



## **Title: Science and Policy Action on Reducing Plastic and Chemical Waste in the Marine Environment**

Date: 5th March 2025 Time: 1130 – 1300 Hrs

Venue: Magnolia Hall, India Habitat Centre

### **(i) Problem statement and state of play**

The marine environment, covering over 70% of the Earth's surface, is a crucial ecosystem that supports biodiversity, regulates climate, and provides resources for millions of people. However, this vast and vital habitat is under increasing threat from human activities, particularly plastic and chemical pollution.

Plastic pollution, ranging from large debris to microplastics, has become one of the most pervasive environmental challenges. These materials, often non-biodegradable, accumulate in oceans and disrupt marine life, causing entanglement, ingestion, and habitat destruction. Similarly, chemical pollutants—such as heavy metals, pesticides, persistent organic pollutants (POPs), industrial waste—contaminate marine ecosystems, leading to toxic bioaccumulation in food chains and long-term ecological damage. POPs are a group of chemicals of particular concern, due to their toxic properties, resistance to degradation, and potential to bioaccumulate and be transported long-range.

The impact of these pollutants is far-reaching, affecting marine organisms, coastal communities, and even human health through seafood consumption. Addressing this crisis requires global

cooperation, stringent regulations, and innovative solutions to reduce plastic waste, control chemical discharges, and restore marine ecosystems.

India is a significant contributor to marine plastic pollution, primarily due to its large population, extensive coastline, and challenges in waste management. Recent estimates indicate that India generates approximately 9.3 million tonnes of plastic waste annually, accounting for nearly 20% of the global plastic waste. Of this, about 3.5 million tonnes are mismanaged and leak into the environment each year, surpassing other major polluters such as Nigeria, Indonesia, and China.

Efforts are underway to address this issue. The Indian government has initiated steps towards formulating a National Marine Litter Policy, aiming to track and monitor litter, develop circular economy solutions, and implement extended producer responsibility to reduce, reuse, and recycle plastics.

Addressing these challenges necessitates science-based approaches to effectively manage plastic waste and POPs, thereby safeguarding the natural environment from the detrimental impacts of such pollution.

**(ii) Objectives of the thematic track**

- Sharing and building knowledge and capacities to tackle plastic and chemical pollution and its associated social, economic, and environmental impacts
- Identify opportunities associated with reducing plastic and chemical waste in the marine environment
- Build a robust science-informed research foundation for policy relevance.

**(iii) Questions -**

- How can robust science-based policy support the reduction of plastic and chemical pollution?
- How can lessons from the global research landscape be applicable in the Indian context?
- In which ways can India best contribute to the global efforts on plastic and chemical pollution management?

**About the World Sustainable Development Summit (WSDS)**

The World Sustainable Development Summit (WSDS) is the annual flagship Track II initiative organized by The Energy and Resources Institute (TERI). Instituted in 2001, the Summit series has a legacy of over two decades for making 'sustainable development' a globally shared goal. The only independently convened international Summit on sustainable development and environment, based in the Global South, WSDS strives to provide long-term solutions for the benefit of global communities by assembling the world's most enlightened leaders and thinkers on a single platform. The 24th edition of the annual flagship event of The Energy and Resources Institute (TERI)—the World Sustainable Development Summit (WSDS)—will be held from 5-7 March 2025 in New Delhi. The Summit deliberations will focus on the theme of **"Partnerships for Accelerating Sustainable Development and Climate Solutions"**.