

## TATHASTU ICS



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### ZERO DRAFT OF GLOBAL PLASTIC POLLUTION TREATY

**SOURCE: DOWN TO EARTH, UNEP** 

### WHY IN NEWS?

The second session of the Intergovernmental Negotiating Committee (INC) wrapped up with member states instructing the INC secretariat to create an initial draft aimed at putting an end to plastic pollution, both on land and in marine ecosystems.

### **ABOUT THE TREATY:**

- The preliminary draft includes ten sections for discussion, covering topics like introduction, definitions, principles, and scope, as well as institutional arrangements and final provisions.
- Saudi Arabia, Iran, and China at INC-2 emphasized the need to define the legally binding instrument's scope, a view supported by India.
- However, it's worth noting that the United Nations Environment Assembly resolution 5/14 already defines the scope as the "full life cycle of plastics,".
- This term is subject to varying interpretations by stakeholders, as highlighted by the Centre for Science and Environment (CSE) in their submission to the INC secretariat.



### **CHALLENGES WITH PLASTIC POLLUTION IN INDIA:**

Management of plastic waste:

India encounters substantial difficulties in handling plastic waste due to insufficient recycling facilities.

This results in widespread littering and improper disposal practices that have adverse environmental consequences.

Pollution on land and water:

India's vast coastline is vulnerable to plastic pollution in marine environments, affecting aquatic life and coastal ecosystems.

> Improper recycling infrastructure:

Insufficient recycling facilities and technology hinder efforts to manage plastic waste effectively.

Most of the recycling facilities fall under the informal sector.

## Lack of comprehensive regulations:

The absence of comprehensive legislation and effective enforcement measures exacerbates plastic-related challenges.



Figure 1: OBJECTIVES OF THE DRAFT

### > Hazardous fumes and air pollution:

The incineration of plastics in open spaces contributes to air pollution and health problems, especially in urban areas.

### > Single-use and microplastic management:

The widespread use of disposable plastics like bags and packaging is a major factor in pollution and poses risks to ecosystems.

### **GOVERNMENT EFFORTS FOR THE REDUCTION OF PLASTIC POLLUTION:**

Government Initiative	Objective
<ol> <li>Plastic Waste Management Rules (2016)</li> </ol>	Regulate plastic use and promote recycling.
<ol><li>Ban on Single-Use Plastics (in various states and union territories)</li></ol>	Eliminate the use of disposable plastics.
<ol><li>Extended Producer Responsibility (EPR)</li></ol>	Hold manufacturers accountable for recycling and proper disposal.
4. Swachh Bharat Abhiyan	Enhance waste collection and management, reducing plastic litter.
<ol><li>National Dashboard on elimination of single-use plastics.</li></ol>	To track the progress for plastic management.

INTERNATIONAL EFFORTS:		
Convention	Year	Key provisions
Basel Convention on the Control of	1989	Bans the export of hazardous waste from
Transboundary Movements of Hazardous Wastes and Their Disposal		developed to developing countries.
Stockholm Convention on Persistent Organic Pollutants	2001	Bans or restricts the production and use of 12 persistent organic pollutants (POPs), including some plastics.
Minamata Convention on Mercury	2013	Bans or restricts the use of mercury, including in some plastic products.
United Nations Environment Programme (UNEP) Clean Seas Campaign	2017	Aims to reduce plastic pollution in the oceans by 2030.
G7 Oceans Plastics Charter	2021	Commits G7 countries to take action to reduce plastic pollution in the oceans.
Global Commitment on Marine Litter	2022	Commits businesses and organizations to take action to reduce marine litter.

### **WAY FORWARD**

- Eco-friendly practices: Encourage the development and adoption of sustainable alternatives to plastics, such as biodegradable materials and reusable products.
- ➤ **Circular economy:** Advocate for the adoption of a circular economy model, wherein plastic items are crafted with recyclability and reusability in mind, leading to a reduction in overall waste production.
- > **Develop recycling infrastructure:** Allocate resources to enhance waste management and recycling infrastructure, encompassing the aspects of collection, sorting, and recycling facilities. Establish an all-encompassing system for managing plastic waste.

### PRELIMS MARKS BOOSTER:

### **TYPES OF PLASTICS AND THEIR APPLICATIONS:**

TYPE		USAGE/ APPLICATION
1.	Polyethylene Terephthalate (PET)	Beverage bottles, food containers, polyester fibers for textiles, and packaging.
2.	Poly Vinyl Chloride	Used in pipes, electrical cables, vinyl flooring, and medical tubing.
3.	Polypropylene	Used in packaging, automotive parts, textiles, and medical devices.
4.	Polystyrene	Used in CD cases, disposable cutlery, and toys.
5.	Polyethylene	Used in plastic bags, shrink wrap, and flexible packaging.
6.	Poly urethane	Used in foam insulation, upholstery, footwear, and adhesives.
7.	Polycarbonate	Used in eyeglass lenses, safety helmets, CD/DVD discs, and electronic components.

### **MAINS MARKS BOOSTER:**

Data/ facts for mains answer writing:

- Central Pollution Board estimates: According to data from the Central Pollution Control Board, plastic waste makes up 8% of the total solid waste, with Delhi being the primary contributor, trailed by Kolkata and Ahmedabad.
- ❖ India produces approximately 3.4 million tons of plastic waste, but the recycling rate for the entire plastic waste stream is only 30%.
- Case study:

Plastic Roads in Tamil Nadu:

The state of Tamil Nadu has pioneered the use of plastic waste in road construction. They mix shredded plastic waste with bitumen to create durable and water-resistant roads. This not only reduces plastic pollution but also improves road quality.



### **INDIA AND SAUDI ARABIA RELATIONS**

### **SOURCE: THE HINDU**

#### WHY IN NEWS?

- Just two days after the inauguration of the India-Middle East-Europe Economic Corridor, Prime Minister Narendra Modi emphasized the crucial strategic partnership between India and Saudi Arabia.
- This declaration came during the official visit of Crown Prince Mohammed Bin Salman of Saudi Arabia, where both nations agreed to establish a collaborative task force to expedite the West Coast refinery project.
- The visit of the Crown Prince holds significance, especially considering that it occurred several months after Saudi Arabia reconciled with Iran through a deal brokered by China.



### **SIGNIFICANCE OF SAUDI ARABIA FOR INDIA:**

# Energy security

- •Saudi Arabia is one of India's top suppliers of crude oil.
- Ensuring a stable and reliable energy supply is crucial for India's economic growth and energy security.

# Strategic partnership

• Both nations share common concerns about regional stability and security, making them natural strategic partners in the Middle East.

## Diplomatic ties

•Saudi Arabia has supported India's interests on various international platforms, including its bid for a permanent seat on the United Nations Security Council.

# Regional security

 India and Saudi Arabia cooperate on counterterrorism efforts, sharing intelligence and working to combat radicalization and extremism.

### Cultural ties

• Saudi Arabia is home to the two holiest cities in Islam, Mecca and Medina.

### CHALLENGES IN THE RELATIONS BETWEEN INDIA AND SAUDI ARABIA:

- ➤ **Geopolitical challenges:** India maintains relations with both Saudi Arabia and Iran.

  The ongoing rivalry between these two nations can create diplomatic challenges for India in balancing its interests.
- Labour issues: The treatment of Indian expatriates and laborers in Saudi Arabia has been a source of occasional tension, with reports of exploitation and abuse.
- ➤ Oil price fluctuations: India is heavily reliant on Saudi Arabia for oil imports. Fluctuations in global oil prices can impact India's economy and fiscal stability, leading to occasional tensions in the energy partnership.

### WAY FORWARD:

### Diversification of economic relations:

Expand economic cooperation beyond energy, including investments in infrastructure, technology, manufacturing, and healthcare sectors.

Encourage Saudi investments in India and vice versa.

### Promoting cultural ties:

Utilize India's historical and cultural ties with Saudi Arabia, especially in the context of Islamic diplomacy, to foster greater cooperation.

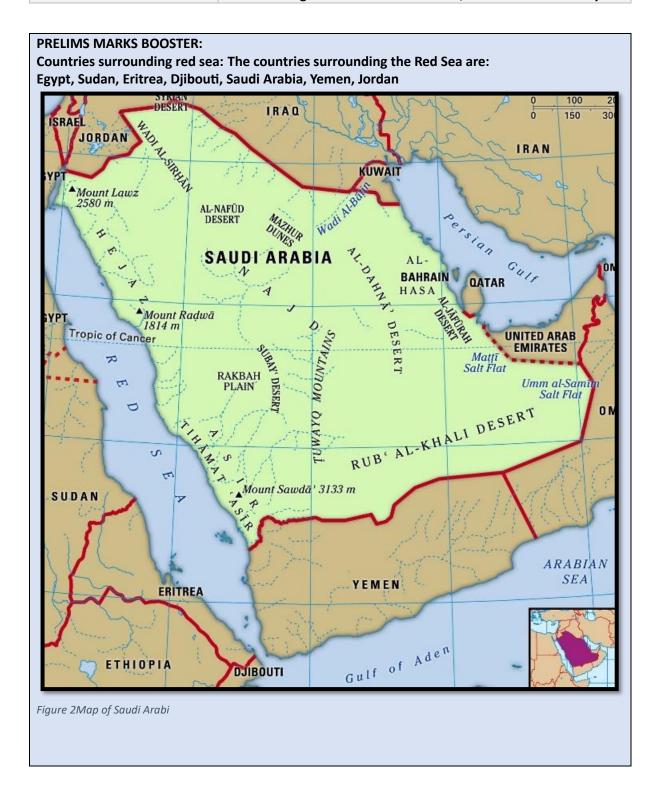
### Peaceful resolution:

Maintain regular high-level diplomatic engagement and dialogues to address any emerging challenges and opportunities.

### HISTORY OF RELATIONS BETWEEN INDIA AND SAUDI ARABIA

1. HISTORICAL RELATIONS	<ul> <li>Indian goods such as spices, textiles, and precious stones were sought after by Arab traders, while India imported items like dates and incense.</li> </ul>
2. CULTURAL RELATIONS	<ul> <li>Saudi Arabia assists more than 175,000 Indian pilgrims during the Hajj annually.</li> </ul>
3. ECONOMIC RELATIONS	<ul> <li>Support Saudi Arabia's Vision 2030 by encouraging Indian businesses to invest in the kingdom's economic diversification initiatives.</li> <li>India Middle East Europe Economic corridor planned at recent G20.</li> </ul>
4. DEFENCE RELATIONS	Naval exercises like AL- MOHED-AL HINDI
5. ENERGY RELATIONS	<ul> <li>Saudi ARAMCO, in collaboration with ADNOC from the United Arab Emirates, has reached an agreement to join forces in the Ratnagiri (Maharashtra) Refinery and Petro- Chemical project Ltd., a Joint Venture valued at \$44 billion.</li> </ul>
6. TRADE and INVESTMENT	<ul> <li>Saudi Arabia is India's 4<sup>th</sup> largest trading partner.</li> <li>Trading in local currencies</li> <li>Discussions on FTA between India and Gulf Cooperation Council, Double taxation agreements.</li> <li>Both parties have also reached an agreement to establish a collaborative task force for a Saudi investment of \$100</li> </ul>

billion, a significant portion allocated to a refinery project along India's western coastline, which has faced delays.



### **GLOBAL BIOFUEL ALLIANCE**

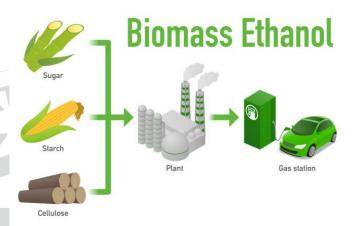
**SOURCE: TOI** 

#### WHY IN NEWS?

During the G20 Summit, **Prime Minister Modi introduced the Global Biofuels Alliance (GBA)**, bringing together **more than 30 countries and international groups** with the aim of encouraging the use of biofuels and increasing global access to bioenergy.

#### **ABOUT GLOBAL BIOFUEL ALLIANCE**

- OBJECTIVE: The initiative's primary goal is to bring together the largest consumers and producers of biofuels to promote the development and deployment of biofuels.
- Its overarching aim is to position biofuels as a pivotal component in the transition to renewable energy, while also contributing to job creation and economic growth.



- Member Participation: A total of 19 countries and 12 international organizations have already committed to joining this endeavour.
- Support from G20 Countries:

Seven G20 nations, including Argentina, Brazil, Canada, India, Italy, South Africa, and the USA, are backing the GBA. Four invitee countries to the G20, namely Bangladesh, Singapore, Mauritius, and the UAE, are also lending their support.

- ➤ Non-G20 Support:
- Eight non-G20 countries, namely Iceland, Kenya, Guyana, Paraguay, Seychelles, Sri Lanka, Uganda, and Finland, have agreed to become founding members of the GBA.
- International Organizations:

The GBA has garnered support from various international organizations, including the World Bank, Asian Development Bank, World Economic Forum, World LPG Organization, UN Energy for All, UNIDO, Bio futures Platform, International Civil Aviation Organization, International Energy Agency, International Energy Forum, International Renewable Energy Agency, and the World Biogas Association.

### SIGNIFICANCE OF THE ALLIANCE:

- Members of the GBA consist of significant biofuel producers and consumers.
- > Specifically, the USA, accounting for 52%, Brazil at 30%, and India at 3%, collectively contribute to approximately 85% of ethanol production and approximately 81% of ethanol consumption.

### **BENEFITS IOF BIOFUELS:**

- Accessibility: Biofuels are easily producible as they primarily rely on widely available biomass resources.
- Reduction in waste: Biofuels can also be manufactured using waste materials such as municipal sewage and inedible crop parts, contributing to waste reduction efforts.

- ➤ Decreased Reliance on Crude Oil and Non-renewable Resources: Biofuels help reduce dependence on crude oil and other finite sources of energy.
- Economic development: Biofuel production often involves labour-intensive processes, leading to job creation and economic development. The establishment of second-generation biofuel production units in rural areas can further boost local economies.

### **CHALLENGES ASSOCIATED:**

- Lower Efficiency: Biofuels exhibit lower efficiency compared to fossil fuels, as fossil fuels yield more energy upon combustion.
- ➤ **Biodiversity:** Genetically modified crops used in fourth-generation biofuel production may pose a risk to biodiversity by potentially diminishing natural plant diversity.
- ➤ Availability of land: Biofuel production demands significant land resources, especially in the case of second-generation biofuels, which often utilize non-food crops, thus necessitating substantial space.
- Food security: First-generation biofuels utilize food sources, raising concerns about potential food shortages if biofuel production is expanded extensively.
- Extensive Water Usage: The extensive water requirements for irrigating biofuel crops and fuel manufacturing can strain local and regional water resources. However, this issue is less prominent in the case of third-generation biofuels.

### **GOVERNMENT EFFORTS FOR BIOFUEL PRODUCTION:**

INITIATIVE	OBJECTIVE
1. GOBARDAN SCHEME	Support villages to manage cattle waste.
2. SATAT YOJANA	For promoting green fuel
3. PM JIVAN YOJANA	To provide financial help for commercial production
4. NATIONAL BIOFUEL POLICY 2018	For domestic biofuel production

### **WAY FORWARD:**

- Promote research: Invest in technologies for the production of advanced biofuels, such as cellulosic ethanol and algae-based biofuels
- > Create market demand: Create a stable market for biofuels by promoting their use in various sectors, including transportation and industry.
- Feedstock Diversification: Promote the cultivation of non-food, sustainable feedstocks like algae, jatropha, and waste biomass to reduce competition with food crops.
- Infrastructure Development: Develop the necessary infrastructure for biofuel production, storage, and distribution, including setting up biofuel refineries and distribution networks.
- Incentives for Farmers: Provide incentives and support to farmers for growing biofuel feedstocks, creating an additional income source.
- **Technology Transfer:** Collaborate with international partners to access advanced biofuel technologies and expertise.

### **National Policy on Biofuels 2018**

### Salient features



An indicative target of 20% blending of ethanol in petrol and 5% blending of biodiesel in diesel is proposed by 2030.



price as compared to 1G biofuels.



**Develop National** Biomass repository by conducting appraisal of biomass across the Country.



With a thrust on Advanced Biofuels, the Policy indicates a viability gap funding scheme for 2G ethanol Bio refineries of Rs.5000 crore in 6 years in addition to additional tax incentives, higher purchase



Bio diesel production to be encouraged from non edible oilseeds, used cooking oil, short gestation crops and development of supply chain mechanisms.



Categorization of Biofuels into Basic Biofuels - First generation(1G) Bioethanol & biodiesel and "Advanced Biofuels"- Second Generation(2G) ethanol, drop-in fuels, algae based Third Generation (3G) Biofuels.



Thrust on research, development and demonstration in the field of Biofuel feedstock production, advanced conversion technologies from identified feedstock.



Increase scope of raw material for ethanol procurement by encouraging Intermediate (B-Molasses), Sugarcane Juice, other Sugar containing materials and damaged as well as surplus food grains.



Setting up of National **Biofuel coordination** committee (NBCC) under Ministry of Petroleum & **Natural Gas** and Working Group on Biofuels.













