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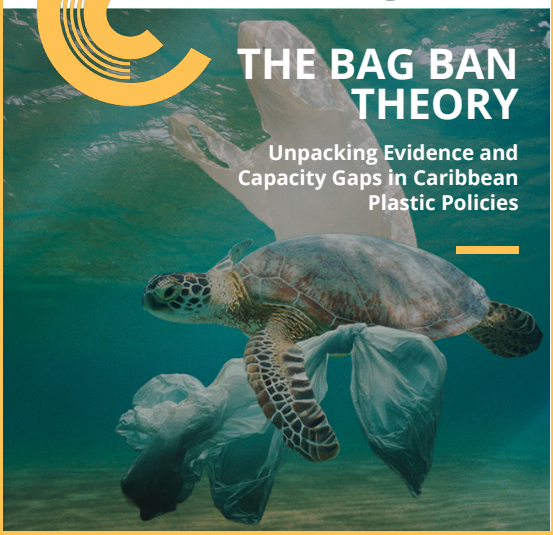
THE BAG BAN THEORY

Unpacking Evidence and Capacity Gaps in Caribbean Plastic Policies



This report examines the effectiveness of single-use plastic bag bans in Antigua & Barbuda, Barbados, and Jamaica. These countries introduced bans with the shared aim of reducing single-use plastic circulation and litter, alongside broader objectives such as protecting marine ecosystems, reducing flood and health risks, and positioning themselves as regional leaders in sustainability. Each relied heavily on consumer behaviour change and substitution with alternatives, supported to varying degrees by public awareness campaigns and exemptions for food safety.

The analysis found that while some visible progress has been achieved, particularly in curbing plastic bag use in formal retail sectors, the absence of systematic monitoring means the effectiveness of the bans cannot be determined with confidence. None of the jurisdictions established baseline indicators or monitoring mechanisms, leaving evaluations to rely on fragmented administrative data, retailer self-reports, and beach cleanup results. These proxies lack methodological integrity and cannot serve as reliable evidence of impact.

Plastics contribute to 3 percent of global emissions, and projections suggest it could rise to 19 percent by 2050 if current trends continue.

In Antigua & Barbuda, the share of plastics in landfills dropped from 20 percent in 2006 to four percent in 2017, though much of this decline preceded the 2016 ban. Government distribution of reusable bags and awareness campaigns supported compliance, and surveys suggested public awareness improved. Yet enforcement inland was uneven, smaller retailers continued distributing banned bags, and health indicators such as dengue incidence fluctuated independently of the ban.

In Barbados, the 2019 Control of Disposable Plastics Act banned a wide range of products and linked the measure explicitly to sustainability and global reputation. Plastics accounted for 12 percent of municipal waste in 2015, declining to three percent in 2021, but cleanup data from 2023 and 2024 still showed plastics making up over 70 percent of litter. A 2017 baseline recorded 21 percent of coastal litter as macroplastics, and by 2021 an estimated 131 tonnes of macroplastics and 177 tonnes of microplastics were still entering the sea. Promised standards for alternatives were not delivered, leaving biodegradable substitutes unregulated and sometimes environmentally harmful. Retailers reported reductions in bag use, but these were self-reported and not independently verified.

Jamaica phased in bans from 2019, targeting bags, straws, and polystyrene containers. International Coastal Cleanup data suggest a fall in plastic bag prevalence from 13

percent of collected waste in 2018 to six percent in 2021, followed by a rise to nine percent in 2022. Imports of plastics increased from US$191 million in 2015 to US$275 million in 2023, suggesting substitution into other plastics. Health proxy data showed that dengue incidence fluctuated considerably, with notable spikes in 2019 and 2023 and declines in the intervening years - patterns more closely linked to variations in rainfall and public health conditions than to the plastic ban itself. Enforcement was initially strong, with 52 prosecutions by the end of 2024, but activity has since declined, raising concerns about sustainability.

Biodegradable and compostable plastics have shown little environmental advantage over conventional bags: many do not degrade faster, and in landfills the lack of oxygen and sunlight prevents effective breakdown.

Across all three countries, the bans have reduced the most visible sources of plastic waste and raised public awareness, but their broader environmental and health impacts remain inconclusive. Plastics are still pervasive, substitutes are poorly regulated, and monitoring and enforcement are inconsistent. Achieving meaningful reductions in plastic pollution will require sustained enforcement, systematic data collection, and stronger regulation of alternatives.
To move from symbolic to substantive, governments must strengthen the design and implementation of plastic bans.

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Recommendations

1. **Establish systematic monitoring of plastics flows:** Ministries responsible for environment and trade should require quarterly importer and manufacturer reports on plastic bags and substitutes, while waste management authorities should conduct regular waste characterisation studies disaggregated by product type and make results public.

2. **Set and enforce standards for plastic alternatives:** National standards bodies should adopt internationally recognised benchmarks for biodegradable and compostable plastics, require independent testing, and publish annual lists of approved alternatives to guide importers, retailers, and consumers.

3. **Strengthen enforcement capacity:** Customs agencies should expand inspections to prevent imports of banned items, while environmental agencies should increase inland spot checks of retailers and informal markets, publishing annual compliance reports that detail inspections, breaches, and penalties imposed.

4. **Institutionalise monitoring of green procurement outcomes:** Annual reports should be tabled to Parliament on compliance and the costs and volumes of alternatives procured.

5. **Strengthen public education with measurable targets:** Campaigns should set clear targets—such as household adoption of reusable bags—and publish participation rates and outcomes.