Country profile

BANGLADESH

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Refill in Bangladesh remains deeply embedded in traditional, necessity-driven markets where bulk purchasing is a daily norm. Formal business models are just emerging, requiring new national safety standards and fiscal incentives to transition into mainstream retail.

SNAPSHOT ON REFILL IN BANGLADESH

No binding legal or policy instruments that sets reuse targets or directly regulate businesses adopting refill solutions.

Voluntary EPR scheme only.

National Plastic Action Partnership (NPAP) present in country.

At least two refill enterprises.

Brand commitments for refill.

Small range of products present in refill: *Mainly home care.*

No deposit return scheme in place.

1. Refill context

Refill and reuse practices are widely present in Bangladesh but are largely embedded in informal and necessity-driven consumption systems rather than formalised or branded business models. While behavioural familiarity with reuse is relatively high, structured refill solutions remain at an early stage of development and are not yet visible in mainstream retail markets.

Stakeholder focus group discussions conducted as part of this study indicate that existing refill practices are primarily concentrated in traditional markets and neighbourhood retail, particularly for essential goods such as cooking oil, grains, spices, and household products. These systems are driven by affordability and accessibility and enable consumers to purchase small quantities according to daily needs. However, they remain fragmented and are not positioned as formal circular business models.
Emerging refill initiatives remain limited and are often exploratory or small-scale, with private sector engagement still at an early stage. At the policy level, existing efforts focus mainly on plastic bans, material substitution, and recycling, with no specific legal or regulatory instruments targeting refill and reuse. While circular economy principles are increasingly reflected in national strategies, concrete incentives and implementation pathways to scale refill systems remain limited.

2. History of refill

Refill and reuse practices in Bangladesh are closely linked to long-standing patterns of resource efficiency and adaptive consumption shaped by economic constraints and high population density. These practices are embedded in daily routines as a practical strategy to manage limited income, storage space, and uneven access to formal retail.

Extending the life of products and packaging is common across many households. Studies indicate that plastic bags are frequently reused two to five times, while bottles, jars, and containers are repurposed for food storage, water, and other daily uses Islam, 2019. This reflects a strong culture of thrift and material retention, reinforced by income constraints and gaps in formal waste collection systems.

At the same time, rapid urbanisation and the growth of packaged consumer goods have contributed to rising plastic consumption and waste generation. For example, plastic waste in urban areas such as Dhaka has increased significantly alongside economic growth and changing consumption patterns World Bank, 2021. As modern retail expands, some traditional reuse practices are declining in certain segments, creating a dual system in which informal reuse behaviours coexist with increasing reliance on single-use plastics.

In recent years, growing public awareness of plastic pollution, together with increasing engagement from local organisations, development partners, and international initiatives, has begun to stimulate interest in more formal refill and reuse approaches. Pilot programmes and circular economy initiatives are emerging, particularly in urban areas, although the broader ecosystem remains largely informal and early-stage.

3. Policy landscape

Bangladesh faces growing challenges related to plastic pollution and waste management, driven by rapid urbanisation, population growth, and increasing consumption. Around 36% of plastic waste is informally recycled, while the remaining waste is often dumped, burned, or leaked into rivers and marine ecosystems ESDO, 2021. The informal sector alone is estimated to manage a significant portion of the country's recyclables, recycling approximately 15% of solid waste, without formal government support Amin & Selim, 2024.

Despite these constraints, Bangladesh has taken early steps to regulate plastic waste and promote circular economy principles. However, the policy focus has historically been on bans, material substitution, and recycling rather than scaling refill and reuse systems. At present, Bangladesh does not have a binding legal framework that directly promotes refill business models or establishes mandatory targets for reusable packaging.

Bangladesh Environment Conservation Act (1995)

A key regulation that established an important precedent in Bangladesh's plastic policy landscape was the Bangladesh Environment Conservation Act (1995), which was amended in 2002 to introduce a ban on the production and use of polyethylene shopping bags Mosaddek et al., 2025. This positioned Bangladesh as one of the first countries globally to regulate polyethylene bags and strengthened the national focus on upstream waste prevention.

While the legislation demonstrated strong political commitment, enforcement has been inconsistent and alternatives have not been systematically scaled Mosaddek et al., 2025. As a result, the ban contributed more to awareness and behavioural shifts than to the development of formal reuse or refill systems. Similar to other regulatory measures in the country, the emphasis has largely been on restricting problematic materials rather than building alternative delivery models.

Core waste legislation and extended producer responsibility (EPR)

The framework for EPR is currently in the early stages of development. Bangladesh has gradually strengthened its waste governance through the *Solid Waste Management Rules (2021)*, which introduce EPR principles specifically for waste management. The regulation mandates that producers take responsibility for managing post-consumer waste Mosaddek et al., 2025.

However, mechanisms to enforce producer accountability or any financial incentives for reuse systems remain underdeveloped. As a result, its impact on driving producer responsibility and scaling upstream circular business models remains limited, and has yet to significantly drive investments in reuse infrastructure or refill systems.

Sector-specific regulations with producer responsibility elements

Bangladesh has introduced sector-specific regulations related to waste and packaging that incorporate elements of producer responsibility. However, regulatory efforts have largely prioritised prohibition, material substitution, and end-of-life management without clear implementation pathways for reuse. The absence of clear hygiene, safety, and operational guidelines for refill models, particularly in consumer goods, remains a key barrier to scaling.

In the electronics sector, the *Hazardous Waste (e-Waste) Management Rules (2021)* require producers and importers of electronic goods to manage end-of-life products through collection, recycling, and safe disposal Hossain et al., 2021. *The Mandatory Jute Packaging Act (2010)* requires the use of biodegradable jute packaging for key commodities in the agricultural sector, prioritising organic alternatives over synthetic materials. Similarly, the High Court's 2020 directive banning single-use plastics in coastal hotels and restaurants focuses on restricting disposable products but does not provide a clear pathway for safe and standardised refill or reuse infrastructure Islam, 2019.

Strategies, planning and circular economy vision

Bangladesh has established a foundational policy framework that supports the circular economy primarily through the *National 3R Strategy for Waste Management (2010)*, which

promotes reducing, reusing, and recycling waste Jerin et al., 2022. Circularity principles are also reflected in national development planning frameworks, including the *Seventh Five-Year Plan (2016–2020)* and urban strategies such as the *Dhaka Structure Plan (2016–2035)* which formally adopt the 3R approach (reduce, reuse, and recycle) and set objectives to minimise waste generation.

More recently, the *Draft National Plastic Industry Development Policy (2021)* aims to eliminate plastic waste by 2030. The policy focuses on standardising recyclable items and improving waste management efficiency, while upstream interventions receive comparatively limited attention and lack binding targets. Overall, the country still lacks a dedicated circular economy law and instead relies on a fragmented mix of policies that often suffer from weak enforcement and coordination challenges among implementing agencies Rahman, 2024. Consequently, practices such as refill and reuse remain largely informal or voluntary without any statutory requirements Sultana, 2025.

4. Policy recommendations

Moving from informal reuse practices towards formal refill systems will require building trust, regulatory clarity, and investment conditions in Bangladesh. While refill behaviours already exist in traditional markets, structured refill business models remain limited and largely absent from modern retail channels. The policy recommendations below are derived from analysis of both desk research and stakeholder engagement.

Establish national safety and quality standards

Concerns around product safety and accountability remain a major barrier to refill adoption in Bangladesh. Developing national standards for refill products, dispensing machines, and supply chain traceability could help build trust among consumers and retailers. Regulatory bodies such as Bangladesh Standards and Testing Institution (BSTI) and Bangladesh Food Safety Authority (BFSA) could play a central role in setting quality standards, licensing dispensing machines, and establishing traceability and anti-counterfeit measures. Clarifying liability across the value chain – ensuring producers remain responsible for product quality while retailers manage machine cleanliness and maintenance – could further reduce operational risks.

Introduce fiscal incentives for refill infrastructure

High upfront costs of dispensing infrastructure, technology, and supply chain adaptation remain a major barrier to scaling refill. Fiscal incentives such as VAT reductions, tax breaks for refill technologies, or differentiated taxation for single-use packaging could help shift producer behaviour. Financial mechanisms that can potentially be supported by the National Board of Revenue (NBR), development partners, and financial institutions could also help reduce early-stage investment risks for producers and retailers adopting refill systems.

Strengthen regulatory capacity and institutional coordination

Stakeholders expressed the need for stronger coordination across institutions responsible for product standards, consumer protection, taxation, and environmental management. Strengthening the capacity of regulatory bodies such as BSTI and relevant consumer protection authorities to monitor refill systems and enforce quality standards would be essential for building consumer confidence. Developing clearer implementation guidelines and harmonising requirements across agencies could create a more predictable environment for businesses investing in refill models.

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