

## Today's Prelims Topics






### Women who helped draft the Indian Constitution

#### Context

On Constitution Day, President Droupadi Murmu recalled the role women members played in the Constituent Assembly.

#### About Women in Constituent Assembly

- The **299-member Assembly had 15 women members**, including prominent figures such as **Sarojini Naidu, Sucheta Kripalani and Vijaya Lakshmi Pandit**.
- But it also had lesser-known women from diverse backgrounds who participated in debates on gender, caste and reservations.
- **Participation of Women in different Committees:**
  - **Hansa Mehta and Amrit Kaur** served on the Fundamental Rights and Minorities Sub-Committees.
  - **G. Durgabai** was on the Steering and Rules Committees.

Name		Notable Contributions
<b>Ammu Swaminathan (Kerala)</b>		<ul style="list-style-type: none"> <li>• Co-founded the <b>Women's India Association</b> in 1917 with leaders like Annie Besant.</li> <li>• Advocated for gender equality through the <b>Hindu Code Bill</b>.</li> <li>• Fought for the removal of oppressive customs for widows.</li> </ul>
<b>Annie Mascarene (Kerala)</b>		<ul style="list-style-type: none"> <li>• Campaigned for universal adult franchise, especially for marginalized groups.</li> <li>• Advocated for universal voting rights and political participation despite caste discrimination.</li> </ul>
<b>Begum Qudsia Aizaz Rasul (Punjab)</b>		<ul style="list-style-type: none"> <li>• <b>Opposed separate electorates based on religion</b>, maintaining unity among communities.</li> <li>• Actively participated in debates about the political future of Muslims in a divided India.</li> <li>• Helped to promote women's hockey in India</li> </ul>
<b>Dakshayani Velayudhan (Kerala)</b>		<ul style="list-style-type: none"> <li>• <b>First Dalit woman in the Constituent Assembly and Cochin Legislative Council.</b></li> <li>• Also first Dalit woman to graduate in science</li> <li>• Advocated for Dalit rights and opposed caste-based discrimination.</li> </ul>
<b>Renuka Ray (West Bengal)</b>		<ul style="list-style-type: none"> <li>• Represented women's issues, particularly divorce and inheritance rights.</li> <li>• Advocated for women's equality in public policy and social justice.</li> </ul>

**UPSC PYQ**

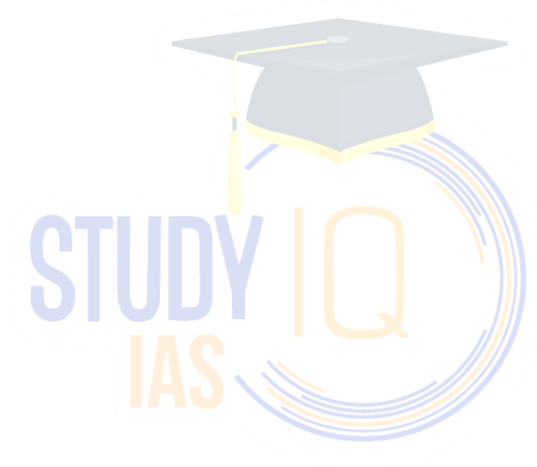
**Q.** With reference to Indian freedom struggle, Usha Mehta is well-known for: **(2011)**

- (a) Running the secret Congress Radio in the wake of Quit India Movement
- (b) Participating in the Second Round Table Conference
- (c) Leading a contingent of Indian National Army
- (d) Assisting in the formation of Interim Government under Pandit Jawaharlal Nehru

**Answer: A**

**Source:**

- [Indian Express - Recalling stories of women who helped draft the Indian Constitution](#)



## Cyclonic storm in Bay of Bengal

### Context

The Regional Meteorological Centre (RMC) in Chennai announced that a deep depression over the southwest Bay of Bengal is likely to intensify into a cyclonic storm soon.

### About Indian Meteorological Department (IMD)

- It is the National Meteorological Service of the country and the principal government agency in all matters relating to meteorology and allied subjects.
- **Establishment & HQ:** 1875, New Delhi.
- **Nodal Ministry:** Ministry of Earth Sciences
- There are **6 Regional Meteorological Centres** : Mumbai, Chennai, New Delhi, Calcutta, Nagpur and Guwahati.
- **IMD Mandate:**
  - To take meteorological observations and to provide current and forecast meteorological information for weather-sensitive activities like agriculture, shipping, aviation, offshore oil explorations etc.
  - To warn against severe weather phenomena like **tropical cyclones, norwesters, dust storms, heavy rains and snow, cold and heat waves.**

### About Colour Coded warnings issued by IMD

<b>Green - No advisory:</b>	A green alert indicates that, while a weather event is possible, no advisory is required. <ul style="list-style-type: none"> <li>• Green code denotes less than 64 mm of rain in 24 hours</li> </ul>
<b>Yellow - Be aware:</b>	A yellow alert denotes bad weather conditions and the possibility that the conditions will worsen, causing disruptions to daily life. <ul style="list-style-type: none"> <li>• A yellow alert is issued if the expected rainfall ranges <b>between 64.5 mm and 115.5 mm.</b></li> </ul>
<b>Orange - Prepare:</b>	When extremely bad weather is forecast, an orange alert is issued to warn of potential disruptions to transport, rail, road, and air. Power outages are also likely. <ul style="list-style-type: none"> <li>• An orange alert is issued when rainfall totals <b>between 115.6 and 204.4 mm in a single day</b></li> </ul>
<b>Red- Take action:</b>	A red alert is issued when an extremely bad weather condition is expected to disrupt transportation and power supply. It might also pose a risk to life. <ul style="list-style-type: none"> <li>• a red alert is issued when rainfall totals exceed 204.5 mm in a 24-hour period.</li> </ul>

### Facts

- While wind speed determines the alert issued during **thunderstorms**, visibility range becomes the deciding factor during **foggy conditions**.
- In the case of a **dust storm**, both wind speed and visibility are taken into account when issuing an alert.

### Source:

- [The Hindu - Deep depression over the Bay of Bengal likely to intensify into cyclonic storm](#)

## Places Of Worship Act

### Context

The 16th Century Jama Masjid in Sambhal, Uttar Pradesh, has recently become the center of a dispute claiming it was built on the site of an ancient Hari Har Mandir.

### Historical Background of the Jama Masjid

- Constructed during Mughal Emperor **Babur's reign (1526–1530)** by his general, **Mir Hindu Beg**.
- It is one of the 3 mosques built during the reign of Babur: Other 2 (Panipat & Babri Masjid).
- **Hindu beliefs:** According to local tradition the mosque incorporates remnants of a Vishnu temple, believed to be the site of the arrival of **Kalki, the tenth avatar of Vishnu**.

### About Places of Worship (Special Provisions) Act, 1991

- It was enacted by the Government of India to maintain communal harmony by preserving the religious character of places of worship

### Key Provisions

- **Status of Religious Places (Section 4):** The religious character of any place of worship existing on August 15, 1947, shall remain unchanged.
  - No legal proceedings can challenge the religious character of such places as it stood on that date.
  - **Exception:** The Act does not apply to the Ram Janmabhoomi-Babri Masjid dispute, which was ongoing at the time of its enactment.
- **Prohibition of Conversion (Section 3):** Conversion of a place of worship or any part thereof from one religious denomination to another or from one religious group to another is prohibited.
- **Penalties for Violation (Section 6):** Violators attempting to alter the status of a religious site can face imprisonment of up to 3 years and/or a fine.
- **Scope of Application:** The Act applies to all religious places in India, except those specifically exempted by the government or related to ongoing disputes as of 1991.

### Challenges to the Act

- Multiple petitions have been filed challenging the Act, arguing it restricts the right to judicial remedies and violates **Article 25 (freedom of religion)** and **Article 26 (right to manage religious affairs)**. The Supreme Court is yet to decide on the constitutionality of the Act.
- **Justice D.Y. Chandrachud's 2022 observation:** Determining a site's religious character may not violate the Act's provisions.
- The Sambhal case has joined disputes over other significant sites, such as:
  - **Gyanvapi Mosque (Varanasi)**
  - **Eidgah Masjid (Mathura)**
  - **Kamal-Maula Masjid (Dhar)**

### Source:

- [The Hindu - What is the controversy around the Sambhal mosque?](#)

## Quality Control Order for Nylon yarn

### Context

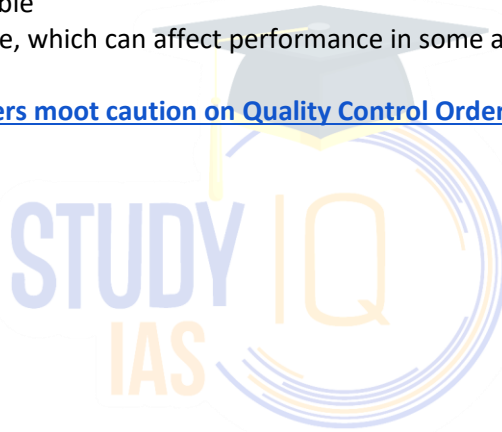
Nylon weavers have urged the Central Government to implement the Quality Control Order on nylon filament yarn only after studying in detail the workability of the domestic and imported nylon yarn.

### About Nylon

- Nylon is a **synthetic polymer**, known as a **polyamide** (developed in the 1930s by **Wallace Carothers**).
- It is formed by **condensation polymerization** of diamines and dicarboxylic acids or their derivatives.
- **Advantages of Nylon:**
  - Durable and long-lasting.
  - High tensile strength.
  - Lightweight and versatile.
  - Resistant to mold, mildew and pests.
- **Disadvantages of Nylon:**
  - Relatively high cost of production.
  - Non-biodegradable
  - Absorbs moisture, which can affect performance in some applications.

### Source:

- [The Hindu - Surat weavers moot caution on Quality Control Order for nylon yarn](#)



## Rebel Group Seizes Strategic Trading Town in Myanmar

### Context

A key trading town in northeastern Myanmar, Kanpaiti, has been captured by the Kachin Independence Army (KIA).

### Key Developments

- **Fall of Kanpaiti:**
  - Kanpaiti is an important trading town on the China-Myanmar border.
  - Kanpaiti serves as a hub for rare earth mineral mining, critical for producing electric motors, wind turbines, advanced electronics and high-tech weapons.
  - The mines in the region supplied **\$1.4 billion worth of rare earth minerals to China in the previous year.**
- **Remaining Border Control:**
  - After this loss, the military retains control over only one town with a border crossing into China: **Muse.**
- **Major Armed Groups:**
  - **KIA:** It is a non-state armed group and the military wing of the **Kachin Independence Organization (KIO)**, a political group of ethnic Kachins in Northern Myanmar
  - **Rohingya Solidarity Organisation (RSO):** It is a militant group involved in the conflict between the Rohingya and the Burmese government. It was formed in **1982** with the aim of establishing an autonomous region for the Rohingya.
  - **Arakan Rohingya Salvation Army (ARSA):** It operates in Rakhine state in northern Myanmar, where the mostly-Muslim Rohingya people have faced persecution.

### Source:

- [The Hindu - Rebel group takes Myanmar border town, mining hub in setback for military regime](#)

## Surface Hydrokinetic Turbine Technology (SHKT)

### Context

Central Electricity Authority (CEA) has recognized Surface Hydrokinetic Turbine (SHKT) technology under the Hydro Category to drive innovations and explore alternate technologies to achieve net zero emission targets.

### About Surface Hydrokinetic Turbine Technology (SHKT)

- **Key Features of SHKT**
  - It uses the kinetic energy of flowing water to produce electricity.
  - It uses natural flow of water without elevation changes like in traditional hydropower (It does not require dams, barrages or reservoirs).
  - It operates in free-flowing rivers, ocean currents or tidal flows.
  - Installed near the water surface to capture maximum energy from water currents.
- **Advantages:**
  - **Eco-Friendly:** Avoids environmental impact associated with dam construction & Minimal disruption to aquatic ecosystems.
  - **Cost-Effective:** Lower capital investment compared to large hydropower project
  - **Accessibility:** Can be deployed in remote areas where other energy sources are unavailable.
- **Challenges:**
  - **Efficiency:** Dependent on water flow speed and volume; not suitable for stagnant or slow-moving water bodies.
  - **Durability:** Subject to wear and tear from debris, sediment, and aquatic vegetation.
  - **Cost:** Initial installation and technology deployment is expensive.

### Source:

- [PIB - CEA recognizes indigenously developed Surface Hydrokinetic Turbine Technology under Hydro Category](#)

## Riyadh Design Law Treaty

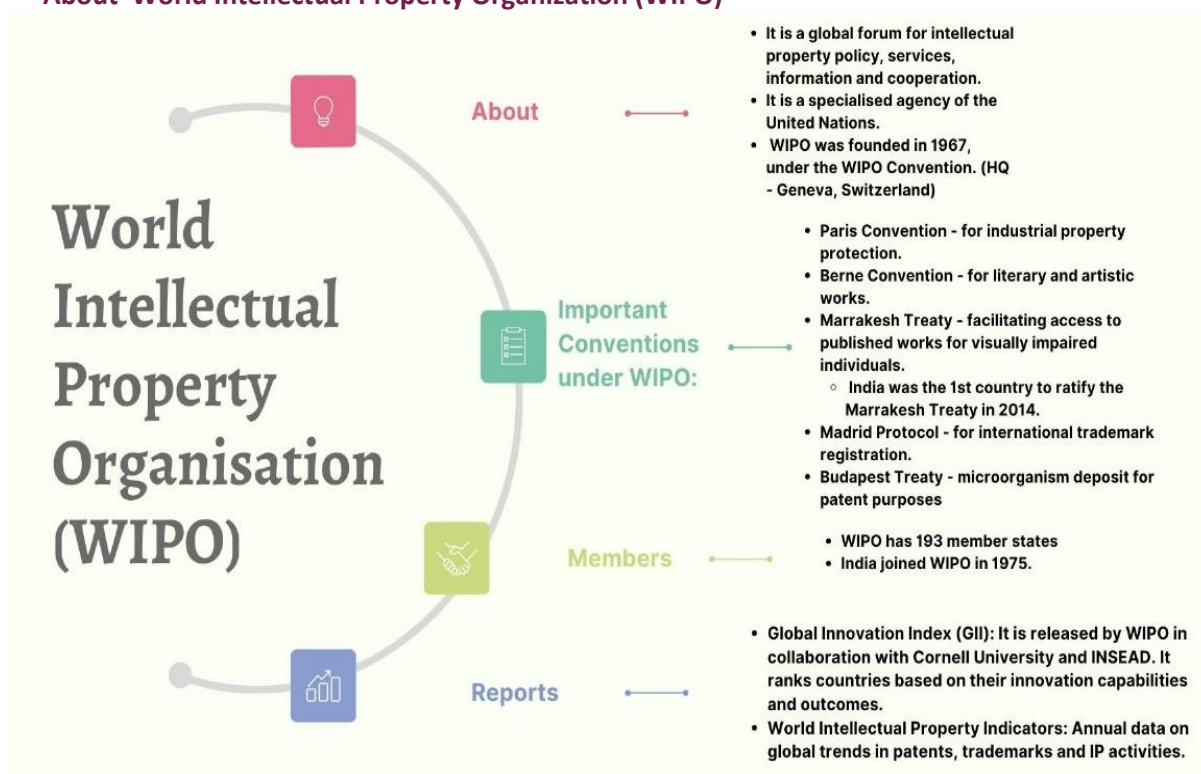
### Context

India has signed the **Final Act of the Riyadh Design Law Treaty**.

### About Riyadh Design Law Treaty (DLT)

- It is a landmark agreement adopted by member states of the **World Intellectual Property Organization (WIPO)** after nearly **two** decades of negotiations.
- The treaty aims to streamline and harmonize global design protection frameworks, emphasizing inclusivity and support for innovation.
- **Key Features:**
  - Relaxed time limits for applications.
  - Reinstatement of lost rights and correction/addition of priority claims.
  - Simplified procedures for recording assignments and licenses.
  - Option to file multiple designs in a single application.

### About World Intellectual Property Organization (WIPO)



### Source:

- [PIB - India signs the Final Act of the Riyadh Design Law Treaty](#)



## News in Shorts

### Pennaiyar River Dispute

- Pennaiyar River is also known as Thenpannai.
- **Origin:** Eastern slope of Nandidurg Mountain (Chennakaseva Hills), Karnataka.
- It flows through **Karnataka and Tamil Nadu**.
- **77% drainage basin** of the river lies in Tamil Nadu.
- **Tributaries:** Markandanadhi, Kambainallur, Pambar, Vaniyar, Kallar, Valayar etc.
- Pennaiyar river is **mentioned in Sangam literature** for its lush vegetation.
- **Important temples on the river:** Penneswaraar Temple, Dakshina Tirupati, Veerateshwarar Temple.
- Pennaiyar river is disputed between Karnataka and Tamil Nadu over Karnataka's intent to construct a dam on **Markandeya River** (major tributary of Pennaiyar River).

**Source:**

- [The Hindu - SC seeks report on Pennaiyar water sharing between T.N. and Karnataka](#)

### Siddi Community

- The Siddi are an ethnic minority group in Karnataka, descended from the Bantu peoples of Southeast Africa.
- They arrived in India as slaves from East and Southeast Africa in the 16th and 17th centuries.
- Siddis primarily speak **Konkani**, but can also speak Kannada and some Marathi.
- In 2003, the government of Karnataka recognized the Siddis as a scheduled tribe, which gives them access to certain benefits.

**Source:**

- [Indian Express - Wanted to capture Siddi community's collective imagination, cultural identity'](#)

### Minority Groups of Sweden

- The Norwegian Parliament has issued a formal apology to Sami, Ove and Forest Finn people and outlined several resolutions to address discrimination they still face in the country.
- **Sami:** They are an **indigenous group** who have been living in northern Norway for centuries.
  - Sami culture includes **traditional clothing** called "**kofte**", **song and a deep relationship with nature**. They also have a rich song tradition called "**joik**".
- **Kvens:** Descendants of migrants from the Torne River Valley (present-day Sweden and Finland) who settled in Norway. They historically practiced slash-and-burn farming, fishing and blacksmithing.
- **Forest Finns:** Descendants of immigrants from eastern Finland who settled in Sweden and then moved to Norway in the 1600s. They have a distinct cultural identity and language.

**Source:**

- [The Hindu - Norway's apology to Sami and other minority groups for assimilation policies](#)

## Editorial Summary

### High Seas Treaty

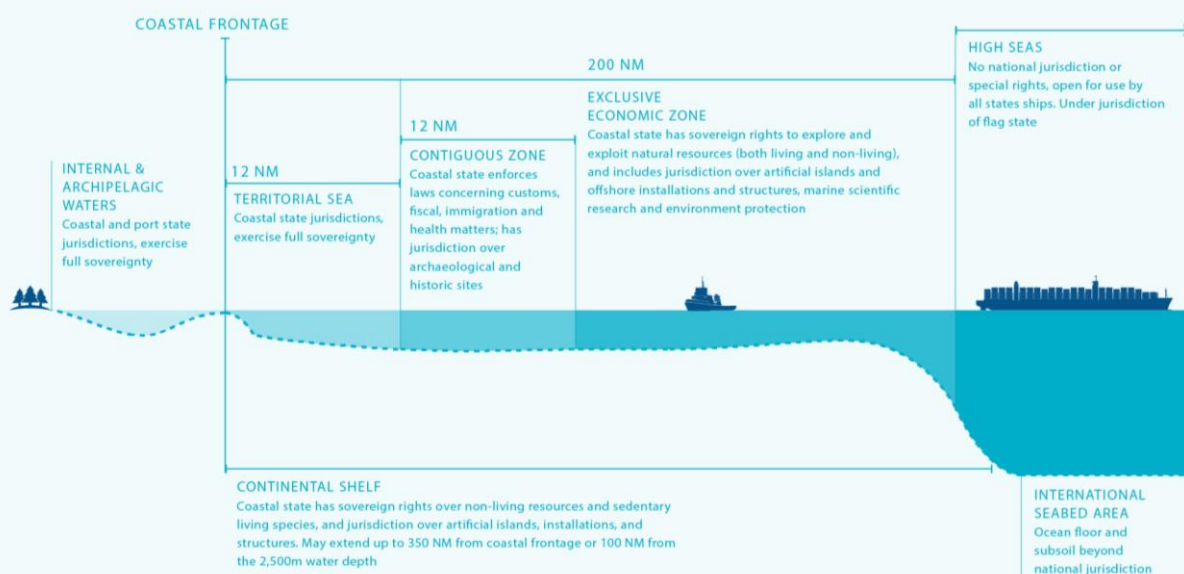
#### Context

India recently signed the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement, also known as the High Seas Treaty.

#### What are High Seas?

##### MARITIME ZONES AND JURISDICTIONS OF STATES IN UNCLOS

UNCLOS: UNITED NATIONS CONVENTION ON THE LAW OF THE SEA



- High seas are areas of oceans that lie beyond countries' national waters (beyond 200 nautical miles).
- These are the largest habitats on Earth and are home to millions of species.
- High seas comprise more than 60% of the world's oceans and nearly ½ of the planet's surface.

#### Objectives and Framework of the BBNJ Agreement

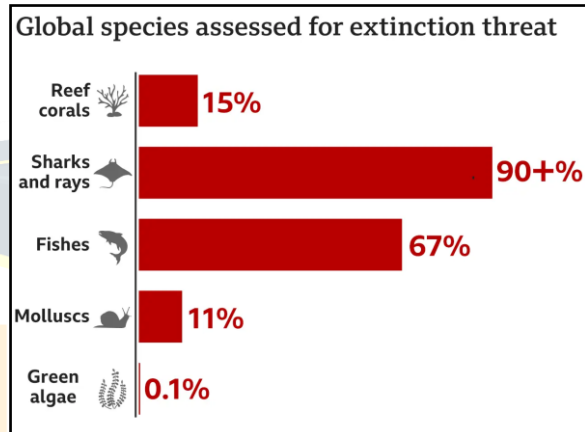
- Adopted in March 2023.
- It serves as the third implementing agreement under the **United Nations Convention on the Law of the Sea (UNCLOS)**.
  - It is a **first ever treaty** to protect the world's oceans that lie **outside national boundaries**.
- Its primary objectives include:
  - **Conserving Marine Biodiversity:** Establishing measures to protect diverse marine life.
  - **Equitable Sharing of Benefits:** Ensuring that profits derived from marine genetic resources are shared fairly among nations.
  - **Environmental Impact Assessments (EIAs):** Mandating assessments for activities that may harm marine ecosystems.
- The treaty prohibits nations from claiming sovereign rights over high seas resources and promotes international cooperation in managing these areas.

### United Nations Convention on the Law of the Sea (UNCLOS)

- It is an **international treaty** that governs the use and management of the **world's oceans and seas**.
- The treaty was **adopted in 1982** and entered into force in 1994 and has been **ratified by 168 countries (including India)**.
- **Key features of UNCLOS:**
  - UNCLOS establishes the **legal framework** for activities in the **oceans and seas**, including fishing, shipping, and exploration and **exploitation of natural resources**.
  - The treaty recognizes the **rights of coastal states** over their **territorial waters** and **exclusive economic zones** and sets out rules for the **delimitation of maritime boundaries** between adjacent states.
  - The treaty also establishes the **International Tribunal for the Law of the Sea (ITLOS)**, to hear disputes related to the interpretation and application of UNCLOS.

### Need for the Treaty

- The world's oceans provide oxygen that sustains human and animal life, drive weather systems and store about one-quarter of the planet-heating carbon dioxide generated by human activities.
- According to the Red List of Threatened Species by IUCN, nearly 10 percent of underwater plants and animals assessed so far are threatened with extinction.
  - According to the World Wildlife Fund (WWF), a third of species such as sharks and rays are at the risk of extinction.
- According to NASA, 90% of global warming is occurring in the ocean.
  - Effects of ocean warming include sea level rise due to thermal expansion, coral bleaching, accelerated melting of Earth's major ice sheets, intensified hurricanes, and changes in ocean health and biochemistry.
- Currently, there is no treaty for conserving the health of vast swathes of the earth's oceans,
  - Only 1.2% of international waters are protected, and only 0.8% are identified as "highly protected."



### Challenges to the High Seas Treaty

- **Lack of Implementation Roadmap:** Out of 104 signatories, **only 14 have ratified** the treaty, far from the 60 required for enforcement.
  - Geopolitical rivalries, especially in the South China Sea and Bay of Bengal, hinder consensus on establishing Marine Protected Areas (MPAs).
- **Contentious Provisions:** The treaty mandates profit-sharing from marine genetic resources via a global fund.
  - Critics highlight potential exploitation by wealthier nations, citing the absence of robust accountability mechanisms.
- **Conflicts with Other Regimes:** Potential overlap with existing frameworks, like the Convention on Biological Diversity, risks fragmenting enforcement and disadvantaging smaller states.
- **Capacity-Building Challenges:** Low and middle-income nations lack resources for equitable participation in ocean science and governance.

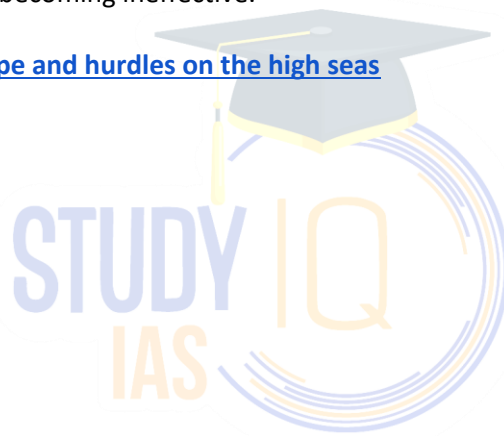
- The treaty lacks enforceable measures to ensure capacity-building and technology transfers.
- **Overlooking Ecosystem Interconnectedness:** The treaty's focus on the high seas ignores the cascading effects of harmful activities in Exclusive Economic Zones (EEZs):
  - **Example:** The 2021 *X-Press Pearl* disaster off Sri Lanka caused widespread marine pollution.
  - Overfishing in West African EEZs depletes fish stocks beyond national jurisdictions.
- **Gaps in Regulation:** Fails to address oil and gas exploration impacts within EEZs, a significant economic interest for many states.
  - Lack of international review for EIAs limits the treaty's enforcement framework.

#### Path Forward: Bridging the Divide

- **Integrated Governance Framework:** High-seas governance must align with coastal regulations to address interconnected challenges like pollution, overfishing, and habitat destruction.
- **Incentives for Coastal States:** Coastal states in the Global South require incentives to harmonize domestic laws with international norms.
- **Commitment from Wealthier Nations:** Wealthier countries must provide technical and financial support to ensure equitable benefits.
- **Political Consensus and Clear Strategies:** Collective commitment from nations is critical to prevent the treaty from becoming ineffective.

#### Sources:

- [The Hindu: Between hope and hurdles on the high seas](#)
- [BBC](#)



## Six Decades Since Thumba Launch

### Context

- On November 21, 1963, India launched its **first Nike-Apache sounding rocket from Thumba, Kerala.**
- This year marks 61st anniversary of India's space program.

### Indian Space Programme: Key Launches and Missions

- **GSAT-N2/GSAT-20 Satellite:**
  - **Launched:** on November 21, 2024, via a SpaceX Falcon 9 rocket from Florida.
  - **Weight:** 4,700 kg.
  - **Purpose:** Enhance broadband services in underserved regions such as the northeast, Andaman & Nicobar Islands, and Lakshadweep.
    - Support in-flight internet connectivity and the Smart Cities Mission.
  - **Orbital Parameters:** Placed in a Geostationary Transfer Orbit (GTO) with a perigee of 250 km, apogee of 59,730 km, and an inclination of 27.5°.
- **Upcoming PSLV-C59 Mission:**
  - **Scheduled for:** December 4, 2024.
  - Will carry the European Proba-3 mission using an extended length configuration (XL) of the Polar Satellite Launch Vehicle (PSLV).
- **Human Spaceflight Initiatives – Gaganyaan Program:**
  - India's astronaut-designate Shubhanshu Shukla is training at the European Space Agency's center for a planned flight to the International Space Station (ISS) in 2025.
  - The Gaganyaan program aims to establish India as a nation capable of independent human spaceflight.

### Private Sector Involvement

Several Indian private companies are gearing up for their own space missions:

- **Pixel:** Launching six hyperspectral satellites named 'Fireflies' early next year.
  - Each satellite weighs around 50 kg, capable of monitoring crop health and environmental changes.
- **GalaxEye Space:** Testing a synthetic aperture radar (SAR) system through its Tech Demo on the PSLV's Orbital Experimental Module (POEM).
- **PierSight Space:** Conducting a mission called 'Varuna' to demonstrate advanced antenna technology and avionics.
- **HEX20:** Planning to launch its 'Nila' satellite in February 2025, which will provide data-processing services.
- **Catalyx Space:** Recently launched its SR-0 satellite that successfully completed all objectives during its three-month mission.
- **AAKA Space Studio:** Conducted India's first Space Analog Mission in Leh, Ladakh, simulating conditions on Mars and the Moon.
- **SatSure:** Collaborating with the Ministry of Electronics and Information Technology on a project to map rural properties using drone technology.

### Scientific Collaborations and Achievements

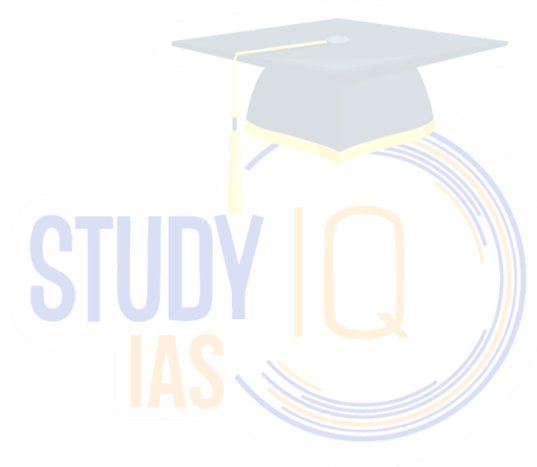
#### Square Kilometre Array Observatory (SKAO)

- India's full membership in the SKAO project.
- This will help India to access scientific data for groundbreaking research.

### Aditya-L1's First Result

- **Visible Emission Line Coronagraph** of Aditya L1's accurately predicted coronal mass ejection on July 16, 2024.
- **Significance:** Enhances understanding of solar phenomena affecting satellites, power grids, and radio communications.

Source: [The Hindu: Six decades since Thumba launch, slew of private entities prepare for flight](#)



## India is getting old before getting rich

### Context

Many Indian states are now sharing a higher ageing burden.

### Key Demographic Factors Influence Composition of a Population

- **Fertility**
  - Fertility rates directly influence the proportion of children in a population.
  - A decline in fertility reduces the share of children in the population, which automatically increases the proportion of older individuals.
- **Mortality**
  - Mortality rates affect life expectancy and the size of older populations.
  - An increase in life expectancy leads to a larger share of older individuals in the population.
- **Migration**
  - Migration can redistribute population and impact demographic composition.
  - Migration typically involves younger individuals moving to urban areas, leaving behind a higher concentration of elderly people in rural regions.

### Challenges Ahead for Ageing in India

#### Demographic Challenges

- **Rapid Ageing:** India is ageing faster than developed nations. This risks India exiting the window of opportunity before fully reaping its demographic dividend.
  - **E.g., France** took **120 years** for the share of the older population (65+) to double from 7% to 14%.
    - **India** achieved this in **28 years**, indicating much faster ageing compared to developed countries. In some South Indian states, this doubling is occurring in **less than 20 years**, highlighting regional disparities.
- **Unbalanced Fertility Transition:** Fertility decline in India is ahead of its socio-economic transition.
  - **E.g., Andhra Pradesh** has a Total Fertility Rate (TFR) of 1.5, comparable to that of Sweden, despite having a per capita income that is 22 times lower than Sweden's.
- **Dependency Ratio Shift:** A larger older population relies on the working-age group. This is increasing economic and caregiving pressures.
  - **E.g., the feminisation of ageing** (as the life expectancy of women exceeds that of men by about 5 years) results in increasing widowhood among elderly population and elderly women in families need greater prioritisation.

#### Socio-Economic and Health Challenges

- **Insufficient Social Security:** A significant proportion of elderly Indians work in informal sectors with no social security.
  - Policies addressing this gap are limited, adding to the economic burden on families.
- **Health Transition:** The double burden of communicable diseases and a rising incidence of non-communicable diseases strains healthcare systems.
  - The need for palliative and curative care adds further challenges.
- **Economic Inequities:** India risks ageing before fully reaping its **demographic dividend** (expected to last until 2045). This reduces the potential for economic growth.

#### Challenges Due to Urbanisation

- **Rising Cost of Living:** Urbanisation increases living costs, making parents less inclined to have more children due to higher expenses for education, healthcare, and housing.

- **Delayed Marriages and Parenthood:** Unemployment and the quest for financial stability lead to delayed marriages and fewer children, affecting population dynamics.
- **Shift in Priorities:** Educated women increasingly prioritize careers and self-actualisation over childbearing.

### Pro-Natalist Policies: Global and Indian Context

#### Global Examples and Effectiveness

- **United Kingdom:** Pro-natalist policies led to a **slight increase in fertility**, but no significant reversal in trends.
- **Japan:** **AI-driven matchmaking efforts** were introduced to encourage marriages and births.
- **Europe:** Monetary incentives for childbearing, but results have been minimal.
- **South Korea:** Despite massive investments, the TFR remains at **0.8**, one of the world's lowest.

#### Key Lessons

- **Limited Success:** Pro-natalist policies have not reversed fertility declines in any country.
- **Gender Equality as a Strategy:** Evidence suggests improving gender norms, such as men sharing household responsibilities, can reduce the motherhood penalty and support higher fertility rates.

### Recommendations for India

#### Policy Interventions

- **Strengthen Social Security:** Introduce pension schemes for informal sector workers.
  - Develop community-based elderly care systems.
- **Improve Healthcare Infrastructure:** Expand care services to address non-communicable diseases and provide palliative care.
- **Leverage the Demographic Dividend:** Invest in skill development and employment opportunities for the working-age population to sustain economic growth during the demographic opportunity phase.
- **Support Gender Equality:** Promote policies encouraging equal household responsibilities to empower women to balance family and career.
- **Focus on Sustainable Fertility Rates:** Encourage family-friendly workplace policies, including paid maternity/paternity leave and affordable childcare, to support higher fertility rates.

#### Social and Cultural Adjustments

- **Enhance Family Systems:** Strengthen intergenerational support through cultural initiatives and incentives for families to care for the elderly.
- **Tackle Widowhood:** Address social stigma and provide targeted financial and psychological support for widowed elderly women.

Source: [Indian Express: India is getting old before getting rich](#)



## Data and Facts

### Basic Animal Husbandry Statistics 2024

#### Context

The Ministry of Fisheries, Animal Husbandry & Dairying released the annual publication of 'Basic Animal Husbandry Statistics 2024' on the occasion of National Milk Day.

#### Milk Production

- **Total Production (2023-24):** 239.30 million tonnes
- **Growth:**
  - 5.62% over the past decade (2014-15: 146.3 million tonnes).
  - 3.78% over 2022-23.
- **Top Producers:**
  - **Uttar Pradesh** (16.21%)
  - Rajasthan (14.51%)
  - Madhya Pradesh (8.91%)
  - Gujarat (7.65%)
  - Maharashtra (6.71%)
- **Highest Annual Growth Rate (AGR):**
  - West Bengal (9.76%), Jharkhand (9.04%), Chhattisgarh (8.62%), Assam (8.53%).

#### Egg Production

- **Total Production (2023-24):** 142.77 billion eggs
- **Growth:**
  - 6.8% over the past decade (2014-15: 78.48 billion eggs).
  - 3.18% over 2022-23.
- **Top Producers:**
  - **Andhra Pradesh** (17.85%)
  - Tamil Nadu (15.64%)
  - Telangana (12.88%)
  - West Bengal (11.37%)
  - Karnataka (6.63%)
- **Highest AGR:** Ladakh (75.88%), Manipur (33.84%), Uttar Pradesh (29.88%).

#### Meat Production

- **Total Production (2023-24):** 10.25 million tonnes
- **Growth:**
  - 4.85% over the past decade (2014-15: 6.69 million tonnes).
  - 4.95% over 2022-23.
- **Top Producers:**
  - **West Bengal** (12.62%)
  - Uttar Pradesh (12.29%)
  - Maharashtra (11.28%)
  - Telangana (10.85%)
  - Andhra Pradesh (10.41%)
- **Highest AGR:**
  - Assam (17.93%), Uttarakhand (15.63%), Chhattisgarh (11.70%).

### Wool Production

- **Total Production (2023-24):** 33.69 million kg
- **Growth:**
  - 0.22% over the previous year.
  - **Decline** compared to **2019-20** (36.76 million kg).
- **Top Producers:**
  - **Rajasthan** (47.53%)
  - Jammu & Kashmir (23.06%)
  - Gujarat (6.18%)
  - Maharashtra (4.75%)
  - Himachal Pradesh (4.22%)
- **Highest AGR:**
  - Punjab (22.04%), Tamil Nadu (17.19%), Gujarat (3.20%).

### Global Perspective

- **Milk Production:** India ranks first globally.
- **Egg Production:** India ranks second globally.

