

# **CURRENT AFFAIRS 2020**

**[Part 1] - Environment**

**ForumIAS**

**Plastic Pollution**

CA - 1229

**News**

On August 15, in his Independence Day address, Prime Minister Narendra Modi called for a **movement to eliminate single-use plastic** in India, beginning on Gandhi Jayanti

**What is a plastic?**

It is a lightweight, hygienic and resistant material which can be moulded in a variety of ways and utilized in a wide range of applications.

**Key terms**

1. Thermosets and thermoplastic
2. Single use plastic
3. Microplastics
4. PET and others

**Impacts of plastic pollution**

1. Non-biodegradable
2. Threat to fauna
3. Bioaccumulation
4. Choke waterways and exacerbate natural disasters
5. Toxic emissions from burning
6. Indirect social costs
7. Can aggravate transmission of vector-borne diseases
8. Marine plastic pollution

**Steps Taken**

1. Plastic Waste Management Rules, 2016
  - a. Increase the minimum thickness of plastic carry-bags
  - b. Expanded the jurisdiction of applicability
  - c. Defined a very complicated system of EPR
2. Maharashtra was the first state in India to implement a ban on single-use plastics, followed by Telangana, Himachal Pradesh and Tamil Nadu.

**Issues**

1. In spite of the notification of the Plastic Waste Management Rules, most cities and towns are not prepared to implement its provisions.
2. Failure in waste segregation
3. EPR implementation is loose: In April 2019, the Central Pollution Control Board (CPCB) issued notice to 52 companies asking them to file their plan to fulfil their EPR (extended producer responsibility) obligation.
4. 'Good' plastics suffer from limitations
5. Absence of robust testing and certification

**Solutions**

1. There should be research and funding to develop and promote innovative biodegradable products as affordable alternatives to plastic
2. The research on plastic eating bacteria

3. Waste segregation should be made mandatory for waste generators
4. Innovative means to encourage recycling and reap economic benefits should be developed.  
Example: A Canadian company has plastic collection centres, where waste can be exchanged for many things (e.g. for medical insurance, cooking fuel)
5. Citizen awareness
6. Effective implementation of rules; collection of fines
7. Reduction and gradually phasing out plastic consumption
8. 6 R's- Record, Replace, Refuse, Restore, Refill and Rethink on plastic over use

#### **International efforts**

1. The Ellen MacArthur Foundation, in collaboration with the United Nations Environment Programme (UNEP), has evolved a new hypothesis titled the 'New Plastics Economy: Global Commitment'. The basic premise of the proposed new plastic economy is: Eliminate-Innovate-Circulate.
2. SDG 14
3. Efforts in France, China and others
4. Efforts to cleanup global garbage patch

## Madrid Climate Talks

### Context

COP25 of UNFCCC took place in Madrid, Spain in December 2019

### Objectives

1. To complete the rule-book to the 2015 Paris Agreement that would become effective in 2020 to replace the 1997 Kyoto Protocol
2. To discuss the functioning of international emissions trading systems, compensation for poor countries.
3. To commit to a long-term action plan for combating climate change

### Key Outcomes

1. Inclusion of oceans in future NDCs
2. Climate ambition alliance
3. Rules under Article 6 of the Paris Agreement
4. Common time frames
5. Finance
6. Periodic Review
7. Response Measures
8. Common Metrics
9. Gender Action Plan

### India's efforts

1. National Action Plan on Climate Change (NAPCC) which covers eight major missions on Solar, Enhanced Energy Efficiency, Sustainable Habitat, Water, Sustaining the Himalayan Ecosystem, Green India, Sustainable Agriculture and Strategic Knowledge on Climate Change.
2. International Solar Alliances (ISA)
3. State Action Plan on Climate Change (SAPCC)
4. FAME Scheme – for E-mobility
5. Atal Mission for Rejuvenation & Urban Transformation (AMRUT) – for Smart Cities
6. Pradhan Mantri Ujjwala Yojana – for access to clean cooking fuel
7. UJALA scheme - for embracing energy efficient LED bulbs
8. Swachh Bharat Mission
9. INDC- India recently submitted its Second Biennial Update Report (BUR) to the UNFCCC in December 2018 as per the reporting obligations under the convention. The report brings out the fact that emission intensity of India's GDP came down by 21% between 2005 & 2014 and India's achievement of climate goal for pre-2020 period is on track.

### Reports, Terms & Initiatives

1. Greenhouse Gas Bulletin
2. Climate Action Summit
3. Emissions Gap Report
4. Fridays For Future
5. Climate Change Performance Index
6. Global Stocktake

## Ozone Hole

### Context

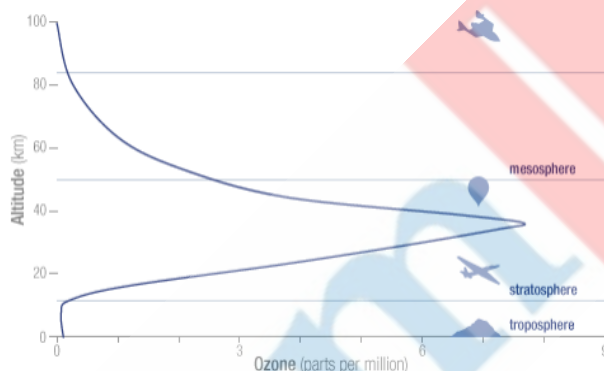
2019 Ozone hole is the smallest on record since its discovery.

### Ozone Hole

The ozone hole is not technically a “hole” where no ozone is present, but is actually a region of exceptionally depleted ozone in the stratosphere.

### Utility of Stratospheric Ozone

Ozone layer is a sunscreen, shielding the planet from potentially harmful ultraviolet radiation that can cause skin cancer and cataracts, suppress immune systems, damage plants disruption and disruption of marine ecosystems. The peak concentration of ozone occurs at an altitude of roughly 32 kilometers (20 miles) above the surface of the Earth.



Ozone concentration in various layers of atmosphere

### Key Terms

1. Dobson unit
2. Ground level ozone pollution
3. Polar stratospheric clouds
4. HFCs

### Montreal Protocol

1. This is a global agreement to protect the stratospheric ozone layer by phasing out the production and consumption of ozone-depleting substances (ODS)
2. It was finalized in 1987
3. It is the first treaty to achieve universal ratification by all countries in the world
4. The Parties are assisted by the Ozone Secretariat, which is based at UN Environment headquarters in Nairobi, Kenya.
5. Developing and developed countries have equal but differentiated responsibilities- both groups of countries have binding, time-targeted and measurable commitments.
6. On October 15, 2016, Parties to the Montreal Protocol adopted the **Kigali amendment** to phase down production and consumption of hydrofluorocarbons (HFCs)

### Concerns

1. Global warming and sluggish recovery of ozone hole
2. Exempted chemicals