

Opinion

End single-use to turn the tide on plastic

Plastic pollution is an increasing global crisis despite large-scale awareness and extensive mitigation efforts. Existing waste management systems and recycling technologies have failed to control the plastic menace.

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Single use plastic (Photo:SNS)

Plastic pollution is an increasing global crisis despite large-scale awareness and extensive mitigation efforts. Existing waste management systems and recycling technologies have failed to control the plastic menace.

According to the United Nations Environment Programme, about 9.2 billion tonnes of plastic materials were produced between 1950 and 2017, with 7 billion tonnes ending up in landfills or the environment. The Global Plastic Outlook 2022 report of the Organisation for Economic Co-operation and Development (OECD) confirms that less than 10 per cent of plastic waste is recycled. It has now become clear that we cannot recycle our way out of the plastic crisis.

The most effective and sustainable solution to the global plastic pollution crisis is significant reduction in plastic production. This will help overcome the mismatch between plastic production and waste-management capacity. According to the Plastic Overshoot Day (POD) Report 2025 by Earth Action, more than one-third of produced plastic is already being mismanaged. Without deliberate reduction in production, plastic pollution will continue to escalate. POD is that day when generation of global plastic waste exceeds the capacity of waste management in that year thereby resulting in pollution. While 5 September was the global POD this year, it is unique to each

country and it fell on 20 April for India. The Global Trade Update released by UNCTAD in August 2025 informed that over 78 per cent of plastics produced are traded internationally, adding that 75 per cent of all plastic ever produced ends up as waste.

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It advocates for a Global Plastic Treaty, which harnesses trade and investment policies, to facilitate a just transition for reducing plastic pollution. The UNEP already has an Intergovernmental Negotiating Committee (INC) for developing a legally binding global treaty on plastic pollution. Despite multiple negotiation rounds between 2022 and 2025, most recently in August 2025, no consensus has been reached by the INC so far. The primary reason behind these unsuccessful negotiations is that many nations do not want mandatory limits on plastic production.

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These nations are willing to focus on waste management and recycling, but not on capping plastic production. However, experience has shown that improvements in waste management cannot keep pace with exponential plastic output. Therefore, capping and reducing virgin plastic production should indeed be the central pillar of any global plastic treaty. Any opposition to this is concerning but understandable since plastic has become an indispensable material in contemporary society. Plastic is ubiquitous in nearly every aspect of modern life and industry. The widespread plastic usage argument does not detract from the significant environmental and health hazards of plastic pollution. According to a May 2024 IUCN briefing, plastic pollution affects human health, economies, ecosystems and the climate. Fossil fuel-based plastic production, microplastics contaminating our bloodstream and threats to wildlife and habitats are some well documented harms of plastic pollution.

A marked shift in global policy, industrial practices and consumer behaviour is thus the need of the hour. One pragmatic measure can be the complete elimination of single-use plastic production and consumption. Single-use plastic items are meant for one-time use; they become waste as soon as they are used. Unlike other plastic materials which are made for durability and longevity, single-use plastic (SUP) items have low utility and high littering potential. The Government of India has already banned some SUP items since 2022, though its implementation needs more efforts.

While plastic straws and cutlery, thin plastic carry bags, plastic flags and invitation cards are banned, other SUP items known to contribute to pollution have been left out. These include plastic water bottles, plastic sachets and pouches for products like shampoo and ketchup, and multi-layered packaging used for chips, biscuits and confectionery. SUP items are typically designed for “use and throw” because of which they degrade easily under environmental conditions. This inherent fragility, combined with their small-scale nature, makes their recycling technically and economically unviable. SUPs have been marketed since the 1950s as symbols of modern living, their disposability attributed to luxury.

As a result, SUP items are so widespread today that they have become integral to global supply chains. Now that we understand the invasive impact of SUP on human and environmental health, the production and use of all SUP items must be eliminated across all industries. SUP items should be permitted only in sectors like healthcare where their use is indispensable for saving lives and ensuring safety. Globally, we have a deep-rooted dependence on SUPs, and it may appear impractical to ban them or achieve a complete transition away from their use. However, recent policy developments and judicial interventions demonstrate that doing this is feasible. Many countries have already banned considerable number of SUP items, and more are being added. Recycling SUPs items is largely ineffective; the only viable solution is to curb their use and production altogether.

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