

# Plastic Waste Imports To India Go Up [UPSC Notes for GS III]

## Plastic Waste Imports To India Go Up

### Context:

- Import of plastic waste into India is banned but still the influx of PET bottles has quadrupled from 2017 to 2018.

### Details of the issue

- There is a huge gap between the production and recycling. According to the Government and industry estimates India consumes about 13 million tonnes of plastic and recycles only about 4 million tonnes.
- The root cause is the lack of an efficient waste segregation system and inadequate collection as much of the plastic not making its way to recycling centres.
- In 2005 the government had banned the import of plastic waste, particularly PET bottles to incentivise domestic plastic recycling units. In 2016, another amendment allowed imports as long as they were carried out by agencies situated in Special Economic Zones. It's this loophole that's been exploited.



### Plastic Pollution

- Plastics are non-biodegradable, synthetic polymers. They are made-up of long chain hydrocarbons with additives and can be moulded into finished products.
- These polymers are broken into monomers such as ethylene, propylene, vinyl, styrene and benzene, etc.
- Finally, the monomers are polymerised chemically into different categories of plastics.
- Petroleum-based plastic is not biodegradable. It usually goes into a landfill where it is buried or it

gets into the water and finds its way into the ocean.

- Since plastic does not decompose into a natural substance like soil, it degrades (break down) into tiny particles after many years. It releases toxic chemicals (additives that were used to shape and harden the plastic) in the process of breaking down which make their way into our food and water supply.
- These poisonous chemicals are now found in the human bloodstream. Causing cancer, infertility, birth defects, impaired immunity and many other ailments.

### **Penetration of Plastic Pollution**

- A major threat to oceans according to a 2017 International Union for Conservation of Nature (IUCN) report, micro plastics are estimated to constitute up to 30% of marine litter polluting the oceans.
- The ingestion of microplastics is very dangerous for humans as these substances contain high concentrations of toxic chemicals such as polychlorinated biphenyls.
- People living in China, Indonesia, the Philippines, Thailand, and Vietnam along rivers and coastlines are the most impacted by plastic pollution.
- Low-income communities near plastic production sites face more health impacts, due to greater exposure to toxins and waste, and bear the brunt of the impacts of improper plastic disposal and incineration.
- Henderson Island in the South Pacific is the most plastic polluted of any island recorded to date.
- Alternatives are more dangerous as studies suggests that using alternative materials such as paper and glass, could be more harmful to the environment than plastic itself.

### **PLASTIC WASTE MANAGEMENT RULES, 2016**

The Plastic Waste Management Rules, 2016 aims to:

- Raise the lower limit of thickness of plastic carry bags from 40 to 50 microns and stipulate minimum thickness of 50 micron for plastic sheets also to facilitate the collection and recycling of plastic waste.
- Expand the applicability jurisdiction from the municipal area to rural areas, because plastic has reached rural areas also.
- To usher in the responsibilities of producers and generators, both in plastic waste management system and to introduce collect back system of plastic waste by the producers/brand owners, as per extended producers responsibility.
- To introduce collection of plastic waste management fee through pre-registration of the producers, importers of plastic carry bags/multilayered packaging and vendors selling the same for establishing the waste management system.
- To promote the use of plastic waste for road construction as per Indian Road Congress guidelines or energy recovery, or waste to oil etc. for gainful utilization of waste and also address the waste disposal issue.

### **What's new in Plastic Waste Management Rules, 2016**

- Rural areas have been brought in the ambit of these Rules since plastic has reached to rural areas also. Responsibility for implementation of the rules is given to the Gram Panchayat.
- Extended Producer Responsibility: Previously, EPR was left to the discretion of the local bodies. First time, the producers (i.e persons engaged in manufacture, or import of carry bags, multi-layered packaging and sheets or like and the persons using these for packaging or wrapping their products) and brand owners have been made responsible for collecting waste generated from their products. They have to approach local bodies for formulation of plan/system for the plastic waste management within the prescribed time frame.
- State Pollution Control Board (SPCBs) will not grant/renew registration of plastic bags, or multi-

layered packaging unless the producer proposes the action plan endorsed by the concerned State Development Department.

- Producers to keep a record of their vendors to whom they have supplied raw materials for manufacturing carry bags, plastic sheets, and multi-layered packaging. This is to curb the manufacturing of these products in unorganised sector.
- Plastic carry bag will be available only with shopkeepers/street vendors pre-registered with local bodies on payment of certain registration fee.
- Central Pollution Control Board (CPCB) has been mandated to formulate the guidelines for thermoset plastic (plastic difficult to recycle). In the earlier Rules, there was no specific provision for such type of plastic.

### **LIMITATIONS OF PLASTIC WASTE MANAGEMENT RULES, 2016**

- The rules do not deal with the informal sector of waste collection.
- These rules do not focus on reducing plastic waste as there is no mention on how to reduce plastic waste in the new rules. While it has focused on the use of plastic carry bags by increasing the minimum thickness from 40 microns to 50 microns, but it is silent on the other forms of plastics such as the mineral water bottles (PET).
- The producers have not shown any interest despite various interventions across the country by government and civic societies.
- It lacks steps to spread awareness among the masses about plastic waste.

### **PLASTIC WASTE MANAGEMENT (AMENDMENT) RULES 2018**

- The amended Rules lay down that the phasing out of Multilayered Plastic (MLP) is now applicable to MLP, which are "non-recyclable, or non-energy recoverable, or with no alternate use."
- The amended Rules also prescribe a central registration system for the registration of the producer/importer/brand owner.
- The centralised registration system will be evolved by Central Pollution Control Board (CPCB) for the registration of the producer/importer/brand owner.

### **Proposed alternatives and their limitations**

- Compostable plastic bags – Compostable plastic cannot degrade in nature; it has to be separated from other waste and heated to 70 degrees Celsius at an industrial facility.
- Bioplastics – May not necessarily be biodegradable and may require very specific conditions to break down. They also do not solve the litter or throwaway culture problem.
- Glass containers: but they are not a good alternative as studies show that making and moving glass bottles uses nearly five times more energy than plastic.
- Paper bags which is considered greener than plastic. Analyses of both materials show that plastic bag production causes significantly less air and water pollution.
- Micro plastic – Study has not shown if consuming micro plastic is harmful or not. It's an emerging area of research, one the World Health Organization is working to assess.
- Incineration does not address the overproduction problem and Creates other pollution.
- Clean up help reduce litter problems but they do not address the source of the problem and ignore the unseen plastic pollution – micro plastics.
- Throwaway alternatives like replacing one single-use item with another does not necessarily solve the problem or help to address our throwaway culture.

An eco-friendly product, which is a complete substitute of the plastic in all uses, has not been found till date. In the absence of any suitable alternative, it is neither practical and nor desirable to impose a blanket ban on the use of plastic all over the country. The real challenge lies in improving plastic waste management

