

Zero Waste to Landfill

“Myth or Reality?”

If it is mixed, it cannot be fixed 😞



Defining Garbage



Food / Kitchen Waste

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Plastic Bag

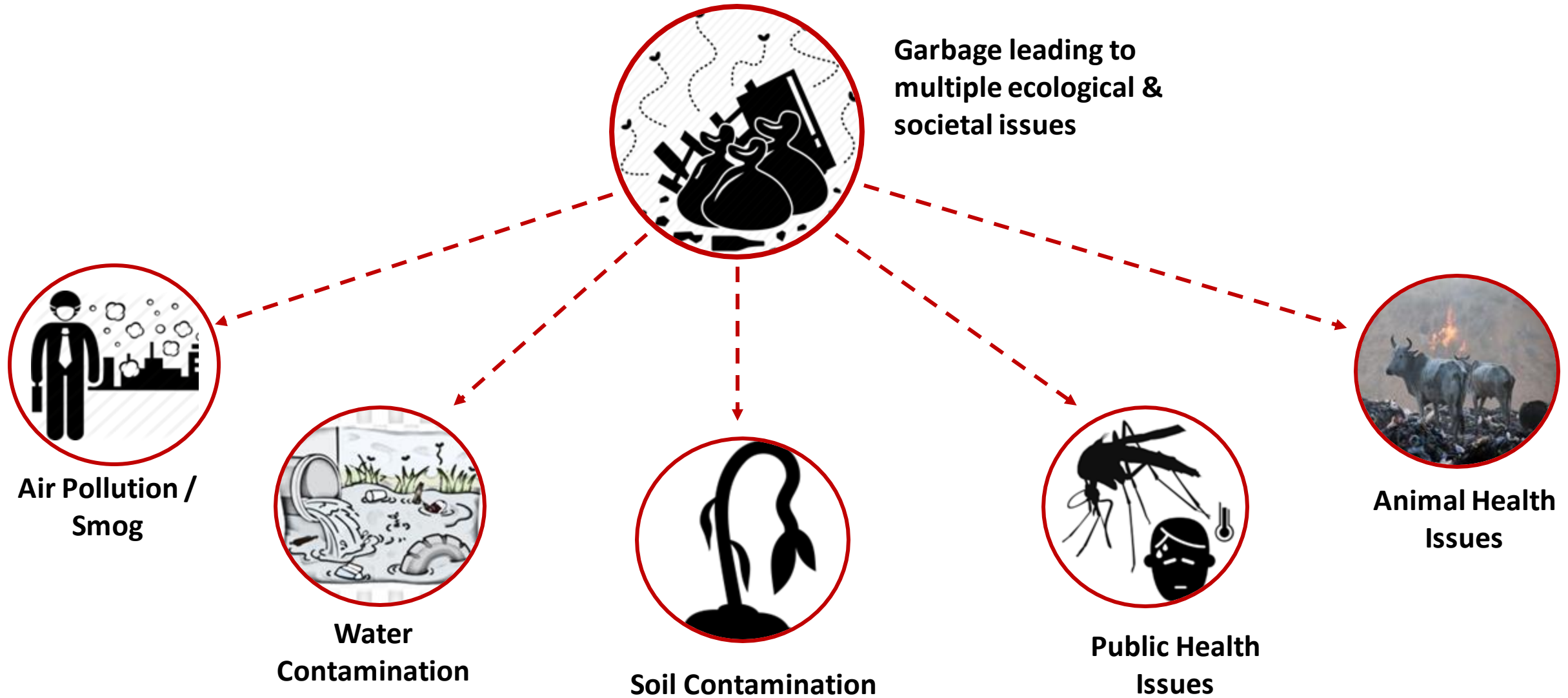
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Garbage

- Food or organic waste when disposed in plastic bags **cannot be recycled**, resulting into **zero resource recovery** and is termed as “Garbage”
- Garbage is characterized by **foul odour** and a breeding ground for mosquitoes and other **disease** causing vectors
- Currently garbage is hauled to landfills or burnt, releasing toxic gases into the air

Garbage – root cause of most problems our society faces



Garbage generated in major cities of India

City	Landfills	Amount of waste per day (in tonnes)
Mumbai	Deonar, Mulund, Kanjurmarg	9600
Delhi	Ghazipur, Okhla, Bhalswa	9000
Kolkata	Dhapa	4000
Chennai	Perungudi, Kodungaiyur, Tiruvottiyur	9600
Bangalore	Official dumping stopped since 2013 Many decentralized projects 10 processing plants but they receive a lot of mixed waste and hence untreatable	4500

- GHG quantification for 1 TPD waste going to landfill, is cumulative 2655 tons of GHG emission in 10 years

SEGREGATION OF WASTE AT SOURCE

Single most important activity that can avoid waste getting into landfill

70% by weight



Food / Kitchen Waste

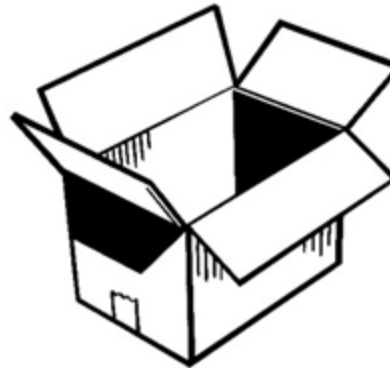
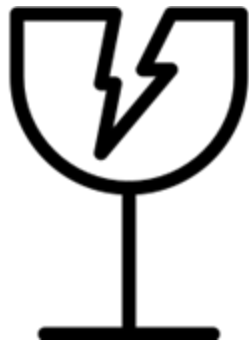


At source composting



Organic Manure

30% by weight



Plastic, Glass, cardboards, metal cans and so on can be recycled **if not mixed with organic waste**

Waste generated in a building & its journey

Waste Type	Activity done “at-source”	Final Destination
Segregated Kitchen / Wet Waste	Goes into composting setup	Compost sold to local farmers, nurseries, landscapes & gardens
Plastic bottles, wrappers, plates, cups	Stuffed into gunny bags for loading & transport	Input material for making plastic pellets
Glass Bottles, broken panes	Stuffed into gunny bags	Pulverized & sent to glass manufacturing factories
Soiled tissue papers, paper cups	Stuffed into larger bags.	Incineration
E-Waste like chargers, phones, cartridges, bulbs, LEDs etc	Packed into corrugated boxes for transport	Sold to e-waste recyclers
Metal waste like cans, boxes etc	Stuffed into gunny bags	Gets into metal recycling industry
Medical & Sanitary waste	Stuffed into larger bags	Incineration

“At-Source” Composting Setup - Example



Shot on OnePlus
By Bhaskar

Journey of Organic Waste



Segregated wet waste is added into composters



Compost is harvested periodically and aggregated for curing & value addition

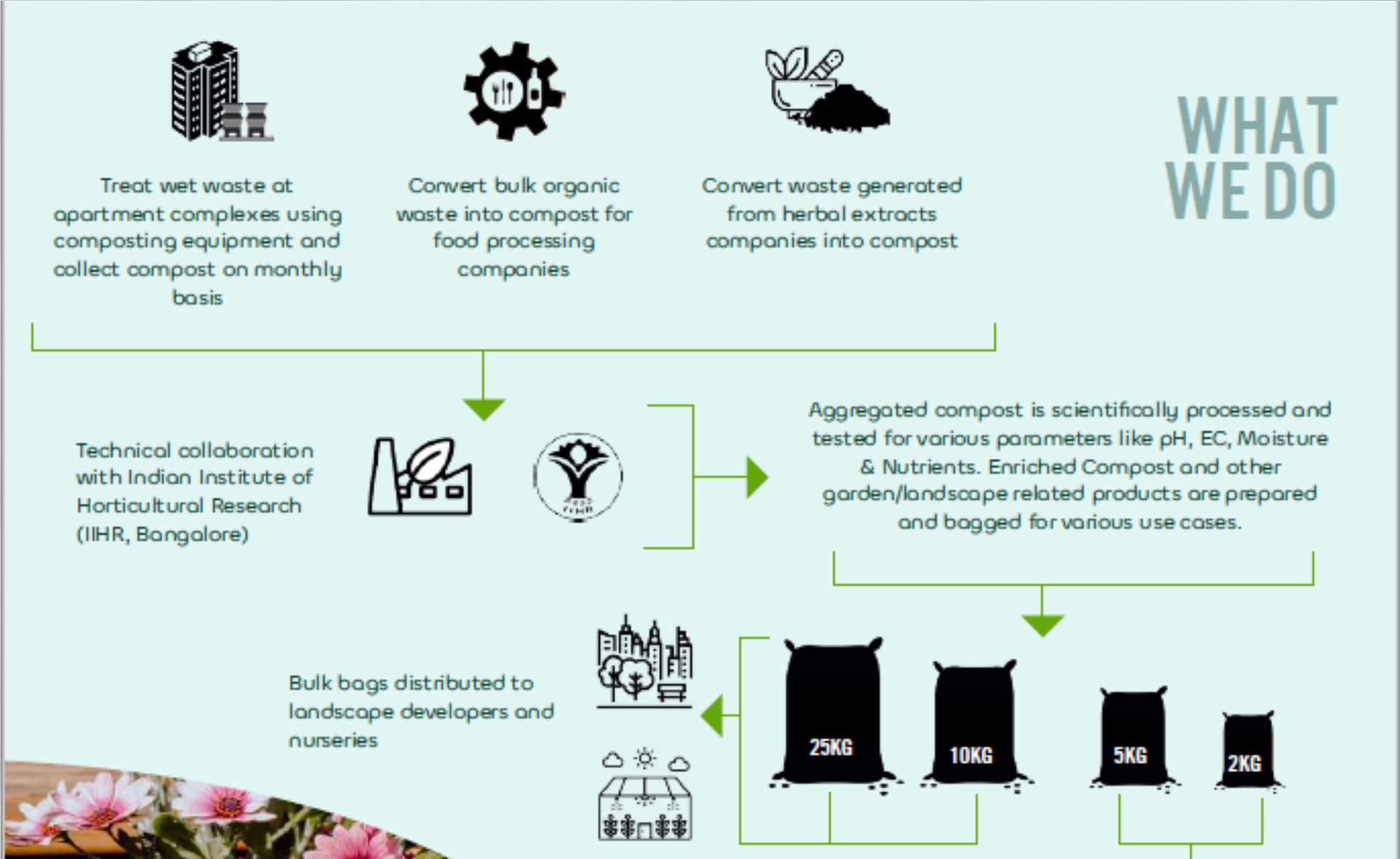


Value added compost sold to nurseries and protected cultivation farmers

About us

- We are One Hop Organics Pvt Ltd. based in Bengaluru. We specialize in “at-source” organic waste treatment products & solutions
- Company established in 2015. Have products & solutions to treat 2 kg to 20 tons per day waste
- Have provided composting solutions to Poultry, Food processing, Bottled juices, Restaurants, IT parks, Baking companies etc
- We offer end-to-end solutions – consulting, project design & implementation
- Installed capacities – 6000 MT per annum. 1200 MT per annum compost production. 2000 MT soil-less grow media production capacity

Infographic



Recommendations to Architects, Designers & Builders

- Make waste management integral to building design
- Allocate optimal space for segregation, composting & storage
- Facilities management process should include waste management and required budget to be allocated
- Give end-to-end waste management contracts. Avoid splitting into wet waste, dry waste etc.
- Have governance processes to review report backs on waste generated & processed

Contact Us

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