

# Decentralized MSW plan: A Distinct future or Reality

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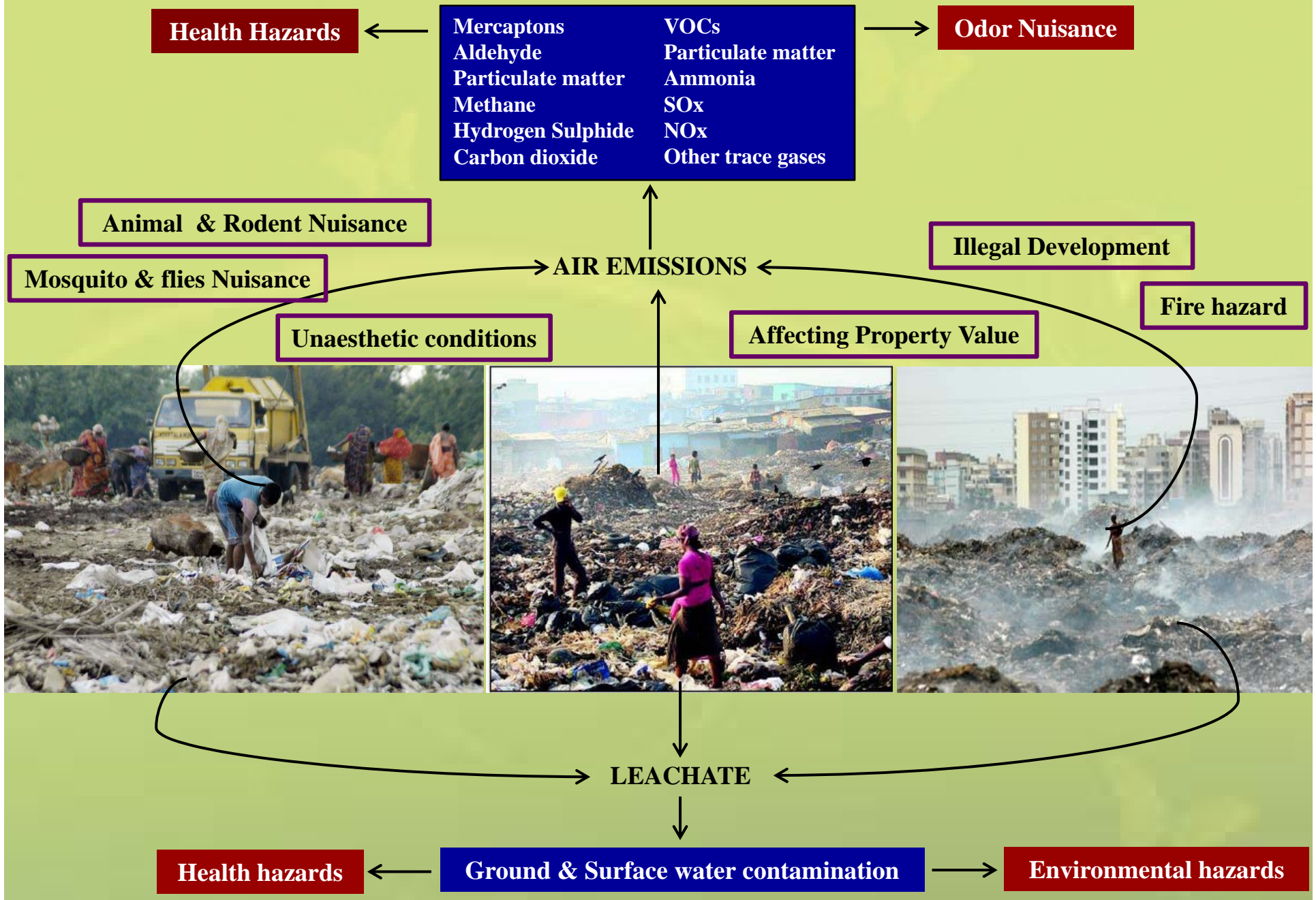
# What is Done Currently



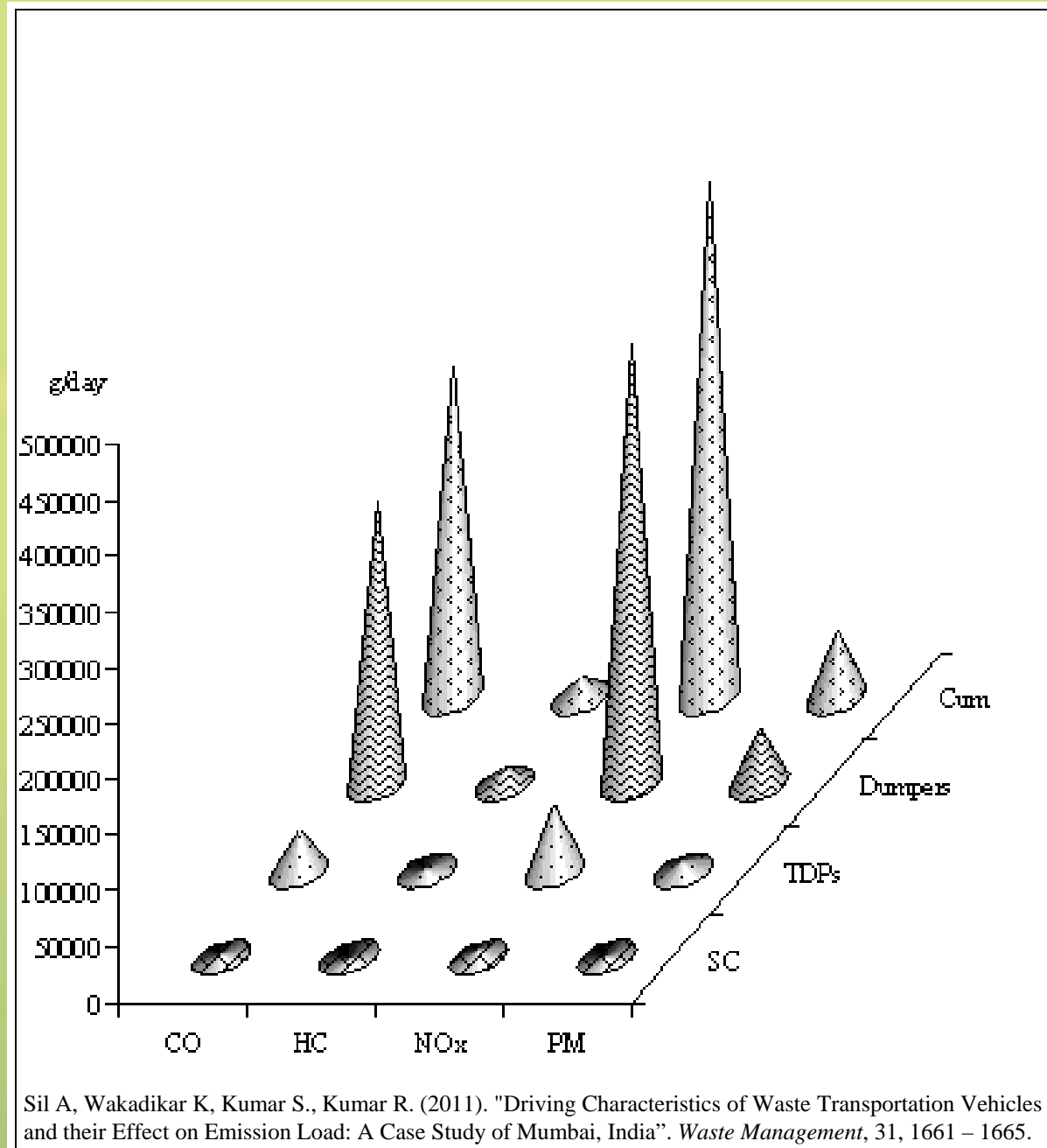
Sil, A., Wakadikar, K., Kumar, S., Kumar, R. (2011). "Driving Characteristics of Waste Transportation Vehicles and their Effect on Emission Load: A Case Study of Mumbai, India". *Waste Management*, 31, 1661 – 1665.



# Hazards of Un-Scientific Disposal



# Emission – Waste Transportation Vehicles



Sil A, Wakadikar K, Kumar S., Kumar R. (2011). "Driving Characteristics of Waste Transportation Vehicles and their Effect on Emission Load: A Case Study of Mumbai, India". *Waste Management*, 31, 1661 – 1665.

# What is the SOLUTION?????

Treat your own Waste  
Waste as resource  
Green jobs

Is it Possible ??????????

Lets see what's  
happening in Mumbai

# The Case Studies

## Heads of Advanced Locality Management (HELMS)

- ◆ Christopher Pereira
- ◆ Bandra
- ◆ Composting using “Tumblers”
- ◆ Horizontal: 8 – 10 kg (30 kg compost per month)
- ◆ Vertical: 25 – 30 kg



## Success Stories

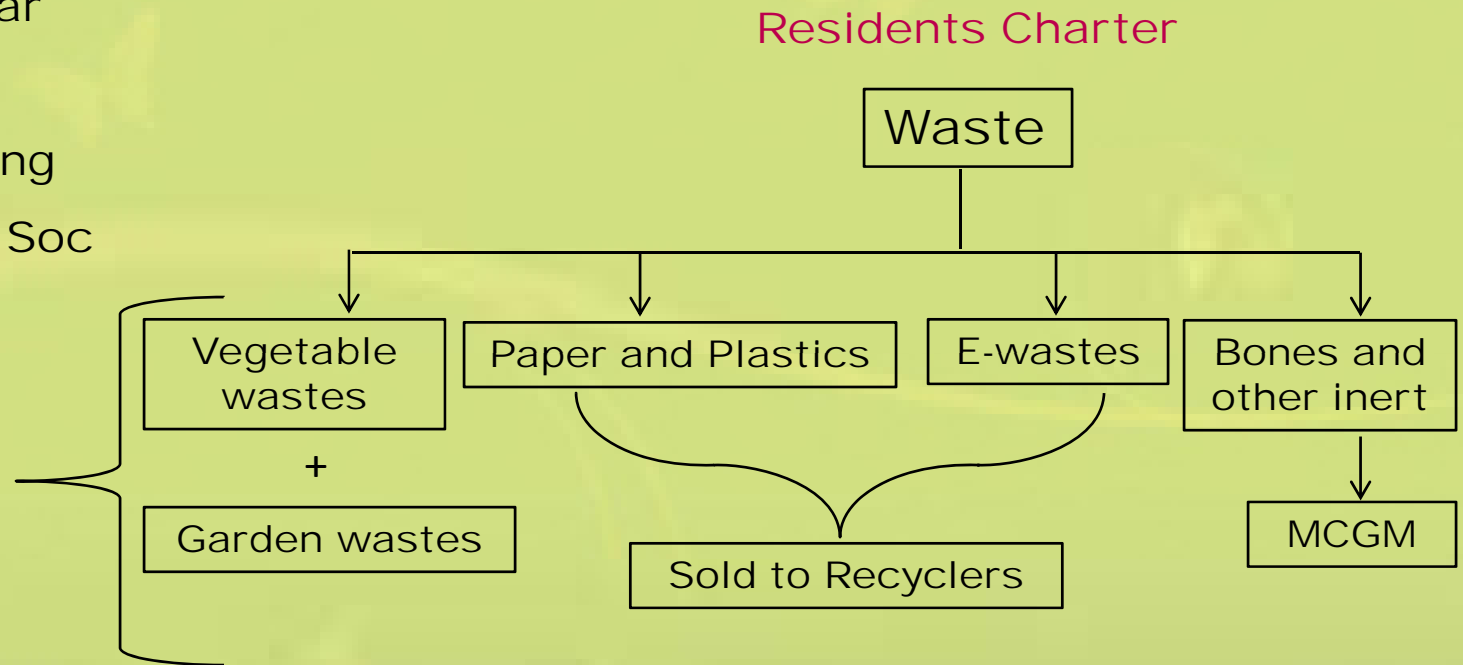
40 locations → 20 in regular use



# The Case Studies

## Devangini Soc., Ville Parle

- ◆ Satish Kolvankar
- ◆ Ville Parle
- ◆ Vermicomposting
- ◆ 30 Apartments Soc
- ◆ 3 pits



## Success Stories

- ▶ Segregation
- ▶ Management of E-waste
- ▶ Plastic Wastes
- ▶ 70 - 75 % reduction on Municipal burden

# The Case Studies

## Niklang Social Works Mandal (CBO)

- ◆ Subhash Nahire and Nasim Inamdar
- ◆ Siddharth Nagar, Borivili
- ◆ Composting
- ◆ 30 tons of flower wastes
- ◆ 5 tons of compost
- ◆ Rs. 5 – 6 per kg (selling price)

### Success Stories

- ▶ Management of flower waste
- ▶ MCGM Support

### Challenges

- ▶ Odor
- ▶ Long process time
- ▶ Water sprinkling
- ▶ Human resource
- ▶ Market of compost
- ▶ Storage and seasonal variation



# The Case Studies

## Environment Education Centre

- ◆ Mr. Afzal Khatri and Mrs. Nusrat Khatri
- ◆ Samta Nagar, Kandivli (E)
- ◆ Composting
- ◆ 120 kg wet waste
- ◆ 150 kg dry waste
- ◆ 300 flats



## Success Stories

- ▶ Overall Management of waste
- ▶ Profit from waste
- ▶ India Gandhi Environment Award, 2008

# The Case Studies

## Triratna Prerna Mandal

- ◆ Mr. Dayanand Jadhav and Dilip Kadam
- ◆ Santacruz (W)
- ◆ Waste Bin adoption
- ◆ Vermicomposting of flower waste
- ◆ Management of dry waste

### Success Stories

- ▶ Lesser trips of MCGM vehicles
- ▶ Dry waste recycling (selling)
- ▶ 15 - 20 days cycle

### Challenges

- ▶ Management of wet waste
- ▶ Maintenance and technological issues
- ▶ Biogas ??????
- ▶ Human resource
- ▶ Awareness

# The Case Studies

## Environmental Greenliness

- ◆ Mrs. Poonam Hudar and Mr. Hudar
- ◆ Imperial Tower, Tardeo
- ◆ Bio Waste Converter (BWC) followed by Composting
- ◆ 35 – 40 operating flats (Total capacity: 250 flats)
- ◆ Dry waste recycled
- ◆ Energy consumption

### Success Stories

- ▶ Management of waste
- ▶ Segregation by Env Greenliness
- ▶ No challenge with scale up
- ▶ No odor issues
- ▶ 14 days cycle

# Overall Perspective

Name	Wastes				Benefit to MCGM
	Wet	Dry	E waste	Energy	
HELMs	✓	X	X	X	Lesser wet waste, transportation
Devangini Soc	✓	✓	✓	X	Reduction of overall waste, transportation
Niklang	✓ (Flowers)	X	X	X	Lesser management of flower wastes
Khatri's	✓	✓	X	X	Reduction of overall waste, transportation
Triratna	X	✓	✓	X	Reduction of dry wastes and trips of MCGM vehicles
Env Greenliness	✓	✓	✓	✓	Reduction of overall waste, transportation