

PLASTIC POLICIES IN SRI LANKA

Country Profile

Acknowledgements

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Abbreviations

EPR	Extended Producer Responsibility				
HDPE	High-density polyethylene				
LDPE	Low-density polyethylene				
LLDPE	Linear low-density polyethylene				
NGO	Non-governmental organisation				
PET	Polyethylene				
PETE	Polyethylene terephthalate				
PVC	Polyvinyl chloride				
PP	Polypropylene				
PPP	Public Private Partnerships				
PS	Polystyrene, expanded polystyrene, Styrofoam				
SUP	Single-use plastic				

1. Context

Estimates suggest that Sri Lanka generates over 260,000 tonnes of plastic waste annually, leading to nearly 12 kg per capita per year (EA 2024) (Figure 1). This is roughly one-third of the global average (31.9 kg), and more than half of the average in SWITCH-Asia countries (20.1 kg).



Figure 1. Plastic waste in Sri Lanka in 2023

Source: Earth Action 2024 data

In Sri Lanka, 89% of the annual amount of plastic waste (>232,000 tonnes) is mismanaged. The annual per capita ratio of mismanaged plastic waste stands at 10.5 kg, which is roughly 2 kg lower than the global average of 12.5 kg and the SWITCH-Asia countries average of 12.2 kg per capita. By far the largest share of mismanaged plastic waste is burned in open sites. Most of the collected plastic waste is discarded in open dumps. The recycling rate in the province that contributes most to plastic waste stands at 3 %. Overall, more than 200 collectors and recyclers are registered in Sri Lanka, concentrated in in the densely populated South-West of the island (MoE 2021b).

Rank of Sri Lanka in global comparison (out of 192)			
Plastic waste in metric tonnes	120		
Plastic waste per capita (kg/year)	55		
Mismanaged plastic waste in metric tonnes	148		
Mismanaged plastic waste per capita (kg/year)	111		
Mismanaged plastic waste	161		

Plastic-related trade data for Sri Lanka show that economic activity related to the upstream in the plastics lifecycle. Together, the negative trade balance of materials needed for the manufacturing of plastic products on the one hand, added to the positive trade balance of exports of final manufactured plastic goods on the other, suggest that Sri Lanka is a manufacturer of plastic products (Figure 2).



Figure 2. Plastic-related trade in Sri Lanka in 2022

Source: UNCTAD data

While Sri Lanka does not produce oil, gas, or primary plastics, there are several hundred small and mediumsized companies (SMEs) in Sri Lanka in the plastic processing and manufacturing sector with sales revenues of individual companies ranging from USD 4 million and to USD 50 million (MoE 2021b; Dun & Bradstreet 2024). Plastic manufacturing in the country is present for more than 40 years already (MoE 2021b). Sri Lanka imports the raw materials needed to manufacture plastic products worth USD 1.13 billion (including plastics in primary forms, feedstocks, precursors and additives used in plastics, and intermediate forms of plastics), which is more than USD 1 billion more than it exports (Figure 2). Sri Lanka also produces chemicals domestically, accounting for 0.95% of its gross domestic product (GDP). In addition, the country imports intermediate manufactured plastic goods for roughly USD 995 million, with negative trade in this category as well. Conversely, when it comes to final manufactured plastic goods, Sri Lanka has a positive trade balance of USD 1.63 billion, and exporting these goods is worth USD 1.87 billion (Figure 2). Sri Lanka's exports constitute a considerable share, namely 14%, of all exported goods from Sri Lanka. Overall, Sri Lanka's plastic-related trade accounts for less than 0.15% of the country's global plastic-related trade, which ranks 62 out of 172.

2. Policy landscape

Several laws, regulations and policies address plastic pollution in Sri Lanka, including command-andcontrol measures, provisions for market-based measures, and information requirements, as described in the policy overview in Table 1. The existing laws and regulations in Sri Lanka target the entire plastics lifecycle (manufacturing, consumption, waste management) and trade, with the exception of production of primary plastic polymers, for which there are no regulations or policies in this country.

Legally Binding Regulations

Sri Lanka's plastic-specific laws and regulations are based on the National Environmental Act No. 47 of 1980 of Sri Lanka, which sets forth various regulations and requirements for industries, including those related to plastic production and use. While the law does not include extensive details to specifically regulate plastic, it does outline two relevant policies that apply to plastic producers and more generally to the manufacturing sector:

- 1. Environmental Protection License (EPL): The National Environmental Act under its Order in Section 23A (2008) requires certain industries to obtain an Environmental Protection License, which is mandatory for industries, including manufacturers that may be deteriorating the environment, which could potentially include plastic manufacturers, though this particular industry is not mentioned in the law.
- 2. Environmental Impact Assessment (EIA): The National Environmental (Procedure for Approval of Projects) Regulations are designed to streamline the approval process for projects that may damage the environment in Sri Lanka. They specify the roles and responsibilities of various state agencies designated as Project Approving Agencies, which are tasked with evaluating projects based on environmental impact assessments and ensuring compliance with environmental standards. The regulations are designed to ensure that any industrial or manufacturing activity that could have a significant environmental impact must undergo a thorough review and approval process. Manufacturing projects, including for plastics manufacturing and especially those involving significant use of resources or producing emissions, typically require an Environmental Impact Assessment (EIA) or an Initial Environmental Examination (IEE) before they can proceed. This precaution ensures compliance with environmental standards and can mitigate potential negative consequences.

The majority of plastic-related laws and regulations in Sri Lanka aim at regulating or banning specific problematic and avoidable products. In 2017, Sri Lanka considerably broadened its plastic policies and published several orders under the **National Environmental Act of 1980** (Government of Sri Lanka 2017a). These additional orders ban the use and production of various plastic products as well as their sale. The starting point for the series of bans and prohibitions was <u>Order No. 2034/33</u>, banning the manufacture, use or sale of polythene or any polythene product whose thickness is $\leq 20 \ \mu$ m. In addition, the manufacturing, use and sale of food wrappers from polythene (<u>Order No. 2034/34</u>), as well as of bags of high-density polyethylene (<u>Order No. 2034/35</u>) and food containers, plates, cups and spoons from expanded polystyrene (<u>Order No. 2034/38</u>) are banned. Another Order then prohibited the use of all forms of polyethylene, polypropylene, or products thereof as decoration for a variety of events (political, social, religious, national, cultural) (<u>Order No. 2034/37</u>).

In 2021, an additional ban was published under the National Environmental Act, addressing the use of PET/ PVC for packaging agrochemicals (<u>Order No. 2211/51</u>). Here, the use of PET and PVC in any process, trade or industry is banned, along with sachets whose net volume is less than or equal to 20 ml/net weight of 20g, inflatable toys, and cotton buds with plastic stems.

Table 1. Overview of plastic-related policies in Sri Lanka

Source: Authors' own representation

	Production (primary polymers)	Manufacturing (plastic products)	Consumption	Waste management/ End-of-life	Trade
		COMMAND	AND CONTROL		
Mandatory performance/outcome standards (incl. targets)					
Mandatory process standards (incl. targets)					
Technological standards (incl. targets)		National Environmental Regulations (Plastic Material Identification Standards) (2021)			
Prohibitions/bans (incl. phaseout)		 Prohibition of Polythene or any polythene product of 20 micron or below in thickness (Order No. 2034/33) (2017) Prohibition of food wrappers from polythene (Order No. 2034/34) (2017) Prohibition of high-density polyethylene bags (Order No. 2034/35) (2017) Prohibition of food containers, plates, cups and spoons from expanded polystyrene (Order No. 2034/38) (2017) 	 Prohibition of Polythene or any polythene product of 20 micron or below in thickness (Order No. 2034/33) (2017) Prohibition of food wrappers from polythene (Order No. 2034/34) (2017) Prohibition of high-density polyethylene bags (Order No. 2034/35) (2017) Prohibition of all forms of polyethylene, polypropylene, polyethylene products or polypropylene products as decoration (Order No. 2034/37) (2017) Prohibition of food containers, plates, cups and spoons from expanded polystyrene (Order No. 2034/38) (2017) Banning the Use of PET/PVC for Packing Agrochemicals (Order No. 2211/51) (2017) 	 Prohibition of open burning of refuse and other combustible matters inclusive of plastics (Order No. 2034/36) (2017) National Action Plan on Plastic Waste Management 2021–2030 	 Prohibition of Polythene or any polythene product of 20 micron or below in thickness (Order No. 2034/33) (2017) Prohibition of food wrappers from polythene (Order No. 2034/34) (2017) Prohibition of high-density polyethylene bags (Order No. 2034/35) (2017) Prohibition of food containers, plates, cups and spoons from expanded polystyrene (Order No. 2034/38) (2017)

	Production (primary polymers)	Manufacturing (plastic products)	Consumption	Waste management/ End-of-life	Trade	
	MARKET-BASED					
Taxes/levies						
Subsidies/grants/tax reductions						
Public procurement			National Policy on Green Procurement 2023)			
EPR/deposit refund schemes		National Action Plan on Plastic Waste Management 2021–2030				
Liability schemes						
		INFO	RMATION			
Taxonomies		National Environmental (Plastic Material Identification Standards) Regulations (2021)				
Data collection, reporting and disclosure						
Labels		National Environmental Regulations (Plastic Material Identification Standards) (2021)				
Awareness raising/ capacity development				National Action Plan on Plastic Waste Management 2021–2030		
GOVERNANCE/COORDINATION						
Roadmaps, plans and strategies		National Action Plan on Plastic Waste Management 2021–2030	National Action Plan on Plastic Waste Management 2021–2030	National Action Plan on Plastic Waste Management 2021–2030		
Inter-ministerial coordination	There is no information about in	nter-ministerial coordination.				

	Production (primary polymers)	Manufacturing (plastic products)	Consumption	Waste management/ End-of-life	Trade
Public-Private partnerships	Some small-scale public-private partnerships (PPPs) seem to exist in Sri Lanka, for example the Solid Waste Management Centre and its Plastic Recycling Centre that were established by the Balangoda Urban Council and are operated by private sector actors (see Karunarathna & Rajapaksha 2020).				
SPECIAL FOCUS SECTOR: TOURISM					
Plastic pollution has a significant negative impact on tourism. Plastic waste degrades the environment, harms wildlife, poses health risks, and tarnishes the destination's image. It also increases operational costs and threatens the natural beauty that attracts tourists to Sri Lanka.					
	preventive measures – such as incentives to improve collection and recycling or the prescription of re-use schemes could be incorporated into the latest draft National Policy on Tourism for Sri Lanka (Government of Sri Lanka n/a).				
	The Sri Lankan tourism industry promoting reusable alternatives influencing suppliers, and partic	is actively combating plastic po , setting up recycling systems, a ipating in global initiatives like tl	Ilution through various private init nd engaging in creative upcycling ne Global Tourism Plastics Initiati	tiatives. These include implemen . The industry is also collaboratir ve (Sri Lanka Tourism Alliance n/	ting zero plastics plans, ng with other sectors, ′a).

In addition to these regulations, the **Plastic Material Identification Standards** were published in 2021, requiring that all manufactured plastic items put on the domestic market are to be marked and categorised according to the standard (MoE 2021a). These classifications distinguish seven types of plastics and their abbreviations:

- Polyethylene terephthalate (PET or PETE)
- High-density polyethylene (HDPE or PE-HD)
- Polyvinyl chloride (PVC or V)
- Low-density polyethylene (LDPE), linear low-density polyethylene or (LLDPE)
- Polypropylene (PP)
- Polystyrene, expanded polystyrene, Styrofoam (PS)
- Other plastics, such as acrylic, nylon, polycarbonate, and multilayer combinations of different plastics (OTHER or O) (MoE 2021a)

It becomes apparent that Sri Lanka had focused its policy efforts on banning problematic and avoidable plastic products in the past, thereby targeting the manufacturing and consumption phases of the lifecycle, as well as trade. While the item list may be expanded, the list of banned products is seemingly already focused on the most polluting products. The efficacy of banning products has been largely called into question by a broad array of observers. Their scepticism stems primarily from two interrelated factors. First, Sri Lanka lacks stringent enforcement mechanisms, such as mechanisms to monitor policy implementation, the lack of consequences if regulations are not complied with or the lack of incentives for more sustainable practices. Second, high-quality, environmentally sound alternatives are scarce in the marketplace. This unfortunate confluence of circumstances has significantly undermined the ban's potential to catalyse meaningful change in consumption patterns and environmental stewardship. As a result, the Plastic Material Identification Standards, despite their laudable intentions, have largely fallen short of the intended result, leaving policymakers and environmental advocates in a quandary as they seek to bolster the effectiveness of the policy and truly instigate the desired paradigm shift towards more sustainable practices (SWITCH-Asia 2021).

Sri Lanka has been actively working on implementing Green Public Procurement (GPP) policies, which aim to integrate environmental considerations into public procurement processes since 2017 (Government of Sri Lanka 2017b). In 2023, Sri Lanka published the **National Policy on Green Public Procurement**, which outlines the framework for incorporating sustainability into the procurement of goods and services, with a focus on reducing their environmental impacts, including those related to plastics. Several areas of the policy are relevant for the use and production of plastic:

- 1. **Resource efficiency**: The policy emphasises the efficient use of resources, including materials like plastics, while promoting the concept of a circular economy, which aims to maximise the value of products (including plastic products) throughout their life cycle. This approach encourages the reuse, repair, refurbishment, remanufacturing, and recycling of materials, including plastics.
- Environmental performance: The policy requires that environmental performance criteria be taken into consideration in the procurement of goods, works, and services. For plastic products, this could mean prioritising those plastics with better environmental profiles, such as recyclable or biodegradable plastics.
- 3. Life-cycle assessment: The policy emphasises the importance of accounting for the entire life cycle of products, including their environmental aspects and potential degradation capacity. For plastics, this would involve assessing their environmental impact from production to disposal.
- 4. Waste Reduction: One of the key principles of the policy is to minimise plastic waste generation.

This policy is expected to lead to increased demand for environmentally preferable plastic products, such as those made from recycled materials or those that are easily recyclable, which could in turn drive innovation in the plastics industry towards more sustainable products.

Regarding waste management, the **National Environmental (Municipal Solid Waste) Regulations of 2009** establish a comprehensive framework for the management of municipal solid waste in Sri Lanka. These regulations, though not specifically targeted at plastic waste, were enacted under the authority of the National Environmental Act, and they provide clear definitions, guidelines, and restrictions to ensure proper waste management practices throughout the country.

At the heart of these regulations is the definition of municipal solid waste (MSP), which encompasses a broad spectrum of materials such as food scraps, paper, plastics, metals, glass, street sweepings, and garden or yard trimmings, as well as various other organic and inorganic materials. However, the regulations are careful to delineate what does not fall under the purview of municipal solid waste. Specifically excluded are materials classified as Scheduled Waste under separate regulations, industrial process waste, agricultural waste, sewage sludge, and source-separated recyclables. In particular, source-separated recyclables present the problem of how plastics that are separated for recycling at the source would be classified as MSP.

The regulations place significant emphasis on proper waste disposal practices. They explicitly prohibit dumping municipal solid waste along national highways or at any location not officially designated for waste disposal, aiming to combat the widespread problem of illegal dumping with its associated environmental damage and aesthetic consequences.

Furthermore, the regulations stipulate specific time frames for waste collection and establish a clear enforcement mechanism. Any violation of these waste management provisions is considered an offense, and is subject to penalties under Section 31 of the National Environmental Act. This punitive aspect underscores the seriousness with which the government views proper waste management, and serves as a deterrent against non-compliance.

National Plans and Roadmaps

In 2021, Sri Lanka made a major advancement regarding plastic waste polices with the <u>National Action Plan</u> on <u>Plastic Waste Management 2021–2030</u> (MoE 2021b). This action plan follows the guiding principles of reduce, reuse, recycle and final disposal, and identifies 11 major goals as well as 5 additional goals that take into consideration training, safety and participation.

Table 2. The goals of the National Action Plan on Plastic Waste Management 2021–2030.

Source: the Authors, based on Ministry of Environment Sri Lanka (2021b)

Goal	Application
1. Implement a system to track and monitor all imports and exports of plastics in the country by 2021, and ensure that the dataset from this inventory is accessible by 2022	Cross cutting
2. Phase out consumer use of certain single-use plastic (SUP) items by 2021 and reduce by 80% the consumption and production of specific SUP by 2025	Reduction
 Collect 80% of recyclable and non-recyclable plastics and plastics in electronic waste from households, and treat and dispose safely of 100% this plastic waste by 2025 	
4. By 2030, reduce plastics in packaging by 30%	
5. By 2030, reduce macro- & micro-plastics in activities on land with run-off into ocean by 80%	
6. In the industrial and service sectors, reduce plastic waste by an additional 30% by 2025	
 By 2022, set the legal groundwork for an operational extended producer responsibility (EPR) scheme, and implement a pilot for selected products 	
8. In the automotive and construction sectors, promote a repair & reuse market by 2025 for durable consumer products containing plastics	Re-use

Goal	Application
9. Establish requirements for quality, health, and safety to expand plastic waste recycling from 4% to 15% by 2025	Recycling
 By 2025, warrant that safe, durable PET products of high quality are produced, by increasing PET bottle collection and recycling rates from 27% to 100% 	
11. By 2025, send to final disposal only those residual plastic wastes that cannot be recycled or re-used	Final Disposal
12. By 2025, a financing mechanism shall be set up, with the aim to gather financial means and direct them towards the plastic waste management sector. The mechanism shall be conducted in cooperation with the private sector	Financing and rewards
 By 2025, public private partnerships (PPP) shall be incentivised by national reward schemes 	
14. By 2030, implement enhancement of knowledge and competency in plastic waste management among relevant stakeholder groups	Education, Training, Research and Development
15. By 2025, for all (informal) waste workers of all genders, occupational health and safety requirements are to be ensured and are able to rely on mechanisms to manage risks	Occupational Health and Safety
16. 16. At the local level, communities should be offered active involvement in developing activities to promote the 3Rs, targeting the entire value chain	

Overall, the National Action Plan on Plastic Waste Management 2021–2030 takes into consideration the concept of circular economy and the 'polluter pays' principle, while aiming for a holistic approach to manage plastics. Though the name of the plan suggests that it targets downstream measures, it actually intends to target all stages of the life cycle of plastics that are relevant for Sri Lanka, and for trade. Nevertheless, a priority action is to improve plastic waste segregation, collection and recycling as currently, not all policies and measures have yet been implemented. The Ministry of the Environment and the Central Environmental Authority are the two lead agencies responsible for the implementation of most of the policies and measures.

The existing policies and laws at the waste management stage are the National Environmental Act 1980 (No. 47) from 1980, the Coast Conservation Act (No. 57) from 1981 (Government of Sri Lanka 2011) and the National Policy on Waste Management from 2020 (MoE 2020a). Even though these policies do not yet directly mention plastic, they do highlight the general term 'pollution' from various sources as well as waste management processes, which potentially includes plastic. In 2017, as part of the National Environmental Regulation, Sri Lanka banned openly burning rubbish and other combustible substances including plastics (Government of Sri Lanka 2017c).

Furthermore, Sri Lanka also published a National Framework for Eco Labelling which aims to transform consumption and production patterns by highlighting eco-friendly products. The Framework does not mention plastics directly, but considers the environmental performance of products and services throughout their life cycle (MoE 2020b).

Non-Plastic-Specific Policies

In addition to the above-mentioned regulations directly targeting the plastic life cycle, there are regulations concerning one sector of major relevance for Sri Lanka's marine plastic pollution, namely fisheries. Broadly speaking, **fisheries regulations** in Sri Lanka intersect with broader environmental and waste management policies, particularly in relation to marine plastic pollution and litter prevention. The **Marine Pollution Prevention Act**, amended in 2008, while not specific to fisheries, holds significant implications for fishing activities. This act empowers the Marine Environment Protection Agency (MEPA) to implement measures preventing marine pollution in Sri Lanka's territorial waters. Further addressing the issue of sea-based pollution, including from fishing activities, the **Marine Environment Protection Sea Dumping Regulation**

of 2012 introduced discharge standards and sea dumping permits specifically targeting the fishing sector. Recognising the economic importance of fisheries, the Sri Lankan government introduced a **new tax regime in 2012** that offered the sector substantial benefits. Projects focused on waste management (that may include plastic waste) in fisheries (among other sectors) became eligible for tax holidays ranging from a minimum of four years to a maximum of twelve years, demonstrating the government's commitment to supporting and developing this crucial industry (SWITCH Asia 2021). Overall, these regulations are more likely to affect the management of plastic waste from ships, rather than reducing the use of plastics themselves in the fishery sector. Global research and development efforts would be necessary to potentially develop fishery equipment from alternative or recycled materials.

On a broader scale, The **National Policy on Sustainable Consumption & Production for Sri Lanka** – SCP policy – while not specifically targeting plastics, will likely have a significant indirect effect on plastic consumption and production in Sri Lanka (Government of Sri Lanka 2019).

First and foremost, the policy aims at promoting resource efficiency and cleaner production in all industries, including plastic. Thereby, it encourages the transformation of existing industries towards more environmentally benign operations, eventually leading to the development of eco-friendly alternatives to traditional (fossil-based) plastics. Furthermore, the establishment of eco-industrial parks that could improve plastic resource efficiency and promote circular economy practices is foreseen. Through improved landfill and recycling facilities, the SCP policy directly addresses plastic waste issues and aims at enhancing overall waste management.

Like the above-mentioned National Action Plan on Plastic Waste Management, the National Policy plans to introduce Extended Producer Responsibility (EPR) into product pricing, with the hope that plastic manufacturers will be made more accountable for the entire life cycle of their products. Yet, the private sector raised concerns about its practicality in general and the desirability of a PRO in particular. Instead, it would prefer collection targets (USAID 2021).

By implementing sustainable public procurement practices, plastic in government purchases could be reduced. Lastly, fostering innovation in sustainable materials and processes could lead to the development of alternatives to plastic.

Taken together, all of these measures aim to reduce plastic pollution, improve plastic waste management, and promote more sustainable practices in plastic production and consumption across Sri Lanka.

Inter-ministerial coordination

There are several indications for inter-ministerial coordination of plastic governance in Sri Lanka, although no information was available on an overarching, centralized and specific coordination mechanism. First, the existence of national plans, international partnerships, and high-level committees suggests some level of collaboration. Second, the Central Environmental Authority (CEA), which is the main coordination body for waste management in general, is responsible for implementing the National Action Plan on Plastic Waste Management (see above) and for developing databases and monitoring mechanisms. Third, the CEA also operates as focal point for local authorities in enforcement matters, namely if they encounter violations of existing regulations (PILF 2023). Fourth, the government established a National Steering Committee brought together representatives from government (and the private sector) to discuss the design of a possible EPR scheme in Sri Lanka (USAID 2021). However, the persistent challenges in waste management and the significant environmental and economic impacts of plastic pollution indicate that there may be room for improvement in how different ministries work together to address this complex issue.

3. Private-sector innovations

In Sri Lanka, several companies explore innovative approaches to reuse or recycle plastic waste, for example the social enterprise Plasticcycle, which promotes the reduction of single-use plastic, responsible disposal, and recycling. Plasticcycle has developed bins for collecting plastic waste for recycling and placed them near retail outlets, housing developments, sports complexes, schools and universities, as well as in recreational areas. Besides this, Plasticcycle also organises awareness-raising campaigns and joins forces with local authorities, NGOs or universities (Plasticcycle 2024). Initiatives by leading beverage companies support bottle-to-bottle recycling through investment.

Other companies explore innovative approaches in the use and transformation or conversion of plastic waste. Eco Spindles, for example, produces yarn and monofilaments from used plastic bottles. In its Ocean Plastic Project, MAS Holdings, one of the largest apparel manufacturers in South Asia, collects and uses ocean-bound plastic waste to produce textiles. Likewise, the Sri Lanka Plastic Recycling Company processes various types of plastic waste, converting it into reusable raw materials.

Meanwhile other companies are committing to developing alternative (plastic) products. The Ceylon Plastic Manufacturers Association, for example, supports innovations in the development of biodegradable plastic materials. Several start-ups are also exploring the potential of alternative biodegradable and compostable plastics. Kudil Products is developing organic and bio-degradable products made from natural materials such as fallen leaves and tree fibres, offering, for example, plates and spoons from areca leaves or shopping bags from banana fibres. The company also produces pots, mats and lamp shades. Kudil Products follows the waste-to-wealth approach, creating value from organic waste, while also promoting women's empowerment and replacing plastic products with non-plastic alternatives (Kudil Products n.d.). The womanowned business Cally Reusable Bags in Sri Lanka makes a set of 10 plastic-free and reusable shopping bags in various sizes (The Sunday Times Sri Lanka 2018). These bags are made from lightweight washable, reusable cotton fabric, and are perfect for buying bulk products – which further reduces packaging waste. Cally Reusable bags addresses the plastic bag ban in Sri Lanka by providing sustainable alternatives that are locally manufactured (Hafi 2018).

Finally, the 'Prevention of Marine Litter in the Lakshadweep Sea' project, known as PROMISE, aims to tackle marine pollution in the regions bordering Sri Lanka as well as in the Maldives and India. The project focuses on reducing marine litter originating from land-based activities, particularly in the tourism industry, which contributes significantly to the degradation of these coastal areas. PROMISE promotes source-to-sea solutions, strengthens micro-, small-, and medium-sized enterprises (MSMEs), and supports government mechanisms to curb pollution. Activities include decreasing single-use plastics, improving waste management, and facilitating zero-waste governance. The initiative seeks to enhance the region's attractiveness for tourists while improving the economic well-being of local communities.

These initiatives showcase a growing recognition of sustainable practices and circular economy principles in the production, use and processing of private-sector plastic in Sri Lanka. They address environmental concerns and create economic opportunities by transforming plastic waste into a valuable resource.

4. Challenges

Sri Lanka's topography and geographical location as an island state present challenges, since mismanaged plastic waste can easily enter the marine environment.

Plastic debris was found on isolated islands near Sri Lanka's coast, threatening valuable ecosystems. The local climate, in particular the monsoon season, further contributes to the problem, because improperly disposed plastic waste is easily washed away in the resulting floods. But also, the growing tourist industry is affected by the consequences of mismanaged plastic waste, as popular beaches become less attractive for visitors (MoD 2023).

In the three above-mentioned examples the ambitions for reducing marine plastics pollution as set out in the National Action Plan on Plastic Waste Management 2021–2030 are crucial.

The Plan's implementation will be key, for in the past, Sri Lanka has struggled to enforce policies that tackle plastic pollution, e.g. the unsuccessful banning of plastic bags in 2006 (Jayasinghe 2023). Even the new rules regarding plastic bags issued in 2017 have not been strictly enforced. Manufacturers, for example, sidestepped the ban on plastic sachets and subverted the existing laws (ibid). Consequently, enforcement and issuing penalties for violators need to be administered more consistently. This of course requires resources, especially personnel, which would seem to be a challenge.

Regarding overall waste management, the country continues to struggle (Jayasinghe 2023), and advancements and investments in waste collection, segregation, recycling as well as technology, and infrastructure are all needed (Dharmasiri 2019). The economic crisis in 2021 further exacerbated the challenges in waste management, as fuel for rubbish lorries was lacking, leading to improper waste disposal (Jayasinghe 2023).

The need for advancing plastic waste management was identified in the National Action Plan on Plastic Waste Management 2021–2030, according to which the major challenges are, among others:

- low collection rates and -quality
- · improper segregation and waste management practices
- · problems in implementing policies, recycling not being understood as a business opportunity
- · insufficient research and development for technologies
- burning of E-waste
- · lack of data on and management of waste.

In terms of recycling, PET bottles constitute the majority of recycled plastic, while other plastics are barely even collected, much less recycled (MoE 2021b).

Finally, there is also room for improvement with regard to public-private collaboration. While there are some initiatives, the private sector is still reluctant to fully engage in some initiatives.

5. Way forward

Overall, it can be concluded that Sri Lanka has already taken important and valuable steps for combatting plastic pollution by banning problematic and avoidable plastic products. As Sri Lanka has no gas or oil industry, and does not produce primary plastic polymers, the country can influence production through its import requirements and standards.

The National Action Plan on Plastic Waste Management 2021–2030 represents a major step towards a holistic plastic management plan that takes into account circular economy principles and follows the concepts of reduce, re-use and recycle.

Because not all the measures have yet been implemented, it remains to be seen how effective the policy will be. Nonetheless, the policy itself shows that awareness for plastic pollution in Sri Lanka is increasing and that there is a clear willingness and prioritisation for concrete actions.

However, implementation remains a challenge because of low waste collection rates, improper waste management, and insufficient enforcement of existing policies, and in several areas Sri Lanka could in fact strengthen its policy efforts even more.

How could the Global Plastics Treaty help?

- By supplying a clear way forward, and with policy guidelines in terms of plastic pollution prevention
- By incentivising actions across the globe, the Treaty could possibly reduce the volume of plastic waste from exporting countries, thereby potentially limiting the pressures on the Sri Lankan waste management and recycling systems
- By providing a framework for standardising EPR schemes across countries, facilitating knowledge sharing and potentially creating opportunities for cross-border cooperation in plastic waste management
- By providing funds for investments into waste management, leveraging financial resources through the financial mechanism in the Treaty
- By facilitating technology transfer to build the necessary infrastructure and expertise for effective plastic waste management
- By enhancing capacities and strengthening regulatory frameworks through its support for capacity-building initiatives and technical assistance
- By promoting global collaboration in research and development for sustainable alternatives

First, Sri Lanka would benefit from strengthening enforcement mechanisms for existing bans on singleuse plastics, which could involve the establishment of a policy monitoring mechanism, a stricter and more consequential imposition of sanctions or penalties in case of non-compliance or the provision of incentives for environmentally friendly actions and practices.

Second, enhancing recycling infrastructure is crucial, requiring investments in facilities and technology to boost the currently low recycling rate. In this regard, encouraging private sector participation through incentives and partnerships could drive innovation in recycling processes.

Third, capacities, knowledge and skills in public authorities at all levels as well as in civil society should be strengthened. To this end, it can be useful to expand the already existing awareness and education campaigns about plastic pollution, its causes and possible solutions and target communities, civil society and public officials alike.

Fourth, implementing Extended Producer Responsibility (EPR) is another vital step, establishing legal frameworks to hold producers accountable for the entire life cycle of their products, thereby encouraging the design of more sustainable items. To this end, the government might want to consider to assign a stronger role for the Ceylon Chamber of Commerce as a leading actor in developing and implementing an EPR scheme for Sri Lanka, thereby drawing on the previous dialogue with the private sector and strengthening its ownership.

Fifth, supporting innovation in biodegradable and compostable alternatives to traditional plastics is also important, and can be achieved by increasing support for start-ups and companies exploring these alternatives through grants and subsidies.

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