and disposing whatever waste is produced" (MoEF 2010:iv).

The Rules aligned the aims of India's solid waste management policy with Agenda 21, the action plan of the World Commission on Sustainable Development of the United Nations Conference on Environment and Development, which India signed in Rio de Janeiro, Brazil, in June 1992. Agenda 21 states that governments should "promote waste prevention and minimization as the principal objective of national waste management programmes," and "develop and implement national plans for waste management that take advantage of, and give priority to waste reuse and recycling" (UNCED 1992).



To maximize weight—and thereby revenue—and minimize operating costs, private operators often indiscriminately combine, rather than segregate waste



A THWARTED OPPORTUNITY: COMPETING AGENDAS FOR SOLID WASTE MANAGEMENT

Had they been implemented assiduously, the Rules stood a strong chance of transforming India into one of the world's cleanest nations. Instead, the Rules were widely flouted. Consequently, nine years after the Rules' enactment, Minister for Environment and Forests Jairam Ramesh exclaimed, "I think that our cities have the dubious distinction of being the dirtiest cities in the world" (*Times of India 2009*).

The Rules failed to arrest the solid waste crisis for several reasons, which have been pinpointed in a performance audit by India's Comptroller and Auditor General (CAG), published in 2008. The CAG (2008) concluded that the waste crisis persisted because of the government's administrative weaknesses and other issues, including: imprecise and incomplete data about waste production, lax monitoring and enforcement of the Rules, a lack of comprehensive planning for waste management, ambiguity and disagreement about responsibility and accountability for regulatory oversight at the level of the central government, a lack of coordination and integration of the nation's waste management policies, and improper budgeting and inadequate staffing levels for waste management. In other words, the Rules could work only if accompanied by significant administrative reforms.

The CAG called for critical administrative reforms to achieve waste minimization, and thereby fulfill the government's commitment to protect public health and the environment, in accordance with Agenda 21 and other international treaties. However, the CAG's recommendations had to contend with a competing prescription for solving the waste crisis.

Donors of development aid, notably the World Bank and USAID, claimed that privatisation was the most efficient way to tackle the waste crisis, and used their financial leverage and other resources to persuade India to privatise waste management. A USAID-supported paper asserted, "Involvement of the private sector is essential for the effective implementation of the Municipal Solid Waste Management Rules 2000" (CMAM 2005).

In 2000—the same year that the Rules were enacted—the World Bank published a 153-page toolkit entitled *Guidance Pack on Private Sector Participation in Municipal Solid Waste Management*, advocating privatisation and providing templates for contracts. The *Guidance Pack* illustrates how, rather than working with governments to strengthen their capacity to implement and enforce locally-formulated waste management regulations, aid donors "vigorously promote the private sector as a provider of municipal services" (Cointreau-Levine and Coad 2000:6).

According to the Bank's logic, administrative reforms to improve the government's ability to manage waste were unwarranted because waste management was an improper role for the state. The Bank argued that, rather than directly performing services, governments should become regulators and facilitators of private sector involvement (Cointreau-Levine 2000, Zhu et al. 2008). In 2008—the same year that the CAG called for administrative reforms to achieve waste minimization—the World Bank published Improving Solid Waste Management in India: A Sourcebook for Policy Makers and Practitioners, which is devoted largely to promoting privatisation of MSWM and construction of massive regional landfills.

According to privatisation's proponents, the objective of privatisation is "low costs" (Cointreau-Levine 2000:11). The Bank's *Sourcebook* claims that privatisation cuts MSWM costs by 50 percent (Zhu et al. 2008:57). In another Bank publication, *Improving Management of Municipal Solid Waste in India: Overview and Challenges*, published in 2006, privatised solid waste management is promoted as costing two thirds as much as government production (Hanrahan, Srivastava and Ramakrishna 2006:67).⁶

⁶A reason for such dramatic savings may be that privatised costs are compared to the costs of unreformed public services. Hanrahan, Srivastava and Ramakrishna (2006:68) claim that government production is more

The Bank regarded the low cost-effectiveness of government-run MSWM as a pivotal problem. Privatisation, they argued, would control the cost of waste management, and landfills would control pollution.

The Bank's advocacy of massive, regional, privately-operated landfills overshadowed its consideration of waste prevention. The Bank's Water and Sanitation Programme promoted massive regional landfills in two documents: Implementing Integrated Solid Waste Management Systems in India: Moving Towards the Regional Approach (WSP 2007), and Secured Landfills: The Bucket at the End of the Solid Waste Management Chain (WSP 2008).

The proposal to create landfills on the scale advocated by the WSP—large enough to contain all waste from up to 20 localities for up to 30 years (WSP 2007:20)—was a major departure from the government's objective of minimizing landfilling. Massive landfills would postpone pressure to recycle and minimize waste, while causing severe environmental damage.⁷ Furthermore, massive landfills create an additional incentive to maximize waste, as private landfill operators earn lucrative tipping fees for each ton of waste disposed. Rather than being an efficient solution, massive regional landfills require waste to be transported long distance, an inefficient arrangement that becomes more expensive over time and is environmentally counterproductive.

The Bank's promotion of privatisation in India followed its similar activity in many other countries. Throughout the 1990s, aid donors favored privatisation ostensibly because of their certainty that the private sector would expand coverage and reduce costs of public services in low and middle-income countries. They proclaimed that, under the influence of the profit motive and the discipline of competition, the private sector would deliver essential services to more people at lower prices than the public sector could. The Bank was so confident of privatisation's advantages that they made privatisation a condition for sanctioning development assistance in the forms of loans

and grants (Bayliss and Kessler 2006:7-10, Dharmadhikary 2008:xiii, Dorvil 2007:5).

It is important to recognize that privatisation has not spread around the world on the basis of its inherent strengths, nor is privatisation an inevitable outcome of economic destiny. Rather, it has been imposed on low and middle-income countries by aid donors as a tactic of their crusade to stimulate private sector growth by shrinking government activity, particularly service provision, taxation and regulation. Privatisation is central to this campaign because privatisation transfers public money, work and assets to the private sector.

The donors' intention was the opposite of strengthening government: privatisation actually intended to shrink government (Sclar 2000:94, Bayliss and Kessler 2006:21). According to the Bank, "Private sector participation involves reducing government control, ownership and/or activity within a service . . . traditionally provided by government" (Cointreau-Levine 2000:17). The Bank explicitly proposed that government sharply curtail direct provision of waste management services; turning 70% over to the private sector at first, and increasing the private sector's share to 80% after five years (Cointreau-Levine 2000:23).

expensive because of the "inefficient functioning" of public employees, as if nothing short of lay-offs can remedy such indolence. The Bank's claims of privatisation's significant cost savings and the inefficiency of public employees are contradicted by findings of other studies by the Bank (cited later in this paper), which found negligible, if any, savings, as well as cases in which public employees performed on par with the efficiency of private sector employees.

⁷ Steisel and Miller (2010) calculated the environmental cost of hauling New York City's waste to private regional landfills: "Hauling New York City's waste to landfills uses half as much fuel every year as the city's taxi fleet running 24/7. The combined annual greenhouse emissions from hauling and putting this waste in landfills amount to half as much as is released to produce the city's electricity."

The Bank's diagnosis of India's solid waste crisis as being a symptom of overpriced, unproductive government services, is distinctly discordant from the Bank's prescription of privatisation and massive regional landfills. The suitability and affordability of massive landfills are additionally questionable in light of the Ministry of Environment and Forests' assertion that "land disposal [is] the most expensive option for solid waste management anywhere in the world" (MoEF 2010:4). The Bank's advocacy of the most expensive, highly inefficient remedy doesn't match its professed concern for fiscal rationality and efficiency.

However, the Bank's prescription undoubtedly appeals to the private sector. In 1992, Michael DeGroote, then chairman of Laidlaw Industries, the world's fourth largest waste management company, described landfills as, "like an oil well

in reverse. With an oil well, the more you take out of it, the more you make. With a landfill site, the more garbage you put in it, the more you make" (Crooks 1993:21). In 1979, the annual report of Service Corporation of America, then the world's third largest waste management company, stated, "Disposal service is our most profitable business . . . Landfill operations . . . are characterized by high fixed costs and low variable costs, and the receipt of additional tonnage at a site which already has sufficient volume to cover its fixed costs will produce a dramatic increase in profit and margin. (Crooks 1993:22)

Clearly, the Bank's agenda of minimizing government and maximizing landfills undermines the Indian government's objective of minimizing waste.



KARUVADIKUPPAM DUMPYARD. PONDICHERRY

THE MEANING AND HISTORY OF PRIVATISATION

Privatisation refers to "the process of transferring the provision of an existing service or ownership of a facility from government to the private sector" (Coad 2000:17). Although the 1979 edition of *Webster's New Collegiate Dictionary* does not include the words privatisation or privatise, privatisation is not a new practice. Governments have experimented with privatisation for centuries, often calling the practice "contracting" or "contracting out."

Several American cities repeatedly attempted to privatise solid waste management in the nineteenth century. According to Adler, by the end of that century: "the realization that every possible improvement to contracting out had been tried led city after city to declare its failure. . . . Practically all American cities discarded contracting out at that time and switched to governmental production" (1999:88).

However, in 1965, privatisation was reinvigorated inadvertently by the passage of the U.S. Solid Waste Disposal Act, which signaled official recognition of America's solid waste crisis. The Act, and subsequent environmental legislation at state and federal levels, led to the closure of thousands of open municipal dumps and their replacement by a far smaller number of regional secured landfills (Crooks 1993).

Such regulations, although enacted to protect the environment, also functioned as an economic selection pressure, creating a decisive competitive advantage for firms that controlled licensed landfills. In the 1970s and 1980s, the waste management industry experienced phenomenal growth and consolidation, triggered by recognition that, under the new regulations, those who controlled licensed landfills would be positioned to "turn the garbage crisis into an extraordinary bonanza" (Crooks 1993:8). Whereas the private sector viewed the new laws as creating unprecedented opportunity, public officials, intimidated by the staggering cost of creating landfills and the potential windfall from operating them, were inclined to cede waste management to the private sector (Crooks 1993:8-9).

Consolidation of North America's waste management industry in the 1970s and 1980s gave a handful of firms an overwhelming share of the business. Amongst themselves, these firms negotiated terms for profitable coexistence, creating captive, monopolistic markets of residential, commercial and institutional clients who became victims of price fixing, bid rigging, racketeering, and other forms of uncompetitive behavior by the waste management behemoths (Crooks 1993). As information regarding waste production and operating costs became corporate trade secrets, public officials lost access to data necessary for oversight of the industry and for the preparation of tenders and evaluation of bids. Crooks concludes that the industry's daunting financial power enables it to influence waste management policy so effectively that "the waste industry now constitutes a veritable shadow government, in opposition to which citizens not only feel compelled to defend themselves but also duty bound to resist destructive powers of a misbegotten bottom line" (1993:259).

America's waste management regulations, rather than mitigating the solid waste crisis, ironically gave rise to an industry that, while charging extortionate rates, has concentrated the garbage crisis at disposal sites that, like nuclear waste sites, will require expensive monitoring and maintenance "for periods ranging from several generations to forever" (Crooks 1993:256).

Despite this long, cautionary history, the Bank and other development agencies promote privatisation as an innovation. In *Improving Solid Waste Management in India: A Sourcebook for Policy Makers and Practitioners*, the Bank advises India's government to "seriously consider new concepts and approaches" to solid waste management (Zhu et al. 2008:74). However, instead of offering truly new concepts and approaches, the *Sourcebook* advocates privatisation, a strategy distinguished by centuries of failure and disfavor. The reasons for privatisation's disrepute become clearer when we examine the theory and performance of privatisation.

PRIVATISATION: A THEORY IN SEARCH OF SUCCESS

rivatisation's formula for success is a **P** work in progress, repeatedly revised in efforts to explain and correct for privatisation's dysfunctions and underperformance. The theory that competitively contracted private firms will provide cheaper and better public services than the government can is based on many assumptions, which collectively represent an enormous leap of faith. These assumptions include: competitors will exist, competitors will compete rather than collude, competition will endure despite contracts that last in some cases for two or three decades, savings from competition will reduce customer tariffs rather than inflate investor dividends, public officials will be experienced enough to design and negotiate contracts that save money and improve services, officials will be vigilant and skilled enough to monitor and enforce contracts, officials will be impartial in the awarding of contracts, and contracts awarded through a competitive bidding process will not be renegotiated.

According to privatisation's proponents, "the objective" of privatisation is "low costs" (Cointreau-Levine 2000:11), which will be an outcome of competition between contractors to win contracts. Proponents regard the cost savings achieved through competition as a measure of the private sector's efficiency. The Bank asserts: "Governments should focus on privatising those activities that are most inefficiently done by government and consume a significant portion of government budgets. For example, solid waste management should be a privatisation priority" (Cointreau-Levine 2000:17).

The theory of privatisation is recited in a recent paper by the German government's development agency, GIZ (formerly named GTZ): "SWM... is increasingly becoming a business opportunity for the private sector in India. This will lead to increased competition and improved services by the private sector while the national institutions face the challenge of providing the rules and a level playing field. At the same time Municipal Corporations will gain experience in shaping and monitoring sensible PPP projects" (Dube, Nandan and Gudipudi 2010:8).

In Innovative Approaches to Solid Waste Management in India: Focus on Private Sector Participation, USAID presented privatisation not only as something recently conceived, but also as beneficial for the poor:

Various approaches to privatisation exist, offering cost savings, new technologies, improvements in efficiency and effectiveness and reduction in the need for permanent sanitation staff. . . . Private sector participation in solid waste management offers several advantages, the first of which is cost savings, which are closely related to improvements in the efficiency and effectiveness of services. Privatisation can also open the door to introduction of new technologies. Moreover, it can reduce the establishment costs of keeping and managing a full complement of permanent staff. . . . This new approach, which emphasizes commercial viability, enables Indian cities and urban authorities to respond more effectively to the greatest needs: increasing access to services and improving service levels. Significant benefits for the poor, in particular, can be achieved through a commercial orientation. (USAID 1999:1 & 4, emphasis added)

However, throughout the 1990s, privatised public services didn't perform as well as expected. According to the Bank in 2000, "Many governments moved toward privatisation in the last decade, but few have done so successfully" (Cointreau-Levine 2000:8). In 2005, a USAIDsupported paper in India reported that "a review of 50 cases of privatised solid waste management revealed, 'a wide variety of contracts in place with unclear deliverables and even more unclear methods of evaluation, penalty and reward for the service providers" (CMAM 2005:29). Dorvil, a solid waste economist at the European Investment Bank, also noted privatisation's trouble, "Very few experiences in the field of solid waste privatisation in low and middle-income countries have shown SWM to have been successfully implemented so far" (2007:228).

The failures shouldn't have come as a surprise to the Bank, which was fully aware that conditions in developing countries were not conducive.

According to the Bank:

In many developing countries, the private sector has had no experience in the provision of solid waste services and so has no knowledge of how to rationalize service delivery. (Cointreau-Levine 2000:11)

The appearance of competition is greater than the reality in most developing countries. In some, companies register several times, under different names, with changes in the names of directors, while the owners are the same in each case. In others, there is the appearance of competition but some of the companies that are bidding are actually owned by key government officials and are given favorable treatment in contract awards. Even when companies have distinctly separate and private ownership, there is a tendency for them to get together and agree on prices and conditions. . . . To the extent that there is an appearance of competition, it is typically prearranged by mutual agreement and in harmony. (Cointreau-Levine 2000:15)

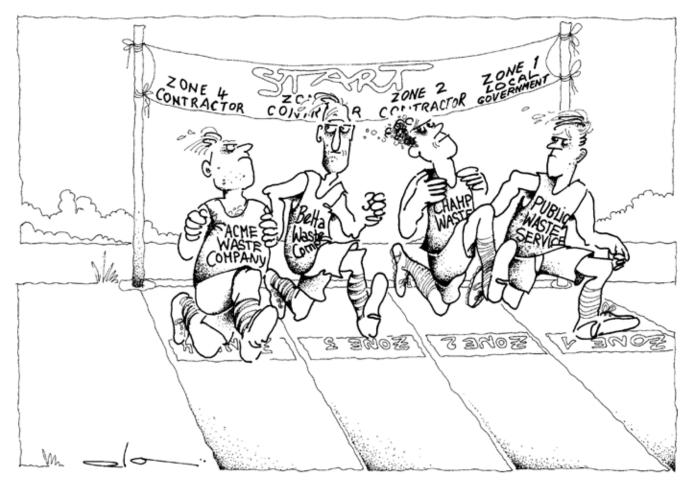
In many developing countries the private sector solid waste management industry is not well developed and the ethical framework is often inadequate to minimize collusion and procurement irregularities. (Cointreau-Levine 2000:26)

Indeed, privatisation was by all measures an illogical, inappropriate and improbable solution to the solid waste crisis.

After initial privatised projects failed to improve efficiency, the Bank announced that privatisation's ability to deliver low costs is contingent upon the existence not only of competition, but also of a condition the Bank has termed "contestability", which required the government not only to ensure that firms compete for contracts, but also that the government itself perform a small portion of the work with municipal workers. In the Bank's revised ideal privatized scenario, the government would not only perform municipal services directly, it would also:

- Build local capacity to develop technical specifications and to tender competitively.
- Build local capacity to enable local government to provide contestable services.
- Build local capacity to generate revenues, and operate as a cost center with segregated accounts.
- Create a level playing field by means of a regulatory framework.
- Specify worker safety and environmental requirements.
- Provide mechanisms to assure flow control.
- Define sanctions and enforcement mechanisms that discourage nonperformance.
- Prepare for agreements that are long enough to allow full depreciation of investment.
- Prepare separate agreements for different activities to optimize expertise.
- Prepare agreements that are large enough in scope to allow economies of scale.
- Ensure contestability, enable the participation of small to medium sized businesses, and set up decentralized monitoring.
- Include price indexing to allow adequate cash flow and continuous profitability.
- Include public consensus in all key decisions.
- Ensure competitive, transparent procurement, with several competing tenders to obtain efficiency.
- Quantify outputs to enable comparative performance monitoring.
- Enlist public cooperation.
- License and control all private sector involvement.
- Monitor performance to compare service providers. (Cointreau-Levine 2000:36)

Through privatisation, the Bank converted solid waste management from a matter primarily of material management into a gauntlet of extremely complicated and specialized administrative responsibilities that have proven daunting for municipal officials of developed nations.



Public and private service providers at the starting line of the privatisation gauntlet

In its *Guidance Pack*, the Bank illustrated its ideal scenario of contestability in a cartoon of three contractors and "public waste service" at the starting line of the privatisation gauntlet.⁸

When contestability failed to consistently boost privatisation's success rate, the Bank surmised that risk discourages the private sector from competing for public service contracts. Accordingly, the Bank instructed governments to design contracts that relieve the private sector of risk by, among other things, assuring levels of revenue, or guaranteeing profit. Bayliss and Kessler examined contracts and found risk abatement incentives in the forms of "cash subsidies, in-kind grants, tax breaks, direct capital contributions, as well as guarantees against risks that are not even under government control"

(2006:11). Bayliss and Kessler add, "Importantly, risk does not disappear, but rather is borne by the developing country government—or more directly by consumers" (2006:11).

These revisions of the original theory justifying privatisation significantly compromise its integrity and appeal. By insisting that government continue to perform a portion of municipal services, contestability inflates the cost of privatisation. Privatisation in which contracts are packed with risk abatement provisions looks like a private sector stimulus package, not free enterprise.

⁸ Cartoon reprinted from Cointreau-Levine 2000:7

PRIVATISATION'S RECORD

s privatisation spread through developing Leconomies, the terms and aftermath of the ensuing auctions and liquidation of public infrastructure, utilities and services became the object of academic scrutiny, much of which ultimately declared privatised services at best no more efficient than the public alternative, and sometimes worse.9 Scholars found instances in which user tariffs after privatisation went up rather than down—indicative of reduced efficiency—and of clients locked into contracts that set prices considerably above market rates. Governments were distressed that, rather than creating greater cost control, privatisation considerably diminished their ability to control costs, as privatisation created monopolistic markets, contractors dictated prices and vital information became trade secrets. One finding is especially alarming: privatisation's problems and governments' efforts to rescue privatised services have hampered nations' efforts to achieve the Millennium Development Goals.

Privatisation's Problems Have "Hampered Progress on the Millennium Development Goals"

In an assessment of privatisation's impact on governments' efforts to achieve the MDGs, Bayliss and Kessler assert, "Market-led policies fail to contribute to the MDGs and often reduce the likelihood of achieving them" (2006:1). In 2007, Bayliss and McKinley found: "Privatisation has failed on several counts. Contrary to expectations, private investors have shied away from investing in such utilities in the region. So it has been costly for governments to motivate them to invest. Moreover, the focus of investors on cost recovery has not promoted social objectives, such as reducing poverty and promoting equity" (2007:1). Bayliss and Fine conclude: "Privatisation has been a widespread failure. This has hampered progress on the MDGs for both water and sanitation, and on many other MDGs dependent on energy" (Bayliss and McKinley 2007:1 cite Bayliss and Fine).

Costs under Privatisation Are Comparable to, and in Some Cases Higher than Costs under Public Provision

In a review of assessments of privatised services, Lobina and Hall found: "Recent World Bank studies (Marin 2009; Gassner et al. 2009) implicitly confirm that there is no superior private sector efficiency as they find little variation in tariff levels between private and public water operators. However, the World Bank is still promoting PSP as a way to achieve efficiency even if the assumed efficiencies of private operations are not apparently passed on to end users in the form of lower tariffs" (Lobina and Hall 2009:4).

A review of the performance of privatised services across America revealed that privatisation demonstrated no clear superiority to government production: "The experience with privatisation to date indicates that the magnitude of actual overall cost difference between contracting out and direct service provision, regardless of the direction of the savings, is typically measured in single-digit percentages. With such slight differentials, choices tend to be and often are based on politics, not economics" (Sclar 2000:29 cites Rehfuss 1989). Sclar concludes: "The costs of directly managing municipal workers are less than the costs of managing outside contractors. . . . Public service ... is often less expensive than contracting" (2000:146 & 155).

A study comparing the cost of incarceration in publicly managed and privately managed prisons found: "Privately operated prisons can cost more to operate than state-run prisons — even though [privately operated prisons] often steer clear of the sickest, costliest inmates. . . . Despite a state law stipulating that private prisons must create 'cost savings,' the state's own data indicate that inmates in private prisons can cost as much as \$1,600

⁹ See, for example, Lobina and Hall 2009, Bayliss and Kessler 2006, Bayliss 2009. Such studies of privatisation in low and middle-income countries echo verdicts of reports on the outcome of the wave of privatisation that began in the USA in the 1980s. See, for example, Sclar, Schaeffer and Brandwein 1989.

more per year, while many cost about the same as they do in state-run prisons" (Oppel 2011 cites Lundahl et al. 2007).

In terms of service quality, the study reported, "Quality of confinement is similar across privately and publicly managed systems, with publicly managed prisons delivering slightly better skills training and having slightly fewer inmate grievances" (Lundahl et al. 2007).

Bayliss and Kessler found: "There is little empirical support for preferring privatization of public services. Evidence suggests that public services perform about the same as private ones even on strict economic terms, where private providers would be expected to outshine government. A recent review of infrastructure performance conducted by a team of World Bank researchers concluded, 'For utilities, ownership often does not matter as much as sometimes argued. Most cross-country studies find no statistically significant difference in efficiency scores between public and private providers'" (Bayliss and Kessler 2006:22 cite Estache, Perelman and Trujillo 2004).

Broekema and Obirih-Opareh, in their study comparing privatisation of waste management in Accra, Ghana, and Hyderabad, India, note privatisation's high transaction costs: "Although it is difficult to calculate the additional costs incurred for contract management and performance monitoring, it is a fact that the number of staff positions within the MCH (Municipal Corporation of Hyderabad) has increased dramatically (whereas the number of labourers has decreased). The transaction costs of privatisation are certainly substantial" (2003:846). Broekema and Obirih-Opareh note that to some extent cost cutting by privatisation is achieved by shifting the cost of waste management to labour through wage and benefit cuts and layoffs: "The 'success' of privatisation in terms of service efficiency comes partly from trampling on the workers" (2003:849).

Contracts Force Residents to Pay Fees above Market Rate

After residents of Washington and Warren counties in New York State, USA, hired a private company to build and operate a publicly-owned waste incinerator, residents were obligated by a long-term contract to pay above market rates to incinerate their trash. If they chose to send their trash elsewhere, the contract obligated them to pay a penalty to compensate the company that ran their incinerator for the company's operating losses (Frisch 2010).

Another way that firms extract extortionate rates is by using 'evergreen' contracts (Crooks 1993). Fine print of such contacts states that the contracts will never expire, but clients rarely read the fine print. When a client whose service charges increase tries to terminate an evergreen contract, the client is informed by the firm's lawyer that termination of the contract is illegal.

Government Loses Cost Control

Privatisation supposedly gives government a powerful way to control the costs of public services. However, with contractors often demanding that awarded contracts be renegotiated, and prices for work dictated by private firms, the theory of cost control loses validity. A review of privatised services in the USA found, "Available evidence indicates that true cost comparisons would show that privatisation has not been successful as a general strategy to contain costs, and may actually force increased cost onto the public" (Sclar, Schaeffer and Brandwein 1989:2).

After closing the municipally owned and operated Fresh Kills landfill in Staten Island, NY, and privatising waste disposal, New York City's cost of waste disposal increased from \$42 to \$96 per ton, as contractors, paid according to every mile each ton of waste travelled, transported the city's garbage to private landfills hundreds of miles away. In the absence of municipally owned and operated disposal options, public administrators found themselves at the mercy of the private waste disposal industry, which is

dominated by three massive corporations (Miller 2000). Miller, a policy advisor to New York City on waste management, calculated that in 2005: "80 percent of the 124 million tons of waste that went to America's largest private landfills went to fills owned by only three corporations. Because of the consolidation of ownership of landfills and the absence of publicly-owned facilities, the public has no leverage over tipping fees" (2007). Miller maintains that "the only effective way to control waste disposal prices in the face of an oligarchic private market is to have access to publicly controlled waste disposal capacity, [and] have solid waste management authorities that offer competitive and predictable rates for both businesses and residents" (2005).

Sclar concludes, "Contrary to the near conventional folk wisdom that privatisation almost invariably represents improvement, this is simply not true" (2000:5). "The bottom line is that public contracting continues to be a cumbersome and expensive instrument for delivery of public service" (Sclar 2000:155).

A review of privatisation in the USA found:

- The Massachusetts State Auditor's Office calculated that the state lost \$1.1 million by privatizing highway maintenance in one district in 1991.
- In 1995, two reviews of the costs of Albany's privatisation of municipal vehicle maintenance concluded that Albany was overspending by 20 percent for the privatized services.
- Miami's privatisation of public transport resulted in a sharp drop in ridership and a 100 percent increase in rider complaints.
- In the first year that Denver, Colorado, privatized public bus service, costs increased 12 percent. Over five years, the cost of private service increased more than 100 percent, while the cost of publicly operated service increased only 11 percent. (Sclar 2000)



WHY PRIVATISATION FAILS

rivatisation fails because the private sector and the government have distinctly different objectives, and because the world that privatisation's promoters imagine bears little resemblance to the real world. The theory of privatisation expects individuals, firms and governments to generally behave in ways that they seldom do, focuses the government's resources on meeting the needs of the private sector rather the needs of the poor, assumes that officials have capacities that they rarely possess, underestimates the cost and trouble of terminating contracts with bad firms, overestimates the vibrancy of competition, assumes collusion won't occur and that contracts, once formalized, will not be renegotiated, and generally expects that contractors will put the public interest above their firm's interests.

Sclar, Schaeffer and Brandwein describe the disjuncture between the theory's "textbook" world and the real world: "The textbook model of competition is devoid of politics and social constraints; the real world is crammed with them. In the world of textbook economics, prices and quality are the outcome of noncoercive, competitive market forces. In the world of real actors, competitors do not simply win or lose on the basis of product and price. They use any and every social and political advantage at their command to maintain market share" (1989:22-23).

Sclar, Schaeffer and Brandwein point out that advocates of privatisation

seldom take into account the real-world market strategies of public contracting in which establishing monopolies, influencing public officials, and obtaining hidden subsidies are commonly used to enrich private investors at public expense. When contracting is examined against these real world constraints, the evidence indicates that the market for contracted services operates less like textbook competition and more like textbook monopoly or oligopoly, in which prices are driven as much by relative bargaining power and political considerations as by underlying production cost. Contrary to the claim that privatisation will lessen the political factor in operating urban transportation systems, developing experience suggests the opposite is true. (1989:2)

Goal Divergence: Profit vs. Public Health

To protect public health, the government designed the Rules to prevent waste and minimize landfilling. However, the government's objective is scarcely acknowledged in the Bank's literature promoting privatisation of solid waste management. Rather, in the Bank's view, "the objective [is] low costs" (Cointreau-Levine 2000:11).



PMSPL COMPACTOR BEING WEIGHED BEFORE ENTERING KURUMBAPET DUMPYARD

Indeed, contractors aim to reduce and avoid costs in order to win contracts and maximize profit. The private sector's objective is clear in a recruitment ad for a chief operating officer by a Bangalore-based waste management firm, Kivar Environ, that states, "You will be responsible for effective and profitable delivery of services by the operating business units."

As public service is outsourced to private contractors, the contractor's desire to maximize profit diverges from the government's desire to safeguard public health, a common phenomenon that scholars call goal divergence (Van Slyke 2003). Rather than motivating contractors to fulfill the government's objective, the profit motive leads contractors to work against it. In the case of MSWM, contracts commonly pay contractors according to the tons of waste collected, hauled and dumped, thereby creating a powerful, direct financial incentive to maximize, rather than minimize waste. From the contractor's perspective, more waste is good, less waste is bad. Dorvil notes: "It is difficult to compare the performance of private firms and municipal management in the field of solid waste management, since these organizations pursue different goals . . . Private firms are indeed interested in maximizing profit, whereas the objectives of municipal management are much more complex" (2007:9).

Paying contractors on the basis of the weight of waste collected, hauled and disposed discourages contractors from recycling and composting waste because collecting, hauling and dumping are the simplest and least expensive way to earn profit. Segregating waste, maintaining segregated waste streams and producing compost would considerably increase the cost and reduce the profitability of waste management.

Privatisation's Success Depends upon Administrative Capacity that Exists Only Rarely

Privatisation's assumption that local officials will impartially and vigilantly design, negotiate, regulate, monitor and enforce contracts with powerful, influential corporations is another

reason for privatisation's shortcomings. The CAG's (2008) performance audit found that all levels of government—central, state and local—suffer from a shortage of qualified staff to implement and monitor solid waste management, yet privatisation imposes several new, daunting responsibilities upon government departments that, under privatisation, are also likely to be downsized.

Bayliss and Kessler note: "A lot of advice from industrialized countries becomes irrelevant when applied to low-income countries with weak institutions. Many developing countries have (under pressure from donors and financial advisors) imported regulatory regimes from industrialized countries, such as the UK and USA, which rely heavily on information, technical expertise and transparent institutional norms. Such models are rarely adapted to take account of conditions in developing countries, where, for example, the advanced accounting, auditing and taxation systems required are largely absent" (2006:13).

Privatisation Focuses the Government's Resources on Attracting the Private Sector Rather than Serving the Needs of the Poor

Governments appropriate considerable funding to attract private sector investment. Such commitments decrease the funding available to improve public welfare. Bayliss and Kessler point out, "The adoption of market-based frameworks has—to varying degrees—put the policy emphasis on meeting the needs of private sector players and diverted attention from broadening access and meeting the needs of the poor" (2006:34). The poor suffer additionally when private contractors demonstrate a preference for serving higher income residents while neglecting low-income neighborhoods. Broekema and Obirih-Opareh observed: "Privatisation has definitely helped to improve service standards at city level, both in terms of volumes of waste collected and spatial coverage. However, this must be attributed largely to the fact that the (local) authorities have decided to increase expenditure in the sector in response to mounting political and social pressures. At the

same time, the involvement of the private sector has done little to improve service standards in deprived residential areas" (2003:849).

Contracts Tend to Create Monopolies

Studies have found that, over time, competition dwindles as contractors cultivate political favor, acquire or merge with competitors, and develop competitive advantages because of inside knowledge. (Crooks 1993) Prohibitive barriers to entry discourage competitors from challenging established contractors. A study of social service privatisation in New York found, "The privatisation of social services in many areas in New York State has transferred public monopoly power and authority to private monopolists, with few increases in performance and accountability" (Van Slyke 2003:307-308).

As seen in the examples cited earlier, privatisation often creates monopolistic markets in which prices are dictated by a single firm. Sclar observed: "Once a contract is put in place, buyers often find the costs of changing suppliers sufficiently daunting that they exercise the option in only the most extreme circumstances. Sellers, for their part, find that mergers and acquisitions that squeeze out excess capacity and push up price margins become increasingly attractive as the contract market settles into place. Resultant forces on both sides of the market thus conspire to create situations of oligopoly and monopoly. This is a far cry from the imagined ideal of competitive market governance pitched by privatisation advocates" (2000:92).

According to Sclar: "The assumption that the market is competitive is incorrect. . . . Most public contracting takes place in markets that range from no competition (monopoly) to minimal competition (oligopoly). . . . Often, the very act of creating a public-contracting process sets anticompetitive forces in motion. What begins as apparent competition quickly transforms itself by the second or third round of contracting into monopoly or, more typically, oligopoly" (2000:69-70).

Sclar provides an example of the attrition of competition: "Westchester, New York, privatised

its entire bus service in 1975. Initially, sixteen companies operated the routes with none of them carrying more than a third of the passengers in the county. Within a decade, the number of competitors had been reduced by half. By 1997, the largest operator controlled 97 percent of the operation" (2000:88). This led Sclar to conclude: "The probability that any particular market will either sustain competition or trend toward it, as the standard market model assumes, is unlikely. . . . Only in a highly constrained set of conditions is it possible to sustain competitive contracting. When competitive contracting cannot be sustained, neither can the automatic case for the intrinsic political and economic superiority of privatisation be compared with direct government service provision" (2000:10-12).

Contracts Are Renegotiated Soon after Being Awarded

According to the theory of privatisation, contracts are binding agreements made with firms selected on the basis of the terms of their bids. Yet, in practice, contracts are often renegotiated soon after being awarded. Bayliss and Kessler report:

There is extensive evidence that concession contracts change, regardless of the initial bidding process. Governments often lack the bargaining power and negotiating experience to deal effectively with such contracts. Because of ambiguity, contested information about asset conditions, or unrealistic baseline assumptions (e.g. about demand or efficiency gains), contracts are frequently renegotiated, typically to the advantage of the provider. Once a firm wins a contract, it can use its control over information and analysis, as well as the improbability that government will cancel the concession, to lobby for major changes. . . . The point is that contracts established through a bidding process are very likely to be renegotiated after the contractor wins the bidding. Of more than 1,000 private concession contracts awarded in Latin America during the 1980s, for example, over 60 percent had to be renegotiated within three years. [Guasch 2000] In the water and sanitation sector, 74 percent of all contracts in Latin America have been renegotiated over the last 20 years,

the majority of which were initiated by private operators [Guasch 2004]. . . . evidence from Latin America indicates that renegotiation takes place after an average of just 2.2 years from the start of the contract [Estache, Guasch and Trujillo 2003]. (Bayliss and Kessler 2006:15-16 cite Guasch 2000, Guasch 2004 and Estache, Guasch and Trujillo 2003)

Collusion

Collusion is conspiracy among contractors to set prices at a level other than prices would be if the contractors set prices competitively. Judging from reports in the media, collusion is common. In New York City, waste collection from commercial establishments is contracted out to private waste management firms. ¹⁰ Sclar reports, "According to one estimate, the \$1.5 billion trash bill paid by New York City businesses for private trash collection is about \$500 million higher than it should be" (Sclar 2000:49 cites *Crain's New York Business* 1995).

In his landmark study on the growth and practices of multinational waste management corporations, *Giants of Garbage*, Crooks recounts the collusive behaviour of waste management firms. In one example, a "sixteen-month Brooklyn undercover investigation in the early 1970s produced evidence showing that most of the refuse collection industry in this New York borough was dominated by criminals and 'operated essentially as a monopoly.' Fifty-five refuse haulers were eventually caught in the net of the district attorney's charges. Collusive practices were yielding an estimated \$20 million a year in overcharges" (1993:15-16).

¹⁰ Unlike waste collection from residences, which is performed by public sanitation workers.

Sclar provides the following example of privatisation's impact on contractor behavior and prices:

Consider what happened when the government of Fort Lauderdale, Florida, decided to close its municipal pipe-laying department in the early 1990s. Local officials estimated that in the previous year they had paid about \$90 per linear foot when they infrequently used outside contractors and assumed that this figure was less than their in-house cost. As word quickly spread through south Florida that all of the pipelaying work in Fort Lauderdale was about to be privatised, contractors readied bids ranging up to \$130 per linear foot. Meanwhile, city engineers prepared a careful, avoidable-cost analysis in anticipation of the upcoming privatisation but were surprised to learn that their in-house cost was actually between \$68 and \$73 per linear foot. At about the same time, department employees had approached city officials via the municipal labor-management conciliation organization with a credible complaint that even this estimate was too high because the work was poorly organized. When the work was reorganized along lines suggested by the employees, in-house costs dropped to \$43 per linear foot. When the outside contractors learned that Fort Lauderdale was having second thoughts about its privatisation decision, they lowered their bids to the \$50 to \$60 range. But, by then it was too late. The department remained public but reorganized. (2000:71)



EXAMPLES OF PRIVATISED MSWM IN INDIA: PUDUCHERRY, BANGALORE AND CHENNAI

side from sporadic articles in the media and investigative reports by NGOs, detailed information about the terms, practices and impact of privatised MSWM in Indian localities is scarce. The government and major development agencies appear to be doing little to systematically measure, assess and publicize privatisation's performance. PricewaterhouseCoopers (PwC), a firm appointed by the Asian Development Bank to provide technical assistance to the JNNURM, has prepared a brief overview of privatised projects under the JNNURM for the MoUD. The document, created "to provide glimpses of projects being undertaken on Public Private Partnership under JNNURM" (PwC no date), analyzes privatised projects strictly on the basis of cost sharing and other financial parameters. The document's scant "glimpses" fall short of revealing environmental or health impacts of such projects. Notably, one of the few non-financial remarks by PricewaterhouseCoopers is that MSWM in Puducherry was privatised to enhance quality of service. (PwC n.d.:12) The document describes Puducherry's solid waste management project as one of the "good initiatives undertaken by the ULBs to initiate Public Private Partnerships" (PwC n.d.:3).

To gain a fuller and more objective impression of the performance of privatisation, I reviewed the public record of privatised MSWM in Puducherry, Bangalore and Chennai. Here are some excerpts from the reports, beginning with Puducherry because PwC endorsed it as a good initiative.

Puducherry Municipal Services Private Limited (PMSPL), Puducherry

On 16 July 2010, Puducherry awarded a 108-Crore, 19-year, solid waste management concession on build, own, operate, transfer (BOOT) basis to Kivar Environ Private Limited, a Bangalore-based firm that had no previous experience managing solid waste. For technical guidance, Kivar Environ entered into an agreement with Waste Connections Inc., one of the largest waste management firms in the USA. To execute the work, Kivar Environ and the Puducherry Urban Development Agency formed a joint venture named Puducherry Municipal Services Private Limited. The scope of work was

comprehensive: PMSPL was given responsibility for street sweeping and drain cleaning; door-to-door collection of approximately 146,000 tons of MSW per year (400 tons per day); waste transport and processing; design, construction and operation of a sanitary landfill; development of a state of the art laboratory; monitoring environmental impact and post closure monitoring of the landfill. Puducherry designated a 25-acre yard adjacent to the Rajiv Gandhi Government Veterinary College in Kurumbapet for PMSPL to develop into a modern waste disposal facility. PMSPL is reportedly paid Rs 2,300 per ton of waste that they collect, transport and dispose.

PMSPL initiated work in January 2011, deploying teams who collected waste door-to-door by pushcart and transferred the waste to plastic dumpsters. From the dumpsters, a fleet of 14 mechanized compactor trucks transported and then dumped unsegregated solid waste at the 25-acre yard in Kurumbapet. On 22 January, the Hindu newspaper reported that the Puducherry Pollution Control Committee (PPCC) had issued notice to Puducherry Municipality for dumping solid and medical wastes at Kurumbapet in violation of applicable regulations. According to the PPCC notice, "the activity leads to severe environmental degradation and is a gross violation of the Environment (Protection) Act, 1986, Bio-Medical Waste (Management and Handling) Rules, 1998, and the Municipal Solid Waste (Management and Handling) Rules, 2000" (Nair 2011).

On 29 March 2011, the *Hindu* reported that the PPCC, acting on complaints from faculty and students of Rajiv Gandhi Veterinary College, issued a show-cause notice to the managing director of PMSPL, asking why criminal action should not be initiated against PMSPL for continued violation of the MSW Rules (Yamunan 2011).

On April 6, PMSPL's dumping operation shifted from Kurumbapet to Puducherry's older dumpyard in Karuvadikuppam, which has been a site of protests by neighboring residents in the past. At Karuvadikuppam, PMSPL continued dumping unsegregated waste at the dumpyard, which is adjacent to Puducherry's airport.

Rather than enhancing quality of service, privatisation of MSWM in Puducherry made headlines after igniting public protest by continuing the same hazardous, illegal disposal practices that previously existed.

Ramky Infrastructure Limited (RIL), Bangalore

In August 2004, Bengaluru Mahanagara Palike (BMP) awarded a concession to Ramky Infrastructure Ltd., according to which RIL would build and operate a sanitary landfill to manage 600 tons of MSW per day for 20 years on a 100-acre parcel of land at Mavallipura. Ramky's Mavallipura landfill began receiving waste on 29 January 2007. Pollution from the landfill aggravated nearby residents, particularly after untreated leachate overflowed from a holding pond and contaminated Mavallipura tank on 6 October 2009. In protest, they blocked access to the landfill and demanded action by authorities.

According to a Bangalore-based NGO, Environment Support Group (ESG), on 9 October 2009, Bangalore Commissioner Shri Bharat Lal Meena, IAS, responded to the protests. The commissioner "promised comprehensive clean-up, pollution and cattle survey, and the digging of fresh borewells [for the residents of Mavallipura]. . . . The commissioner promised that the landfill would conform with all the standards and safeguards per the clearance conditions, but refused to the demand to the relocation of the landfill. He also confirmed there have been serious violations both in the siting as well as the management of the landfill and acknowledged that the landfill provided a threat to the Yelahanka Air Force Base. Several months later, none of the commitments made by the commissioner have been kept. Ramky continues to pollute with impunity" (ESG 2010:29).

After protests against the Mavallipura landfill by local residents in early October 2009, the Karnataka State Pollution Control Board (KSPCB) issued a 7-day show cause notice on the Bruhat Bengaluru Mahanagara Palike (BBMP) stating:

- **1.** It was informed that around 60-70 truckloads of average 6-8 tons, which amounts to total of 450-500 tons of solid waste, is coming to the processing facility.
- 2. The platform provided was overloaded and with heaps of waste up to 20 feet of height was noticed. There was no proper treatment of the entire waste, like segregation, overturning, maturation of the waste.
- **3.** The facility has compost screening plant of capacity 150 tons/day which was not working during inspection. Around 2,000 tons compost has been stored on the land without impervious platform, which also generating leachate.
- **4.** The developed landfill is not maintained according to the authorization conditions, and not maintained soil layer on each layer of waste dump and not provided the HDPE sheet to the whole landfill site.
- **5.** Adjacent to the landfill site around 2,000 to 3,000 tons of MSW was dumped on open land indiscriminately without segregation, which leads to generation of lot of leachate and due to rain water bund provided for landfill area at northwestern side has been breached and the leachate has flowed into the natural drain, finally joins the Mavallipura water tank. This has polluted the water quality of the village water tank against which villagers have complained to the Board.
- 6. The leachate generated from the platform is collected in lined storage tank, which was not managed properly and the tank has not been provided with proper pump and pipeline system. Most of the leachate has been let into the Kacha unlined pit, and which has joined the storm water drain and stagnated nearby the entrance gate which has resulted in smelly nuisance. The said natural valley water looks like dark in colour and emitting pungent smell in the entire area.
- **7.** The conditions of Schedule III and IV of MSW Rules and authorization orders have been completely violated.

8. The annual report in Form II has not been submitted as per authorization conditions. (ESG 2010:30-31)

On 5 March 2011, ESG issued a press release following the visit on 3 March of BBMP Commissioner Mr. Siddaiah to Ramky's landfill in Mavallipura. After inspecting the landfill, the commissioner reportedly said: "The way Ramky is running the landfill, there are numerous problems. They are not treating the leachates; it is running everywhere. There is also no segregation of waste. A large amount of waste is being received and simply not managed properly. . . . People's health is being adversely impacted. Healthy people are also being affected. Several are reporting kidney problems, meningitis, bone disorders, cancers, etc . . . Contaminated water could be a causative factor. How can people survive in such a polluted environment? . . . The condition around the landfill is scary. It has created a variety of complex problems. What people are complaining about is absolutely to be trusted" (ESG 2011:1).

Ramky's landfill, which was supposed to last for 20 years, was filled in three years because waste was dumped indiscriminately rather than recycled and composted.

3. Neel Metal Fanalca (NMF), Chennai

In 2007, the Corporation of Chennai (COC) awarded a 7-year concession to Neel Metal Fanalca Environment Pvt. Ltd. for collection, segregation, transportation and disposal of 1,500 tons of MSW per day in 66 wards. Neel Metal Fanalca is a 49:51 joint venture between Fanalca SA, Columbia, and Neel Metal Products Ltd., part of the Delhi-based, Rs 2,000-crore diversified JBM group.

Neel Metal Fanalca won the concession by bidding Rs 645 per ton for clearing garbage in Ice House and Adyar zones, and Rs 673 per ton for Kodambakkam and Pullianthope zones. Prior to its agreement with NMF, the COC had been paying Rs 1,200 per ton of garbage cleared to Chennai Environmental Services, popularly known as Onyx. The agreement with NMF went into effect on 26 August 2007.

On 2 August 2010, the *Hindu* reported: "Privatisation of solid waste management in four zones has only led to conservancy taking a backseat in these areas. . . . Privatisation of garbage clearance in many suburban areas too has not been successful. Many municipalities



NEEL METAL FANALCA TRANSFER STATION, KODAMBAKKAM, CHENNAI

have privatised at least one-third of their wards as they lacked the required manpower. Ambattur municipality, which roped in the services of Neel Metal Fanalca, has levied fines on the company for poor waste disposal" (*Hindu* 2010a).

On 28 Dec 2010, the *Hindu* (2010b) noted that although NMF's contract stipulates segregated collection of MSW, segregation is not being practiced.

On 1 February 2011, The Madras High Court ordered Neel Metal Fanalca to terminate its waste management services on 31 December 2011, prior to the expiration of NMF's concession agreement (*Hindu* 2011).

On 30 January 2011, the *Times of India* (TOI) reported:

The shoddy work of the company [NMF] has been under sharp criticism from day one. Following large-scale complaints against the inefficiency of the company in managing thickly populated wards like K K Nagar and Vadapalani, the civic body took over the conservancy operations in ward 128 of Kodambakkam zone in last May. Later they also took over wards such as 118 (Trustpuram), 120 (United India Colony and Kamaraj Colony), 121 (Dr Subburayan Nagar and Raghavan Colony), 116 (Nandanam) and 115 (Alwarpet) in the subsequent months. The solid waste management wing was even planning to withdraw six more wards from Ice House zone as well, especially in Chepauk constituency. Overflowing bins, poor street conservancy and lack of men and material forced the corporation to issue show-cause notices to the company. But the company allegedly never amended its ways. 'At least ten notices were sent against the firm in the recent past,' Mayor M. Subramanian told TOI. (TOI 2011)

The outcomes of privatisation in Puducherry, Bangalore and Chennai were predicted in a study of solid waste management in Chennai, Lima and Manila in 2001: "If the privatisation of SW [solid waste] collection, transportation and disposal is restricted to large-scale enterprises only, the financial viability and disposal levels

may improve, but the prospects for achieving ecological gains are gloomy. Large-scale enterprises in solid waste collection do not seem to be interested or able to capitalise on waste separation and resource recovery" (Baud et al. 2001:12).

In Puducherry, Bangalore and Chennai, privatisation failed to bring waste management services into compliance with the government's regulations, and failed to achieve the government's paramount goal for waste management: waste minimization. According to reports, waste was not segregated and handled in separate streams. Rather, mixed waste was dumped, leading to the emission of greenhouse gases, the production of POPs, and the pollution of water supplies.

Aside from issuing notices and terminating NMF's contract, authorities in these cases have failed to enforce contractual provisions to protect public health and the environment. Such failure indicates that officials either are not sufficiently empowered or are disinclined to compel contractors to obey the law and abide by their contracts. This is precisely the problem that led to the failure of waste management contracts in the USA in the 1800s. After reviewing attempts to privatize services between 1823 and 1881, Adler concluded:

Contracting failed because enforcement failed. . . . All the devices now being recommended to make enforcement effective were in place. . . . If enforcement did not take place it was because the city government lacked the courage to go beyond protests to impose meaningful penalties on the guilty. Every breach of contract brought about a study of how to fix the system, but rarely did any bring about the punishment of the corrupt. This inaction, which cannot be explained either by a profit motive or by moral feebleness, may be impossible to fix. . . . Contracting out creates a conflict of interest for the government officials who are in charge of it, and this fact cannot be changed. (1999:89 & 101)



ALTERNATIVES TO PRIVATISATION

The government's commitment to privatisation sets the nation on the brink of a Rubicon: once ministries and municipalities privatise services, it becomes very cumbersome and costly to resume government production. Alternating back and forth, as American cities did during much of the nineteenth century, is grossly inefficient. These factors and privatisation's poor performance provide strong reasons to devise alternatives to privatisation.

Those who insist upon privatisation tend to discount examples of well-performing reformed public services. However, as privatisation flounders, examples of alternatives to privatisation are gaining attention, even from the World Bank.

Public management has achieved impressive improvements in water supply in Cambodia: "Phnom Penh Water Supply Agency's impressive performance in extending service coverage (from 25% to 95%, 1993-2005) and reducing non-revenue water - NRW (from 72% to 11%, 1993-2005) . . . finds very few parallels with any progress made under private management" (Lobina and Hall 2009:5).

The Bank cites the example of Quito, Ecuador, where they found no difference in cost per ton or productivity between private and public waste collection. According to the Bank, the "government waste collection workforce had incorporated many improvements into its working practices during the previous four years. Collection routes had been rationalized, worker and vehicle productivity improved, vehicle downtime minimized, use of consumables controlled, and public cooperation developed" (Cointreau-Levine 2000:11).

Case studies of MSWM in Indian localities led the Bank's Water and Sanitation Programme to acknowledge, "Private sector participation is not the only way to improve service delivery . . . productivity of existing workers can be increased even without PSP" (WSP 2006:26). On the basis of the case studies, the WSP made the following observations regarding changes that are needed to help localities comply with the Rules:

- Engagement of the informal sector is necessary for long-term sustainability of the program.
- Downward delegation and clear allocation of responsibilities [are] needed for institutional continuity. . . . Clarity in roles and responsibilities would lead to greater transparency and accountability, and facilitate service improvements in the sector.
- Capacity building is required for information systems and accounting processes to enable more economically and operationally efficient decision-making.
- Local planning processes need to be improved.
- Measures [are] required for fostering community engagement.
- Introduction of service charges needs to be encouraged, with the aim of increasing accountability, as well as financial viability, of these services.
- Critical gaps [remain] in treatment and disposal due to (a) a diluted focus on public health objectives of MSW management; and (b) resource constraints faced by ULBs in addressing the complexities of designing and implementing a viable and effective treatment and disposal system. . . . For treatment and disposal systems, greater intervention is warranted from state and national agencies. (WSP 2006:26-27)

There are several cases of local authorities achieving considerable improvements in solid waste management by personally giving this responsibility high priority, but in a policy atmosphere that favors privatisation, such successes are not encouraged, rewarded or replicated.

CONCLUSIONS AND RECOMMENDATIONS



KURUMBAPET DUMPYARD, PONDICHERRY

Is privatisation a formula for provision or perversion of public services? The record indicates that privatisation inexorably perverts public services by reorienting them to serve private, rather than public interests.

This review yields two critical conclusions: first, privatisation's liabilities considerably outweigh its strengths, and second, the government and the public are the segments of society within which we will find the solution to the solid waste crisis. It is tragic and ironic that the World Bank promotes privatisation when, in fact, the public holds the greatest untapped opportunity for tackling the waste crisis, for the public's habits, values and daily consumption choices are the root of the crisis. Dedication of the government's considerable powers and resources to educate the public and change behavior is essential to alleviate the crisis.

Public service improvements achieved by administrative reforms indicate a path that deserves exploration. The CAG's performance audit highlighted aspects of the administration of India's waste management policy that need attention. The government should remain fully involved, not only establishing facilities and implementing services, but also setting standards, enforcing regulations and monitoring compliance.

In addition, to increase transparency and accountability, the government should create and maintain a publicly accessible database containing the contracts, budgets and performance records of all privatised solid waste management projects in the nation. There should also be annual public reporting of the performance of each locality's waste management services according to the Ministry of Urban Development's service level benchmarks.

From America's experience, Sclar cautions that privatisation "obscures real reform opportunities" (2000:94). We must not let privatisation prevent us from considering and exploring real solutions to the solid waste crisis.

Action that is urgently needed

- An intensive, government-sponsored public awareness campaign to educate the public about the importance of practicing the 3Rs—reduction, reuse and recycling—and the hazards of pollution from solid waste
- Administrative reform as recommended by the CAG, particularly clarification of responsibility and accountability at all levels of government for implementation of the MSW Rules, and augmentation of human and financial resources to bring the Rules into effect
- Government production of MSWM services in compliance with the MSW Rules

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