

2. War on Plastics

Prelims: Environment- Pollution & Waste Management

Mains: GS-III- Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

- ▶ **Context:** The PM invoked Gandhi in his appeals, and it has been speculated that a specific ban may be announced on October 2, the Mahatma's 150th birthday.

Single-Use Plastic:

- ▶ As the name suggests, single-use plastics (SUPs) are those that are discarded after one-time use. Besides the ubiquitous plastic bags, SUPs include water and flavoured/aerated drinks bottles, takeaway food containers, disposable cutlery, straws, and stirrers, processed food packets and wrappers, cotton bud sticks, etc. of these, foamed products such as cutlery, plates, and cups are considered the most lethal to the environment.

Impact on Environment:

- ▶ If not recycled, plastic can take a thousand years to decompose, according to UN Environment, the United Nations Environment Programme. At landfills, it disintegrates into small fragments and leaches carcinogenic metals into groundwater. Plastic is highly inflammable — a reason why landfills are frequently ablaze, releasing toxic gases into the environment. It floats on the sea surface and ends up clogging airways of marine animals.

Plastic Waste Management:

- ▶ The Plastic Waste Management Rules, 2016 notified by the Centre called for a ban on “non-recyclable and multi-layered” packaging by March 2018, and a ban on carry bags of thickness less than 50 microns (which is about the thickness of a strand of human hair). The Rules were amended in 2018, with changes that activists say favoured the plastic industry and allowed manufacturers an escape route. The 2016 Rules did not mention SUPs.
- ▶ On World Environment Day in 2018, India pledged to phase out SUPs by 2022. The PM has called for “a new revolution against plastic”, and some government-controlled bodies such as Air India and the Indian Railways have announced they would stop SUPs.

Size of The Problem:

- ▶▶ There is no comprehensive data on the volume of the total plastic waste in the country. A 2015 study by the Central Pollution Control Board (CPCB) surveyed 60 cities and extrapolated the data to estimate that the country generated around 26,000 tonnes of plastic waste daily in 2011-12, equivalent to the weight of 4,700 elephants.
- ▶▶ About 70% of the plastic waste was collected; 60% was recycled. It is likely that the actual daily generation of plastic waste is much more. According to the Plastic Waste Management Rules, all states and UTs are required to send annual data to the CPCB; however, many states and UTs have failed to comply.

Recycling of Waste:

- ▶▶ About 94% of plastics are recyclable. India recycles about 60%; the rest goes to landfills, the sea, and waste-to-energy plants.
- ▶▶ Most experts view recycling as an interim measure until plastic is completely banned.
- ▶▶ According to deputy programme manager (plastics) at the Centre for Science and Environment, plastics have an end life too and that plastics can't be treated more than four-five times.
- ▶▶ The CPCB warns that recycled products are at times more harmful to the environment, as they contain additives and colours.

Models Before India:

- ▶▶ At least 60 countries around the world have fully or partially restricted the use of non-biodegradable polymers. Consumption has reduced in at least 30% of the countries, while 20% have failed to achieve the goals, says a 2018 report by UN Environment.
- ▶▶ In 2002, Ireland imposed a 0.15-euro levy, Plas Tax, on plastic bags. A dramatic change in behaviour was seen within a few weeks.
- ▶▶ In 2008, Rwanda imposed a blanket ban on the sale, use, and production of plastic bags. A wave of illegal imports from neighbouring countries followed, and Rwanda was forced to increase penalties. After initial hiccups, residents switched to green alternatives.
- ▶▶ A 2011 study by the Delhi School of Economics suggested that levying a fee on consumers would yield better results than a ban, due to "little enforcement capacity". People may be forced to carry biodegradable bags to grocery stores, vegetable markets and shopping malls if the alternative were to hurt their pockets.
- ▶▶ For multi-layered packaging, experts have suggested effective buyback schemes and recycling units. The Prime Minister has mentioned the use of plastics in road construction and extraction of fuel. However, these initiatives would require capital investments and commitment.