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## **Future imperfect: waste management in India and pathways to sustainable policy frameworks**

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**EQUITABLE AND SUSTAINABLE WASH SERVICES:  
FUTURE CHALLENGES IN A RAPIDLY CHANGING WORLD**

**Future imperfect: Waste management in India and  
pathways to sustainable policy frameworks**

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Waste and waste management is one of the most pressing and prescient problems in the contemporary world, more so in relatively densely populated cities of the global south (UNHABITAT 2010). It is estimated that globally the combined output of municipal solid waste annually, is approximately 2.01 Billion Tons and is expected to grow more than 150% to over 3 Billion tons by 2050; with an almost three fold increase in low income countries (Kaza, *et al.*, 2018). India too is not far behind in these trends with 1,00,000 MT per day (CPHEEO, 2000 in PEARL 2015) being produced across the country.

Research has also found that the management of this waste in the country is problematic with over a third of the total collected quantity being managed in environmentally unsound methods (Kaza, *et al.*, 2018). This leads to a concern about the environmental sustainability of the current waste management approaches with a majority of these being dumped in landfills and waste dumps, sometimes in nearby fringes of these cities.

While Urban sanitation, in India, specifically, waste management are clearly contributors to basic health conditions in urban areas, they however, rank lower relative priority than water supply and sanitation (Hanrahan, Srivastava, and Ramakishna 2006). This order of priority is marked as evidenced by the relatively recent life of legislations and policy responses aimed specifically at waste and its management; the most recent being Municipal Solid Waste Rules(Management and Handling) 2016 and the National Urban Sanitation Policy 2016. In addition, these policies in India have had mixed effects with focus often on segregation rather than disposal and management and in some cases this has only served to exacerbate the issues around transportation, storage and disposal issues.

That these policies have issues is borne out by the rising tide of various conflicts around waste management in many urban centers leading to disruption to these services. Some of the key protests in India around waste management include ones in Mandur near Bangalore, Ghazipur near Delhi, Vilappilsala near Trivandrum, and Naregaon near Aurangabad.

This paper argues that, all these conflicts are often borne out due to the lack of community involvement in and around these disposal and treatment facilities, leading to public protests from communities in nearby peri urban areas which resulted in the closure of these waste management plants. This takes back the waste problem to the very beginning of not managing it at all.

By investigating the protests, the paper highlights lacunae that are present in the policies hitherto framed and also points out the lack of such wider participation usually signals continuing issues for Urban Planning activities ; which as of now are heavily technocratic in nature. Therefore, the paper aims to develop and advocate a framework based on re-including people into the process of planning in order to produce an inclusive approach to ensure sustainable waste management practices to tackle the mounting future challenges surrounding waste.

## **References**

Hanrahan, David, Sanjay Srivastava, and Sita.A Ramakishna. 2006. *Improving Management of Municipal Solid Waste in India Overview and Challenges*.

[www.worldbank.org/in%0Ahttp://documents.worldbank.org/curated/en/178191468035334268/pdf/370700IN0Munic1ver0P08436401PUBLIC1.pdf](http://www.worldbank.org/in%0Ahttp://documents.worldbank.org/curated/en/178191468035334268/pdf/370700IN0Munic1ver0P08436401PUBLIC1.pdf).

Kaza, Silpa, Lisa Yao, Perinaz Bhada-Tata, and Frank Van Woerden. 2018. The World Bank Group *What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050*. Washington.

PEARL. 2015. NIUA *Urban Solid Waste Management In India*.

UNHABITAT. 2010. *State of the World's Cities 2010/2011: Bridging the Urban Divide*.

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