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## 1. Why the world needs a global plastic treaty

### Overview

More than 170 countries will converge in Busan, Republic of Korea, to negotiate a new legally binding global treaty to end plastic pollution, including marine pollution. This is the fifth (and final) round of talks since 2022, when the UN Environmental Assembly (UNEA) agreed to develop such a by the end of 2024.

### Why is a global plastic treaty required?

Owing to its adaptable properties and versatile use, plastic has become almost indispensable for humans. As a result, plastic production has skyrocketed across the world in recent decades. The annual global production of plastic doubled from 234 million tonnes (mt) in 2000 to 460 mt in 2019. Nearly half of this was produced in Asia, followed by North America (19%) and Europe (15%). Plastic production is expected to touch 700 mt by 2040, according to a report by the Organisation for Economic Co-operation and Development (OECD).

This has led to a crisis as plastic takes anywhere from 20 to 500 years to decompose, and less than 10% has been recycled till now, according to a 2023 study published by The Lancet. About 400 mt of plastic waste is generated annually, a figure expected to jump by 62% between 2024 and 2050.

Much of the plastic waste leaks into the environment, especially into rivers and oceans, where it breaks down into smaller particles (microplastic or nanoplastic).

This has severely impacted the environment and health of living beings.

Scientific studies submitted to the UN Environment Programme (UNEP) have found that exposure to chemicals in plastic can cause endocrine disruption and a range of human diseases including cancer, diabetes, reproductive disorders, and neurodevelopmental impairment. Plastic also harms species inhabiting marine, freshwater, and land ecosystems.

Plastic contributes to climate change as well. In 2020, it generated 3.6% of global greenhouse gas (GHG) emissions, with 90% of those quantifiable emissions coming from plastic production, which uses fossil fuels as raw material. The remaining 10% of emissions were released during plastic waste management and treatment. If current trends continue, emissions from the production could grow 20% by 2050, a recent report from the United States' Lawrence Berkeley National Laboratory said.

India contributes to a fifth of global plastic pollution, according to a study published in the journal Nature in September. It accounts for 20% of the world's global plastic pollution with emissions of 9.3 mt, which is significantly more than the countries next in the list — Nigeria (3.5 mt), Indonesia (3.4 mt) and China (2.8 mt), the study said.



### What is on the negotiating table?

Negotiations primarily pertain to formulating a global set of rules that will address plastic pollution through its life cycle, from fossil-fuel based production, and the challenges of managing plastic disposal and waste. The final rules may also ban “particular types of plastic,

plastic products, and chemical additives used in plastics, and set legally binding targets for recycling and recycled content used in consumer goods," according to a report by the Grist magazine.

There will be talks on 'just transition' for workers and those persons and communities whose livelihoods would be affected by the elimination of certain items and a move away from plastic production.

However, countries have been unable to converge on these crucial agenda items and there has been large variance in the positions taken by them.

For instance, countries have failed to agree on the framing and language of how to proceed with production caps. That is because oil and gas-rich countries, and major petrochemical-producing and plastic-producing nations have opposed negotiations around production caps. Saudi Arabia, Iran, Russia, Kazakhstan, Egypt, Kuwait, Malaysia, and India have expressed resistance to stricter mandates and have instead proposed downstream measures such as innovative waste management and sustainable plastic use, according to a report by the Centre for Science and Environment.

On the other hand, Rwanda, Peru and the European Union have proposed ambitious targets for curbing plastic pollution. Rwanda has proposed a 40% reduction target by 2040, with 2025 as the baseline year.

Countries have also not been able to agree on the subject of finance. The UNEP's intergovernmental negotiation committee (INC), which is leading the negotiations, noted in the draft text that countries should make efforts to increase the mobilisation of private funding, including alignment of public and private investment and finance to achieve the objectives of any potential treaty.

### **What is India's position?**

India has made it clear that it does not support any restrictions on the production of polymers. Any restrictions are beyond the mandate of the UNEA's resolution adopted at Nairobi in 2022, according to India.

The country has also sought the inclusion of financial and technical assistance, and technology transfer in the substantive provisions of any final treaty.

On the exclusion of harmful chemicals used for plastic production, India has said that any decision should be based on scientific studies, and the regulation of such chemicals should be regulated domestically.

India banned the use of single-use plastics covering 19 categories in 2022. However, the country has said that a decision on the issue of including certain plastic items for phase-out in the final treaty should be "pragmatic" and "regulation should be nationally driven taking into account national circumstances."

For scientific and safe waste management, the country wants a mechanism to be established to assess infrastructural requirements. India has said that there must also be an assessment of the financial resources needed for waste management as well as the availability of adequate, timely, and predictable financial resources.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

## 2. Why India's toxic farm fire counting method is disputed

### Introduction



India plans to count toxic farm fires by monitoring the burnt area they leave rather than the current method of using orbiting satellites to measure live fires.

Here is a look at how India counts farm fires – a major contributor to severe pollution in the north – and why its method is being questioned.

### Why are farm fires lit?

Farmers in India light fires, in violation of laws that bar the practice, to quickly clear crop waste or stubble left behind after paddy is harvested so that they can plant wheat.

Although the government offers subsidies on harvesting machines that can replace this method, demand has been low due to their high price or long wait for those looking to rent them.

### How does India monitor farm fires?

Officials say satellites are the only way to monitor farm fires since they capture a much larger area.

India's space agency procures data from two orbiting NASA satellites that pass over the northern breadbasket states of Punjab and Haryana, among others, twice a day – around 10.30 am (0500 GMT) and 1.30 pm (0800 GMT).

This is then shared with the government to count farm fires.

### Is this method foolproof?

NASA satellites only capture instances of farm fires during the limited period when they are passing over the region, which takes them 90 seconds. They therefore only capture any blaze visible at that time or lit in the previous half hour.

Experts suspect that farmers have, over time, become aware of this surveillance period and shifted the time of burning their crop waste to evade the NASA satellites.

### **Why is it being questioned now?**

An adviser to the Supreme Court, which is monitoring pollution management by authorities in the national capital region, this week said there was a discrepancy in the farm fire data obtained from orbiting and stationary satellites.

Citing information given by a senior scientist at NASA Goddard Space Flight Center, she said that a South Korean stationary satellite had captured farm fires at 4.20 pm (1050 GMT), well after the NASA satellites had moved on.

### **What is the alternative?**

The court had directed the federal government to procure data of farm fires from stationary satellites as an alternative but the government said this data is "sub-optimal". Instead, India's space agency is working on a system to count farm fires by studying the burnt area they leave behind.

Relevance: GS Prelims & Mains Paper III; Environment

Source: The Hindu

## **3. Why did the Supreme Court pull up the the Commission for Air Quality Management?**

### **Introduction**

**"HAS NOT PERFORMED": SC BLASTS DELHI AIR QUALITY PANEL**



Air pollution in Delhi has been in the 'severe' and 'severe plus' category for the most part of the last 10 days. This week, the Supreme Court pulled up the Commission for Air Quality Management (CAQM), the government's monitoring agency, on its inadequate pollution control response.

### **What is the CAQM?**

The CAQM in the National Capital Region (NCR) and adjoining areas came into existence through an ordinance in 2020, which was later replaced by an Act of Parliament in 2021. The CAQM was set up for better coordination, research, identification and resolution of problems surrounding air quality and connected issues. It initially had 15 members, comprising officials, past and present, of the environment ministry and other departments of the Union government, as well as officials of various State governments, and representatives from NGOs and other agencies. The CAQM is now headed by Rajesh Verma and there are 27 members.

The CAQM replaced the EPCA (Environmental Pollution (Prevention and Control) Authority), which was formed in 1998 by the Supreme Court. However, the EPCA was not backed by a statute and experts had raised the issue that it lacked the teeth to act against authorities which did not follow its orders. Despite that drawback, it was under the EPCA that many of the



measures being followed by the CAQM started, including the Graded Response Action Plan or GRAP, a list of temporary emergency measures to control air pollution.

### **What are the powers of CAQM?**

Under the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021, the CAQM was given the power to take all measures, issue directions and entertain complaints, as it deems necessary, for the purpose of protecting and improving the quality of air in the NCR and adjoining areas. Under Section 14 of the Act, the CAQM can initiate stringent actions against officers for not following its orders.

### **Why did the SC pull up the CAQM?**

Over the years, the Supreme Court which has been hearing an ongoing case on air pollution, has pulled up different governments and agencies for their laxity. On September 27, Justice A.S. Oka and Justice Augustine George Masih orally observed about CAQM: "Like pollution, your directions are in the air." The court was referring to various stakeholders not following the CAQM's orders despite specific provisions under the 2021 Act. "There has been total non-compliance of the Act. Please show us a single direction issued to any stakeholder under the Act... We are of the view that though the Commission has taken steps, it needs to be more active. The Commission must ensure that its efforts and directions issued actually translate into reducing the problem of pollution," the Bench observed. On November 18, the Supreme Court slammed the CAQM for delayed action while directing stringent curbs under Stage IV of the GRAP and noted that rather than taking pre-emptive action to contain air pollution, it waited in vain for the air to improve. Stage IV is the highest level of restrictions under GRAP, and according to the CAQM's rules, it is supposed to be implemented when the air quality category is likely to fall to 'severe plus', and is likely to remain in that level for three or more days. The court pulled up the CAQM for delaying implementation of curbs though the AQI had slipped to the 'severe plus' category.

### **Is the CAQM to blame for Delhi's pollution?**

Though the CAQM makes plans and coordinates with different agencies, it is the agencies that have to implement them on the ground.

An official of the CAQM said the commission has improved coordination and planning. "For example, though the paddy stubble burning, which is a source of severe pollution, happens in October-November, we start meeting State officials from February and continue talks till the season is over," the member said. The CAQM had also coordinated with Punjab and Haryana to prepare action plans for controlling stubble burning in 2022 and it is updated every year.

About challenges that the commission faces, the official said, "Over the years, though we were looking at different sources of pollution and trying to control them, our main focus was on controlling stubble burning. But from now onwards, we will try to focus on multiple areas. We will be putting more energy and time on controlling dust and vehicular pollution too."

Anumita Roychowdhury, executive director, Centre for Science and Environment, said that the decision to impose GRAP should be taken proactively by the CAQM. Pollution forecasting methods have to be more accurate, she added.

Relevance: GS Prelims & Mains Paper III; Environment  
Source: The Hindu

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