

Ban on single use plastic

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Source: UNEP & Economic Times

Manifest Pedagogy: Single Use Plastics is a major pollutant in the environment today. It's composition, International and Indian efforts to reduce and ban its usage are very important topics for the Environment Section in Preliminary. There is a good possibility of a single direct question on the content and ill effects of Single use plastics in paper3 on CSE Mains.

In news: India ban on single use plastic

Placing it in the syllabus: Prime Minister of India announced that India would phase out single-use plastic by 2022

Static dimensions:

- What is single use plastic
- Examples of single use plastic
- Environmental effects of single use plastic
- Conventions related to plastic waste

Current dimensions:

- India ban on single use plastic
- International efforts to ban single use plastic
- Alternative to plastic

Content

What is single use plastic ? and examples

According to UNEP Single-use plastics, often also referred to as disposable plastics, are commonly used for plastic packaging and include items intended to be used only once before they are thrown away or recycled. These include, among other items, **grocery bags, food packaging, bottles, straws, containers, cups and cutlery**



Environmental effects of single use plastic

- While it is still unclear, some studies suggest that plastic **bags and Styrofoam containers can take up to thousands of years to decompose, contaminating soil and water, and posing significant ingestion, choking and entanglement hazards to wildlife** on land and in the ocean.
- Due to their light weight and balloon-shaped design, plastic bags are easily blown in the air, eventually ending up on land and in the ocean.
- Plastic bags can choke waterways and exacerbate natural disasters.
- **In 1988, poor drainage resulting from plastic bag litter clogging** drains contributed to devastating floods in Bangladesh, causing several deaths as two-thirds of the country was submerged

Biodiversity loss and food chain contamination

- Plastics in the environment **pose significant hazards to wildlife both on land and in the ocean.**
- High concentrations of plastic materials, particularly plastic bags, have been found **blocking the breathing passages and stomachs of hundreds of different species.**
- Plastic bags in the ocean resemble jellyfish and are often ingested by turtles and dolphins who mistake them for food.
- There is emerging evidence that the **toxic chemicals added during the manufacturing process transfer from the ingested plastic into the animals' tissues**, eventually entering the food chain for humans as well.
- When plastic breaks down into microplastic particles, it becomes even more difficult to detect and remove from the open oceans.

Conventions related to plastic waste

- **Basel convention: Controlling transboundary movements of hazardous wastes and their disposal**
- The International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL): MARPOL specifically prohibits the discharge of plastics from ships.
- The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (London Convention) and its 1996 Protocol (the London Protocol): With the aim of preventing marine pollution from the dumping of wastes and other matter, the London Protocol further prohibits the dumping and incineration at seas of wastes, including plastics
- **Stockholm Convention on Persistent Organic Pollutants:** With the potential to regulate the production, use, and disposal of additives used in the manufacture of plastics, to the extent they are persistent organic pollutants (POPs)

India ban on single use plastic

- The Government of India has held off imposing a blanket ban on single-use plastics to combat pollution a measure seen as too disruptive for industry at a time when it is coping with an economic slowdown and job losses.
- The plan was part of a broader campaign to rid India of single-use plastics by 2022.
- It was mentioned that there would be no immediate move to ban plastic bags, cups, plates, small bottles, straws and certain types of sachets and instead the government would try to curb their use.
- For now, the government will ask states to enforce existing rules against storing, manufacturing and using some single-use plastic products such as polythene bags and styrofoam, the officials of the Ministry of Environment told
- There was a conscious decision within the government not

to hit businesses hard for now and discourage the use of plastic only on a voluntary basis,” said an official working on policy.

International efforts to ban single use plastic

- About 112 countries, states and cities around the world have already imposed bans on various single-use plastic goods. Of these measures, 57 are national and 25 are in Africa. And the list of these restrictions continues to grow.
- Most of these bans target thin single-use plastic carrier bags or imports of non-biodegradable bags. Some, such as the one in Antigua-Barbuda, include other single-use or problematic items, such as foam coolers and plastic utensils. A few – notably, Kenya’s plastic bag law – impose stiff punishments on violators, including jail time and fines of up to \$38,000.

Alternative to plastic

- **Bioplastics:** Made from algae, waste agricultural and food residues, using bacteria or mushrooms as micro-converter
- **Some bioplastics like PHAs** (polyhydroxyalkanoates) are soil- and marine-safe – that is, they safely degrade in the environment within weeks or months, leaving no harmful residues.
- **Water dispensers & ‘water ATMs’:** They can replace packaged plastic bottled water in most locations.
- Finally, where single-use plastic cannot be avoided, a plethora of technologies can help recover and sort the waste. Examples are smart bins, sorting machines, reverse vending machines and smart packaging technologies that make it easier to separate different materials.