



सत्यमेव जयते

Ministry of Housing & Urban Affairs,
Government of India



Ministry of the Environment
Japan

**THANK YOU FOR
THE
OPPORTUNITY!**

MISSION ZERO WASTE

EIGHTH REGIONAL 3R FORUM IN ASIA AND THE PACIFIC

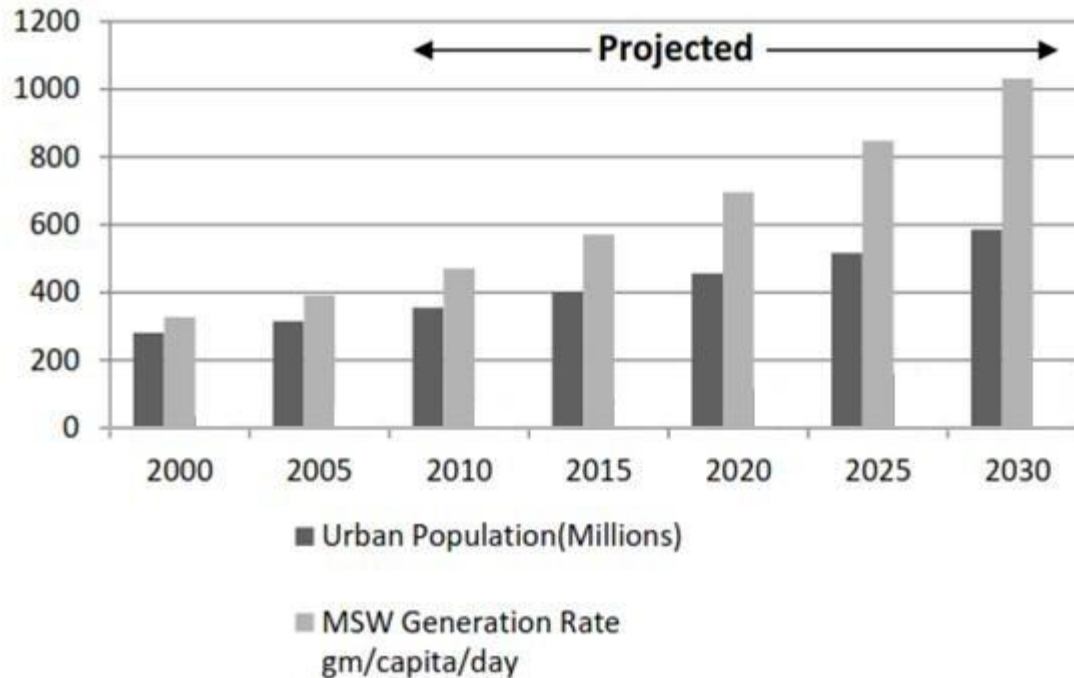
“Mission Zero Waste”

9-12 April 2018

Brilliant Convention Centre, Indore, Madhya Pradesh, India

Theme

Achieving Clean Water, Clean Land and Clean Air through 3R and Resource Efficiency- A 21st Century Vision for Asia-Pacific Communities



The revised MSW Manual 2016, developed by MoUD in collaboration with GIZ, aims at guiding all stakeholders particularly Urban Local Bodies (ULBs) to adopt suitable measures for **waste minimisation** at source, **better systems for segregation, collection, transportation, processing, treatment** and **disposal** in complete **harmony with the environment** and in line with **prevalent MSW regulations** prepared.

Source: <http://indus-media.com/events/solid-waste-management-2016>

SWACHH BHARAT RANKINGS 2017: CITIES RANKED ON CLEANLINESS

The top two cleanest cities in India: Indore and Bhopal.



The Ministry of Urban Development had claimed that more than 80 per cent of the 18 lakh people surveyed across 434 towns and cities had given a positive response to the impact of Swachh Bharat Mission.

Source: <http://indianexpress.com/article/india/swachh-bharat-rankings-2017-here-are-the-top-100-cities-ranked-on-cleanliness-4640216/>



2 killed as 50 tonnes of waste hurtles down Ghazipur landfill

Vehicles Swept Into Drain; Toll May Increase

Somreet Bhattacharya & Pankhuri Yadav | TN

New Delhi: Fifty tonnes of garbage came crashing down the 16-storey-high mountain of waste at east Delhi's Ghazipur landfill site in a deadly 'avalanche' that swept away a car and three two-wheelers, killing two people and injuring five on Friday afternoon.

Heaps of garbage dropped into the Kondli canal running alongside the landfill around 2pm, creating a giant wave of slushy water that hit the road next to the canal. It washed away the four vehicles — an

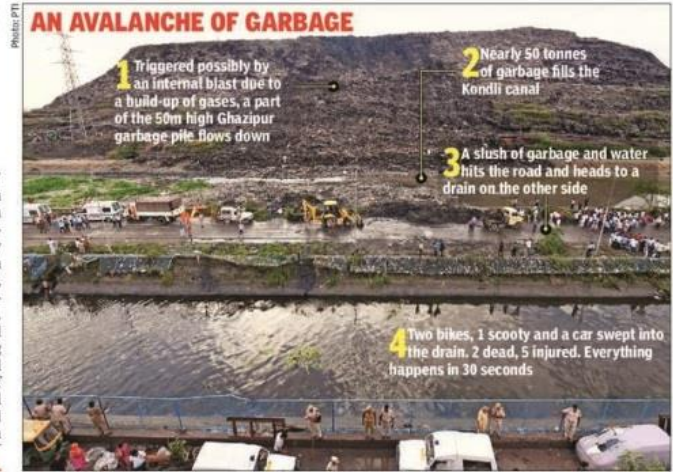
FULL COVERAGE: P 2 & 3

Accent car, a scooter and two bikes — which fell into a drain on the other side of the road.

Fire officials, divers, police and NDRF teams searched the drain for three hours to rescue people who were swept into it and fish out the two bodies.

Police suspect more people working at the landfill site could be trapped under the debris. Officers said raggickers from the area usually climbed up the mound searching for things to pick up.

The dead were identified as Rajkumari, 30, who was on the scooter along with two others, and a 20-year-old youth, Abhishek. Those rescued from the drain include Ayub Ansari (driver of the Accent), Pankaj and Karan (who were on the



AN AVALANCHE OF GARBAGE

- 1 Triggered possibly by an internal blast due to a build-up of gases, a part of the 50m high Ghazipur garbage pile flows down
- 2 Nearly 50 tonnes of garbage fills the Kondli canal
- 3 A slush of garbage and water hits the road and heads to a drain on the other side
- 4 Two bikes, 1 scooter and a car swept into the drain. 2 dead, 5 injured. Everything happens in 30 seconds

Local lad pulled out driver of sinking car

The toll in the Ghazipur disaster would have been higher but for the quick response of the local people who jumped into the drain searching for commuters who were swept in, minutes after the tragedy. A braveheart, All, pulled out the driver of the Accent car that was sinking in the water. **P 2**

AAP gov't, EDMC blame each other

Calling the Ghazipur accident a man-made disaster, CM Arvind Kejriwal blamed the municipal corporation for it while the EDMC mayor cited lack of land as a problem and pointed a finger at the Delhi government for not implementing the report of the Delhi Fourth Finance Commission. **P 3**

Why tragedy was waiting to happen

The Ghazipur landfill, which reached its exhaustion level in 2002, is just one of the city's ticking time bombs. Complacent municipal bodies are yet to adopt modern techniques, resulting in landfills getting saturated, while lack of space in a land-starved city has resulted in few other alternative sites coming up. **P 2**

scooty), Deepak (riding the bike on which Abhishek was sitting) and Amit, who was on another bike. They are being treated at different hospitals. Eyewitnesses said the disastrous sequence of events lasted

just a few seconds. "I could not believe my eyes when I saw the mountain falling. Initially, I thought many more people had died as the water and garbage struck the vehicles with immense force," said Asghar,

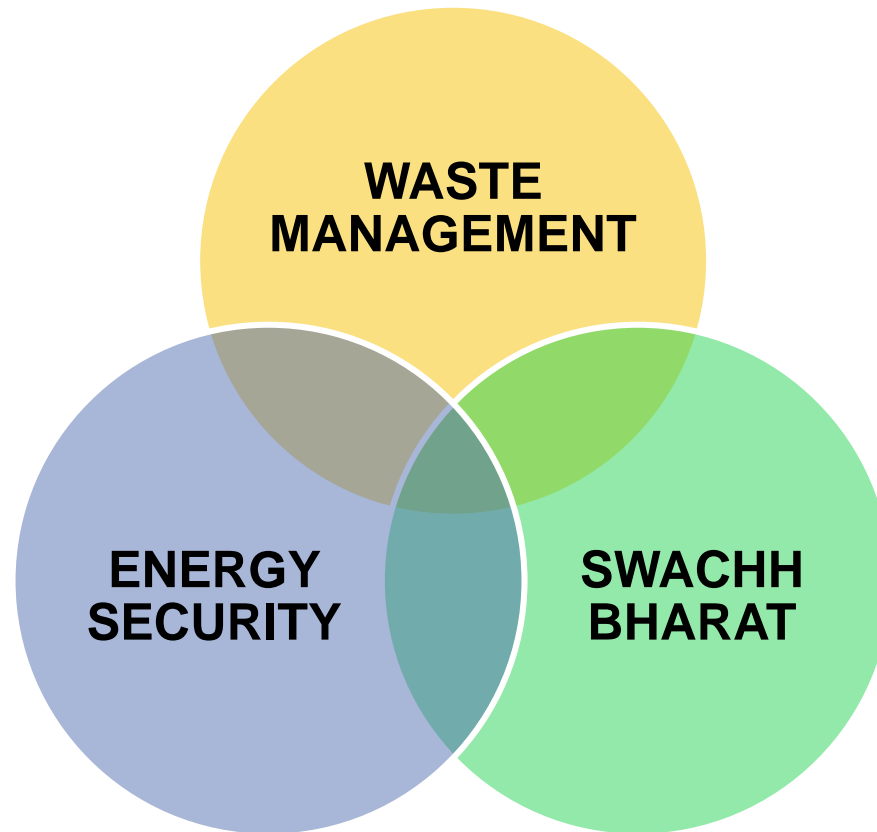
resident of Khoda colony in the area. Many other commuters had a narrow escape as their vehicles stopped at the edge of the canal.

► **Build-up of gases, P 3**

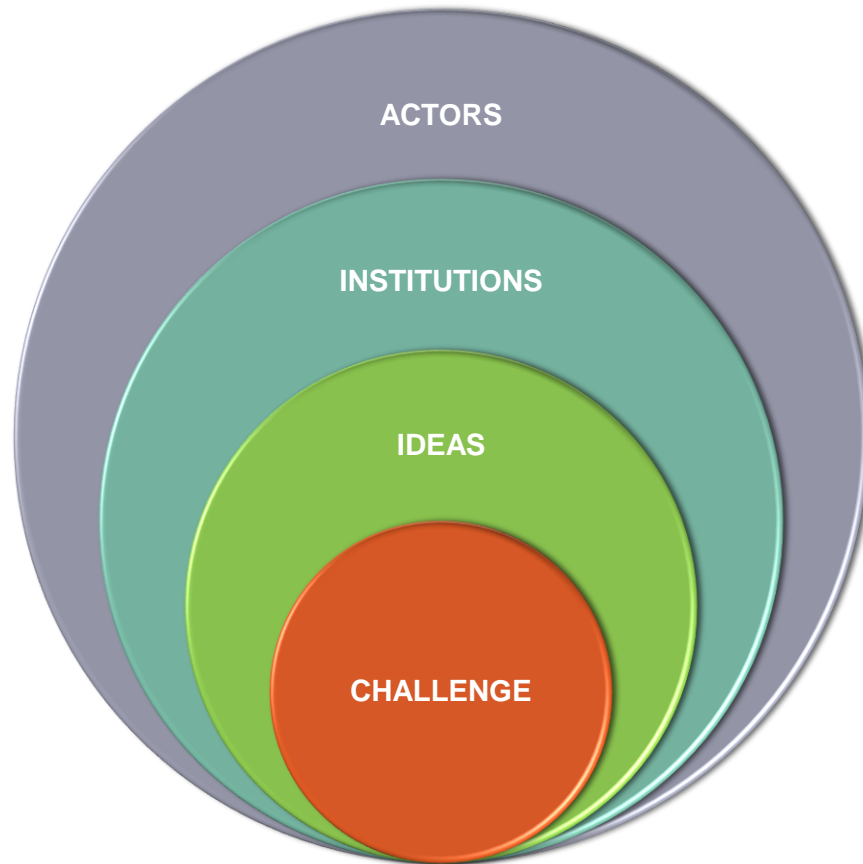
INDIA ALONE GENERATE MORE THAN 1,00,000 METRIC TONNES OF SOLID WASTE EVERY DAY, WHICH IS HIGHER THAN MANY COUNTRIES' TOTAL DAILY WASTE GENERATION TAKEN TOGETHER, TIMES OF INDIA SEPTEMBER 2, 2017

10-04-2018

THE SYNERGY CHALLENGE



CHALLENGING A CHALLENGE



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1.2 Basis for policy formulation: Statistics of MSW and waste to energy in India; role and potential of energy generation from waste to electricity

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1.4 Understanding of constitutional and legal connections among the three thematic areas in the context of 21st Century implementation of policies and programs

Chapter II

2. Energy Security and Sustainable Development: Analysis of the synergies between waste to energy, and 3R (Reduce, Reuse, Recycle of waste). Linkages with SDG Goal numbers 7, 11 and 12

2.1 Emerging critical policy parameters and interrelationship among (a) waste management, (b) energy security and (c) Swachh Bharat in India, in the context of solid waste management

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Chapter III

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Chapter VII

7.1 Operational Plants

18 RECOMMENDATIONS

IDEAS:

1. Hold biannually a Swatch Bharat Global Investors Meet only in the area of waste to energy in India. Waste to Gold Global Investors Summit – 2018. The motto can be waste to gold-no wasting.
2. Strategy to transform the sector should be based on creating an eco-system of market forces as was the case for the Solar Mission.
3. Solar Energy Corporation of India (SECI) can be named as Renewable Energy Corporation of India and expand its mandate to take over waste management on an outsourced basis based on demand aggregation
4. Linkages between plant technology and waste characteristics.
5. Waste to Energy vs. Recycling.

INSTITTIONS:

6. WtE vs. Livelihood of rag pickers in India Toxics Link, a New-Delhi based environmental NGO, classifies waste pickers into four categories: Those who carry sacks and collect anything of resale value from open drains, bins and dump sites; the kabadi or bhangar men on bicycles who collect from households and then segregate glass, paper, and bottles from plastics; those who ride tricycles and collect almost 50 kg of waste each day and travel long distances to sell them, and finally, those who work for scrap dealers.
7. Inclusive role of actors, ideas, and institutions within and outside government systems in the value chain
8. India chapter of Zero Waste Europe by the Association of Municipalities and Development Authorities (AMDA)

18 RECOMMENDATIONS

9. **Zero Waste Municipalities with facilities for local R&D on waste and information dissemination centres** Strategy to transform the sector should be based on creating an eco-system of market forces as was the case for the Solar Mission
10. **India's Zero Waste Association as a part of ISWA and zero waste auditing as a business policy.**
11. **Zero packaging shops and modern Indian malls.**
12. **Awareness at all levels**

ACTORS:

13. **Role of GWMO (Global Waste Management Outlook) promoted by UNEP (United Nations Environment Programme) and ISWA (International Solid Waste Association)**
14. **Waste governance and financing of waste projects in the 21st Century**
15. **Incorporate lessons from Climate and Clean Air Coalition (CCAC) MSW initiative**
16. **Pricing mechanism for Bio-CNG and model document for purchase/sale agreement with oil and gas marketing companies**
17. **Rationalization of financial support for projects on Waste to Energy (WtE)**
18. **Recommendation on Institutional and policy reforms**