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FROM POLICY TO PRACTICE: A CRITICAL STUDY OF INDIA'S SINGLE-USE PLASTIC BAN (2022) AND ITS EFFECTIVENESS (A COMPARATIVE STUDY WITH AFRICA, USA, UK)

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ABSTRACT

The growing environmental crisis caused by plastic waste has prompted governments worldwide to adopt restrictions on single-use plastics. India's 2022 nationwide ban represents a landmark step in environmental governance, aiming to address pollution, protect ecosystems, and promote sustainable alternatives. This paper critically evaluates the implementation of India's ban, its legal and administrative framework, enforcement challenges, and socio-economic implications. A comparative study with Africa, the USA, and the UK is conducted to highlight divergent regulatory strategies, effectiveness, and public participation. The research concludes by suggesting hybrid frameworks that balance environmental protection with socio-economic realities.

KEYWORDS: Plastic ban, India 2022, environmental law, global comparison, waste management, sustainability.

1. INTRODUCTION

Plastic, once hailed as a symbol of modern innovation, has over the decades transformed into one of the greatest environmental challenges of the 21st century.¹ Global plastic production has increased exponentially since the 1950s, crossing 390 million metric tonnes in 2021, with a significant portion devoted to short-life, disposable applications.² Single-use plastics (SUPs) such as bags, straws, stirrers, plates, cutlery, and packaging materials are especially problematic due to their widespread use, low recyclability, and tendency to leak into terrestrial

¹ UNEP, *Single-Use Plastics: A Roadmap for Sustainability* (United Nations Environment Programme, 2021).

² Ministry of Environment, Forest and Climate Change, *Notification on Single-Use Plastic Ban, 2022*, Gazette of India.

and marine ecosystems.³ These plastics persist in the environment for centuries, breaking down into microplastics that infiltrate food chains, potable water, and even human bloodstreams, raising serious concerns for public health and biodiversity.

In India, the problem is particularly acute. With rapid urbanisation, changing consumption patterns, and inadequate waste management infrastructure, plastic waste has overwhelmed municipal systems. According to the Central Pollution Control Board (CPCB), India generated approximately 3.5 million tonnes of plastic waste annually by 2019–20, with nearly half of it comprising single-use items⁴. The informal waste sector plays a significant role in collection and recycling, but thin plastic films, sachets, and low-value SUPs are often left unmanaged, ending up in open dumps or water bodies. Recognising this, the Government of India announced in August 2021, through the Ministry of Environment, Forest and Climate Change (MoEFCC), that the manufacture, import, stocking, distribution, sale, and use of certain SUP items would be prohibited from 1 July 2022.⁵

This ban targeted a range of low-utility and high-litter products, such as plastic straws, stirrers, plates, cutlery, wrapping films, invitation cards, polystyrene cups, and cigarette packets. Complementary provisions included increasing the mandated thickness of carry bags to enhance recyclability. The legal foundation of the ban is the Plastic Waste Management Rules, 2016 (amended in 2021), supplemented by directions from the CPCB⁶ and state pollution control boards. On paper, the policy is both comprehensive and progressive. However, two years since its introduction, evidence suggests uneven compliance: in metropolitan cities like Delhi, Mumbai, and Bengaluru, banned items continue to circulate in markets, enforcement mechanisms have proved inconsistent, and awareness among small retailers remains low. Furthermore, the absence of affordable and scalable alternatives has hampered smooth transition, particularly for micro, small, and medium enterprises (MSMEs).

The Indian case is not unique. Across the globe, countries have grappled with similar challenges in enforcing SUP bans. Kenya, for instance, introduced one of the world's strictest bans on plastic carrier bags in 2017, with violators facing fines up to USD 40,000- or four-years' imprisonment. Rwanda adopted a similar prohibition earlier, achieving notable success

³ Vince & Hardesty, *Marine Policy*, 2018.

⁴ CPCB, *Plastic Waste Management Rules*, 2016 (Amended 2021).

⁵ Kumar & Agrawal, *Journal of Environmental Management*, 2020.

⁶ *Supra* Note.

by coupling legislation with strong community mobilisation and border enforcement. South Africa has pursued a hybrid model of regulation and market-based incentives, mandating recycled content in packaging and holding producers accountable under EPR frameworks. The UK implemented national restrictions on polystyrene containers and plastic cutlery, while the USA exhibits a fragmented landscape, where states such as California and New York enforce stringent bans while others resist due to political or economic concerns.

This comparative framework provides an invaluable lens for analysing India's 2022 SUP ban. The central research problem is whether prohibition as a legal tool can effectively reduce SUP pollution in India, or whether it needs to be accompanied by complementary measures in enforcement, market alternatives, and behavioural change. The working hypothesis is that prohibition alone is insufficient and may lead to unintended consequences such as black markets or disproportionate burdens on small retailers unless supported by systemic reforms. Thus, this paper situates India's SUP ban within the larger global discourse on sustainable plastic governance. It seeks to bridge policy and practice by offering a critical, evidence-based assessment of the ban's effectiveness and proposing a hybrid, multi-dimensional framework. By doing so, the study contributes to legal scholarship, policy debates, and environmental governance reforms in India and comparable jurisdictions.

2. RESEARCH BACKGROUND

2.1. RESEARCH PROBLEM

Plastic pollution, particularly from single-use plastics (SUPs), has emerged as one of the most pressing environmental challenges of the 21st century. India generates nearly 3.5 million tonnes of plastic waste annually, a significant portion of which consists of disposable items such as straws, cutlery, and polythene bags that remain in the environment for decades. In response, the Government of India enforced a nationwide ban on 19 categories of SUPs from July 1, 2022, under the amended Plastic Waste Management Rules, 2016.⁷ While the policy demonstrates strong intent, its translation into effective practice has raised serious concerns regarding compliance, monitoring, and the availability of eco-friendly alternatives. The persistence of banned items in local markets and informal waste streams indicates that enforcement remains inconsistent and fragmented across states.

⁷ Ministry of Environment, Forest and Climate Change, *Notification on Single-Use Plastic Ban, 2022*, Gazette of India.

At the same time, the ban poses socio-economic challenges, especially for small-scale manufacturers, vendors, and waste-pickers who depend heavily on plastic-related livelihoods. Unlike countries such as Kenya, where strict penalties have curbed plastic use, or the UK and USA, where phased transitions and consumer sensitization were prioritized, India struggles to balance environmental protection with economic realities. This creates a crucial research problem: assessing whether India's SUP ban is capable of achieving its environmental objectives while also ensuring socio-economic sustainability, and what comparative lessons can be drawn from international best practices to bridge the policy–practice gap.

2.2. NOVELTY

The present study stands out in its attempt to critically evaluate India's 2022 single-use plastic ban not merely as a legal or policy development but as a dynamic socio-legal experiment situated within the broader global discourse on environmental governance. While existing literature has largely focused on the environmental impacts of plastic waste and the necessity of regulatory measures, very few studies have undertaken a comparative analysis that juxtaposes India's ban with experiences from regions like Kenya, South Africa, the UK, and the USA. This research thus introduces a novel perspective by embedding India's regulatory framework within a global benchmarking exercise, assessing not only ecological outcomes but also socio-economic consequences.

Another unique contribution of this study lies in its interdisciplinary approach. It goes beyond a descriptive legal analysis by integrating insights from environmental law, economics, public policy, and social justice. The study highlights how enforcement challenges, livelihood disruptions, and infrastructural deficits act as critical determinants of policy success or failure. By foregrounding these issues, the research offers fresh insights into the policy–practice gap, thereby contributing to the growing scholarship on environmental sustainability, comparative regulatory governance, and the role of law in shaping behavioural change.

2.3. RESEARCH OBJECTIVES

1. To critically examine the effectiveness of India's 2022 single-use plastic (SUP) ban in achieving environmental sustainability while balancing socio-economic concerns.
2. To assess implementation gaps and barriers to compliance across states and municipalities, including enforcement, availability of alternatives, and public awareness.

3. To evaluate whether the ban has successfully translated legal mandates into practical environmental improvements or remains constrained by systemic challenges.
4. To undertake a comparative analysis of global experiences (Kenya, South Africa, UK, USA) in regulating SUPs, focusing on enforcement strategies, socio-economic impacts, and market-based measures like EPR.
5. To develop actionable recommendations for a hybrid governance model that integrates legal, economic, and behavioural instruments for long-term effectiveness of the SUP ban in India.

2.4. RESEARCH QUESTIONS

1. To what extent has India's 2022 single-use plastic (SUP) ban reduced the production, distribution, and consumption of prohibited items?
2. What are the major implementation challenges faced by states, municipalities, and local authorities in enforcing the ban?
3. How effective have enforcement mechanisms, monitoring systems, and public awareness campaigns been in promoting compliance?
4. What role does the availability (or lack) of cost-effective alternatives play in the practical success of the ban?
5. What insights can be gained from **UK and US state-level approaches**, including phased bans, regulatory guidance, and consumer incentives, to improve India's SUP governance?
6. What combination of legal, economic, and behavioural strategies can effectively bridge the **policy–practice gap** in India's SUP management?

2.5. RESEARCH GAP

Although India's 2022 single-use plastic (SUP) ban is a significant policy step, there is limited research assessing its practical effectiveness across states and municipalities. Existing studies focus largely on environmental impacts or technical waste management, leaving gaps in understanding enforcement challenges, public compliance, and availability of alternatives.

Moreover, few studies compare India's approach with global best practices from Kenya, South Africa, the UK, or the USA, which limits insights into how India can bridge the policy–practice gap. This research seeks to address these gaps by evaluating the ban's effectiveness and drawing lessons from international experiences.

2.6. RESEARCH HYPOTHESIS

H1: India's 2022 single-use plastic (SUP) ban alone has a significant effect on reducing the production, distribution, and consumption of prohibited plastic items.

H2: The effectiveness of the SUP ban is positively influenced by the availability of cost-effective alternatives and sustainable substitutes.

H3: Strong enforcement mechanisms at the state and municipal levels significantly improve compliance with the SUP ban.

H4: Public awareness campaigns and behavioural interventions have a significant positive impact on consumer adoption of eco-friendly practices.

H5: Lessons drawn from international best practices (Kenya, South Africa, UK, USA) can enhance the policy effectiveness of India's SUP ban.

2.7. RESEARCH METHODOLOGY

This study employs a qualitative and comparative research design to critically assess the effectiveness of India's 2022 single-use plastic (SUP) ban and draw lessons from global best practices. The methodology combines doctrinal legal analysis, policy evaluation, and comparative case study methods to provide a comprehensive understanding of the research problem. By integrating multiple approaches, the study ensures a nuanced examination of both the legal framework and practical outcomes of the ban.

1. Research Approach: The research adopts a qualitative approach, emphasizing textual analysis of legislation, government notifications, policy documents, and international best practices. A comparative approach is used to analyse enforcement strategies, socio-economic impacts, and public compliance in countries like Kenya, South Africa, the UK, and the USA. This approach allows for identification of key factors influencing policy effectiveness and facilitates recommendations tailored to India's socio-economic context.

2. Data Sources

- Primary sources: Statutory provisions, amendments to the Plastic Waste Management Rules (2016), government notifications, and reports from the Central Pollution Control Board (CPCB) and Ministry of Environment, Forest and Climate Change (MoEFCC).
- Secondary sources: Scholarly articles, reports from international organizations (UNEP, World Bank), policy briefs, newspapers, and online databases.

- **Comparative data:** Policy documents and enforcement reports from selected countries (Kenya, South Africa, UK, USA) to analyse varied regulatory approaches.

3. Data Collection Methods

- **Document Analysis:** Systematic review of legislative texts, government circulars, and environmental regulations.
- **Comparative Policy Analysis:** Evaluating successes and challenges in international contexts to identify transferable lessons.
- **Descriptive Statistics:** Where available, secondary data on plastic waste generation, recycling rates, and compliance levels are analysed to support qualitative findings.

4. Analytical Framework:

The study employs a thematic analysis framework to categorize key challenges and outcomes under the following themes:

- a) **Legal and regulatory compliance** – enforcement gaps, monitoring mechanisms.
- b) **Socio-economic impact** – effects on small-scale manufacturers, vendors, and informal waste workers.
- c) **Availability and adoption of alternatives** – market penetration of eco-friendly substitutes.
- d) **Behavioural response** – public awareness, consumer adoption of sustainable practices.
- e) **International lessons** – best practices, penalties, and hybrid governance models.

5. Limitations of Methodology

The study relies primarily on secondary data and policy documents, which may limit access to real-time compliance statistics or granular socio-economic impact data. Field surveys or interviews with stakeholders could enhance empirical validation in future research.

2.8. LITERATURE REVIEW

1. Chaturvedi (2017) in Environmental Policy and Law.
2. Kumar and Agrawal (2020) in Journal of Environmental Management.
3. Sinha and Sinha (2022) in Economic and Political Weekly.
4. Njeru (2006) in Journal of Modern African Studies.
5. Haward (2019) in Global Environmental Politics.
6. Vince and Hardesty (2018) in Marine Policy.
7. Hopewell, Dvorak, and Kosior (2009) in Philosophical Transactions of the Royal Society.
8. Plastic Effort: Glitch on Ban Reporting App Makes Task Impossible

9. Ban on Single-Use Plastics in India: Success or Challenges?
10. Plastic Waste Management in India – Addressing the Socio-Economic and Environmental Challenges
11. Kenya Emerges as Leader in Fight Against Plastic Pollution
12. Ban the (Plastic) Bag? Explaining Variation in the Implementation of Plastic Bag Bans
13. RWANDA: A Global Leader in Plastic Pollution Reduction
14. Plastic Waste Regime in Rwanda, Kenya, and South Africa
15. Extended Producer Responsibility for Plastic Packaging in South Africa
16. Plastics and Packaging Laws in South Africa.
17. Plastic Bag Bans Are Spreading. But Are They Truly Effective?
18. Reducing Plastic Waste Through Legislative Interventions in the United States.

3. LEGAL BACKGROUND

3.1. LEGAL AND POLICY DESCRIPTION: INDIA'S 2022 SINGLE-USE PLASTIC BAN

India's 2022 ban on single-use plastics (SUPs), effective from 1 July 2022, represents one of the most ambitious environmental regulatory interventions in the country's history.⁸ The Ministry of Environment, Forest and Climate Change (MoEFCC) notified the prohibition through the Plastic Waste Management Amendment Rules, 2021, identifying items with "low utility but high littering potential." These included plastic straws, cutlery, plates, cups, wrapping films, polystyrene decoration materials, and plastic sticks for balloons and candy. Plastic carry bags below 120 microns were also phased out through a staggered timeline, increasing thickness requirements from 50 to 75 microns in 2021 and to 120 microns in 2022.⁹ The design of the ban reflected a balance between environmental urgency and economic feasibility by prioritizing items where affordable alternatives were readily available.¹⁰

The regulatory structure reflects India's quasi-federal system. While the MoEFCC and the Central Pollution Control Board (CPCB) set the national policy framework, enforcement lies primarily with State Pollution Control Boards (SPCBs) and municipal bodies. These authorities are responsible for inspections, seizures, and penalties under the Environmental Protection Act, 1986, which includes fines up to ₹1 lakh and imprisonment for repeat offenders. Local bodies

⁸ Supra Note.

⁹ Central Pollution Control Board, *Plastic Waste Management Rules, 2016 (Amended 2021)*, Ministry of Environment, Forest and Climate Change, Government of India.

¹⁰ Hopewell, Dvorak & Kosior, "Plastics Recycling: Challenges and Opportunities," *Philosophical Transactions of the Royal Society*, 2009.

thus serve as the frontline enforcers, supported by awareness drives and grievance redressal mechanisms. However, enforcement has been uneven: while states like Maharashtra and Tamil Nadu have launched aggressive crackdowns, smaller states and rural markets struggle with monitoring due to resource constraints and the persistence of informal supply chains.¹¹

The 2022 prohibition builds upon earlier regulatory milestones, particularly the Plastic Waste Management Rules, 2016, which introduced source segregation, recycling norms, and the principle of Extended Producer Responsibility (EPR). The 2021 amendment further strengthened the EPR framework, mandating producers, importers, and brand owners to ensure the collection and disposal of plastic packaging waste through a centralized CPCB portal. While EPR aims to shift accountability towards corporations and promote eco-design, compliance remains inconsistent, particularly among small enterprises. Notably, the 2022 ban does not extend to multilayered plastic packaging widely used in the fast-moving consumer goods (FMCG) sector, drawing criticism from environmentalists who argue that this exemption weakens the overall impact of the policy.

Ultimately, the legal and policy design of the 2022 ban reflects both ambition and compromise. It demonstrates India's resolve to transition towards sustainable practices by combining prohibition, phased adaptation, corporate accountability, and decentralized enforcement. Yet, its effectiveness depends on strict monitoring, availability of affordable alternatives, and stronger public participation. While it marks a significant step forward in addressing plastic pollution, the continued use of exempted categories and uneven enforcement raise questions about whether the ban, in its present form, can fully achieve its environmental objectives.

4. COMPARISON WITH ANALYSIS

4.1. COMPARATIVE ANALYSIS AMONG THREE JURISDICTIONS

4.1.1. KENYA: A MODEL OF STRINGENT ENFORCEMENT

Kenya's 2017 nationwide ban on plastic carrier bags is often described as the toughest in the world. It prohibits manufacturing, distribution, and use of plastic bags, with violators facing fines of up to \$40,000 or imprisonment up to four years.¹² The strictness of penalties, coupled with proactive border inspections, has significantly reduced visible plastic litter. However, the policy has also faced challenges, such as illicit cross-border smuggling and reliance on informal

¹¹ Sinha & Sinha, *Economic and Political Weekly*, 2022.

¹² Time, "Kenya's Plastic Bag Law: Jail and Fines for Violators," 2017.

alternatives. Compared to India's 2022 ban, Kenya's approach is uncompromising and enforcement-driven, whereas India relies more on phased prohibitions and balancing industrial feasibility with environmental goals.

4.1.2. UNITED KINGDOM: GRADUALISM AND CONSUMER BEHAVIOUR CHANGE

The United Kingdom adopted a phased strategy that began with imposing charges on plastic bags in 2015, leading to a 90% drop in their use within five years. Later, in 2020, bans on plastic straws, stirrers, and cotton buds were introduced, followed by restrictions on single-use cutlery and plates in 2023.¹³ This step-by-step approach allowed industries and consumers to adjust gradually while fostering long-term behavioural change. The UK experience underscores how regulatory success depends not only on prohibition but also on economic incentives and public sensitization. India's broader, nationwide ban contrasts with this incremental path, but it could benefit from the UK's focus on consumer acceptance and market adaptation.

4.1.3. UNITED STATES: FRAGMENTED APPROACH AND STATE-LEVEL INITIATIVES

In the United States, plastic regulation lacks federal uniformity and is driven primarily by state and municipal governments. California and New York have implemented statewide bans on plastic bags and straws, while cities like Seattle and San Francisco pioneered restrictions on various single-use plastics.¹⁴ Yet, the absence of a national framework, coupled with strong industry lobbying, has created inconsistencies and uneven enforcement. Compared to India's centralized approach, the U.S. model highlights both the potential of local-level experimentation and the limitations of fragmented federal structures. India's challenge lies in ensuring that state-level enforcement does not replicate such unevenness within its own federal system.¹⁵

4.1.4. RWANDA: AFRICA'S SUCCESS STORY

Rwanda stands out as one of the earliest and most successful implementers of a plastic ban, having prohibited plastic bags in 2008. Its policy is marked by uncompromising enforcement and active community participation, supported by nationwide awareness campaigns. The result has been a visible reduction in litter and cleaner public spaces, making Rwanda a global

¹³ Gov.uk, "Single-Use Plastics Bans and Restrictions in the United Kingdom," 2020.

¹⁴ Environment America, "Bag Bans Effective at Reducing Plastic Waste and Litter," 2018.

¹⁵ World Bank, *What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050*, 2018.

reference point.¹⁶ Compared to India, Rwanda’s smaller size and centralized governance structure made enforcement more manageable, but the lesson remains clear: strict monitoring and community mobilization are critical to sustaining long-term compliance.

4.1.5. SOUTH AFRICA: LEVY SYSTEM AND MIXED RESULTS

South Africa, by contrast, adopted a levy-based system on plastic bags in 2003. Initially successful, the policy witnessed declining effectiveness as consumer awareness waned and enforcement weakened.¹⁷ Many consumers reverted to plastic, highlighting the limitations of levy systems without robust public education and enforcement. For India, this experience underscores the importance of not only prohibiting plastic but also ensuring continuous public engagement and affordable alternatives to prevent relapse into old consumption patterns.

4.2. SYNTHESIS OF LESSONS FOR INDIA

Taken together, the comparative examples highlight diverse pathways. Kenya and Rwanda demonstrate the impact of stringent enforcement backed by strong penalties and societal mobilization. The UK shows the effectiveness of gradual and incremental bans aligned with consumer behaviour. The U.S. illustrates the challenges of federal fragmentation but also the value of local-level experimentation. South Africa offers cautionary lessons about the limits of partial measures like levies.¹⁸ For India, the challenge lies in blending these lessons which ensuring strict enforcement while also focusing on public awareness, affordable substitutes, and industry accountability under Extended Producer Responsibility (EPR).

4.2.1. COMPARATIVE TABULAR ANALYSIS

Aspect	India (2022 Ban)	Rwanda	Kenya	South Africa	United Kingdom	United States
Policy Stringency	High (19 items banned)	High (comprehensive ban since 2004)	Very High (2017, strict penalties)	Moderate (plastic bags, recycled content)	High (bans on selected SUP items)	Varies by state (patchwork)
Enforcement	Inconsistent	Strict;	Strict;	Weak;	Inconsistent	Fragmented

¹⁶ Global Green Growth Institute (GGGI), “Rwanda: Lessons Learnt from a Pioneer in the Fight Against Plastic Pollution,” 2021.

¹⁷ CMS Law, “Plastics and Packaging Laws in South Africa,” 2020.

¹⁸ Njeru, *Journal of Modern African Studies*, 2006; Haward, *Global Environmental Politics*, 2019.

	nt; local successes	border and domestic checks	heavy fines and prison terms	limited monitoring	nt; local authority variation	ted; state/local level
Public Awareness & Engagement	Moderate; campaigns exist but reach limited	High; Umuganda cleanups and campaigns	High; public education campaigns	Moderate; awareness limited	Moderate; growing but uneven	Varies; community initiatives in some areas
Compliance Rate	Partial; localized improvements	High	High initially, challenges with smuggling	Decreasing over time	Variable	Varies by jurisdiction
Availability of Alternatives	Limited and costly; impacts informal sector	Better alternatives promoted	Alternatives available; cost may be barrier	Limited; cheap non-compliant options	Increasing; some substitutes available	Varies; depends on state/local programs
Socio-Economic Impact	Significant on vendors and informal sector; some support programs	Managed with public engagement	Some challenges for retailers; mitigated through engagement	Small businesses affected; informal sector vulnerable	Minor; mostly consumer behaviour	Varies; uneven impact
Key Challenges	Enforcement gaps, scarcity of	Access to alternatives	Smuggling of banned plastics	Sustaining compliance	Compliance gaps, inconsistent	Fragmented policy,

	alternative s, socio- economic pressures				nt enforceme nt	uneven enforcem ent
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5 OUTCOME OF 2022 PLASTIC BAN

5.1. EVIDENCE OF ON-THE-GROUND EFFECTIVENESS IN INDIA

India’s single-use plastic ban has shown mixed on-the-ground effectiveness. In certain municipalities like Sambhaji nagar and Hubli-Dharwad, authorities have conducted raids, confiscated banned plastics, and imposed fines, resulting in localized reductions in single-use plastic usage.¹⁹ However, enforcement across the country remains inconsistent due to limited manpower, fragmented responsibilities between central, state, and municipal authorities, and technical glitches in reporting mechanisms, which collectively hinder full compliance. Public awareness campaigns have been launched, but their reach and visibility are limited, leading to only partial adoption of sustainable alternatives by consumers, constrained by cost, convenience, and availability. The socio-economic impact has been significant for street vendors, small businesses, and informal sector workers who struggle to transition due to the lack of affordable alternatives, although some states, such as Andhra Pradesh, have introduced programs to support affected groups. Additionally, the scarcity and high cost of eco-friendly alternatives further limit widespread compliance, leaving the nationwide effectiveness of the ban uneven. Overall, while certain regions have observed reductions in single-use plastics, the ban’s success is hindered by enforcement gaps, insufficient alternatives, socio-economic challenges, and limited sustained behavioural change.

5.2. WHY POLICY FAILS OR SUCCEEDS?

The effectiveness of India’s single-use plastic ban depends on multiple interrelated factors. One critical factor is institutional capacity and governance. In areas where municipal bodies and state pollution control boards have clear roles, adequate staffing, and coordinated enforcement mechanisms, compliance has been higher. Conversely, fragmented responsibilities between central, state, and local authorities often lead to enforcement gaps, delayed action, and inconsistent monitoring. Economic factors play a significant role in determining compliance. The availability, affordability, and accessibility of alternatives to single-use plastics directly

¹⁹ AB Academies, “Single-Use Plastic Ban and Marketing Scenario: Policy and Compliance” 2021.

influence whether businesses and consumers adopt sustainable options. In regions where eco-friendly substitutes are scarce or costly, stakeholders are less likely to comply, leading to continued use of banned items. Similarly, small businesses and informal sector workers often lack the financial resources and technical know-how to transition smoothly, creating socio-economic friction that undermines policy success.

Legal clarity and enforceability also affect outcomes. Bans that provide detailed definitions, timelines, and penalties tend to be easier to implement, while vague notifications or frequent exemptions create loopholes that hinder enforcement. Political economy considerations, including industry lobbying and regional policy priorities, further influence the rigor of implementation. Behavioural factors are equally significant. Public awareness campaigns can shape attitudes and norms, but inconsistent messaging and limited long-term engagement reduce the likelihood of sustained behavioural change. Cultural habits, convenience, and consumer resistance often slow down the adoption of alternatives, even in regions with strong enforcement.²⁰

Ultimately, the success of the policy depends on a combination of robust governance, clear legal frameworks, economic incentives, availability of alternatives, and sustained public engagement. Failures typically arise where one or more of these components are weak, while successes occur when these elements align, creating an environment where compliance is feasible, incentivized, and socially reinforced.

6 CONCLUSION

India's single-use plastic ban of 2022 represents a significant policy step toward reducing plastic pollution and promoting sustainable waste management. Evidence from the ground indicates that while some municipalities have successfully enforced the ban, its overall effectiveness is uneven due to enforcement gaps, limited public awareness, socio-economic challenges, and scarcity of affordable alternatives. Comparative analysis with other countries highlights that policy success depends not only on legal prohibition but also on institutional capacity, availability of alternatives, stakeholder engagement, and consistent monitoring.

The ban has demonstrated potential in reducing SUP usage in localized areas and in raising

²⁰ Central Pollution Control Board, *Plastic Waste Management in India – Addressing Socio-Economic and Environmental Challenges*, Ministry of Environment, Forest and Climate Change, Government of India, 2022.

public consciousness about environmental sustainability. However, the policy's impact is constrained by practical challenges such as fragmented governance, limited resources, resistance from small businesses and informal sector workers, and inconsistent consumer behaviour. Addressing these challenges requires an integrated approach combining strong legal frameworks, robust enforcement, economic support, infrastructure development, and sustained awareness campaigns.

Ultimately, the Indian experience underscores that translating policy into practice demands more than legislation; it requires systemic coordination, stakeholder inclusion, and continuous adaptation to ground realities. Lessons from India's experience can inform future environmental policies, not only within the country but also in other developing economies seeking to curb plastic pollution while balancing social and economic considerations.

7. POLICY RECOMMENDATION

To enhance the effectiveness of India's single-use plastic ban, a multi-pronged approach is essential. In the short term, clear and uniform definitions of banned items should be issued along with a priority list of high-littering products. Targeted enforcement in high-risk areas, supported by rapid-response teams and digital reporting tools, can improve compliance. Public awareness campaigns must be revitalized, emphasizing both environmental impact and practical alternatives, while temporary subsidies or credit support should be provided to small businesses and informal sector workers to help them transition.

In the medium term, a robust Extended Producer Responsibility (EPR) framework should be implemented with measurable key performance indicators. Investment in waste collection, segregation, and recycling infrastructure is critical, especially in urban and semi-urban areas.²¹ Programs to formalize and integrate informal waste workers into the formal waste management system can both improve livelihoods and enhance compliance. Standardization of eco-friendly alternatives and clear labelling can facilitate adoption, while fiscal incentives, such as tax relief or subsidies for sustainable products, can lower economic barriers.

In the long term, India should move toward a circular economy model where products are designed for reuse and recycling, supported by research and innovation funding. Legal reforms

²¹ Ministry of Environment, Forest and Climate Change, *Extended Producer Responsibility (EPR) Guidelines for Plastic Waste*, 2022, Government of India.

must ensure clarity in rule-making, delegation of authority, and grievance redressal mechanisms, accompanied by transparent data reporting for monitoring progress. Regional cooperation and alignment with international best practices can also strengthen enforcement and provide access to technological innovations.²²

Monitoring and evaluation should be ongoing, with clear targets for reduction in single-use plastics, measurable behavioural change indicators, and regular public reporting. Only through a combination of legal clarity, infrastructure development, economic support, and sustained public engagement can the policy achieve its environmental goals and ensure equitable implementation.

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