



CURRENT AFFAIRS



Argasia Education PVT. Ltd. (GST NO.-09AAPCAI478E1ZH)
Address: Basement C59 Noida, opposite to Priyagold Building gate, Sector 02,
Pocket I, Noida, Uttar Pradesh, 201301, CONTACT NO:-8448440231

Date –28- November 2024

“TACKLING THE PLASTIC CRISIS: A GLOBAL CALL TO

WHY IN THE NEWS?

The second day of talks for a treaty to reduce plastic pollution is ongoing, with environmental activists and civil society groups urging leaders by stating that “the world is watching.” National representatives are meeting in Busan, South Korea, for a week of discussions focused on finalizing a Global Plastics Treaty – a groundbreaking, legally binding accord to regulate plastic throughout its entire lifecycle. There has been resistance to limiting the amount of plastic that companies are permitted to produce.

PLASTIC POLLUTION:

Plastic pollution refers to the accumulation of plastic products and waste in the environment, where they harm ecosystems, wildlife, and human health. It occurs when plastic items—often single-use products like bottles, bags, and packaging—are discarded improperly, leading to their spread across land, rivers, oceans, and other natural habitats. Over time, these plastics degrade into smaller particles, known as microplastics, which continue to pollute the environment and enter the food chain.

Key Points on Plastic Pollution:

- 1. Marine Pollution:** Plastic waste accounts for 80% of all marine pollution, with 8 to 10 million metric tons entering the ocean annually.
- 2. Future Projections:** By 2050, plastic could outweigh all fish in the sea, according to research.
- 3. Production Surge:** In the past decade, more plastic products have been produced than in the entire previous century.
- 4. Persistence:** The Environmental Protection Agency (EPA) reports that nearly 100% of all plastics ever created still exist today in some form.
- 5. Degradation Time:** Plastic takes between 500 to 1000 years to degrade, and even then, it only breaks down into microplastics, never fully disappearing.
- 6. Ocean Plastic:** There are currently 50-75 trillion pieces of plastic and microplastics in the ocean.
- 7. Garbage Patches:** As plastic degrades, it either breaks into microplastics or accumulates in large floating garbage patches.



GLOBAL PLASTIC MENACE:

- 1. Massive Production:** Global plastic production has surged from 1.5 million metric tons in 1950 to 359 million metric tons by 2018.
- 2. Ocean Pollution:** Each year, between 4.8 to 12.7 million metric tons of plastic enter the oceans, contributing to marine pollution.
- 3. Persistent Plastic:** Plastics, which are largely non-biodegradable, persist in the environment for hundreds to thousands of years, causing long-term environmental damage.
- 4. Microplastics:** By 2018, microplastics (plastic particles less than 5mm) were found in the organs of over 114 aquatic species and have reached deep-sea habitats.
- 5. Environmental Impact:** Plastic waste harms marine life through ingestion and entanglement, while on land, it clogs drainage systems, contributes to flooding, and disrupts ecosystems.
- 6. Plastic Pollution Hotspots:** Floating plastic waste accumulates in five subtropical gyres, forming “garbage patches,” including the notorious Great Pacific Garbage Patch.
- 7. Waste Mis-management:** Around 50% of all plastics produced are single-use items that are often improperly disposed of, exacerbating pollution.
- 8. Chemical Leach:** Plastics release harmful chemicals such as phthalates, BPA, and PBDE into the environment, disrupting ecosystems and human health, especially affecting reproductive systems.

INDIA AND PLASTIC POLLUTION:

1. Plastic Pollution Statistics

Annual Generation: India produces approximately 3.5 million tons of plastic waste each year.

Single-Use Plastics: Around 50% of this waste consists of single-use plastics like bags and packaging.

Recycling: India recycles 60-70% of plastic waste, but much of it is informal and inefficient.

Ocean Contribution: India significantly contributes to global plastic pollution, with improper disposal leading to ocean waste.

2. Key Laws and Policies

Plastic Waste Management Rules (2016): Mandates segregation, collection, recycling, and extended producer responsibility (EPR).

Amendment (2021): Ban single-use plastics, strengthen EPR for packaging, and aim for 100% recycling by 2025.

Environment Protection Act (1986): Provides the framework for controlling plastic pollution.

Swachh Bharat Abhiyan (2014): Encourages segregation, plastic-free zones, and waste management.

National Action Plan (2018): Focuses on public awareness and improving recycling infrastructure.

3. Recent Government Actions:

Single-Use Plastic Ban: States like Delhi and Maharashtra have implemented bans on plastic bags, straws, and packaging.

EPR: Producers are responsible for managing plastic waste and recycling their products.

Plastic Waste Management Fund: Supports recycling and waste management infrastructure.

NEED FOR A GLOBAL TREATY ON PLASTIC:

1. The Growing Dependence on Plastic: Plastic production has surged from 234 million tonnes in 2000 to 460 million tonnes in 2019, with projections reaching 700 million tonnes by 2040.

2. Plastic Waste Crisis: Plastic takes 20 to 500 years to decompose, and less than 10% is recycled. Annual plastic waste generation is around 400 million tonnes, expected to rise by 62% by 2050.

3. Environmental and Health Impacts: Plastic waste contaminates ecosystems and poses health risks, including endocrine disruption, cancer, and neurodevelopmental disorders, affecting both humans and wildlife.

4. Plastic's Contribution to Climate Change: Plastic production and waste contribute 3.6% of global greenhouse gas emissions, with emissions projected to rise by 20% by 2050.

5. India's Role in Plastic Pollution: India is the largest contributor to global plastic pollution, accounting for 20% of emissions, or 9.3 million tonnes annually, surpassing countries like Nigeria, Indonesia, and China.

ISSUES ASSOCIATED WITH A GLOBAL PLASTIC TREATY:

1. Lack of Enforcement: Without strong enforcement mechanisms, countries may fail to comply with treaty commitments, leading to limited impact in reducing plastic pollution.

2. Resistance from Industries: Many plastic-producing industries may oppose regulations that limit production or promote alternatives, fearing economic losses or increased operational costs.

3. Differences in National Priorities: Countries have varying levels of development and environmental priorities. Wealthier nations might be able to implement measures faster while developing countries could struggle due to lack of resources, technology, and infrastructure.

4. Lack of Consensus on Targets: Setting global targets for plastic reduction and recycling might face disagreements among nations, especially regarding specific timelines and thresholds for waste reduction or recycling rates.

5. Inadequate Funding: A global treaty may not provide sufficient financial support for developing nations to implement waste management systems or transition to more sustainable materials.

6. Impact on Local Economies: The transition away from plastic-based industries could disrupt local economies, especially in countries heavily reliant on plastic production, leading to job losses and economic instability.

7. Dependence on Voluntary Participation: If the treaty relies on voluntary commitments, some nations may prioritize national interests over global environmental goals, limiting the treaty's effectiveness.

8. Implementation Complexity: Coordinating a global treaty with diverse regulatory environments, legal frameworks, and economic structures across countries could be administratively complex and time-consuming.

WAY FORWARD:

1. Strengthen Global Collaboration: Governments, industries, and civil society must work together to create and implement a robust global plastic treaty, ensuring shared responsibilities and collaborative solutions to

tackle plastic pollution.

2. Adopt Circular Economy Models: Encourage countries and industries to shift towards circular economies where plastic materials are reused, recycled, and repurposed, minimizing waste and reducing reliance on virgin plastic production.

3. Invest in Sustainable Alternatives: Accelerate the development and adoption of biodegradable or environmentally friendly materials to replace single-use plastics, incentivizing innovation through research and development funding.

4. Enhance Recycling Infrastructure: Build and upgrade waste management systems worldwide, particularly in developing countries, to ensure better collection, sorting, and recycling of plastic waste.

5. Implement Stronger Regulations: Enforce stricter regulations on plastic production, use, and disposal, including bans on harmful plastics and the establishment of clear recycling targets for businesses.

6. Promote Public Awareness and Education: Raise awareness globally about the environmental impact of plastic pollution and encourage responsible consumer behaviour through education, media campaigns, and community-based initiatives.

7. Incentivize Industry Accountability: Hold industries accountable for the lifecycle of their plastic products by requiring extended producer responsibility (EPR) programs that ensure manufacturers take responsibility for the disposal and recycling of their products.

8. Strengthen Monitoring and Reporting: Establish a global monitoring system to track plastic production, waste, and recycling rates, ensuring transparency and holding nations accountable for meeting environmental targets.

CONCLUSION:

The escalating plastic pollution crisis requires urgent global action. As discussions for a Global Plastics Treaty continue, addressing challenges like enforcement, industry resistance, and differing national priorities is crucial. The way forward involves stronger global collaboration, adopting circular economy models, investing in sustainable alternatives, and improving waste management systems. A legally binding treaty, alongside stricter regulations and industry accountability, can reduce plastic production and waste, protect ecosystems, and combat climate change. Immediate action is needed to curb plastic's harmful impact on the environment and future generations.

PRELIMS QUESTION:

Q. Which of the following is true regarding the global plastic pollution crisis?

1. Plastic takes between 20 to 500 years to degrade, and less than 10% of plastic is recycled globally.
2. Plastic waste accounts for 40% of all marine pollution, with 8 to 10 million metric tons entering the ocean annually.
3. India is the largest contributor to global plastic pollution, accounting for 10% of global emissions.
4. The plastic production rate has decreased significantly over the past decade.

Select the correct answer from the options below:

- A. 1 and 2
- B. 2 and 3
- C. 1, 2, and 3
- D. All of the above

ANSWER: A

MAINS QUESTION:

Q. Discuss the environmental and health impacts of plastic pollution. What role can a global treaty play in addressing this issue?

(250 words, 15 marks)

Ritik singh

PLUTUS IAS
UPSC/PCS

UPSC CSE 2024-25

**CHEMISTRY
OPTIONAL**

**ONLINE BATCH
AVAILABLE AT
CHANDIGARH**

**ADMISSION
OPEN**

**CHEMISTRY
WHATSAPP CHANNEL**

CHEMICAL COLLECTIVE

STARTS FROM

29th NOVEMBER 2024
04:00PM

2nd Floor, Apsara Arcade, Karol Bagh Metro Station
Gate No. - 6, New Delhi 110005

OUR CENTERS Delhi | Chandigarh | Shimla | Bilaspur

BY NAUSHAD ANSARI
PHD IN CHEMISTRY, M.TECH- IIT DELHI,
M.SC AND B.SC IN CHEMISTRY.
QUALIFIED JOINT UGC - CSIR NET- JRF & GATE.

✉ info@plutusias.com ☎ **8448440231** 🌐 www.plutusias.com