

# Why Waste Trash

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## Manage waste smartly and reduce air pollution

It's winter in India, which, in many parts of the country also means terrible air pollution. According to Central Pollution Control Board's air quality data base PM 2.5 levels in New Delhi is 277  $\mu\text{g}/\text{m}^3$ , Kanpur is 240  $\mu\text{g}/\text{m}^3$  and Patna is 243  $\mu\text{g}/\text{m}^3$ , which is almost four times the prescribed limit of 60  $\mu\text{g}/\text{m}^3$ . A World Bank study, "The Cost of Air Pollution", states that air pollution killed around 14 lakh people in India in the year 2013.

Widely unacknowledged is the role of waste in air pollution. Given that Delhi hit the global news for its poor air quality, let's look at the role of it's out of control waste in increasing the air pollution.

Delhi generates about 10,000 tons of waste at the very least. Of this, 50% is wet waste, and 20% dry. When the waste reaches one of Delhi's two operational landfills, it often catches fire due to methane formation and combustion. Some of it burns before it reaches the landfill-it is set on fire in dhalaos, and at night, for warmth. In the winter alone, Chintan estimates that security guards alone burn about 30,000 small fires a night to stay warm.

Some estimates are that almost 250 tons of waste is burned every day. If this number sounds small compared to 10,000 tons, then think of it as the waste of 50,000 people.

Estimates are that the pollution load from this is about 1800 kg/day of PM 2.5 and 2000 kg/day of PM 10.

## Stopping waste burning can reduce the burden of air pollution by 10%

But this is not the story of Delhi alone-it is the under-reported condition of many inland towns and cities. The fact that Indian cities burn waste and increase point sources of air pollution is undeniable. We've seen this from Bhopal to Port Blair. Many of the local residents and municipal officials who burn this waste say it has to be burned because it is not picked up to begin with. But is



efficient collection adequate response and prevention?

Imagine perfect collection. Question is, where will this be sent? To a landfill? If so, it will catch fire as methane is emitted, because most of our cities don't have adequate landfills. Moreover, engineered landfill fires are also known to occur. And if to a plant, the questions to ask are these: does this have to be centralized? The sheer transportation itself adds to air pollution. And does the technology also pollute the air?

If reducing the air pollution from waste is a consideration at all, a key first step is to prevent the need to transport the waste. That means that the logic of setting waste on fire because it remains uncollected is made irrelevant. Decentralization is no longer the NIMBY crisis we imagined even 5 years ago. City after city shows how decentralized models are embraced by citizens, Urban Local Bodies and elected representatives jointly. Mysuru, Karnataka with population of 9.5 lakhs is just one case in point. Here, of the 402 metric tons of waste, 79.35% consists of household waste and 3.0% consists of market waste, of which most of it is composted through a 200 ton capacity compost plant producing approximately 30 to 35 metric tons per day of manure. The plans are to shift all waste handling to a decentralized mode. Vengurla, Maharashtra with population of 12 thousand, follows the same logic, as do many buildings in Bangalore with a total population of 1.15 crore. The case of these cities and towns show how handling wet waste becomes a central element of success in every case. The reason is two folds. Wet waste is the part that we love to complain about, after plastic bags. It stinks and it breeds flies. It is also the single biggest fraction of waste-nearly 50% of the total waste. We simply don't have a dry waste crisis at the same level-almost all the recyclable waste is recycled by the informal sector.

Decentralization also serves other purposes. It diverts waste from landfills and dumps, reducing the fires that take place due to spontaneous combustion-a big source of air pollution, as we just read. Plus, it compels waste generators to confront their own consumption.

For these reasons, any town or city combating air pollution has to fight the emissions from waste.

**A solid waste management project in Mamallapuram, Tamil provides services to 5,000 households and small business entities in town. It collects around 5.5 tons of waste daily of which 80% is processed. Only 20% of the waste is dumped in landfills. Biodegradable waste is converted into organic manure in a compost park set up exclusively for this purpose, while recyclable waste is segregated and sold to recyclers.**



Visit our website [www.chintan-india.org](http://www.chintan-india.org) for more on waste recyclers, child wastepickers and Chintan's campaigns and initiatives.