



# PARC

POLICY ADVOCACY RESEARCH CENTRE

*Vivek Vyaspeeth Initiative...*



# WARSA

WASTE AS RESOURCE BY CHANGING  
STAKEHOLDERS' APPROACH

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Introduction		Page 18-19
Report Objectives		Page 20-21
Statement of the problem		Page 22-23
<b>SECTION 1- REVIEW OF CURRENT STATUS</b>		
Global Scenario and Focus Points	We have analyzed 10 countries leading in municipal solid waste recovery across the globe, including starting timeline, adopted strategy and the landmark initiatives that helped drive the maximum change in the impact. We also have included the global technological focus points that the world is focused on for enhancing process efficiency.	Page 25-29
Brief Review of Policies and Frameworks in India	When globally compared, the Indian initiatives started in 1989. Few important initiatives paved India's way. As we enter the first year of DECADE OF ACTION, we need to review the past and plan our next steps to achieve performance improvement.	Page 30-31
Municipal Solid waste: Generation, Recycling and Disposal in India	We need a thorough understanding of the problem for effective planning. The clear understanding of constituents of municipal solid waste according to SWM Rules 2016, projected waste volumes by 2050, India's waste composition (estimated percentages), current waste disposal habits followed in India. This also includes the contexts of waste management that we have to consider.	Page 32-36
Focus on Landfill Reduction and Planning for Maximum Resource Recovery	This section explains the importance of planning for maximum resource recovery with numbers from scenario simulation, savings, and benefits in terms of job creation. There is also a table which explains consequences, negative effects and economic impact with scientific backing. This also suggests the imperative in relation to pandemic.	Page 37-41
Resourceful Guidebooks Available	We summarize two guidebooks that we think are important reference material in the waste management sector. Observing the diverse challenges in the sector, we need to access the technical, financial and implementation aspects.	Page 42-44

## SECTION 2- INTRODUCTION TO SYSTEMS' THINKING APPROACH

SDGs and Solid waste management	In this section, we highlight India's current SDG performance and how the waste management directly or indirectly impact all 17 SDGs. We also mention the targets, indicators and their description that have direct correlations with waste management.	Page 46-51
Collaboration to fill gaps for efficient management.	Even though rules and regulations are codified, there are critical gaps in the implementation, namely: (1) institutional pro activeness (2) structured collaboration (3) communication (4) administrative frameworks (5) infrastructure (6) national policy (7) strategic planning (8) finances management & strategic deployment (9) town planning (10) effective engagement & participation at municipal levels (11) corporate responsibility (12) vision (13) public engagement & participation (14) stakeholder partnerships, etc. We have tried to contextualize SWM rules in relation to these.	Page 52-61
Understanding the Stakeholders	Waste management sector has many stakeholders involved. The engagement and commitment of each one of them will improve the sector's performance. For undertaking this effectively, we need to map them as per their current approach and strategies that one can use to drive the engagement impact. This is the most important part of the report that will help the central and state governments for planning & implementation, help industries to address their target audiences, help brands and companies map their planning strategies.	Page 62-79
Revisiting food waste management strategy	Food waste management is a critical aspect of solid waste management. We highlight the missing inter-linkages and their positive integration impact.	Page 80-82
Reconsidering sanitary waste	Sanitary waste is a challenge in terms of health risk of the sanitation workers, and we emphasize the reconsidering & restructuring sanitary waste.	Page 83
Integrated Sustainable waste management.	We mention the importance of integrated sustainable waste management and three dimensions of the approach in this section. Together they will help address the issue on priority.	Page 84

### SECTION 3- DRIVERS FOR CHANGE

Challenges	Waste management sector faces tremendous challenges starting from decision making, socio-cultural diversity, financial and economic problems, technical difficulties, operational weaknesses, inappropriate regulation & framework, information sharing and knowledge gaps. There are non-compliance barriers and bureaucratic checks & balances. Understanding these challenges will help the sector strategically overcome these with consistent and streamlined efforts.	Page 86-92
Stakeholder Engagement Initiatives in India	In this section, we have landscaped various stakeholder engagement initiatives in India and a diverse range of the possibilities of improvement. More the involvement, more the impact!	Page 93-100
Opportunities	Considering the diverse challenges and efforts undertaken so far for mitigating those challenges, we present a range of improvement opportunities for all those prioritizing the waste management sector.	Page 101-105



WASTE MANAGEMENT SECTOR, IMPORTANT IN TERMS OF SOCIO ECONOMIC DEVELOPMENTS AND SDG ALIGNMENTS NEEDS THE COMPLETE SYSTEM RETHINKING.

## SECTION 4- PARC RECOMMENDATIONS

Need of Separate WAR (Waste as Resource) Department	We suggest reforming organizational structures to incorporate a distinct and separate resourceful department handling waste management on priority.	Page 107
SDG: Alignment with Waste Management Sector	We suggest aligning SDGs with waste management to drive the performance improvement across the sectors.	Page 108
Filling the GAPS through collaboration	Collaboration is the key to success! We suggest positive cross-sector collaboration for improving performance.	Page 109
Sanitary Household Waste	Separating this from municipal waste is our important suggestion. We propose few strategies for effective communication and management of this waste.	Page 110
Converting Food Waste as Opportunity	Promoting city compost and its integration with fertilizer industries and agriculture sector will help us tackle the food waste and create new opportunities.	Page 111
Supporting Business Models to Ensure Integrity	Emphasizing the sustainable financing for business models will ensure the private sector engagement, which will boost the government efforts.	Page 112
Responsibilities and Partnerships	PARC recommends successful implementation of FCA in the waste management sector and encourages the models to give affordable services.	Page 113
Policies and Institutional Pro-activeness	PARC recommends thinking about actions one can take in the personal, institutional, and constitutional capacities.	Page 114
Financial Support	We believe that financially supporting waste management is investment for future stakeholders of the country.	Page 115
Data Revolution for Transparency	We suggest taking commendable actions to make systems in the waste management sector more transparent and easier to access with the help of digitalization, interconnectivity, and single data-base portal reporting.	Page 116

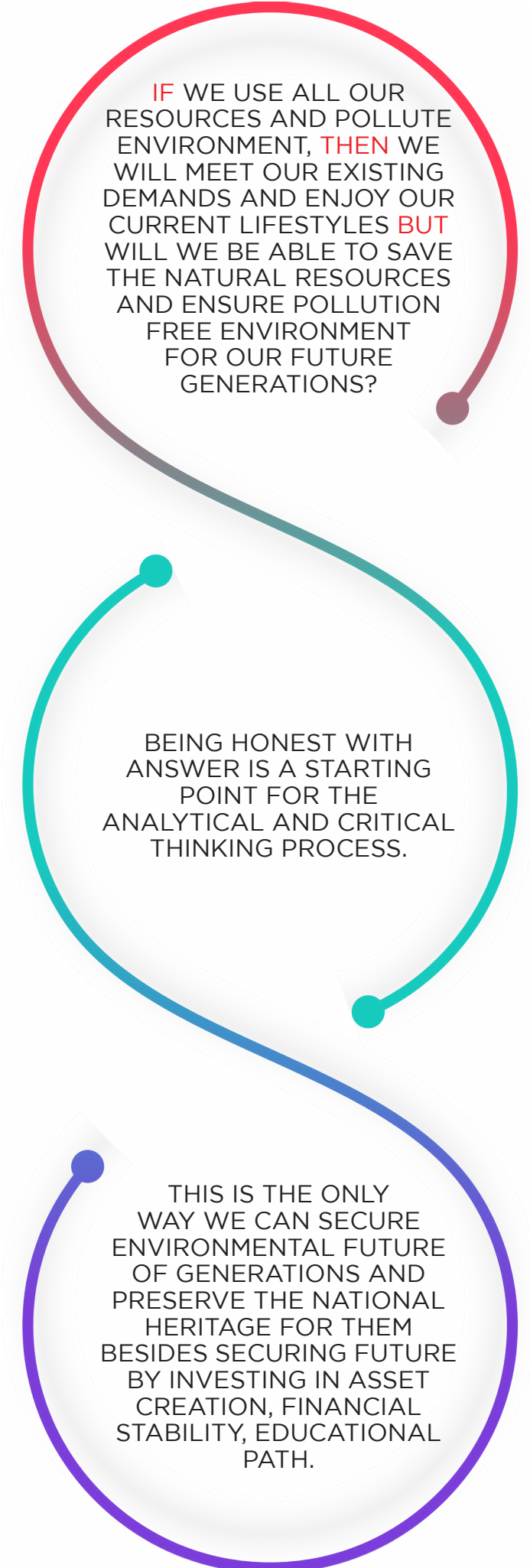
## SECTION 5- PLANS AND STRATEGIES AHEAD

New Policy Vision-Defined Aim and Execution Plan	We believe that there needs to be a comprehensive consideration of the waste management and therefore we propose 8 step change model which includes creating urgency, making the change happen, and sustain the change. Stakeholder driven policy is likely to create more impact.	Page 118-121
Future Engagement checklist for Stakeholders	Each stakeholder is important in the sectors' performance. Hence, we have created the provocative stakeholder engagement checklist based on ISO 14000 guidelines. This will help readers to change their approach towards waste management.	Page 122-123

## SECTION 6- EXPERT VIEWS

Mrs. Aafrin Kidwai Editor-In-Chief (Solidwasteindia.com)		Page 125
Dr. Amiya Kumar Sahu Founder & President (National Solid Waste Association Of India)		Page 126
Ms. Aparna Kapoor Director (SFC Environmental Technologies Pvt)		Page 127
Mr. Ehsaan Gadawala Director (Material Recycling Association Of India)		Page 128
Mr. Kartik Kapoor Un-Habitat (United Nations Human Settlements Program) Waste Management Consultant		Page 129
Mr. Prabhjot Sodhi Sr. Program Director CEE, Delhi (Plastic Waste Management Project)		Page 130
Mr. Ramdas Kokare Then Municipal Commissioner (Vengurla, Who Started The Effort.)		Page 131
Mr. Ullas Parlikar Global Consultant (Waste Management, Circular Economy, Policy Advocacy & Co-Processing)		Page 132

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IF WE USE ALL OUR RESOURCES AND POLLUTE ENVIRONMENT, THEN WE WILL MEET OUR EXISTING DEMANDS AND ENJOY OUR CURRENT LIFESTYLES BUT WILL WE BE ABLE TO SAVE THE NATURAL RESOURCES AND ENSURE POLLUTION FREE ENVIRONMENT FOR OUR FUTURE GENERATIONS?

BEING HONEST WITH ANSWER IS A STARTING POINT FOR THE ANALYTICAL AND CRITICAL THINKING PROCESS.

THIS IS THE ONLY WAY WE CAN SECURE ENVIRONMENTAL FUTURE OF GENERATIONS AND PRESERVE THE NATIONAL HERITAGE FOR THEM BESIDES SECURING FUTURE BY INVESTING IN ASSET CREATION, FINANCIAL STABILITY, EDUCATIONAL PATH.

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