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Tendering trash: Lessons in urban waste management from Indian cities

South Asian cities are urbanising rapidly. With this, overflowing landfills and trash laden streets are becoming more common. Local governments and municipal corporations, many marred by inadequate financing and low capacity, are the first to be held responsible for this mismanagement, from which further negative spill overs occur. These can include high incidences of communicable diseases as well as harmful impacts on the environment.

The [problems with urban waste management](#) are well known – yet, their solutions less so. Getting it right from the outset is critical. To help with this, here are some lessons from and evidence on how three Indian cities are tendering urban waste management.

Caution with contracts: Turning to privatisation

Bengaluru, India's third most populous city, like many other underfinanced and resource-constrained cities, chose to privatise a large part of its solid waste management. The tasks and management of street sweeping, and the door-to-door waste collection were sought to be contracted out.

However, in large part due to [overbearing contractual requirements](#) (for example, a sizeable fiscal turnover or significant waste management experience), the city did not receive a single response to its call for proposals. Consequently, the city's municipal administration chose interim contractors behind closed doors – a solution that is rarely good for accountability or efficiency. Furthermore, the limited competition resulted in increased costs for the city.

The weak incentive structures and lack of monitoring gave rise to a [garbage mafia](#). These groups now thrive on exploiting various vulnerable groups employed to manage the waste. Inconsistent funding, as well as the allocation of responsibilities from the city government, has led to the ad-hoc contractors failing to keep the city clean.

Ultimately, in Bengaluru, the privatisation of waste had strong negative impacts on the city. This spans from the [pilferage of revenues](#) to the unfortunate need to [involve state civil courts](#) to enforce laws that maintain the city's environment. The municipal administration claims to be working on [new tenders](#) that consider the failures of the previous tenders. The lesson gleaned is that *rigidity in the tendering process limits choice in*

service providers.

Informing the informal: Local enterprise against privatisation

While Bengaluru bears the brunt of short-sighted solutions to managing waste, New Delhi takes a much [longer-term approach](#). The city has meticulous planning and is deliberating furthering the transition from state managed to private managed services. A second lesson that can be drawn from this experience, is that *working with and [planning for informality](#) is vital for urban waste service delivery*, and may have been a missed opportunity in the case of New Delhi.

Part of New Delhi's long-term planning was a [comprehensive strategy](#) to manage waste (known as Master Plan 2021). This strategy accounted for every last detail, including the role of over 80,000 informal waste workers and highlighted the need for localised centres to avoid the use of landfills. A positive outcome has been that by setting the ambitious goal of developing '[model neighbourhoods](#)' with door-to-door collection and strict segregation at source, municipal corporations are proactively attempting to manage the waste.

However, even with these plans in place, inadequate state capacity and financing have led to service delivery remaining unfulfilled. As plans developed for the corporations to privatise in order to meet the goals of the masterplan, [local enterprises](#) expressed their concerns. A particular issue was regarding the effects of privatising on the thousands of [informal workers](#). These workers are often the backbone of waste collection. Activists claim that *the transition from informal to formal labour may affect many thousands as competition between the two sectors increases*.

Public-private cooperation: A middle ground

The final case of Pune helps draw parallels between privatisation and [public-private cooperation](#). In 2000, the city corporation collaborated with India's first cooperative of self-employed waste managers, known as [SWaCH](#) (Solid Waste Collection and Handling). The cooperative provides formal employment and social protection to more than 3,500 women. *These cooperatives can bring the flexibility, accessibility, and accountability cities need*, which is our third lesson.

The SWaCH cooperative manages more than 70% of the waste generated in the city and in addition to state support, collects a user fee from citizens to meet their expenses. The cooperative has designed a system to collect waste from slums with over 1.2 million previously ignored residents.

Fundamentals of [social inclusion](#) and accountability underpin the cooperative's award-winning sustainable model. Pune has remained clean and a clear path of communication between municipal authorities, citizens, and the cooperative ensures their work continues.

In this manner, *the municipal corporation [saves costs](#) by partnering with the cooperative compared to working with a private entity*. Furthermore, the corporation provides [subsidies to citizens](#) and communities to support in-house composting of

[to citizens](#) and communities to support in-house composting of wet waste. Pune has paved the way for bypassing privatisation while efficiently designing incentives for various citizens and stakeholders.

Conclusion: Incentivising waste management

For many citizens, urban waste management is the local government issue that affects them most regularly. To account for this importance, cities need to get waste collection right. Bengaluru's case shows how tendering on strict metrics restricted city choice and shifted power from the city to corporations. In New Delhi, over planning without the flexibility to incorporate the informal sector is likely to push citizens out of work. Finally, in Pune's case, bottom-up solutions with citizen and city collaboration can align incentives.

All these cases show that there is no one size fits all solution for urban waste management. However, lessons can be drawn from all. It shows that for fast-growing and low resource cities, it is important to align incentives with the multitude of relevant actors from the outset. Municipalities must, therefore, explore different models of tendering for waste collection that best suits their context. In doing so, they should take ideas and evidence from other cities to understand what can work.

References:

Akshatha, M. (2018). "Bruhat Bengaluru Mahanagara Palike's new garbage plan may go to waste", *The Economic Times*. Accessible: <https://economictimes.indiatimes.com/news/politics-and-nation/bruhat-bengaluru-mahanagara-palikes-new-garbage-plan-may-go-to-waste/articleshow/66915352.cms>

Delhi Development Authority (2007). *Master Plan for Delhi-2021*. Accessible: https://dda.org.in/tendernotices_docs/may1/MPD-2021_31.03.2017260417.pdf

DHNS (2019). "Remove garbage, and the mafia", *Deccan Herald*. Accessible: <https://www.deccanherald.com/opinion/first-edit/remove-garbage-and-the-mafia-760787.html>

Environment Support Group (2020). *Karnataka High Court monitors state of Solid Waste Management in Bangalore*. Accessible: <https://esgindia.org/new/campaigns/swm/karnataka-high-court-monitors-state-of-solid-waste-management-in-bangalore/>

Hanrahan, D., Srivastava, S. and Ramakrishna, A. S. (2006). *India – Improving management of municipal solid waste in India: overview and challenges: Improving management of municipal solid waste in India: overview and challenges (English)*, Washington, DC: World Bank. Accessible: <http://documents.worldbank.org/curated/en/178191468035334268/Improving-management-of-municipal-solid-waste-in-India-overview-and-challenges>

Hayami, Y., Dikshit, A. K. and Mishra, S. N. (2007). "Waste

pickers and collectors in Delhi: Poverty and environment in an urban informal sector”, *Taylor and Francis Group Online*. Accessible: <https://doi.org/10.1080/00220380500356662>

Kaza, S., Yao, L., Bhada-Tata, P. and Van Woerden, F. (2018). *What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series*, Washington, DC: World Bank. Accessible: <http://documents.worldbank.org/curated/en/697271544470229584/pdf/132827-PUB-9781464813290.pdf>

Kulkarni, C. (2019). “ACB to probe Rs 384-crore garbage scam”, *Deccan Herald*. Accessible: <https://www.deccanherald.com/city/bengaluru-crime/acb-to-probe-rs-384-crore-garbage-scam-743647.html>

Kulkarni, P. (2019). “PMC to encourage composting at home with a panel and subsidies”, *Pune Mirror*. Accessible: <https://punemirror.indiatimes.com/pune/civic/pmc-to-encourage-composting-at-home-with-a-panel-and-subsidies/articleshow/69816052.cms>

Ministry of Housing & Urban Affairs (2017). *Centre to launch Neighborhood Action Plan in cities for better Solid Waste Management*, Press Information Bureau, Government of India. Accessible: <https://pib.gov.in/newsite/PrintRelease.aspx?relid=171068>

Misra, N. (2011). “Activists question privatization in Delhi as Pune shows the way”, *Live Mint*. Accessible: <https://www.livemint.com/Politics/xringBheTz2fPKDQR22S8I/Activists-question-privatization-in-Delhi-as-Pune-shows-the.html>

National Herald. *Solid waste management remains a giant problem in Delhi*. Accessible: <https://www.nationalheraldindia.com/environment/solid-waste-management-remains-a-giant-problem-in-delhi>

Parsons, S., Maassen, A. and Galvin, M. (2019). “Urban Transformations: In Pune, India, Waste Pickers Go from Trash to Treasure”, *World Resources Institute*. Accessible: <https://www.wri.org/blog/2019/03/urban-transformations-pune-india-waste-pickers-go-trash-treasure>

Santhosh, S. and Ram, P. (2019). “How Has Municipal Red-Tape Led to Waste Being Mismanaged in Bengaluru?”, *Engage EPW*. Accessible: <https://www.epw.in/engage/article/how-has-municipal-red-tape-led-waste-being>

Sinha, S. (2018). *Can Waste Pickers Help Solve Delhi's Towering Trash Problem?*, WIEGO. Accessible: <https://www.wiego.org/blog/can-waste-pickers-help-solve-delhi%E2%80%99s-towering-trash-problem>

United Nations Environment Programme (2018). *Empowering waste workers for a cleaner, safer city*. Accessible: <https://www.unenvironment.org/news-and-stories/story/empowering-waste-workers-cleaner-safer-city>