# UPSC Daily Current Affairs| Prelim Bits 23-12-2024

## National Green Tribunal

### Why in News?

*The Southern Bench of the National Green Tribunal (NGT), by suo motu has directed the Kerala to remove the biomedical and mixed solid waste dumped in villages of Tirunelveli district in Tamil Nadu.*

- **Established in** – ***2010***, as per the *National Green Tribunal Act*.
- It was setup as per recommendations of the Supreme Court, Law Commission and India's international law obligations to develop national laws on environment.
- **Specialised judicial body** – It is equipped with expertise solely for the purpose of *adjudicating environmental cases* in the country.
- **Task** – Providing effective & expeditious remedy in cases relating to
  - Environmental protection
  - Conservation of forests and other natural resources
  - Enforcement of any legal right relating to environment
- **Tribunal's orders** – They are binding and it has *power to grant relief* in the form of compensation and damages to affected persons.
- **Composition** – It has a presence in ***5 zones***

| | |
|---|---|
| **North Zone of NGT** | Delhi |
| **Central Zone of NGT** | Bhopal |
| **East Zone of NGT** | Kolkata |
| **South Zone of NGT** | Chennai |
| **West Zone of NGT** | Pune |

- The Principal Bench is situated in the North Zone, headquartered in Delhi.
- **Headed by** – The Chairperson who sits in the Principal Bench and has
  - At least 10 but not more than 20 *judicial members* and
  - At least 10 but not more than 20 *expert members*.

| **Coverage under NGT** |
|---|
| • The Water (Prevention and Control of Pollution) Act, 1974<br>• The Water (Prevention and Control of Pollution) Cess Act, 1977<br>• The Forest (Conservation) Act, 1980<br>• The Air (Prevention and Control of Pollution) Act, 1981<br>• The Environment (Protection) Act, 1986<br>• The Public Liability Insurance Act, 1991<br>• The Biological Diversity Act, 2002 |

- **Simple approach** – Aggrieved parties may approach the Tribunal in person by

submitting an application and *no need of advocate*.
- **Orders are binding** – Its orders are enforceable and has *powers of a civil court* under the Code of Civil Procedure, 1908.
- **Orders are not final** – It has powers to review its own decisions and if this fails, the decision can be challenged *before the Supreme Court within 90 days*.

| Recent Activities of NGT |
| --- |
| • NGT had sought a reply from the Geological Survey of India (GSI) and others regarding the declining state of Varkala cliff in Kerala.<br>• NGT has sought responses from some ministries of the Union government on a plea seeking implementation of a star-rating system.<br>• NGT eastern bench in Kolkata has ordered a stay on road construction work inside the Barak Bhuban wildlife sanctuary in Assam's Cachar district.<br>• NGT principal bench has taken suo moto cognizance of alleged tree felling and burning near Talacauvery Wildlife Sanctuary. |

**References**


1. The Hindu| Clearing of dumped Biomedical Wastes
2. NGT| National green Tribunal


## SpaDeX MISSION

### Why in News?

*ISRO plans to launch SpaDeX (Space docking experiment) in December 2024.*

- **SpaDeX mission** – *2 satellites/spacecrafts will be launched* into orbit around the earth, where they will demonstrate various technologies while in motion.
  - **Primary objective** – Demonstration of *Docking manoeuvre*
  - **Secondary objectives** – Demonstration of the *transfer of electric power* between the docked spacecraft.

***Docking** specifically refers to joining of 2 separate free-flying space vehicles.*
***Power transfer technology**, also known as wireless power transfer (WPT), is a technology that allows electrical energy to be transmitted without the use of physical wires or connectors.*

- **Spacecraft & Technology –** SpaDeX spacecraft were designed and realised by the *UR Rao Satellite Centre*.
- The full integration and testing of the satellite were carried out at Ananth Technologies, Bengaluru.
- **Launched by** – ***PSLV C-60***
- **Launch specifications** – Both spacecraft will be launched simultaneously but independently into a
  - 470-km wide circular orbit at 55° inclination
  - With a local time cycle of about 66 days

- **Docking manoeuvre** – It is made up of *2 small spacecraft*
  - **Chaser** - SDX01
  - **Target**- SDX02.
- It involves various stages like
  - **Rendezvous** – Aligning orbits of 2 spacecraft
  - **Docking** – Connecting 2 spacecraft
  - **Undocking** – Disconnecting the 2 spacecraft.
- It requires very precise control of the spacecraft's attitude and velocity to ensure a safe connection.



- **Significance –** It is vital for
  - **Assembly and maintenance of the space stations** – Bharatiya Antariksh Station (BAS)
  - **Crew transfer** – Gaganyaan human space flight mission
  - **Suppling fuel to missions** – Chandrayaan-4 mission, for sample return from the Moon.
  - cost-effective indigenous

*India will be the **4th country in the world** to have space docking technology if the mission is successfully completed.*

**Reference**


1. Business Line | SpaDeX Mission
2. The Hindu| Orbital Docking


## India Maritime Heritage Conclave

*Recently India's 1st Maritime Heritage Conclave (IMHC 2024) was held in December 2024 in New Delhi.*

- It is the *First India Maritime Heritage Conclave*.
- **Aim –** To celebrate India's maritime legacy and its profound contributions to global

trade, culture, and innovation.

*India's modern maritime strength includes a 7,500 km coastline, 13 major ports and 200 non-major ports. Indian ports handle 95% of trade volume and contribute 70% of trade value, taking advantage of their strategic location in the Indian Ocean region.*

- **Nodal ministry** – Ministry of Ports, Shipping and Waterways.
- **Objectives**
  - Showcase entire India's Maritime Legacy
  - Global Cultural Confluence
  - Technological Evolution
  - Spiritual and Cultural Exchange
  - Maritime Heritage Preservation




- **2024 Theme** – Towards Understanding India's Position in Global Maritime History.
- **Global participation** – Representatives from *11 countries*.
- **Significance** – It emphasized on skill development, youth engagement, and cultural preservation to carry over nation’s maritime legacy.

## National Maritime Heritage Complex (NMHC)

- **Located in** – Lothal, Gujarat.
- **Focus** – To showcase India’s ancient maritime techniques, including shipbuilding and bead-making, reflecting the nation’s role as a global connector.
- It will be one of the ***world's largest maritime complexes***, integrating both historical

and modern maritime activities.

- **Features**
  - 4 thematic galleries.
  - Open Aquatic Gallery and Lighthouse Museum.
  - Eco-resorts, theme parks and Maritime Research Institutes.

**Reference**

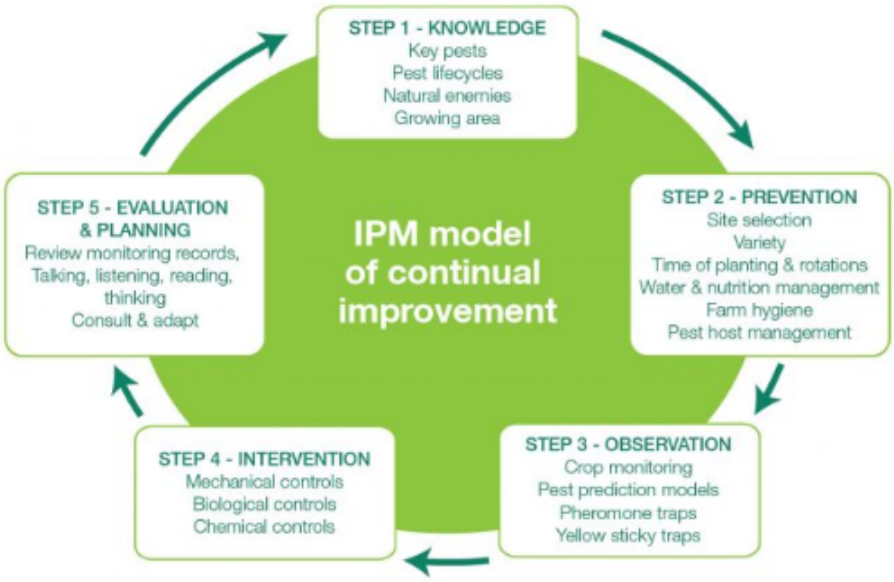
PIB |India Maritime Heritage Conclave 2024

## Integrated Pest Management (IPM)

### Why in news?

*The recent launch of Kisan Kavach marks a significant advancement in protecting farmers from the harmful effects of pesticide exposure.*

- **IPM** – It is a sustainable approach to managing pests by *combining biological, cultural, physical, and chemical tools* in a way that minimizes economic, health, and environmental risks.
- **Different from organic practices** – IPM doesn't discourage spraying chemicals unlike organic, but rather promotes using them only when necessary.




- **Monitoring** – Keep tracks of the pests and their potential damage and is helpful in selecting the best possible combinations of the pest management methods.
- **Pest resistant varieties** – Breeding for pest resistance is a continuous process.
- **Cultural pest control** – It includes crop production practices that make crop environment less susceptible to pests.
- Cultural controls are based on pest biology and development.
  - **For examples** – Crop rotation, cover crop, row and plant spacing, planting and harvesting dates, destruction of old crop debris, etc.,
- **Mechanical control** – These are based on the knowledge of pest behaviour.

    - **For Examples** – Hand picking, installation of bird perches, mulching and installation of traps.
- **Biological control** – It include *augmentation and conservation of natural enemies of pests* such as insect predators, parasitoids, pathogen and weed feeders.
- Here, *native natural enemy populations are conserved* and non-native agents are released with utmost caution.
- **Chemical control** – Pesticides are used to keep the pest population below economically damaging levels when the pests cannot be controlled by other means.

| **IPM initiatives in India** |
| --- |
| • IPM was declared as an official *Ministerial Policy in 1985.*<br>• There are *35 Central Integrated Pest Management Centers* (CIPMCs) in over 28 states and 2 UTs.<br>• National Mission on Agricultural Extension and Technology (*NMAET-Plant Protection & Plant Quarantine*).<br>• Strengthening and Modernization Pest Management Approach in India (*SMPMA*)<br>- It is a season long activity which is confined in 14 weekly sittings in form of FFS in a village to popularize IPM.<br>• Training programme through Kisan vigyan Kendra about IPM |

*According to Indian Council of Agricultural Research-National Centre for Integrated Pest Management around 3-5% of India's total cultivated area is under IPM.*

**References**


1. Government of Assam | Integrated Pest Management (IPM)
2. PIB | Bharat's First Anti-Pesticide Bodysuit


| **One Liners 23-12-2024** |
| --- |
| **Geography** |
| **Panama Canal**<br>• **Panama Canal** – It is a *lock-type canal*, opened in *1979*.<br>• **Connects** – The Atlantic and Pacific oceans across the Isthmus of Panama.<br>• **Owned and administered by** – The Republic of Panama.<br>• From its opening in 1914 until 1979, it was controlled solely by the United States, which built it. |
| **Economy & Agriculture** |

**Bio pesticides**

• They are living organisms which can intervene the life cycle of insect pests in such a way that the crop damage is minimized.
• **In India** – Around 20 microorganisms are registered as biopesticides.
• **Examples** – Bacillus thuringiensis, Trichoderma, Pseudomonas, Metarhizium, Beauveria.
• **Importance** – For sustainable crop protection.

**Kisan Kavach**

• A reusable protective suit designed to protect farmers from the harmful effects of pesticide exposure.
• **Kisan Kavach Protective Shield** – It includes a full-body suit, mask, headshield, and gloves, offering comprehensive protection.
• **Developed by** – BRIC-inStem in Bangalore, in collaboration with Sepio Health Pvt. Ltd.,

## Environment & Disaster Management

**Chilika Lake**

• Asia's largest brackish water lagoon, is a *Ramsar site* spanning 64 km in length and 13.5 km in width.
• **Location** – Near Satapada of *Odisha*, is connected to the Bay of Bengal via a shallow and narrow channel.
• **Biodiversity** – It is habitat of the *endangered Irrawaddy* dolphins, frequently sighted in the Satapada region.

**Unclassed forests**

• They are non-notified forests under government ownership, mainly belonging to revenue department or other departments such as railways or even forests.

## Miscellaneous

**The Order of Mubarak Al- Kabeer**

• The *Prime Minister of India* was recently conferred with the Order of Mubarak Al- Kabeer.
• It is highest *national award of Kuwait*.

**Bharat Ratna awards**

• It is the highest civilian award of the country, instituted in *1954*.
• **Aim** – To recognize exceptional service/performance of the highest order in any field.
• **Recommendations** – Made by the Prime Minister to the President.
• **Nodal ministry** – Ministry of Home Affairs.
• **Number of awards** – Normally restricted to a *maximum of 3* in a year, can be *conferred posthumously*.

**The order of the Civilian Awards in India**

• Bharat Ratna
• Padma Vibhushan
• Padma Bhushan
• Padma Shri

**Chaudhary Charan Singh Awards 2024**

• **Honours** – Outstanding achievements in *agriculture, rural development, and journalism*.

**Kalam Ratna Award - Journalism**

• It was presented to Ms. Neerja Chowdhury for her dedication to insightful journalism.

**Sewa Ratna Award**

• It was conferred upon Dr. *Rajendra Singh, the "Waterman of India,"* for his pioneering efforts in water conservation.



SHANKAR
IAS PARLIAMENT
*Information is Empowering*