

Circular India

AN AWARENESS TO
ACTION TOOLKIT
TO ACCELERATE
CIRCULARITY



Index

सूचिका



Index

सूचिका

EXPLORE THE
TOOLKIT ONLINE



1^१	Forewords		
	The Government	4	
	Hindustan Unilever Ltd.	6	
	UNDP India	7	
	SBI Foundation	8	
	Xynteo	9	
2^२	Acknowledgements	11	
3^३	Introduction and Rationale For The Toolkit	15	
	Waste To Wealth - India Is Leading The Transformation	16	
	The Need For Accelerating Circularity	18	
	What Does It Include	19	
	Who Is It For	20	
4^४	Five Key Elements For A Successful Waste Circularity Initiative	21	
4.1	Partnerships	23	
	Why Are Partnerships Important	24	
	What We Did - With UNDP India & Xynteo	25	
	Best Practices From Across India	28	
	Lessons Learnt	32	
4.2	Infrastructure	35	
	Why Is Infrastructure Important	36	
	What We Did - Inclusive Models With UNDP India & Xynteo	37	
	Best Practices From Across India	44	
	Lessons Learnt	48	
4.3	Communication	51	
	Why Is Communication Important	52	
	What We Did - Start A Little Good Behavior Change Campaign	53	
	Best Practices From Across India	60	
	Lessons Learnt	64	
4.4	Safai Mitras	67	
	Why Are Safai Mitras Important	68	
	What We Did - Project Utthaan	69	
	Best Practices From Across India	72	
	Lessons Learnt	76	
4.5	Citizen Action	79	
	Why Is Citizen Action Important	80	
	What We Did - Youth Ambassador Program	81	
	Best Practices From Across India	82	
	Lessons Learnt	86	
5^५	Looking Ahead: A Call To Action	89	
6^६	A Step-By-Step Guide For A Behavior Change Campaign	92	
7^७	References	102	
8^८	Our Partners	103	
9^९	Abbreviations	104	

Foreword by

Vishwas Mote,
Deputy Municipal Commissioner,
Brihanmumbai Municipal
Corporation



Our partnership represents a strategic step towards realizing our vision of a circular city, protecting our environment while creating economic opportunities.

The Swachh Bharat Mission 2.0 and Mission LiFE have set the right tone for nation's developmental agenda towards a Clean India, and we firmly believe that the key to achieving this lies in placing our communities and citizens at the center of our efforts, especially as we expand our efforts to integrate sustainable waste practices.

For over a century and a half, BMC has been at the forefront of urban governance, adapting to the evolving needs of our vibrant metropolis. Our partnership with HUL, SBI Foundation and Xynteo is a testament to the power of collaboration, bringing together the strengths of the public and private players, and citizens.

As we embark on this journey towards a cleaner, greener Mumbai, we invite all citizens to join us.

Let us start a little good today, for a better tomorrow.

Foreword by

G. Sreekanth,
Municipal Commissioner,
Chhatrapati Sambhajnagar
Municipal Corporation



We recognize that the path to cleaner, greener cities is paved with small, consistent actions taken by each member of the community.

The vision of a Clean India under the Swachh Bharat Mission 2.0 can be met when all players in the ecosystem are empowered to drive transformational and sustainable change.

Our partnership with HUL, SBI Foundation and Xynteo along with our own Hum Honge Kamyab campaign, and our on-ground partner, EcoSattva demonstrates our commitment to enabling strong partnerships to leverage diverse expertise and resources for the betterment of our city, it's people and the planet.

We envision Chhatrapati Sambhajnagar as a model of urban sustainability, setting an example for cities across India.

We recognize that the path to cleaner, greener cities is paved with small, consistent actions taken by each member of the community. This Toolkit serves as a comprehensive guide, includes best practices from experts across the waste management ecosystem in India, and offers practical strategies to inspire citizens towards responsible waste management, particularly through behavior change and source segregation.

Foreword by

BP Biddappa
**Executive Director &
Chief People, Transformation
and Sustainability Officer**



India has been witnessing a remarkable economic transformation over the last decade and is a shining example of growth and development.

The success of national initiatives such as the Swachh Bharat Mission, and Mission LiFE have highlighted the transformative power of systemic interventions. As the economy continues to grows, India has the potential to build a more circular economy and lead the global transition to circular systems through reduction, circulation, and collaboration.

In line with the Swachh Bharat Mision and Hindustan Unilever’s ethos of **‘What is good for India is good for HUL’**, HUL along with its partners have set up sustainable circular waste management projects that enable collection, segregation, and processing of waste. These projects that we have been running since 2018 have demonstrated how multistakeholder partnerships between public sector, private sector and civil society can help in accelerating circularity. Our interventions have included investing in setting up waste infrastructure, reaching out to more than 200,000 citizens to encourage waste segregation, and ensuring social inclusion of more than 10,000+ Safai Mitras.

The Toolkit combines learnings from programmes with our partners at UNDP and Xynteo along with inputs from more than 20 waste management organizations. By democratising our strategies and spotlighting the successes of others around India, we hope to empower you to adopt, implement, and scale circular waste management initiatives.

With the release of this Toolkit, we also hope to get more like-minded corporate partners and foundations to work with us to expand to more cities across the country.

Foreword by

Angela Lusigi
**Resident Representative,
UNDP India**



With over 600 million people expected to live in cities by 2031 in India, rapid urbanization and increasing consumption are placing immense pressure on public health, ecosystems, and economic stability

India’s waste generation is projected to rise dramatically—from 62 million tons today to 150 million tons by 2030. This isn’t just a question of managing larger volumes; it underscores an urgent need for sustainable, transformative solutions.

Effective waste management is essential for achieving multiple goals of the 2030 Agenda for Sustainable Development. It plays a vital role in building sustainable cities and communities (SDG 11), promoting responsible consumption and production (SDG 12), and supporting inclusive economic growth (SDG 8). But effective waste management is complex, demanding we move beyond isolated efforts toward collaborative action, behavior change, and innovative partnerships.

A powerful way forward is to embrace a circular economy, one that bridges sectors, encourages behavioral change, and promotes community-centred solutions. Through the lens of inclusive circularity, we can support national priorities like Mission LiFE and the Swachh Bharat Mission, advancing both community well-being and environmental health.

This Toolkit—developed in collaboration with HUL and other partners—embodies this vision. It unites governments, businesses, civil society, and communities to share insights and strategies that drive impactful behaviour change and sustainable waste management practices. This Toolkit serves as both a practical resource and a rallying call for collective action in waste management.

Together, we can create a cleaner, healthier, and resilient future. We invite partners to join us in advancing circularity and building sustainable communities across India, creating lasting benefits for generations to come.

Foreword by

Sanjay Prakash

Managing Director and CEO, SBI Foundation



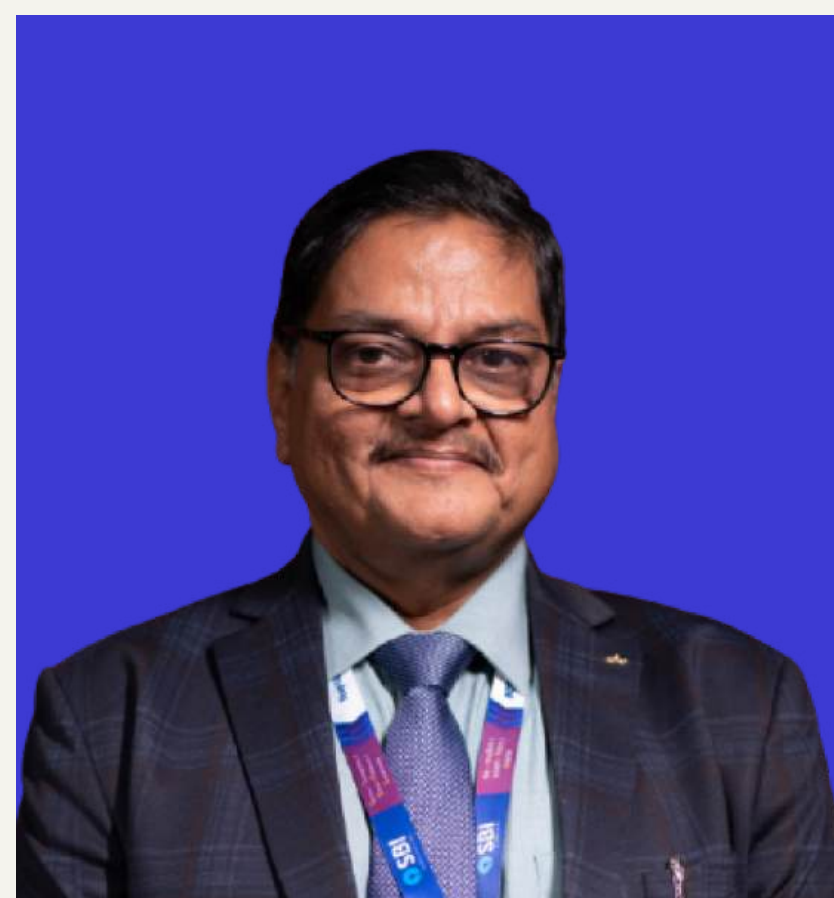
We recognize that economic empowerment is not just about financial inclusion; it is about restoring dignity, fostering self-reliance, and building resilient communities.

At the State Bank of India Foundation, we believe we are entrusted with the confidence of the public, and with this trust comes a profound responsibility to contribute meaningfully to society. This ethos drives our partnership with Hindustan Unilever and Xynteo's program that embodies our commitment to creating deep social impact and citizen action.

This Toolkit represents a confluence of visionary thinking innovative case studies and practical solutions, aimed at addressing the most pressing challenges of our time – waste management and sustaining livelihoods. At SBI Foundation, we envision a future where this waste becomes a catalyst for economic growth and job creation by transitioning to a circular economy.

Through our partnership, we strive to create equal opportunities for all sections of society, particularly focusing on sustainable livelihood initiatives that can uplift individuals and communities alike.

As you engage with this Toolkit, you will find a wealth of insights and practical strategies that can catalyze positive change. Let us work together to create a more inclusive, sustainable, and dignified future for all.



Foreword by

Vipul Kumar

Senior Partner, Xynteo



In a world grappling with mounting environmental challenges, the imperative for sustainable and inclusive growth has never been more pressing.

As we confront the urgent need for effective waste management solutions, India stands at a pivotal juncture – one that presents both significant challenges and remarkable opportunities for transformative change.

This Toolkit is a comprehensive resource blending tested strategies with innovative insights from leading waste management experts across India. It offers a practical frameworks for impactful circularity and waste management initiatives, yet what truly sets it apart is its commitment to collaborative action. By bringing together government bodies, corporates, NGOs, and communities in a united effort, we aim to address India's waste challenges through collective strength. Through these partnerships and the replication of proven models, we're fostering an ecosystem poised to deliver lasting, systemic impact.

As you explore this Toolkit, I encourage you to see it not just as a guide, but as a catalyst for collective action. May it inspire new partnerships, deepen existing collaborations, and encourage each of us to start a little good in our sphere. Together, we have the potential to create transformative change at scale.



Acknowledgements

आभार



We present this Toolkit, as we stand at the cusp of a transformative era for India’s circular economy.

...Our work over the years has been shaped by a deep commitment to creating sustainable change, grounded in the belief that even small actions can generate significant impact over time. This Toolkit reflects that. It is built on lessons learned, challenges faced, and the progress we have made in driving circularity through practical, tested solutions.

This Toolkit is a product of collaboration – between governments, communities, social enterprises, and waste management experts – each contributing their expertise to create holistic, scalable solutions for circular waste management. It is not merely a documentation of what has been done, but a call to action for those who share our commitment to accelerating this shift.

We are also thrilled to introduce this Toolkit in a digital format through a dedicated microsite. By offering this resource online, we hope to make it more accessible, engaging, and easy to use – whether you’re in the field, in the boardroom, or anywhere in between. A QR code linking to the microsite is provided below. We encourage you to explore, utilize, and share this widely.

There is much more to be done, and undoubtedly, more to be learned. But as we continue on this journey, we wanted to take this moment to share our experiences and insights with others – hoping it can help spark new ideas, collaborations, and actions. This is just the beginning, and we invite you to join us on this journey.

Here’s to building forward.

Authors

- Mr. Prashanth Venkatesh, Marketing and Sustainability Director, HUL
- Dr. Ashish Chaturvedi, Head, Action for Climate and Environment, UNDP India
- Ms. Ruchita Raicha, Assistant Manager, Sustainability, HUL
- Ms. Pratibha Sharma, Project In-Charge, Plastic Waste and Circular Economy, UNDP India
- Mr. Ritik Kumar Sinha, Associate Partner, Xynteo
- Ms. Kavya Jain, Senior Consultant, Xynteo

EXPLORE THE TOOLKIT ONLINE



We are deeply grateful to the individuals and organizations whose unwavering commitment and collaborative spirit have brought this Toolkit to fruition. This Toolkit, developed by Hindustan Unilever Ltd. (HUL) with support from UNDP India and Xynteo, is a testament to the transformative power of collective action.

Heartfelt gratitude to the exemplary leadership including, Mr. Rohit Jawa, MD and CEO, HUL; Ms. Rebecca Marmot, Chief Sustainability Officer, Unilever; Mr. Yogesh Mishra, Executive Director - Supply Chain, Head of Supply Chain, HUL and Mr. Sashidhar Vempala, Chief Sustainability Officer, HUL for their impact-driven vision, unwavering support and guidance.

We sincerely thank the leadership at UNDP including Ms. Isabelle Tschan, Deputy Resident Representative for their outstanding partnership and invaluable contributions towards our collective endeavors.

We are grateful to the leadership at SBI Foundation Mr. Jagannath Sahoo, President and COO for joining us and leading alongside in driving positive change.

The impact and continued growth would not have been possible without the guidance and steer from Mr. Prasad Pradhan, Head, Sustainable Business & Communications, HUL and Ms. Geetanjali Vats, Global Plastics Sustainability Lead; Ms. Yashmi Yadav, Senior Manager, Sustainable Business & Communication, Mr. Raviraj Durwas, South Asia Lead, TRANSFORM; Ms. Kanupriya Rawal, Assistant Manager, Sustainability; Mr. Vaibhav Arora, Project Executive, Sustainability who have been instrumental in driving the circularity programs at HUL forward. We also thank Ms. Neha Singh, Strategic Partnerships Specialist; Ms. Shivani Khadke, Project Assistant; Ms. Inara Aslam, Graphic Designer and Mr. Jayesh Sharma, UNV Youth Mobiliser, from UNDP India, for their expertise, foresight and continued support on our programs and partnerships.

We appreciate Mr. Aman Bhaiya, Vice President from SBI Foundation for their dedication and continued commitment. We also applaud our knowledge and project management partner, Xynteo including Ms. Milan Kaur, Manager; Ms. Sonal Mishra, Senior Consultant, Ms. Pragya Ojha, Senior Consultant; Ms. Aadya Vatsa, Consultant; Ms. Zara Khan, Executive Content and Media, and Mr. Dattatrya Waghmare, Contractor, who have been instrumental in shaping our programs into scalable initiatives. We thank them for their collaborative spirit that has made this Toolkit a reality.

Lastly, this Toolkit wouldn’t have been possible without the incredible efforts of our implementation partners spread across the country. Their role in establishing a robust waste management system and building partnerships with the communities has ensured the success and sustenance of our programs.

We thank Ogilvy for helping us bring the creative vision of our programs alive.

Special acknowledgement goes to our photographers, Mr. Gaurav Meghanegey and Ms. Ruchita Raicha for capturing the essence of our work and adding an emotional visual depth to this document.

Lastly, a big shout out to Mr. Heemanish Midde, Manager, Sustainability, HUL for extending his optimistic spirit and problem-solving mindset to this Toolkit.

Introduction and Rationale

परिचय और उद्देश्य



Waste to Wealth - India Is Leading The Transformation

India is rapidly growing, and as we stand on the global stage, we have the unique opportunity to lead the transition to a circular economy. The shift towards circularity presents an enormous opportunity. Estimates indicate that adopting circular economy principles could create a global economic value of nearly \$4.5 Trillion. Some estimates also indicate that India could create an annual value of \$624 Billion by 2050. Beyond the economic potential, the circular economy is expected to generate additional jobs with estimates indicating that nearly 1.4 crore jobs could be added over the next decade. This could create new opportunities for entrepreneurs across the country. The momentum is undeniable. **This is India's moment to lead the transformation and turn waste into wealth.**

Sustainable practices and circularity isn't new to Indians – it's woven into the fabric of India's culture and ethos of reuse and recycle. Today, this deeply rooted mindset is accelerating, and becoming mainstream across all sectors including the waste ecosystem. From local and national governments, corporates, start-ups, social enterprises to NGOs and local communities – action and innovation are brewing to unlock the vast potential of circularity. From major cities to rural areas, impactful initiatives are emerging, proving the remarkable potential of waste. **On the global front as well, circularity is seeing unprecedented growth**, driven by both environmental imperatives and economic opportunities.

This movement is propelled by the Government of India's ambitious initiatives, like the Swachh Bharat

Mission and Mission LiFE. Backed by progressive policies like the Extended Producer Responsibility (EPR), these efforts have strengthened waste collection infrastructure and driven inclusion of informal waste workers into formal systems, laying groundwork for a systemic change. It is clear that policy, rooted in ground-realities can improve the business opportunity from waste.

Start-ups and innovators are also seizing this opportunity. In the last five years, over 400 waste management and circular economy-focused start-ups have taken shape. At the grassroots level, civic action is surging. NGOs, community leaders, and local influencers are leading the charge. Sustainability and circularity are no longer confined to boardrooms – they are becoming a people's movement and a part of daily conversations in households across the country. Social media is seeing a marked increase in searches related to sustainability and eco-friendly practices, reflecting a broader cultural shift towards environmental consciousness. Millennials who are 34% of India's population, are particularly driving this trend, using digital platforms to engage in conversations around sustainability within their communities.

As India continues to grow, the potential in waste is growing too. The annual municipal solid waste generation is projected to reach 70 million tonnes by 2026. To manage this effectively and to continue deriving value from waste, the entire ecosystem needs convergence and urgent action.

\$624 Bn
by 2050

Potential annual value created in India

400+

Waste management and circular economy focused start-ups have come up in the past 5 years

~70 Mn

tonnes of projected annual municipal solid waste generation by 2026

Rationale For This Toolkit

Over the last 5 years, and with a diverse and driven team, we have tested solutions to drive a systems level change in India's waste ecosystem.

We've engaged with local communities, government bodies, corporate partners, and NGOs, ensuring that multiple voices and perspectives to shape the solutions we developed. **Rooted in thoughtful design, testing on-ground, stakeholder consultations, and insights** from waste management experts, our efforts have shaped into powerful proofs of concept that can be replicated to scale solutions across the waste value chain.

Through HUL's partnerships with the local government, UNDP India, SBI Foundation, Xynteo, Ogilvy and various waste management organizations, we have built a comprehensive understanding of what works. **These partnerships have helped us create scalable models ready for replication across India.** We have also drawn inspiration from innovative waste management initiatives across the country, which have demonstrated immense potential for innovation, scalability, and reach. Many of these initiatives continue to offer valuable insights and solutions that guide us in our journey.

Several successful initiatives in India have unlocked one or more of these Five Key Elements, but the **ecosystem lacks convergence and regulatory harmonization** for a lasting systems level change.

We have learned that there are Five Key Elements in a successful waste management initiative

Multistakeholder Partnerships

Across the waste value chain with a clear value proposition.

Effective Communication

Rooted in real understanding of people, their habits and their motivations.

Citizen Action

To amplify and reinforce community participation.

Robust Infrastructure

To effectively collect, handle and manage waste coming out of households.

Holistic Inclusion of Safai Mitras

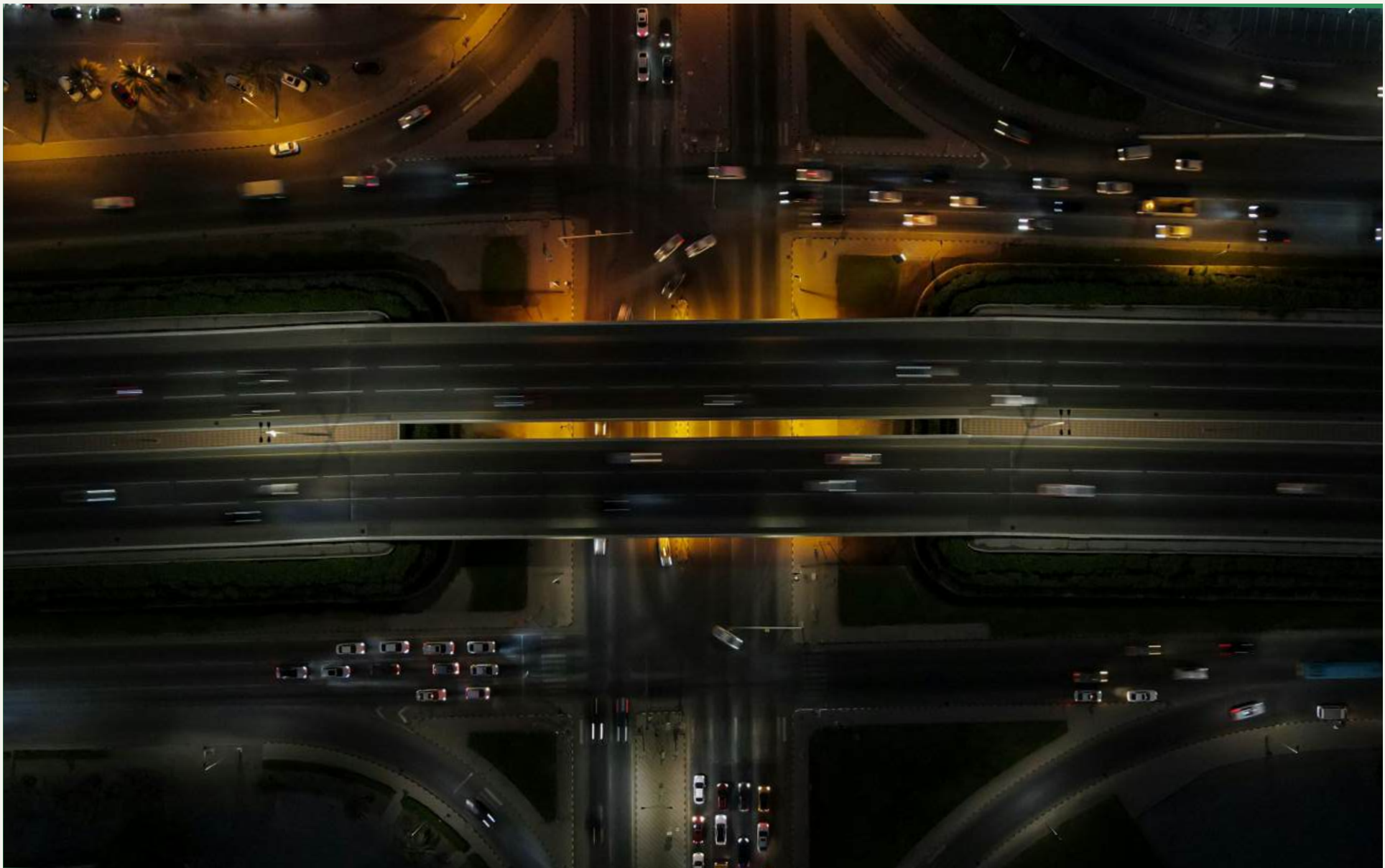
To integrate the informal economy of waste into the value chain.

Thousands of Indians are ready to act, but there is a gap between awareness and action. A replicable, human-centered **communication framework is needed to drive citizen behavior change** on waste segregation at the source.

The Need for Accelerating Circularity

As India grows with palpable momentum on driving circularity, there is an urgent need to scale impactful waste management solutions. Our goal is guided by the understanding that every part of the waste management system must be viewed in relation to the whole for true progress to be made. This Toolkit is designed to be a resource that compiles successful models, innovative solutions, and key learnings from over five years of our circularity programs across 10 Indian cities, in collaboration with 20+ waste management organizations. It offers strategies, replicable frameworks, and actionable insights while showcasing waste management initiatives from across India that have succeeded in different contexts.

By democratizing our strategies and spotlighting the successes of others around India, we hope to empower you to adopt, implement, and scale circular waste management initiatives.



What Does It Include

- 1st Learnings from our programs in partnership with UNDP India and Xynteo
- 2nd Innovative case studies from waste management experts from across India
- 3rd An open-resource guide to design effective communication based on Unilever’s principles of behavior change

The Toolkit can be used to develop a waste management initiative from scratch or be consulted to enhance an already existing one.

The only thing you need to know before applying and adapting the Five Key Elements discussed in this Toolkit is that the solutions depend on the context. This means that for each of the Five Key Elements, consider how they might work in your region or where you are planning to deploy them, what might need to be changed to make it fit the local context. If you are still unsure, conduct some investigative research or reach out to us so that we can help make your initiative a success.

EXPLORE THE TOOLKIT ONLINE



Who Is It For?

1st

Foundations, Social Enterprises and Non-Profits

Gain advanced strategies and insights to build new or enhance existing waste management initiatives.

2nd

Corporates, Circularity Start-Ups and Incubators

Discover innovative ways to drive circularity, boost sustainability and access proven strategies, scalable models, and actionable insights to overcome barriers and accelerate impact across your value chain.

3rd

Government Agencies

Access practical frameworks and resources to implement effective waste management policies and support community engagement.

4th

Citizens & Community Influencers

Find actionable tools and inspirations to lead grassroots initiatives and advocate for effective waste segregation in their communities.

Five Key Elements For A Successful Waste Circularity Initiative

1st Partnerships



2nd Infrastructure



3rd Communication



4th Safai Mitras



5th Citizen Action



Partnerships

साझेदारी

India’s public-private partnerships for climate are a global model to follow

जलवायु के लिए भारत की सार्वजनिक-निजी भागीदारी
अनुसरण करने योग्य एक वैश्विक

1^३

India leading among developing nations in circular economy investments: Chatham House

भारत में चर्च में है। इस क्षेत्र में जेडई एडवोकेस
विशेष रूप से ध्यान देने योग्य है।



‘Swachh Bharat Mission’ has transferred urban sanitation and waste management in India.

स्वच्छ
भारत
मिशन
शुद्धता

Why Are Partnerships Important

Partnerships are the engine for the waste management system to move towards greater efficiency, innovation, and sustainability.

Waste moves through a complex web of interactions – from households and consumers to Safai Mitras, local government collection systems, recyclers, and waste management organisations, before it reaches its final destination, which may be, recyclers, processors or landfills.

In most countries, the mix of formal and informal systems fragments this waste journey. Safai Mitras, for instance, often work independently, lacking formal recognition, while local governments manage waste at scale but may not engage closely with informal communities.

Recyclers rely on segregated waste, but their ability to process it is impacted by how effectively it is sorted and collected upstream, and so on. In such an interconnected system, actions of one stakeholder directly impacts the effectiveness of another.

This is where **partnerships become not just an advantage, but a necessity**. For successful waste management initiatives, partnerships must be unlocked at every stage to enable resource-sharing and creation of holistic systems where the actions of one stakeholder positively impacts others down the chain.

From policy-making to on-ground waste segregation, one partnership can amplify another's results, creating a ripple effect that benefits the entire system. By aligning objectives of each stakeholders through a shared value proposition, the success of one part of the system can reinforce the rest. Waste is also a highly local issue and therefore needs effective and decentralized systems – whether it's through the formal inclusion of Safai Mitras, technology integration for better collection, private sector investment in infrastructure or effective participation of local communities.

What Did We Do?

Our approach has been rooted in unlocking the full potential of the waste value chain by creating partnerships that deliver real, practical outcomes – not just theoretical collaboration.

By combining data-driven insights, a deep understanding of macro implications, and grassroots realities, we have created models that align strengths of all stakeholders.

Through our work with UNDP India and Xynteo, **our solutions went beyond just connecting stakeholders**; they align efforts in a way that delivers maximum impact and long-term results. By forming strong partnerships at each level of the waste value chain, we ensured that every hand was on deck, and that **we leveraged core expertise of each partner to its maximum**.

1st At the household level, we partnered with local municipality officers and sanitation staff, grassroots NGOs, and community champions

to engage citizens and consumers. With HUL's expertise in behavior change, we rolled out initiatives informed by human insights – understanding the barriers people face in waste segregation and what motivates them to act. This allowed us to nudge citizens towards segregating waste at the source, creating a ripple effect that strengthened the very foundation of the value chain.

2nd We developed a robust Public-Private Partnership (PPP) model, to set up decentralized Material Recovery Facilities (MRFs)

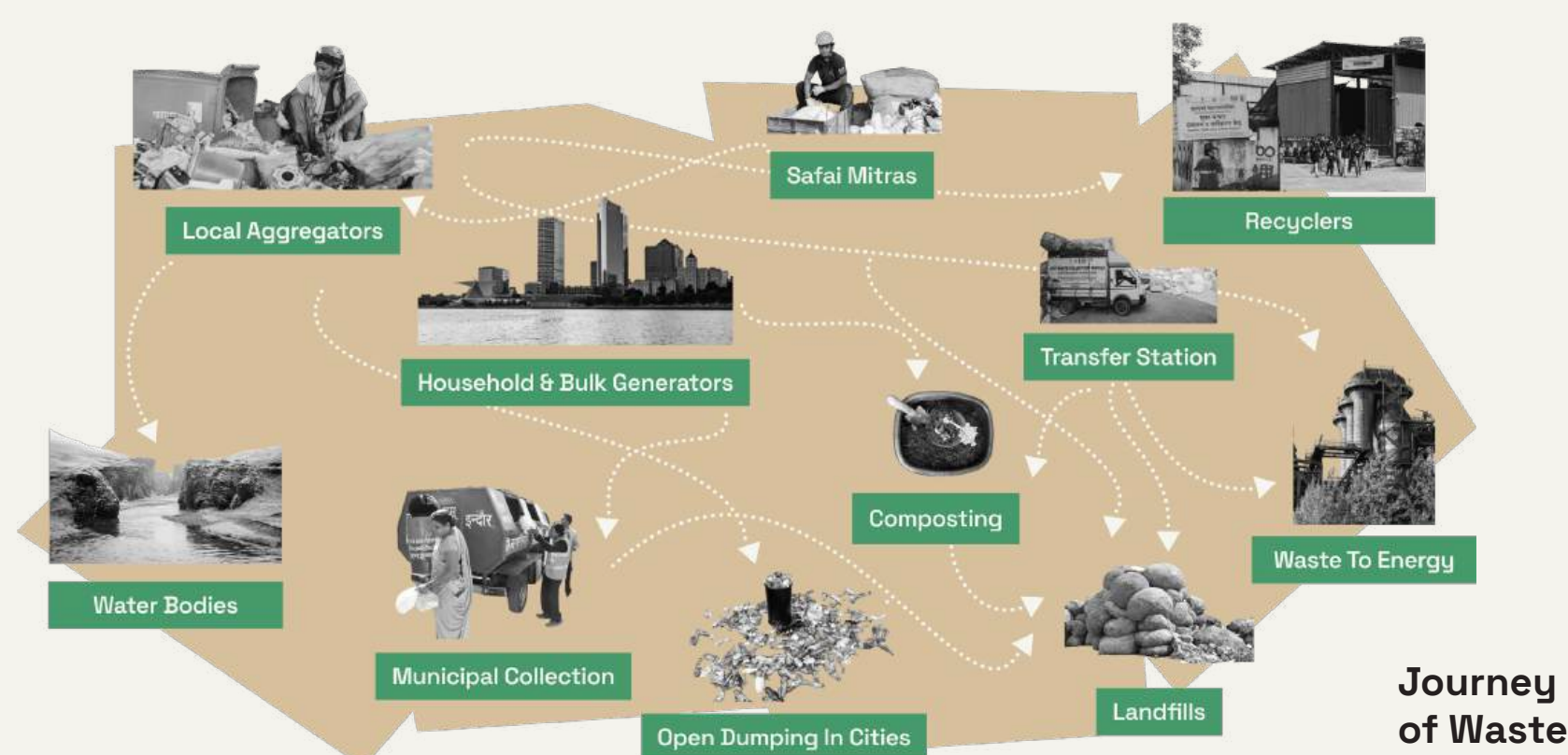
as waste moved from homes to collection. This was anchored by collaboration with local municipalities, which provided land and regulatory support, and social enterprises that co-invested in and operated the MRFs. Integral to this model were the Safai Mitras, who played a key role in the collection process, ensuring that waste was properly segregated and collected at source and efficiently delivered to the MRFs. Their formal inclusion helped bridge the gap between informal communities and formal systems, creating an equitable system and dignified livelihoods.

3rd Further down the chain, we partnered with recyclers and start-ups,

to ensure that that every type of waste was processed and recycled efficiently. Their involvement brought vital business acumen and innovation to the table, ensuring the financial viability of the system. This allowed us to maximize the value of each waste stream and contribute to the business case of the MRFs – ensuring that the model was scalable and replicable.

4th To support the stabilization of our models during the early stages, we brought in mission-aligned funding partners.

These partners helped bridge financial gaps, ensuring that the system could operate sustainably until it reached a point of financial viability. This viability gap funding was essential in allowing the model to grow and achieve longevity.



5th Finally, we worked with knowledge partners and experts

who provided a holistic, 360-degree view of the system. Their inputs ensured that our models were sustainable, inclusive, and resilient. They contributed design thinking, innovation, and strategic oversight, allowing us to build circular solutions that were not only efficient but also robust and adaptable to future.

Our approach worked because it is grounded in shared value.

Each partner contributed their core strength, and every stakeholder saw a tangible benefit – creating a cycle where one partner’s success propelled the others. By leveraging these synergies, we built models that are not only sustainable but adaptable and scalable – transforming fragmented efforts into a unified, high-impact system.



1³

Case study Indore



Context

Indore has been ranked India's cleanest city for six consecutive years under the Swachh Survekshan rankings. With over 1,000 tonnes of waste generated daily and a population of over 3 million, the city faced severe waste management challenges until 2014. Low segregation rates, inadequate infrastructure, and high landfill dependency exacerbated the problem. However, the launch of the Swachh Bharat Mission in 2014 prompted the Indore Municipal Corporation (IMC) to overhaul its waste management practices, transforming waste into a collective responsibility through strong public-private-partnerships across the value chain.

Innovation

Indore's success is rooted in its government-led approach that leveraged strong partnerships across the value chain to ensure that every stakeholder – from citizens to Safai Mitras, private sector players, recyclers, and the municipality – had a clear role in the solution. IMC implemented a highly efficient daily door-

to-door waste collection system, servicing nearly 100% households in the city. The city also established advanced processing facilities with about 1,000 TPD capacity, including 10 decentralized Material Recovery Facilities (MRFs) and 14 waste-to-compost plants. A Waste-to-Energy plant further processed non-recyclable waste. Partnerships with recyclers ensured that every type of waste was directed to the appropriate channels, reducing landfill usage significantly.

Central to Indore's model was the integration of the informal waste sector of Safai Mitras and local aggregators to formally integrate them into the system through formalising their roles and extensive capacity building. This sector currently handles about 13% of the city's waste processing.

What makes Indore's approach even more remarkable is the cultural shift it engineered. Through citizen engagement campaigns, waste management became a point of pride.

Through citizen engagement campaigns, the city launched Swachhata Rath (cleanliness vehicles) and mobile apps, inspiring widespread citizen participation. Waste segregation in Indore has evolved from a mandate to a movement, driven by collective action.

Key Takeaways



Making waste a collective responsibility



Infrastructure complimenting citizen action



Strong partnerships from source to end



Use of tech to engineer a cultural shift through citizen participation

To learn more, visit: smartcityindore.org/solid-waste/

2nd Case study TrashCon



Context

TrashCon, an innovative, technology-first waste management company, is focusing on hard-to-recycle plastics like flexibles and multi-layer plastics (MLPs).

These low-value plastics don't get collected in the informal eco-system as easily as other types of plastics such as rigids. They often end up in the cities, oceans or landfills especially with urban waste rapidly growing. TrashCon is addressing this through a systems-level approach, focusing on both the technology and partnerships needed to handle low-value waste streams efficiently.

Innovation

TrashCon's proprietary technology transforms flexible plastics into 100% recycled WoW plastic boards. These boards, which can replace plywood and other construction materials – are being used in the construction industry and provide twice the repetition than plywood without having the need to cut the trees.

As a technology partner in the collaborative public-private-partnerships, TrashCon has enabled effective downstream avenues for flexibles and MLPs. Their technology can be installed within MRFs and even at decentralized waste management hubs, creating synergies between MRF operators, informal Safai Mitras, and municipalities.

MRF operators benefit from a guaranteed offtake for low-value plastics, enhancing both operational efficiency and financial sustainability. Safai Mitras, who provide waste to the MRF, gain increased financial incentives to collect these difficult-to-recycle plastics, which form a majority of the plastic waste stream. For local municipalities, integrating TrashCon's technology within waste management infrastructures streamlines operations, creating opportunities for the municipality to procure affordable recycled products, such as benches and building materials for public infrastructure projects, schools and public spaces.

For TrashCon, partnering with MRFs provides a steady, cost-effective supply of feedstock, proving the scalability of their technology.

Key Takeaways



Creating shared value for all stakeholders



Enabling efficiencies in existing waste infrastructure



Improving financial viability of setting up MRFs through guaranteed off-take

To learn more, visit: trashcon.in

Lessons Learnt



1^१ Partners to align under a compelling vision.

Many of the examples quoted in this Toolkit started with multiple partners aligning to a compelling vision. For example, improving the ranking of the city in the 'Swachh Survekshan' ranking list. A powerful vision when brought to mainstream by different stakeholders and supported by visible top-down action, has the potential to stir positive reinforcement for local municipalities, sanitation staff, and communities. The sense of pride that gets attached to such initiatives, propels action, participation, and collaboration.

2^२ Waste is a local issue and context is always key.

Every region and community has unique needs and challenges, a one-size-fits-all approach does not work. Successful partnerships take into account the local context ,communities and their needs– adapting models to fit specific cultural, economic, and social dynamics. These nuances ensures add relevance to the solutions.

3^३ Partnerships thrive when each stakeholder sees a clear benefit.

Whether it's through economic returns, social impact, or operational efficiency, a “value in, value out” approach is crucial. By ensuring each partner's contributions and benefits are aligned, the system becomes self-sustaining, fostering longevity and sustainability.

4^४ Integration, not silos, drives real change.

Waste management is an interconnected system, where the actions of one stakeholder impact the rest of the chain. True success comes from integration – ensuring that efforts are aligned end-to-end, from households to recyclers. By breaking down silos and fostering collaboration across the entire value chain, a unified system can deliver sustainable impact.

Infrastructure

कचरा संग्रहण सुविधा

2^२



Why Is Infrastructure Important

Infrastructure is the backbone of an effective waste management system. It ensures that waste generated is not only collected efficiently but also processed in a way that maximizes reuse, recovery and recycling.

At its core, robust infrastructure means having the right systems, technologies, and partnerships to handle the complexity of waste management. This includes infrastructure at source for segregation, efficient transportation systems, material recovery facilities, and linkages with appropriate recyclers. Dedicated public spaces for waste management infrastructure are critical to bring these processes into the public domain, demonstrating to citizens how waste can be economically processed and transformed into resources. Such spaces, when

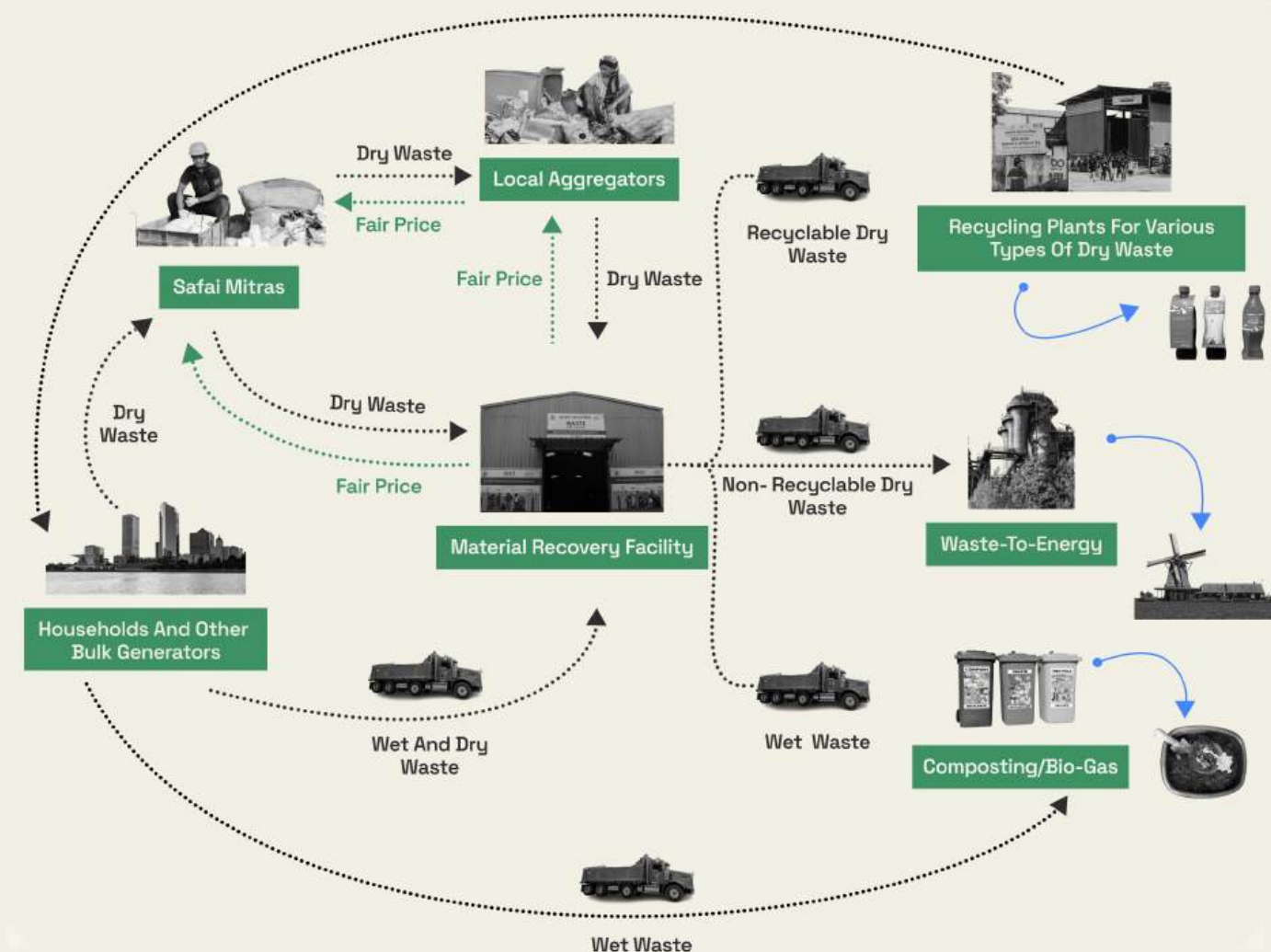
strategically integrated into urban areas, foster transparency and awareness, shifting waste management from a hidden issue to one that engages public participation and accountability. Evidence has increasingly shown that MRFs are essential components of an integrated waste management system in urban settings, designed to extract valuable recyclables from municipal solid waste. Leveraging advanced technology and the involvement of Safai Mitras and informal communities, MRFs process a wide range of dry waste

across the value chain, preparing it to be shipped to different recyclers as raw material. Strategically placing these facilities in public spaces fosters transparency and awareness, transforming waste management from a hidden issue into one that actively engages citizens. Visible infrastructure helps citizens understand how waste is processed into resources, reinforcing their participation and trust in the system.



What we did – Inclusive models with UNDP India and Xynteo

In partnership with local municipalities, social enterprises, Non Profits, and recyclers, we created a public-private-partnership model – with an objective to set-up end-to-end, financially viable and decentralized material recovery facilities that are inclusive and community-led.



In our model, aligning with Government of India’s Swachh Bharat Mission guidelines, we set-up MRFs based on three key considerations:

- 1st

Location

MRFs needed to be embedded within communities, reducing logistical costs and allowing Safai Mitras to engage directly with the facility. By decentralizing the MRFs, we ensured an efficient collection and reduced contamination risks in transport.
- 2nd

Size and Scalability

Each MRF was designed to match the population it served, with a scalable framework that allowed for future expansion as waste generation increased. This not only catered to immediate needs but ensured the system could grow with the community.



- 3rd

Purposeful Design

Our focus was to strike a balance between automation and creating livelihood opportunities. Automation was integrated thoughtfully, reserved for high-volume or hazardous tasks that required speed and precision. However, manual processes were retained where human expertise, such as sorting and quality control, added significant value. This enhanced overall productivity while ensuring that Safai Mitras and other informal workers remained integral to operations. By blending technology (like conveyor lines, shredders and bale press) with human skills, we were able to create efficient and inclusive facilities. Additionally, we designed the MRFs to be adaptable – capable of handling various types of waste while allowing for future expansion as waste volumes increased and community needs evolved.



To learn more about the operational guidelines by the Swachh Bharat Mission Urban 2.0, see our Resource Center

To operationalize the MRFs, we placed key focus on waste inflow and outflow.

- Streamlining formal waste collection.

We worked closely with local municipal systems to align waste collection from established formal channels with the MRFs. In a few cases, collection trucks were deployed to collect directly from households, to complement municipal systems. This created a flow of waste, ensuring that the collected dry waste could be processed efficiently and at scale at the MRF. In addition, channels were established for wet waste to compost or waste-to-biogas plants, thereby creating a circular system for organic waste to come back into resource use.
- Integrating the informal systems.

Safai Mitras were formally integrated into the system, allowing them to collect and sell waste at fair market prices. This was key in bridging the gap between the informal and formal sectors, ensuring that valuable waste streams made it into the MRFs.
- Connecting with recyclers.

We established strong partnerships with recyclers and processors to ensure waste coming into the MRF had defined definite offtake secured. By building these connections, we aligned the entire waste flow – from households to recycling facilities – creating a streamlined value chain. This integration across the system maximized recycling efficiency, increased the volume of materials diverted from landfills.



We also prioritized workplace safety for all workers, particularly the Safai Mitras employed at the MRFs. Each facility was designed to meet Occupational Health and Safety (OHS) standards, ensuring the provision of protective gear, comprehensive safety training, proper ventilation, and ergonomic workstations. This minimized risks and created a secure, healthy working environment for all staff at the MRFs.

With the infrastructure and operations in place, we learned that even with the system for waste collection in place, a significant challenge remained: the quality of waste entering the MRFs.

We found that much of the incoming waste was low-value, contaminated, and mixed, making it difficult to salvage for recycling. The high-value waste (such as PET and HDPE) often bypassed formal systems and was sold to informal aggregators. To address this, we:

1st

Worked on improving the quality waste through behavior change campaigns.

We realized that improving the quality of waste at the source was crucial. We launched targeted behavior change campaigns to encourage better waste segregation at the household level in areas where waste was coming from. This helped improve the quality of waste coming into the MRFs.

2nd

Subsidized collection and processing costs.

For financial viability, we implemented a cross-subsidization model. The MRFs purchased high-value waste from informal aggregators at fair market prices. Using this revenue, we subsidized the collection and processing of low-value waste, such as soft plastics and multi layer plastics (MLPs).

We understood that stabilizing the MRFs would take time, typically 12-18 months. During this period, **viability gap funding** – supported by CSR initiatives and public-private partnerships – was essential to cover operational costs and maintain the working capital needed to keep the system running. Once the facilities stabilized with good quality and quantity of waste, they reached financial viability.



The Model Solved for 3 Key Things



1st

It added value to the waste coming out of households.

For waste to be effectively recycled, even segregated dry waste needs further processing, such as sorting, cleaning, and baling, to prepare it for the right kind of recycling. Our decentralized MRFs enabled segregation and processing of waste to ensure that waste could meet the specific requirements of different recyclers, thus streamlining the waste for the most appropriate recycling pathways.

3rd

It increased the flow of waste into the recycling ecosystem.

By setting up decentralized MRFs closer to waste generators, we reduced logistical costs and the risk of contamination from handling. The closer proximity allowed for more efficient collection and transportation, making the recycling process more economical and scalable. This, in turn, resulted in a greater volume of waste entering the recycling ecosystem, diverting more materials from landfills and ensuring they are recycled effectively.

2nd

It created a robust supply chain for waste feedstock for recyclers.

One of the major bottlenecks in the recycling sector in India has been the inconsistent supply of waste feedstock. Even as the sector matures, it has struggled with a lack of reliable, high-quality, and quantity-specific waste streams. Categorizing waste into different categories and aggregating it at the MRFs and consistently aligning the recyclers helped in faster inventory turnover at the MRFs. This created a reliable and consistent supply of high-quality feedstock for recyclers, unlocking greater recycling potential across multiple waste categories.



Our Impact So Far

06

projects across Mumbai and Chhatrapati Sambhajnagar since 2018

10,000+

tonnes of dry waste has been diverted from landfills

200+

green jobs created

20+

partners mobilized



To learn more about our approach to setting up and operationalizing an MRF, additional guidance and detailed operational procedures, see our Resource Center

1st

Case study

Saahas Zero Waste



Context

Saahas Zero Waste (SZW), a Bangalore based waste management company is tackling India's urban waste challenge through innovative, decentralized waste management solutions. With growing urban populations, millions of tonnes of waste are generated daily, requiring urgent circular economy interventions. SZW focuses on creating circular economy solutions that emphasize waste reduction, recycling, and on-site processing directly at the source.

Innovation

Their flagship service – the Zero Waste Program, is a unique on-site and off-site model providing holistic decentralized waste management solutions for corporates, bulk waste generators, governments.

Their end-to-end model collects and manages both wet and dry waste streams, offering solutions through a complete system of collection, primary on-site processing and transport of the processed waste to an appropriate end destination or a bio-CNG plant, while segregated dry waste is sent to MRFs for further sorting. Their approach goes beyond typical decentralized models and ensures zero-waste in regions they work in, ensuring maximum waste is diverted from landfills. Currently, SZW converts up to 80% of the waste collected into recycled products and 95% including energy recovery. One of their major innovations is the integration of technology for real-time tracking and monitoring through its SaaS-based Management Information System (MIS).

MIS enables organization-wide transparency and accountability by tracking the flow of waste from collection through processing and resource recovery. This traceability enhances the system by bringing real-time transparency and accountability to 95% of the total waste generated. This represents a significant breakthrough for both improving operational efficiency and ensuring accurate, data-driven compliance with waste management standards.

Key Takeaways



End-to-end waste handling both wet and dry waste



On-site composting and decentralized MRFs to reduce landfill dependency



Tech-enabled traceability through real-time waste tracking

To learn more, visit: saahaszerowaste.com

2nd Case study Trashonomy



Context

Udaipur, a rapidly expanding city and one of India's top tourist hubs, generates over 250 tonnes of waste daily – almost twice of what the local population alone would produce.

This surge in waste generation is driven by the city's thriving tourism sector, leaving significant gaps in its waste management infrastructure – resulting in higher-than-expected load on the waste management infrastructure. Trashonomy, a young social enterprise, has seized this challenge as an opportunity to implement a unified waste management ecosystem, addressing the city's challenges of waste collection, processing, and recycling.

Innovation

Central to Trashonomy's approach is strengthening infrastructure through their strategic partnership with the Udaipur Nagar Nigam (UNN) and local contractors. By functioning as an extension of the municipality, Trashonomy has taken on

end-to-end responsibility for waste management operations, relieving the municipality's operational burden. Their partnership with UNN has unlocked systemic access to land and viability gap funding to set-up and run large-scale MRFs.

Trashonomy has also streamlined the waste from across the city into their MRFs. They have done this by establishing strong linkages with local waste management contractors and Safai Mitras. By forging these linkages, Trashonomy has streamlined waste collection and ensured that waste from across the city is reaching their MRFs for processing. One of their key successes has been to streamline door-to-door waste collection coverage from households in previously underserved areas. They have done this by integrating existing local waste contractors into a unified value chain, with streamlined diversion of waste to their MRFs. This has brought every corner of the city into the system.

For commercial and industrial establishments, Trashonomy has set-up a direct waste collection system with complete traceability, which has unlocked access to high-quality recyclables. This has not only boosted the financial sustainability of their MRFs but has also improved the overall efficiency and impact of the waste management system in the city, making their model both environmentally and financially viable.

Key Takeaways



Strategic government partnership for systemic impact



City-wide waste collection, including underserved areas



Improved financial viability through high-quality waste streamlined into MRFs

To learn more, visit: trashonomy.com

Lessons Learnt

1^१ Decentralized infrastructure as a solution to municipal waste challenges.

Beyond simply processing recyclables, MRFs are pivotal in addressing the larger problem of municipal waste. They help manage the vast waste volumes generated by cities, reducing the pressure on central landfills. A decentralized MRF model promotes localized solutions, demonstrating to the public the economic and environmental benefits of systematic waste segregation and processing at the community level.

2^२ Clear value proposition leads to financial viability.

For all stakeholders – municipalities, social enterprises, and recyclers – a well-defined value proposition is essential. When each partner sees clear benefits, the system becomes less reliant on grant funding and more self-sustaining. This contributes to making any model stable, scalable, and therefore financially viable in the long-term.

3^३ The key to success is integration, not reinvention.

One of our most valuable insights has been that the key to success lies not in reinventing the wheel, but in integrating existing systems. India's waste management landscape is highly fragmented and majorly informal, with various stakeholders and processes operating in isolation. Instead of creating entirely new structures, unifying these elements into a well-organized system and streamlining the resources already in place, greater efficiency, scale, and impact can be unlocked.

4^४ Inclusion requires investment.

Ensuring meaningful inclusion of Safai Mitras and informal waste workers is crucial for both social equity and operational effectiveness. This inclusion requires targeted investments in training, protective gear, fair compensation, and long-term capacity building. It's not an organic process – it needs dedicated budgetary support and a clear, intentional strategy. Inclusion must be embedded into the core design, ensuring these workers not only participate but also benefit from the system's success.

Communications

प्रभावी संदेश

Time to look at waste as a resource

अपशिष्ट को एक संसाधन के रूप में देखने का समय आ गया है

अस्पताल कर्मचारियों ने
लगाई ब्राव: एशियन अस्पताल के
कर्मचारियों ने

3^३

Making it Personal - How Behaviour Change Can Tackle Climate Change

पर संवाददाता इंदौर जाएगा। इस सत्र में जेईई एडवांस
स्तर पर करने वाले छात्रों ने

Waste segregation will support the circular economy

अपशिष्ट पृथक्करण से चक्रीय अर्थव्यवस्था को समर्थन मिलेगा

Why Is Communication Important

Waste infrastructure serves as the hardware and communication is the software that drives human behavior.

Waste infrastructure and segregation behavior are interconnected components of an effective waste management initiative. Infrastructure serves as the hardware, comprising physical structures and systems for waste collection, transportation, and processing. However, it's success hinges on behavior change communication, the software that drives human behavior.

At Unilever, we've repeatedly discovered that changing behaviors is notoriously hard.

This perspective is shared among stakeholders across the waste ecosystem, who universally acknowledge that segregation behaviors are their most significant hurdle in the waste value chain. Many successful initiatives in India such as the Indore and Goa models reflect a common feature of proper waste segregation at source.

Waste segregation is the first domino in the waste management chain, influencing the entire system's efficiency and

environmental impact. And yet, our research unveils a striking paradox: nearly 80% of individuals recognize the importance of waste segregation, less than 10% actually practice it consistently. This disparity highlights the knowledge-action gap.

Despite the urgency of the issue, why are people not segregating waste? We conducted a study across India's top metros and spoke with thousands of citizens to understand their segregation behaviors. The study revealed some key barriers:



I alone cannot make a difference



Its not my job to manage waste



Even if I do it, the person who picks it up will mix it



It takes a lot of my time



I find it confusing

What We Did – Start A Little Good Behavior Change Campaign

Successful change comes from a real understanding of people, their habits and their motivations.

We tested various frameworks, drew on skills from inside and outside Unilever – Ogilvy's behavioral science experts and academics from leading universities to uncover key insights into the barriers hindering segregation. One of these insights was 'social mirroring', which means that the behavior of those around us significantly affects our behavior. For an example, if you are in a network of eco-conscious people, you are three times more likely to be eco-conscious yourself.

Conversely, if you are in a network of non-eco-conscious people, you are three times more likely to not be eco-conscious. The findings further revealed implicit biases and cultural contexts that hindered action.

More importantly, our study revealed that positive messaging, which inspires people to take action and join the mission towards environmental sustainability, resonates most with urban citizens. By emphasizing examples of collective participation – like "thousands of people are already doing it, you can help too" – individuals feel motivated to associate themselves with a larger cause. This appeal to intrinsic values makes people want to contribute and feel good about being responsible citizens, as they connect their personal actions to a meaningful and positive movement.

We took these insights and applied them to Unilever's proven 'Five Levers for Change' – a set of principles that when integrated into behavior change initiatives, significantly enhances the likelihood of achieving lasting impact.

Based on our local context and target audience, we tested this communication through door-to-door interactions with over 2,00,000 citizens across Mumbai and Chhatrapati Sambajinagar. We knew that if context is important to communication, delivery and execution was what would make or break it. We ensured the key messages were communicated effectively and in the right tone by providing rigorous training to our on-ground teams and conducting workshops that prepared them for meaningful, impactful engagement with citizens.

In an impact assessment conducted by Sattva, the team observed waste disposal and collection at housing societies. They recorded that on an average, segregation rates amongst households that participated in the campaign were almost 2.5 times higher compared to those who did not. The study found that households who participated in the campaign segregated waste in correct categories and kept two dustbins outside their houses for collection.

2,00,000

citizens in Mumbai and Chhatrapati Sambajinagar were engaged in a focused door-to-door behavior change campaign.

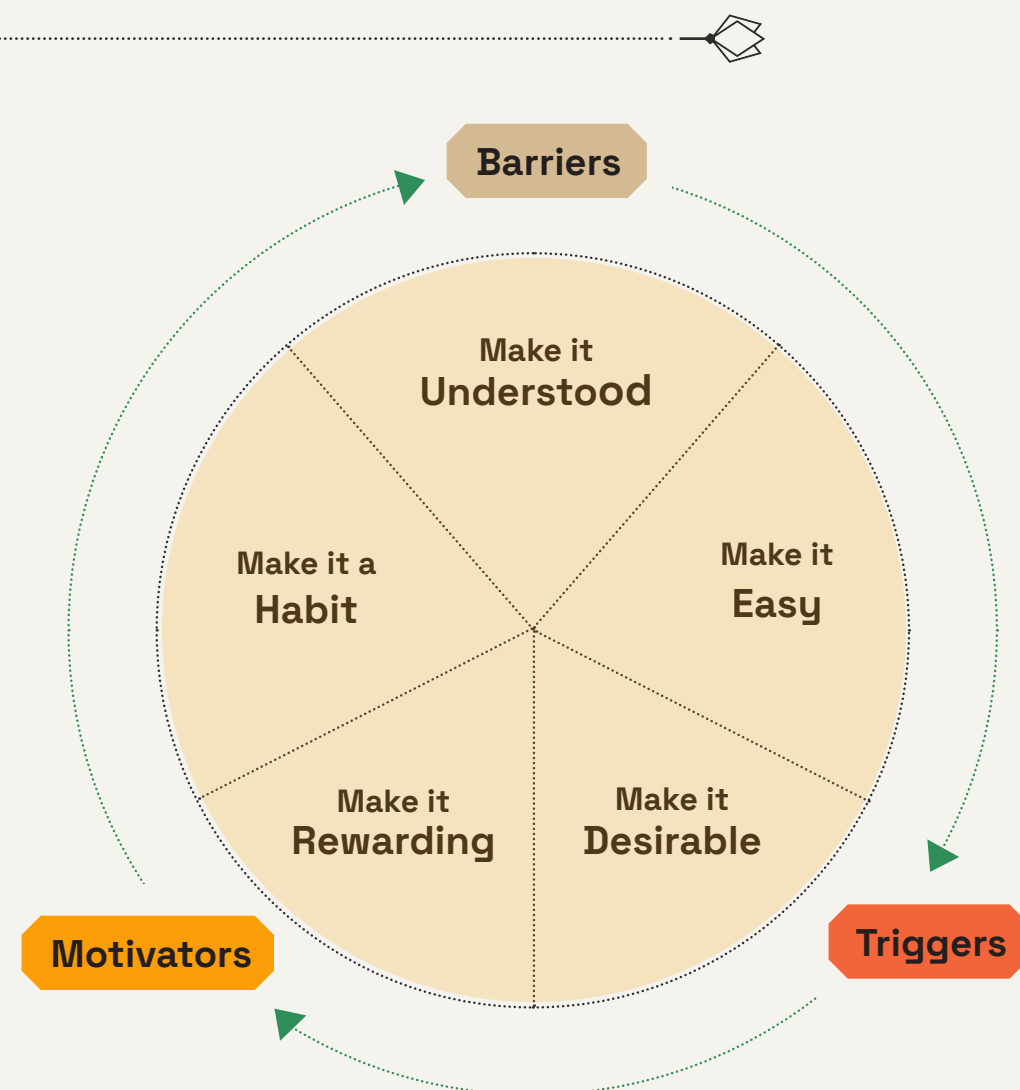
2.5x

higher segregation rates recorded among households that participated in the campaign compared to those who did not.

How To Apply The ‘Five Levers for Change’ Framework

These Levers don’t have to follow one after the other.

But what we’ve learnt is that the **most effective campaigns apply all the Levers in some way.**



Applying the framework to create tangible outcomes:

Make it Desirable

Will doing this new behavior fit with their actual or aspirational self-image? Does it fit with how they relate to others or want to?

This Lever is about 'self and society'.



How To Apply This

Leverage social proof as it is a powerful motivator, particularly when individuals see that others in their community are also participating to segregate their waste. Especially, the lifestyles and habits of people we respect – like our parents or sometimes a celebrity. Highlight testimonials of local heroes or groups who your audience relates to. This not only provides a relatable example of positive action but also triggers a FOMO (fear of missing out) effect, compelling action.

BARRIERS

What are the things that **stop** people from adopting a new behavior?

What it might sound like

- “ I find it confusing to know which items go in which bin. It feels like a guessing game every time I go to throw something away.
- “ It seems like so much of a task to learn about all of this.
- “ Even if I segregate waste, my neighbours don’t. I, alone, cannot make an impact.
- “ I wish I understood the recycling process better. It’s hard to make eco-friendly choices when I’m not sure what happens to my waste.

TRIGGERS

How could we get people to **start** a new behavior?

What it might sound like

- “ Thousands of people are segregating their waste. Are you?
- “ Remember, if its mixed, it can’t be fixed.

MOTIVATORS

What are the ways to help them **stick** with the new behavior?

What it might sound like

- “ “Your municipality is on your side – your segregated waste will find its right home”
- “ “Your city needs you to build small habits that can have a big impact”

Make it Rewarding

Do people know when they’re doing the behavior ‘right’? Do they get some sort of reward for doing it?

This Lever demonstrates the proof and payoff.



How To Apply This

Make your key messaging tangible to show benefit of their action. Use examples and statistics. For instance, illustrating how one family living in a metropolitan area can divert as much as 600 kg of waste per year from landfills – equivalent to the weight of an elephant – simply by segregating waste makes the action more tangible. Similarly, sharing how recycled plastic bottles can be transformed into t-shirts makes the concept of recycling easy to understand.

Make it Understood

Do people know about the behavior? Do they believe it's relevant to them?

This Lever raises awareness and encourages acceptance.



How To Apply This

Use simple language, without jargon and complex technical terms. The goal is to make the information easy to understand for everyone, regardless of their prior knowledge or familiarity with waste management.

Make it Easy

Do people know what to do and feel confident doing it? Can they see it fitting into their lives?

This Lever establishes convenience and confidence.



Make it a Habit

Once people have made a change, what can we do to help them keep doing it?

This Lever is about reinforcing and reminding.



How To Apply This

Consistent reiteration of the core messages in immediate and surrounding environment of the audience can serve as nudges to continue action. WhatsApp and Social Media are excellent reminder mediums.

Designing communication is just one part of inspiring behavior change. A successful campaign requires strategic planning, engagement, and consistent action.

Explore our step-by-step guide to design and execute your own behavior change campaign to inspire waste segregation.

Steps To Deploy An Effective Behavior Change Campaign To Inspire Waste Segregation



Explore our step-by-step guide to learn more about how to execute these steps.

1st Case study Goa



Context

Goa, with its booming tourism industry, which attracts millions of visitors annually, faces a constant challenge to manage waste effectively. This influx exacerbates issues such as inadequate waste segregation, insufficient infrastructure, and environmental pollution, particularly in coastal and tourist-heavy areas.

Innovation

While most cities in India are implementing a 2-way (Wet and Dry) waste segregation system, Panjim, the capital of Goa tried to do something unique. Under the HDFC-United Nations Development Program Dry Waste Management project, it has implemented an innovative model for 16-way segregation at source. The implementation team, Feedback Foundation, adopted a holistic behavior change model that aimed to evoke a positive change in the public mindset, inform people about best practices, and ensure the safety of those working with waste.

Under the initiative, they conducted several training and awareness drives, including segregation workshops for citizens and training sessions for Safai Mitras. Multiple meetings were held with BWG stakeholders, informing them of the benefits of the system and its key features. The model was first demonstrated at Revival 2020—a two-day sustainability-themed event in the city. Citizens were encouraged to bring in their dry waste and segregate the waste themselves.

Once segregated, the waste goes through different streams of recycling and resource recovery, eliminating the need to send any to a landfill. The 16-way segregation model is cheaper, requires minimal manual or mechanical sorting, and reduces the burden on the environment.

More importantly, this innovative system reduces the occupational health risks for Safai Mitras, who work on segregating the waste at Swachtha Kendras (material recovery facilities).

Key Takeaways



Citizen action is the first and most crucial factor for an effective waste management system.



Smart planning, citizen cooperation, and the support of local municipalities make the circular economy not a cumbersome concept but a self-sustaining and rewarding solution.



More categories of segregation enable better resource recovery, thereby promoting the principles of Circular Economy.

To learn more, visit: goa.in

2³ Case study Baeru



Context

In coastal Karnataka, there is a persistent issue of limited waste segregation at the source, where waste is not properly separated. This makes it impossible for Safai Mitras to recover valuable materials, thereby adding to the growing plastics waste problem.

Traditional door-to-door awareness campaigns and information dissemination have not been effective, as local communities are unaware of the direct link between waste segregation and its economic benefits for Safai Mitras and the environment. Most importantly, the language of communications around the challenge is often inaccessible, alien and fails to inspire communities to take meaningful action.

In the past, local governments and NGOs focused on conducting clean-up drives and door-to-door campaigns to promote better waste management. However, these efforts lacked cultural integration and did not engage communities at a deeper level, resulting in minimal and short-lived impact.

Innovation

Baeru Coast Clear, is a women-led climate action organization that aims to reduce ocean plastic pollution and strengthen coastal communities' resilience to climate change. Through their innovative programs, Baeru has remarkably combined cultural traditions with modern environmental themes and technology and has developed strong communication that resonates with the local communities. One of their programs leverages the 11th century traditional art form of Yakshagana to communicate the urgency of

coastal waste management and ocean plastics. By incorporating relevant environmental themes with community traditions, the program connects deeply with local people, making such issues understandable.

Through another program, Yuva Prerana, Baeru has placed young students at the forefront of taking ownership of waste management within their neighbourhoods and panchayats. These young leaders actively participate in community programs, influencing their peers and families to adopt sustainable practices. Through these initiatives, students have become catalysts for Behavioral change at the grassroots level, fostering a deeper connection to waste management responsibilities in their localities.

Leveraging technology, Baeru has gone beyond these formats of communication through another program, Yuddha Against Plastic (YAP), a WhatsApp chatbot designed to digitally engage citizens and women in waste management. YAP not only fosters conversations about waste management, identifying black spots, and promoting collaborations, but it also plays a crucial role in promoting digital literacy for women in the waste sector. Through YAP, women learn to trace waste data from the collection point to its end destination, helping them better understand and manage the waste cycle. YAP has been about much more than digital experiences and exchanging ideas. It is empowering women and youth with the tools to participate in waste management processes and engage in real-time data tracking.

Baeru has bridged the gap between digital engagement, waste management, and community collaboration – all while making the conversation accessible and engaging for the young generation.

Key Takeaways:



Cultural relevance is not only a method of engagement but a powerful tool



Combining cultural traditions with modern environmental themes and technology



Collaboration with local governments for scale and legitimacy



Youth as catalysts to drive sustainable change

To learn more, visit: baeru.in

Lessons Learnt

1^१ Social norms shape habits.

One of the strongest influences on behavior is social norms. People tend to follow what others around them are doing. When communities see their peers actively segregating waste, they are more likely to adopt the habit themselves.

2^२ Infrastructure aids segregation behaviors.

The presence of reliable waste management infrastructure, like collection systems and MRFs significantly boosts the adoption of waste segregation. When people see that their segregated waste is being properly collected and processed, they feel their actions have a real impact.

3^३ Small actions have transformative power.

Even small actions, when practiced consistently, can lead to large-scale impact. The idea that “you don’t need everyone to do everything perfectly, but you need everyone to do something” is key. The ripple effect of small, consistent actions can drive significant change in behaviors.

4^४ Even a Tow-Truck needs towing sometimes.

Even the most well-meaning individuals need reminders and reinforcements to continue a habit. Building awareness is the first step, but consistent nudges – whether through reminders, prompts, or reinforcing positive feedback – are crucial to keeping habits alive in the long term.

Safai Mitras

सफाई मित्र

48



Why Are Safai Mitras Important

Safai Mitras or waste pickers are the of the recycling system in India. They collect, sort and sell materials for recycling or reuse. It is estimated that more than 4 million people earn a livelihood from waste.

Through collecting materials such as plastic, glass, paper and electronic waste from households and streets – Safai Mitras' contribution to material recovery is immense. Their efforts also contribute to better public health and the environment by reducing the amount of waste entering the landfill and promoting resource recovery.

These invisible superheroes, despite their undeniable role, are at the forefront of various challenges including marginalization and social exclusion. Due to the itinerant nature of their work, they earn low and unsteady incomes, face increased vulnerability to climate and natural disasters and are exposed to health risks.



Approximately 70% of them earn a monthly household income of less than INR 10,000, highlighting their economic vulnerability. Many belong to socially disadvantaged groups, which further limits their access to essential services and opportunities. Over 60% lack formal education, perpetuating a cycle of disadvantage and hindering their ability to secure better livelihoods. Additionally, the absence of essential documentation restricts their formalization efforts, leaving them without the benefits that come with recognized employment. Despite these obstacles, sanitation workers are the true entrepreneurs on the ground, demonstrating resilience and resourcefulness as they continue contributing significantly to public health and environmental sustainability. For circularity to truly materialize, we need to include and mainstream Safai Mitras in the formal waste management ecosystem.

What We Did – Project Utthan

1st **First, we recognised and we listened.**
As we embarked on developing comprehensive waste models, we realized that recognizing the contributions of Safai Mitras was imperative. Through our work with community-based organizations, we began to truly listen to the needs of Safai Mitras, the gaps in the ecosystem. For example, through on-going consultations with one of our partners, Stree Mukti Sangatana, we realized that there was an immediate need to focus on the occupational health and safety of Safai Mitras.

2nd **Occupational safety.**
In 2020, we began with comprehensive capacity building programs to equip them with the knowledge to handle hazardous materials safely, enhance their risk awareness, and prepare them for emergencies (like the pandemic), while improving their working conditions. This was crucial especially since Safai Mitras were working tirelessly, often in high-risk conditions (while handling COVID related medical waste), to keep cities clean and societies and families healthy.



3rd **Social and financial security.**
Following a Baseline Survey by UNDP 2020, we begun to unearth deeper and more complex challenges in the ecosystem, with Safai Mitras at the intersectionality of marginalization from the lens of caste, gender, economic backwardness, occupation and opportunities. These circumstances demanded for efforts to empower Safai Mitras with a better quality of life.

4^x **As a first-of-its-kind, social and financial inclusion program.** Project Utthan aims to enhance the participation of Safai Mitras and their families in diverse social protection schemes covering food, health safety, education, and financial inclusion. These include the Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Jeevan Jyoti Bima Yojana, eSHRAM card, Sukanya Samriddhi Yojna, Deendayal Antodaya Yojna and Jan Dhan account, among others.

The program also focused on bridging the critical gap of access by setting up process for issuance of National ID cards, including Aadhaar, ration cards, and voter card, as required, to ensure eligibility for accessing and utilizing the benefits of social security programs. Through increased outreach of Government programs and social protection schemes, the partnership has resulted in reduced vulnerability and increased community resilience. It has, further, created opportunities for safe, sustainable, and dignified livelihoods.



5^y **Mobilising Safai Mitras to drive behavior change.** Over time, we have also recognized that Safai Mitras are key drivers in promoting behavior change and ensuring that households consistently segregate waste. They are pivotal in sustaining household-level efforts as waste moves through the value chain, by ensuring proper collection, handling and management. Through interactive training sessions, we have equipped them with technical skills for waste management, and provided essential protective gear like gloves and masks.



To learn more about our work with Safai Mitras and success stories from ground, see our Resource Center

1³ Case study Hasiru Dala Innovations



Context

The informal sector of waste pickers play an essential role in the waste and recycling value chain. However, they face significant barriers like low incentives, unreliable buyers, and unstable market access. These make it difficult for them to collect recyclable waste at fair prices, leading to financial instability and contributing to increased waste ending up in landfills. Having been so deeply inserted in India's waste ecosystem and despite their crucial role, waste pickers struggle to find identity, basic human dignity, dignity of labour, and economic opportunities to rise in the value chain. The informal nature of their work also exposes them to health risks and harassment, all while working in precarious conditions.

Innovation

Bangaluru based Hasiru Dala Innovations (HDI) has taken a transformative approach to integrate waste pickers into the waste value chain by professionalizing them. Recognizing their value, experience and expertise, HDI has developed strategies that have created predictable livelihoods and entrepreneurship opportunities for them. HDI's key innovation is its inclusive business model, which transitions waste pickers into micro entrepreneurs. In a partnership model, HDI offers support and guidance to waste pickers to establish proper infrastructure

for waste collection, transportation, and sorting. In turn, the micro entrepreneurs, provide primary waste collection services for HDI's bulk waste generator (BWG) clients and streamline the waste to HDI's transfer stations. Which is where wet waste from small vehicles is transferred to larger trucks – which goes to HDI's Waste-to-Biogas plant; and dry waste, managed by the micro entrepreneurs (referred to as van units or franchisees of HDI) – is sorted into up to 25 categories, including paper, plastic, and glass, and eventually sold to appropriate recyclers.

Through this approach, HDI provides these entrepreneurs access to clean waste directly from the source – a significant shift from their previous uncertainty of finding enough tradeable waste to sustain their livelihoods. This unlocks predictable incomes, a fully operational and well-supported waste management infrastructure, and the autonomy to trade the dry waste collected. This inclusive entrepreneur business model has opened doors for more green-collar jobs. The micro entrepreneurs further provide jobs to more waste pickers in handling of waste. HDI's first ever micro entrepreneur, Lotfar, now operates a Material Recovery Facility, lives in a pucca house, files his GST returns, and is aspiring to buy land to build his own house – an inspiring change from earlier where the aspiration was limited to earning a daily livelihood.

To further support waste pickers, HDI's sister not-for-profit organization Hasiru Dala supports them to gain access to government welfare schemes, including Jan Dhan Yojana and the National Health Insurance Scheme; and fosters dedicated financial literacy officers who work on the field with waste pickers, teaching them how to use UPI for payments, how to open a bank account, and so on.

Key Takeaways

Waste pickers as micro entrepreneurs

Predictable livelihoods through formal partnerships

Inclusive business model for empowerment

To learn more, visit: hasirudalainnovations.com

2³

Case study

Stree Mukti Sangatana



Stree Mukti Sangatana
(Womens Liberation Organization)

Context

Within the already vulnerable informal sector, women Safai Mitras face additional layers of marginalization. Gender-based discrimination, social stigma, and patriarchal norms restrict their access to economic opportunities, education, and healthcare. Women Safai Mitras often earn lower incentives, bear disproportionate household responsibilities, and face heightened risks of harassment and violence. Their reproductive health is also compromised due to inadequate sanitation facilities and lack of protective gear. Moreover, societal expectations confine them to traditional roles, limiting their mobility and agency within the waste value chain. As a result, women Safai Mitras remain trapped in a cycle of poverty, invisibility, and exploitation.

Innovation

Through Parisar Vikas initiative established in 1999, Stree Mukti Sangatana, organized women into Self-Help-Groups (SHGs) and federations to provide clear pathway for

Safai Mitras to gain durable income in the waste picking sector. Additionally, they were trained to become zero waste experts. Today, these federations are 5,000 women strong.

Furthermore, Stree Mukti Sangatana partnered with Bhaba Atomic research Centre to train the women Safai Mitras in the technicality of composting. Their primary goal was to create a sustainable model for zero waste that would include labor friendly initiatives, an integrated waste management system, and a low cost-energy friendly waste disposal system. What this initiative also did was put focus back on womens' contribution to the entire supply chain of waste management. The women who run the federations have emerged as leaders in driving zero-waste initiatives. They were able to get IDs from the government recognizing them as waste pickers, get official government documentation like Aadhar and Ration Cards, and even able to enroll their children in schools.

‘Technical jobs, or expertise in anything related to technology is considered to be the man’s domain, says Jyoti Tai, President of Stree Mukti Sangatana. “We wanted to change this for these women, we wanted them to be the technical experts in their field, so we trained them in composting and how to operate the machinery too”.

Key Takeaways



Formal organisation of communities through SHGs and federations to unlock autonomy and economic empowerment



Fostering a strong community of change agents to drive sustained actions on zero waste efforts



Recognising women in the informal sector is key to unifying the waste management ecosystem

Lessons Learnt

1^१ Safai Mitras should be at the front and centre of circularity.

It is important to acknowledge that Safai Mitras are not just workers in the informal waste economy; they are vital agents of change within their communities as well. All circularity initiatives must place Safai Mitras at the forefront, ensuring their voices and contributions shape collective efforts.

2^२ Ensuring safety and fair compensation is important.

Occupational safety is paramount for Safai Mitras, yet many circularity initiatives don't, yet, prioritize it. As systems become more formalized, embedding safety measures at the core of such initiatives is essential. Additionally, ensuring consistent livelihoods through fair market prices for the waste they collect is crucial; Safai Mitras must receive the true value of their contributions to foster economic stability and enhance their quality of life.

3^३ Social inclusion of Safai Mitras is key.

The path to social inclusion of Safai Mitras remains a significant challenge. While many government social protection schemes exist, effective access to these is still a long journey for the community. To truly empower Safai Mitras, concerted efforts are needed to ensure they access the resources and support they need, paving the way for a more equitable society.

4^४ Agents of change for sustained impact.

Safai Mitras' deep knowledge of local contexts and consistent presence in communities makes them agents of change who can influence attitudes and ensure that segregation efforts are upheld over time. Working with them ensures long-term impact, reinforcing the idea that circularity and proper waste management is a shared responsibility.

Citizen Action

नागरिक सहभागिता



5^५



Why Is Citizen Action Important

If infrastructure, communication, Safai Mitras, and partnerships are the building blocks of an effective waste management initiative, then citizen action is the driving force that brings it to life.

Without active involvement of citizens, even the most innovative and well-designed models can fall short of their potential. Community engagement turns waste management into a **shared responsibility**, where the success of every initiative relies on collective action.

When people feel empowered and included in the process, they are far more likely to adopt sustainable practices like waste segregation and building sustainable habits into their daily lives.

But it's more than just participation - it's about creating **a sense of ownership and pride**. Effective community involvement transforms waste management from a top-down government or corporate mandate into a people's movement, where every small action adds up to big impact. Citizens

become partners in the solution, with their efforts reinforcing the transparency and accountability of the entire system. As they witness the results of their participation, they are motivated to contribute further, knowing they are part of a movement that drives real change.

At its core, citizen action amplifies the scope and effectiveness of waste management initiatives. **It turns isolated actions into a ripple effect**, via local champions, early adopters, and influential voices – inspiring more citizens to get involved. This collective power lays a strong foundation for a circular economy, where waste is not just managed but reimagined as a valuable resource.



What We Did – Youth Ambassador Program

A simple message – start a little good – transformed into a powerful movement led by young voices.

Through our work across diverse communities, we've learned that **there is no single mold for an ambassador or a local champion.**

They come in different forms and emerge from various contexts – sometimes it's senior citizens who inspire change, while in other cases it may be women, youth, or even local celebrities who galvanize collective action. What unites them is their ability to connect with people, inspire action, and create a shared sense of responsibility within their communities. Our key learning is that **every initiative requires its own champions – individuals who can resonate with their unique community and drive forward a common agenda.**

For us, under the Start A Little Good initiative, we engaged young students from colleges and universities across Mumbai and Chhatrapati Sambhajnagar to go door-to-door and inspire local residents to take small steps

towards segregating their waste at home. A simple message – start a little good – transformed into a powerful movement led by young voices.

By involving these young changemakers, we found a way to not only inspire citizen action but to make waste management a part of everyday conversation. Waste segregation – something often seen as mundane or overlooked – slowly became a topic of active discussion, driven by the energy and passion of those eager to shape the future. Students didn't just relay information – they connected with residents on a personal level, making waste segregation feel important, achievable, and impactful.

We created the Youth Ambassador Program – a structured internship model designed to equip students with the tools and knowledge

to effectively communicate and inspire Behavior change towards waste segregation. In partnership with AIESEC, one of the world's largest youth platforms, we formally enrolled students into the program, providing them with comprehensive training and support to become the initiative's voice of change on the ground.

This wasn't just about creating advocates, it was about building a vibrant community of empowered youth. We fostered a collaborative environment where students could exchange ideas, inspire one another, and learn through hands-on experience of engaging with residents. The program provided them with a safe space to grow, not only as waste champions but also as leaders who could drive meaningful change in their own communities. In doing this, the program didn't just amplify our message – it created a powerful network of young leaders committed to creating a sustainable future.

1³

Case study

Ecosattva Environmental Solutions - Kham River Restoration Mission



Context

The Kham River Restoration Mission is a public-private partnership, managed by EcoSattva Environmental Solutions, that is working to restore a seasonal river flowing through the historic city of Chhatrapati Sambhajnagar (formerly known as Aurangabad). The river had been turned into an open drain, with many points where sewage was entering the river, resulting in a large part of the river covered in solid waste. In response to this, the Mission set three simple objectives – to rejuvenate the river, enhance its ecosystems, and elevate its place in the hearts of residents. Since its inception, the Mission has successfully facilitated the cleaning and dredging of 11 km of the river, eliminated 171 Garbage-Vulnerable Points (GVPs), and diverted over 5 million litres of sewage till date to treatment plants – all by harnessing the collective power of citizen action.

Innovation

Citizen engagement has been at the heart of the Kham River's transformation. The Mission went beyond traditional NGO involvement by involving schools, cultural groups, and local communities, fostering a strong connection between people and their environment. This broad participation was instrumental in making the Mission a success.

The initiative's approach to citizen mobilization began with education and cultural revitalization efforts. Public awareness campaigns targeted schools and cultural events to shift how residents perceived the Kham River. These efforts included locally commissioned artwork, dance performances, and educational programs, all aimed at instilling pride in the river's ecological value. A standout strategy was creating a relatable, emotional identity for the Mission. Branding efforts, including a distinct logo, color scheme, and the popular "Kham Song" anthem, created a personal connection with the community, transforming the river's restoration into a source of local pride.

Citizen participation extended to hands-on efforts like clean-up drives and transforming GVPs into green pocket parks. This empowerment led residents to take ownership of their public spaces. For instance, the creation of the Amar Shaheed Udyaan Park, which commemorates local martyrs, doubled as a green community space, further strengthening social ties.

Key Takeaways



Cultural revitalization as a tool for public engagement and awareness



Art, branding, and identity to inspire collective ownership and local pride



Collaboration with local communities to transform waste-affected areas into public spaces

To learn more, visit: kham.ecosattva.in

2nd Case study

Waste Warrior Solutions



Context

Dehradun is a rapidly growing town and generates approximately 300 metric tons of waste daily, but only 20% is managed effectively. There is a need for better awareness of proper waste disposal. The accumulation of mixed wet and dry waste has resulted in growing waste mounds, posing serious public health risks. A crucial step in resolving this issue is ensuring segregation at the household level and proper disposal of dry waste. While many local residents have heard about waste segregation, there is a lack of understanding about categorising the types of waste correctly.

Innovation

Waste Warriors Society, a non-profit organization, is working towards addressing this challenge in the Indian Himalayan Region (IHR).

Their Model Ward Program in Ward 97 of Dehradun, Harrawala, focuses on enabling

effective adoption of best practices for solid waste management. As a part of the program, Waste Warriors runs an active citizens' initiative, in which they identify and onboard proactive champions. Waste Warriors team supports them in nudging local residents to understand and adopt proper waste management practices through training and on-ground visits to the MRF.

Frequent Chai Pe Charcha Baithaks are also organized by the active citizens to understand, resolve and break barriers that residents face in adopting proper waste management practices. This makes residents feel included in the decision-making process thereby changing their behavioral patterns. In these baithaks, audio-visual content is shared with the community to help them understand the waste problem, and simplify waste management practices.

To celebrate the efforts of the local champions, and to reward their efforts, local champions are awarded in a felicitation ceremony. By empowering the active citizens to become the voice of the initiative, Waste Warriors have ensured long-term sustainability of their program.

Key Takeaways



Community champions are key for sustained impact



Making the challenge understood and simplifying the solution effectively breaks barriers preventing behavior change, thereby unlocking action



Communication strategy that appeals to intrinsic motivations of people to make a difference – making waste management aspirational

Lessons Learnt

1^१ Champions can come from anywhere.

We've learned that influential voices within a community don't always come from traditional leadership roles. They can be local leaders, grassroots organizers, or even individuals who are deeply trusted within their communities. The key is identifying these champions who resonate with the community's values and context. Once identified, it is essential to engage them in a way that creates mutual value – helping them become champions of waste management while also enhancing their personal credibility and influence within the community.

2^२ People inspire People.

The power of peer influence cannot be underestimated. When people see others they relate to actively supporting and advocating for something meaningful, they are more likely to follow suit. The influence of seeing someone within the community believe in and practice a behavior encourages others to adopt it. Role models who lead by example create a ripple effect – demonstrating that change is not only possible but achievable.

3^३ Amplify the champions.

Acknowledge and celebrate the efforts of the communities and champions you engage – by giving them a platform, making them feel heard, and calling out their wins. Recognizing local champions not only strengthens their connection to the initiative but also inspires others to step up and contribute, creating a cycle of positive reinforcement within the community.

Looking Ahead: A Call To Action

अगले कदम की ओर: एक आह्वान



The path towards a circular economy requires acceleration – now more than ever – to truly transform India’s waste story.

As we look to the future, the models and strategies shared in this Toolkit serve as a powerful foundation for the next phase of India’s waste management journey. While we’ve made significant progress, there’s still much more to achieve.

The impact we have seen so far – through strengthened infrastructure, citizen-driven action,

empowering Safai Mitras, and building strong partnerships – proves that collaboration can create real, lasting change. But we cannot do this alone. The scale of the challenge demands collective action, collaboration across the waste value chain, and a relentless commitment to innovation.

1st This Toolkit is just the beginning.

It captures the best of what’s already working across India and offers inspiration for others to take up the mission in their own contexts. We invite corporates, government bodies, waste management organizations, and individuals to join us in accelerating this movement. By adapting and adopting these proven strategies, you can contribute to driving waste circularity and fostering scalable and lasting solutions. Together, we can shift mindsets, reimagine waste as a valuable resource, and build systems that benefit both environment and communities.



2nd This is a collective call to action.

With your participation, small steps can lead to big, transformative impact. Let’s continue to innovate, collaborate, and build on the momentum we have created. The journey forward is filled with opportunities, but it will require the strength of partnerships and the inclusion of local voices. We are committed to measuring our impact, learning as we go, and adapting to ensure that no one is left behind.

3rd We invite purpose-aligned organizations to join us in this mission.

Together, we can push the agenda forward, unlock new solutions, and create a future where circularity is the norm, and waste is a thing of the past. Let’s start a little good – and keep the momentum growing.

A Step-By-Step Guide For A Behavior Change Campaign To Inspire Waste Segregation



This step-by-step guide is designed to provide a ready-to-use roadmap for developing and executing a behavior change campaign to inspire urban citizens to segregate their waste. It offers replicable frameworks and templates that are easy to customize and deploy, ensuring that you have all the tools you need to create meaningful impact. The steps outlined here are based on the Start A Little Good model, which has been tested successfully with over 200,000 citizens across various cities and contexts.

Each step provides practical guidance and key insights, from understanding your local context and partnering with municipalities to measuring the progress and results.

Here’s what you’ll find:

Step 1 ▶

Understand your context and identify your audience

Step 3 ▶

Measure what matters – baseline study

Step 5 ▶

Activate the campaign

Step 2 ▶

Partner with local municipality and streamline waste collection

Step 4 ▶

Design campaign communication and prepare to activate

Step 6 ▶

Measure what matters – endline study



STEP 1: UNDERSTAND YOUR CONTEXT & IDENTIFY YOUR AUDIENCE

The first step to designing your behavior change campaign is to understand the local context, the key actors and stakeholders, the target audience, and the prevailing waste management systems.

1. WHO IS YOUR TARGET AUDIENCE.

Identify the primary actors in household waste management – residents, househelps, and, housekeeping staff. In some cases, Resident Welfare Associations (RWAs) may also play a key role.

Pro Tip:

Househelps and housekeeping staff are often critical to daily waste handling, and including them in your campaign increases the chances of sustained behavior change.

2. WHAT IS YOUR WASTE JOURNEY?

Map out how waste flows from households into municipal collection system and final disposal points. Who collects it? How is it stored at household level? In cases of housing societies, how is it stored after collection by housekeeping staff? Understanding this journey.

Pro Tip:

Knowing the waste journey allows you to place interventions where they are most needed and can be most effective.

3. WHAT ARE THE CURRENT BARRIERS TO WASTE SEGREGATION?

Why aren't people segregating their waste? Is it due to lack of knowledge, resources (like separate bins), or convenience? Understanding these barriers helps you develop campaign communication that is localised and relevant.

4. WHAT IS THE EXISTING WASTE MANAGEMENT INFRASTRUCTURE IN PLACE?

What infrastructure, such as waste bins, collection points, and recycling facilities, already exist? What gaps need to be addressed to promote better waste segregation?



STEP 2: PARTNER WITH LOCAL MUNICIPALITY AND STREAMLINE WASTE COLLECTION

The next step is to align the campaign with the local municipality's waste management systems and securing permissions and their support to streamline waste collection. In India, local municipalities are responsible for the collection, transportation, and disposal of waste from households. Partnering with them ensures that the waste segregated through the behavior change campaign is collected, processed, and managed efficiently. This is critical to eliminate logistical challenges and sustained impact.

1. SECURE FORMAL PERMISSIONS AND ALIGNMENT WITH LOCAL MUNICIPALITY.

- **Approach the ward-level municipal office.**
Approach approaching the ward (or zone)-level office of the municipal corporation of the target location.

- **Submit a letter to request for permission.**
Address your request to the Solid Waste Management team of the municipal corporation. Clearly outline the intent, objectives, and focus areas of your campaign, detailing the roles, responsibilities, and the support you seek from the municipality.
- **Secure formal permissions.**
Obtain formal letters that authorize you to approach households, housing societies and RWAs. This formal approval is essential to legitimize campaign activities and encourage participation.

Pro Tip:
Securing early buy-in from the municipality not only streamlines collection processes but also ensures on-ground support. Municipal backing adds credibility to the campaign and strengthens community engagement.



2. ALIGN WASTE COLLECTION WITH MUNICIPAL SYSTEMS.

Work with local officials to align your campaign with existing collection schedules and infrastructure. This ensures that segregated waste is picked up on time and reaches the appropriate waste processing facilities, such as Material Recovery Facilities, rather than ending up in landfills.

- **Ensure separate collection for wet and dry waste.**
Work with the municipality to ensure separate collection systems are deployed for collection of segregated waste to eliminate contamination improving recycling outcomes.
- **Establish collection routes, and timings.**
Align municipal waste collection routes and schedules with the campaign and establish clear and regular waste collection timings.

- **Communicate collection timings and schedule to households.**
In case there is any change in the existing collection schedules, inform households through formal channels, such as official notices, community WhatsApp groups, or posters in housing societies and regular waste collection timings.

Pro Tip:
Establishing a helpline managed by the municipality can troubleshoot collection-related challenges in real-time. This builds trust with households, reinforces their participation, and ensures smoother operations by addressing issues promptly.



STEP 3: MEASURE WHERE YOU START FROM –
CONDUCT A BASELINE STUDY

Before you begin the campaign, an understanding of where households currently stand is crucial for measurable outcomes. Conducting a baseline and endline study allows to capture key data on existing waste management behaviors, knowledge, and attitudes. This provides tangible metrics to track progress over time.

By setting a clear starting point, you can measure what truly matters and identify gaps that the campaign needs to address. Measuring progress allows to gauge the effectiveness of the campaign and measures tangible outcomes against success metrics, helping to refine strategies as needed and maintain momentum.



1. DEFINE YOUR
SUCCESS METRICS.

The success metrics should be measurable, specific, and aligned with the campaign's objectives. Here are three key aspects to consider:

- **Knowledge** – How aware are households about waste segregation? For example, do they know the difference between wet and dry waste, or the importance of recycling?
- **Attitude** – What are the perceptions and attitudes of residents toward waste segregation? Are they inclined to change behaviors if provided with tools and resources?
- **Action** – What are the current waste segregation rate? How consistently are households sorting waste at source?

Pro Tip:
Keep success metrics simple, but relevant. The more specific and measurable they are, the easier it will be to track progress and measure results.



2. CREATE A
MONITORING
FRAMEWORK.

This will guide the data collection process and ensure consistency in measurement. Consider the following:

- **What are you measuring?**
Whether it's segregation rates, knowledge improvement, or change in attitudes, list out indicators that align with your success metric – how aware are households about waste segregation? For example, do they know the difference between wet and dry waste, or the importance of segregation?

- **How will you measure it?**
Define data collection methods (e.g., surveys, observation, or interviews). Ensure that these are simple and accessible to both your team and participants.

Pro Tip:
Consider using digital tools or simple data collection apps to improve collection and documentation efficiencies and accuracy.

STEP 4: DESIGN CAMPAIGN COMMUNICATION &
PREPARE TO ACTIVATE

This is one of the most critical steps of the campaign. Communication is the heart of everything the campaign aims to achieve as it shapes what message is delivered and how.

1. PREPARE A COMPELLING
COMMUNICATION
FRAMEWORK.

This should define the key messages and tailor them to the local context based on insights gathered from the baseline study.

Pro Tip:
Using findings from the baseline study, including qualitative insights can add to the impact of your campaign communication ensure that it fits the local realities and needs.



2. DEVELOP AND ACTIVATE THE YOUTH AMBASSADOR PROGRAM.

Mobilize young students through a formal internship program to conduct the door-to-door engagements with households and delivering the campaign on ground.

Here are simple steps to create your own Youth Ambassador Program:

- **Develop an internship** with a clear value proposition for students, such as gaining hands-on experience in community engagement, strengthening their resumes, and developing key skills like communication and project management.
- **Build in clear expectations** with respect to their role, time commitment required, the duration of the program, and what they will receive in return (stipend, certificates, etc.).
- **Identify and partner with youth platforms, students organisations and local colleges** that can help you socialise the program on their platforms and networks.
- **Use both online and offline channels to activate the program** and reach potential students. Employ social media, flyers, college newsletters, and youth forums.
- **Share formal offer letters and create a cohort of students** to onboard them into the program.

3.CONDUCT AN ONBOARDING WORKSHOP AND TRAININGS FOR YOUTH AMBASSADORS.

Host interactive, in-person training workshops. Gauge where students are in terms of their understanding of the waste problem, importance of segregation and communication skills. Engage them in rigorous trainings, including role-playing scenarios to build their confidence.

4. DEVELOP TRAINING MODULES FOR HOUSEHELPS AND HOUSEKEEPING STAFF.

5. HIRE CAPACITY BUILDING TRAINERS OR TRAIN THE TRAINERS.

6. ONBOARD HOUSEHOLDS, HOUSING SOCIETIES, AND RWAs.

Secure buy-in from relevant stakeholders for participation align on the timing, logistics, and campaign activities.

7. CREATE A ROSTER PLAN FOR YOUTH AMBASSADORS.

Create a team of two Youth Ambassadors each, and tag them to households or housing societies that they are expected to cover. Create a roster plan for them and share it in advance so they can manage their time commitments.

Pro Tip: Build in flexibility in the plan to accommodate last-minute adjustments and absenteeism to ensure the campaign stays on track without disruptions.

STEP 5: ACTIVATE THE CAMPAIGN

This step is where your campaign strategy and preparations turn into on-ground action.



1. DOOR-TO-DOOR ENGAGEMENT WITH HOUSEHOLDS.

This should be in a conversational and interactive format, use props and materials to make the engagement relatable and engaging. The goal is to spark curiosity and conversations about waste segregation, so avoid one-sided communication. Whenever possible, include househelps in these engagements.

A day in the campaign should ideally look like this:

Report at a planned location	<ul style="list-style-type: none">• Ensure Youth Ambassadors gather atleast 15 mins before the campaign activities begin on-ground at a pre-decided location• Ensure each team has two Youth Ambassadors
Huddle for a briefing	<p>Cover the following:</p> <ul style="list-style-type: none">• Teams are familiar with each other, and know their target households and expected coverage• All props are kept handy• Revise the key messaging and communication• Esure that each team has sufficient leave behinds for each household that they are expected to cover• There is alignment between each team on the flow of conversation with households• Address concerns, questions from the students before they begin
Door-to-door engagements	
Huddle for a debriefing	<ul style="list-style-type: none">• Gather after the completion of campaign activities• Collect and record feedback: discuss experience, gather insights on residents' responses and queries• Stress on key successes: celebrate positive interactions or impactful moments encountered during the campaign and record them• Address challenges: discuss any difficulties faced and suggest improvements for future engagements• Reinforce campaign's objective and the importance of Youth Ambassadors' role



2. DEPLOY COMMUNICATION COLLATERALS.

In and around the households at strategic points of influence where residents can see them. This is will create a recall for the campaign, and reinforce the messaging.

3. CONDUCT TRAINING OF HOUSEHELPS AND HOUSEKEEPING STAFF.

Keep the training relatable by using real-life examples that connect to their daily experiences with managing waste. Use local language wherever possible to ensure clarity and comfort.

4. SEND DIGITAL REMINDERS TO REINFORCE WASTE SEGREGATION AND RECALL OF THE CAMPAIGN.



STEP 6: MEASURE WHAT MATTERS – CONDUCT ENDLINE STUDY

Once the campaign is completed, conduct an endline study to measure the effectiveness of campaign interventions and track progress against the baseline. This study will help assess tangible outcomes on whether the campaign successfully drove the intended behavior change and help to identify areas for improvement.

By comparing the baseline and endline data, you can demonstrate tangible results, adjust future campaigns, and showcase the overall impact.



Scan this to customize and download ready-to-use templates and communication materials for your behavior change campaign

References

Chase India Report on Circular Economy Startups

Startups Accelerating Circular Economy in India. Chase India, 2022.

- Available at: chase-india.com/media/qqfc0xyh/startup-accelerating-circular-economy-report-revised.pdf

UNCTAD Report on Circular Economy Principles in India

Circular Economy Principles Could Help India Realize \$624 Billion by 2050. UNCTAD, 2020.

- Available at: unctad.org/press-material/circular-economy-principles-could-help-india-realise-624bn

FICCI on Circular Economy Investment Potential Circular Economy Can Unlock \$4.5 Trillion in Global Market by 2030. FICCI, 2021.

- Available at: ficci.in/api/press_release_details/3431

Indore. Indore Smart City Portal.

- Available at: indoresmartcity.org/

Inc42.

The Future of Circular Economy: Startup Investment Trends and Predictions." Inc42, August 14, 2023.

- Available at: inc42.com/resources/the-future-of-circular-economy-startup-investment-trends-and-predictions/

Times of India Blogs

The Rise of the Indian Millennial. The Times of India, November 16, 2020.

- Available at: timesofindia.indiatimes.com/blogs/voices/the-rise-of-the-indian-millennial/

Central Pollution Control Board (CPCB)

Annual Report on Implementation of Solid Waste Management Rules, 2016. CPCB.

- Available at: cpcb.nic.in/

Indore Smart City

Overview of Waste Management Initiatives in Indore. Indore Smart City Portal.

- Available at: indoresmartcity.org/

Our Partners

This Toolkit would not have been possible without the invaluable contributions of the many organizations that helped bring it to life. Each partner, from conceptualization to execution, has played a vital role in building the resources, solutions, and narratives that make up this Toolkit. We extend our deepest gratitude for their unwavering support and collaboration.

Solid Waste Management teams of municipalities



Implementation Partners



Contributors



Program Communication



Toolkit Design & Development



Abbreviations

- BMC:** Brihanmumbai Municipal Corporation
- CEO:** Chief Executive Officer
- COO:** Chief Operating Officer
- CSMC:** Chhatrapati Sambhajnagar Municipal Corporation
- CSR:** Corporate Social Responsibility
- EPR:** Extended Producer Responsibility
- FMCG:** Fast Moving Consumer Goods
- FOMO:** Fear Of Missing Out
- HDPE:** High Density Polyethylene
- HUL:** Hindustan Unilever Limited
- MD:** Managing Director
- Mission LiFE:** Mission LiFEstyle for Environment
- MLP:** Multi-Layer Plastic
- MRF:** Material Recovery Facility
- NGO:** Non-Governmental Organization
- OHS:** Occupational Health and Safety
- PET:** Polyethylene Terephthalate
- PPP:** Public-Private Partnership
- RWA:** Resident Welfare Association
- SALG:** Start A Little Good
- SGD:** Sustainable Development Goal
- SBI:** State Bank of India
- TPD:** Tonnes per day
- UNDP:** United Nations Development Programme

Disclaimer

This Toolkit is designed to be a resource that compiles best practices, innovative solutions, and key learnings to design a holistic and inclusive circularity program in India. It offers strategies, replicable frameworks, and actionable insights that have succeeded in different contexts. These can be adopted for any waste management program. Users are strongly encouraged to adopt these basis their evolving contexts.

It is essential to note that while we have made efforts to share best practices and processes, HUL and it's partners cannot be held liable for any inaccuracies, errors, or consequences arising from the use of the information presented in this document. Furthermore, all content, including text, images, and other media, is the intellectual property of HUL and should not be reproduced or distributed without prior permission. For any media related query, please contact mediacentre.hul@unilever.com

For any inquiries or clarifications regarding the content of this document, please contact Ruchita.raicha@unilever.com



EXPLORE THE
TOOLKIT ONLINE

