

Open burning of waste should be managed through preventive action, not curative measures





Transformative Actions to end Open Burning of Waste in India

Lessons from Warangal & Tenali



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Municipal Waste Management : India

Source Segregation: 40-60 %

Door to Door Collection ~ 90 %

Transportation : > 90 %

Processing: 40-60%

Plastic Waste: ~ 20-60 % recycled

Legacy Waste Dump Sites : > 3000

Large Presence of Informal Sector
in Recycling



Policies, Regulations, Institutions, Funding

Municipal Solid Waste Rules, 2016 & amendments

Plastic Waste Management Rules, 2016 & amendments
Ban on SUP

Construction and Demolition Waste Rules: 2016, 2025

Extended Producer Responsibility (EPR) Rules, 22, 24

Swachh Bharat Mission (SBM)- 2014; SBM 2.0 - 2021 -
Decentralisation, RRR, Ranking, BCC, Startups, formalising informal workers, remediation legacy dump sites

National Green Tribunal - Special Court for Environment
Prohibition of open burning of waste

Large-scale funding under SBM - 25 billion USD

LIFE Mission - Waste Avoidance; NAMASTE - Informal workers

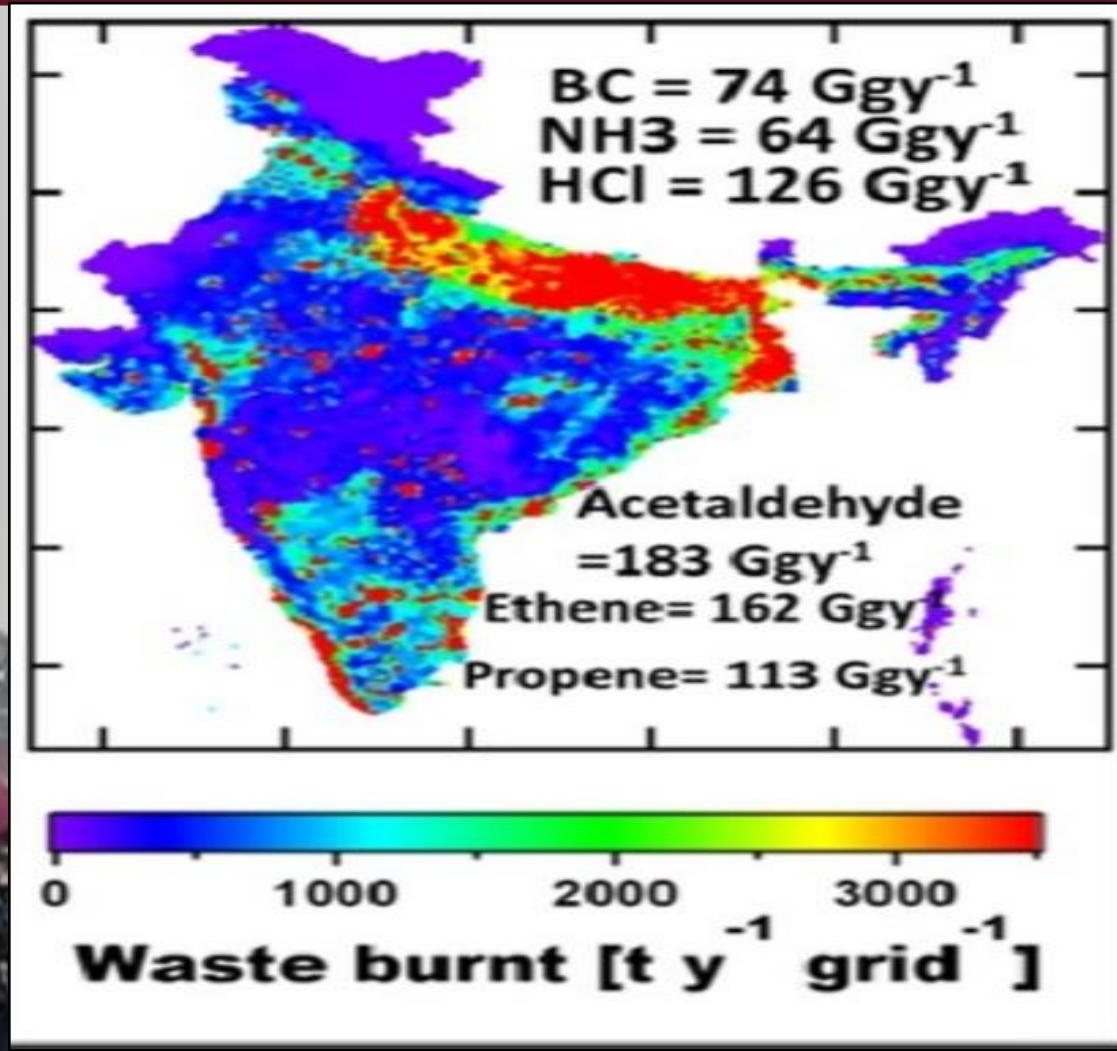
PPP Policy - VGF

Central Government -
Policy, Acts, Funding,
BCC

State Government -
Policy, Strategy,
Implementing
Regulations, BCC and
Funding

Local Government -
Implementation,
Financing, BCC

Why Open Burning of Waste is a Persistent Problem?



Underlying Reasons

Weak Source Segregation

Gaps in Waste Collection - GVPs

Inadequate Infrastructure for Processing

Poor awareness on Health and Environmental Implications of OB

Spontaneous Combustion (sub-surface chronic fires)

Deliberate Act - Reduce the Quantity and to Extract Material

Weak Capacities to Plan and Implement ISWM

Inadequate Funds - small and medium towns

Data Gaps - OB



Disproportionate Burden on Informal Workers



Occupational Hazard

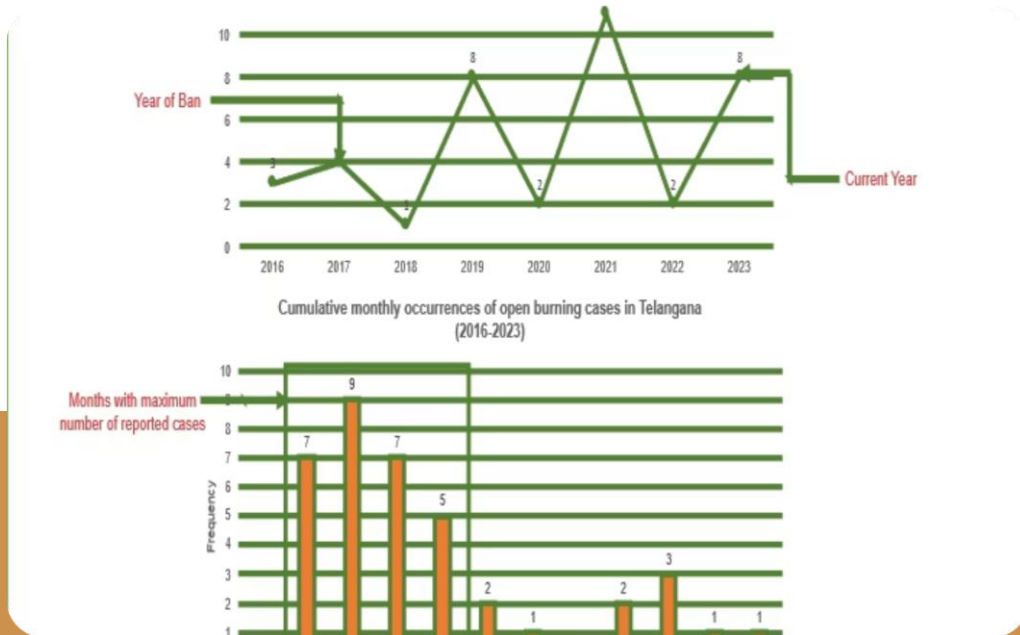
Health Hazard

Reduced Availability of

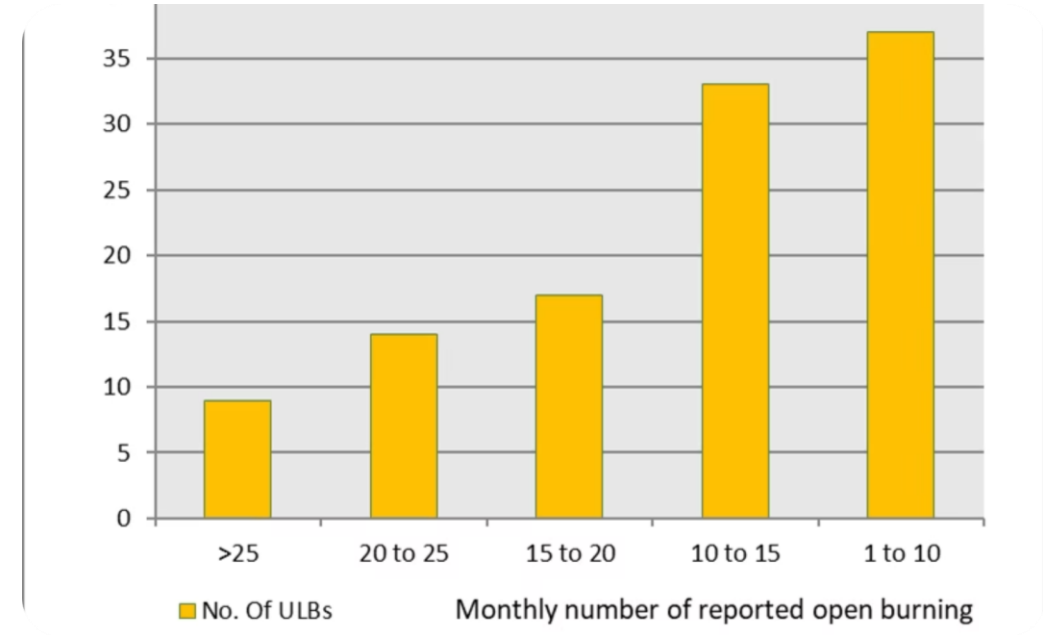
Recyclables

Livelihood Disruption

OB of Waste in AP & Telangana States



Telangana: Escalating Incidents



Andhra Pradesh: Widespread Problem

Andhra Pradesh has a widespread issue; up to 35 ULBs report monthly incidents.



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Prevention of OB in Warangal and Tenali Cities - Key Steps

1

Desktop review of reported Cases



2

Situation Assessment Open Burning & Institutional arrangements



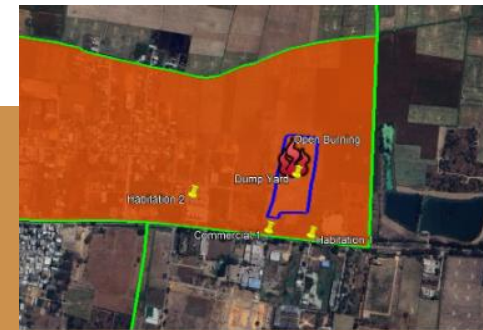
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Consultation with the state and local governments



4

Social Media Campaign



5

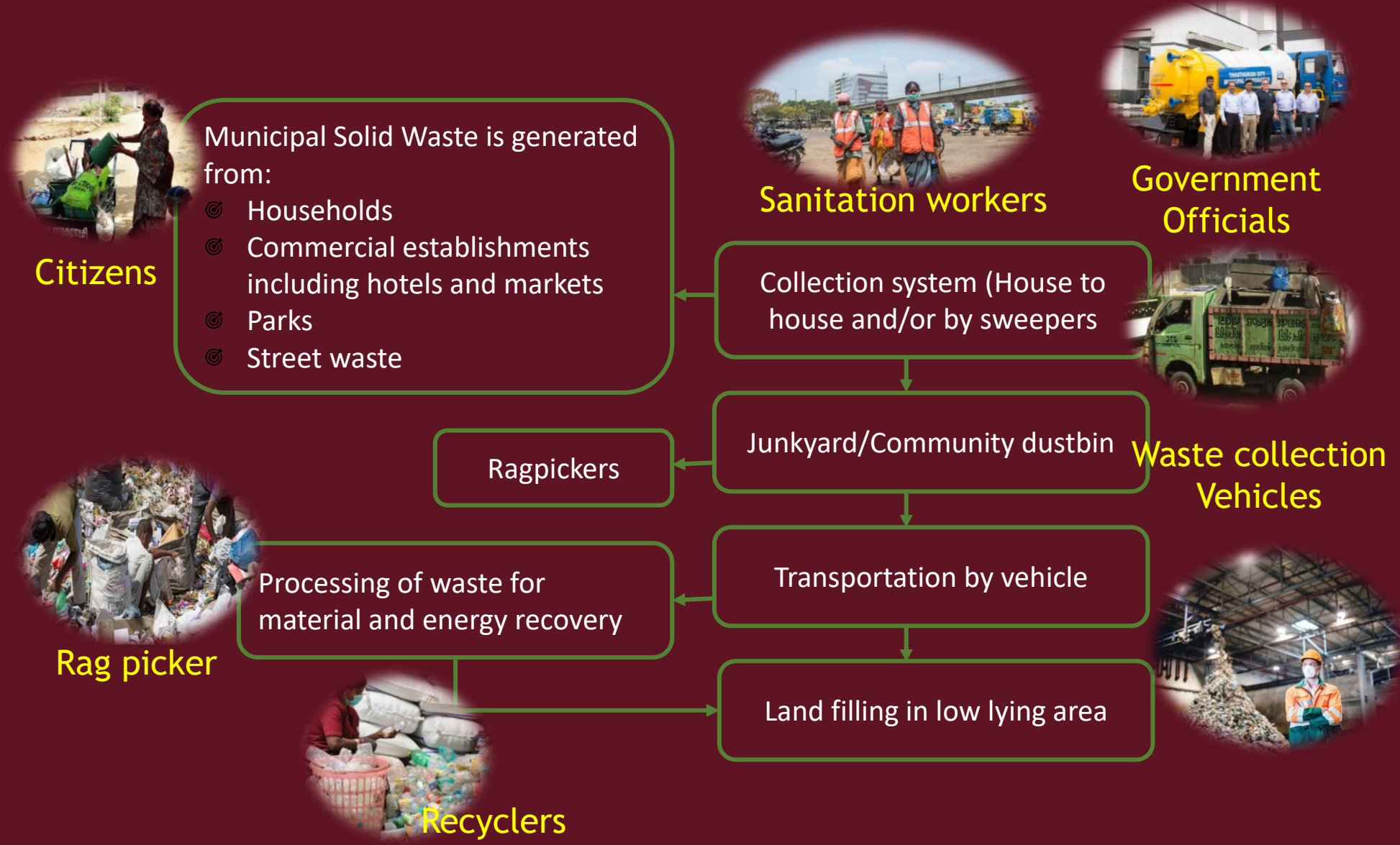
Enumeration of ragpickers & Air Quality Monitoring



6

Development of implementation Action plan, stakeholder consultations & CB.

Multiple Stakeholders Across the Value Chain Of MSW



Targeted Prevention of OB in Warangal & Tenali



Warangal: Multi-pronged Strategies

Warangal implements enhanced waste collection, decentralized processing units, and public awareness campaigns.



Tenali: Community-led Solutions

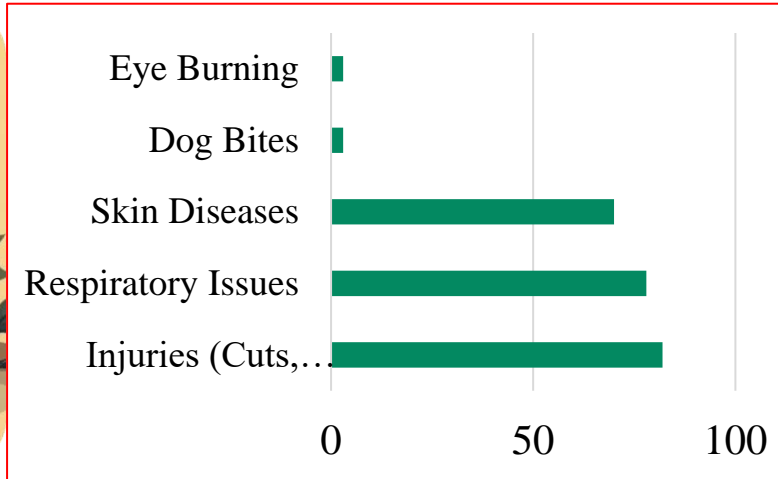
Tenali empowers ragpickers, promotes bulk waste segregation, BCC, and encourages household composting.

Enumeration of the Waste Pickers (E.g. Tenali)

Status of Health



Average monthly income: **Rs 5,000**, highlighting severe economic precarity.



Life expectancy often does not exceed **60 years** due to harsh working conditions and health hazards.



Teenagers constitute **67%** of ragpickers, with **67% illiteracy**, underscoring critical social challenges.

Understanding these demographics is crucial for developing targeted intervention strategies.

Engaging Bulk Waste Generators for Sustainable Practices

Bulk waste generators, including commercial establishments, hotels, and large residential complexes, are crucial stakeholders in preventing open burning.



Their active participation can significantly reduce the volume of mixed waste destined for landfills or open burning sites.

Fostering Household Composting: Reducing Organic Waste at Source

Awareness generation for household composting is a cornerstone of effective waste management. By encouraging residents to compost organic waste at home, we can:



Reduce Landfill Volume

Significantly decrease the amount of organic waste sent to landfills.



Produce Nutrient-Rich Compost

Create valuable compost for gardening, promoting a sustainable circular economy.



Decrease Open Burning

Directly reduce the likelihood of organic waste being openly burned.

Behavior Change Communication



Listen To The Whispers Of The Earth

Video performance ?

880
Total views

Post performance ?

1,987 Impressions	139 Engagements	7% Engagement rate
82 Clicks	4.13% Click-through rate	45 Reactions
0 Comments	12 Reposts	



LISTEN
to the whispers
of the people.

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Measuring Impact: Social Media

Scalability

The campaign brought to light the voices of communities, which are often unheard and unseen in waste management discussions.

Affordability

With a total budget of **INR 1,00,000(1,193 dollars)** the digital nature of the campaign ensures both financial and environmental sustainability and leaving no environmental footprint.

Universal in nature

The choice to conduct the campaign in **multiple languages** gave it universal appeal. Feedback on social media indicated that the video resonated with the issues of open burning globally.

Rapid

The campaign adopted a **visual language** that effectively communicated the gravity of the issue while being sensitive to masking geographic and linguistic markers

Innovative tool

The campaign used original visuals and voices from the ground. The 'BRUT' video format was also explored to powerfully communicate the visuals.

Consistent messaging

Comprehensive Action Plan

Action Plan for Warangal, Telangana



Phase 1: Foundation Building

- Implement Bulk Waste Management for 30-40% waste recovery.
- Conduct stakeholder consultations with Bulk Waste Generators.
- Organize an expo with WASH Innovation Hub for Organic Waste Management Technologies.
- Sanitary Inspectors to establish at least three decentralized BWM units in their jurisdiction (total 72 units).
- Identify and enumerate ragpickers by ULB.



Phase 2: Capacity & Infrastructure Enhancement

- Provide capacity building for officials on OB prevention.
- Develop infrastructure and promote household composting/behavior change campaigns.

Action Plan for Tenali, AP



Phase 1: Improving Collection & Awareness

- Improve collection efficiency for horticultural waste.
- Promote and improve Household composting.
- Conduct stakeholder consultations with RWAs and Individual Households.
- Generate awareness, introduce technology, and create technical support units for households.
- Identify ragpickers and conduct health profiling of sanitation workers.



Phase 2: Staff Capacity & Infrastructure

- Provide capacity building for officials in the prevention of OB.
- Focus on Infrastructure Development.

Behavior Change Communication

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Reframing OB of Waste: Call for Action

1. Intense Advocacy and BCC Campaign on OB (OBF Cities)
2. Improving Infrastructure and Services of WM - MRF, Processing, Disposal, Fire Safety etc.
 - *Building Institutional Capacities, Platform for collaboration of stakeholders (CSTF),*
 - *Fiscal Incentives and blended finance, PPP, Enforcement*
3. Mainstreaming informal sector - intentionally
4. Deepening and Professionalizing Circularity - Developing MSMEs /Startups
5. Strengthening data driven decision making - Digital tools for monitoring & improvement
6. Knowledge to Action & Regional Peer Learning