

# NCSC IAS

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## 1. Ensuring Digital Financial Inclusion: Mandatory Aadhaar-Linked Payments for MGNREGS Workers

### GS 2 (Governance)

- **Why in News:** The government has mandated the use of **Aadhaar-based payment systems (ABPS)** for the disbursement of wages under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme.
- **Background**
  - The initiation of the **ABPS for MGNREGS** workers began on **January 30, 2023**.
  - The recent extension, **until December 31, 2023**, marked the **fifth prolongation of the deadline**, allowing state governments time to align databases.
  - However, this move has been accompanied by a **notable surge in deletions of MGNREGA job cards**, raising questions about the link between the mandatory ABPS and the reduction in the number of active workers.
- **Need for ABPS Implementation:**
  - The government's decision to make ABPS mandatory stems from its intention to **streamline wage disbursement and enhance transparency**.
  - The system requires workers' Aadhaar details to be linked to their job cards, aiming to **expedite payments and minimize rejections**.
- **Ineligibility Statistics:**
  - According to data from the Union **Rural Development Ministry**, as of December 27, **34.8% of job card holders remain ineligible for ABPS**.
  - The criteria for eligibility are based on active workers, **defined as those who have worked at least one day over the last three financial years**.
  - Of the **25 crore registered workers**, **12.7% of active workers are still not eligible for ABPS**.
- **Deletions and Pressures on States:**
  - Ground reports and anecdotal evidence suggest that states, **under pressure to achieve 100% ABPS-eligible job cards, have deleted a significant number of cards**.
  - Reasons for deletions include **discrepancies between Aadhaar and job card details**, such as variations in names.
  - **LibTech India reports that 7.6 crore workers** have been deleted from the system in the past 21 months, a figure higher than the number now deemed ineligible for payment.
- **Activists' Concerns:**
  - Activists argue that enforcing ABPS with a substantial portion of **MGNREGA workers rendered ineligible infringes upon the right to work**.
  - This, they claim, **contradicts the spirit of the Act passed by Parliament**.
  - They call for the revocation of mandatory ABPS implementation, **the reinstatement of erroneously deleted workers, and compensation for the loss of work opportunities**.
- **ABPS Mechanism and Government's Perspective:**
  - ABPS utilizes the worker's unique **12-digit Aadhaar** number as their financial address.
  - For a worker to be paid under ABPS, their **Aadhaar details must be linked to their job card**, bank account, and the National Payments Corporation of India (NPCI) database.
  - The government **asserts that ABPS implementation will enhance efficiency, prevent leaks, ensure prompt payments, and reduce rejections**.

### Aadhaar-linked pay made mandatory for MGNREGS workers

34.8% of registered workers and 12.7% of active workers still not eligible for the new payment system; 76 crore job cards deleted since April 2022

Sobhana K. Nair  
NEW DELHI

From the New Year, wages under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) will be paid only through an Aadhaar-based payment system (ABPS), which requires the Aadhaar details of workers to be seeded to their job cards.

The fifth extension of the deadline to make the system mandatory, giving the State governments time to reconcile databases, ended on Sunday. Since the first push in this direction, the rate at which MGNREGS job cards are deleted has significantly re-



Rules kick in: The fifth extension of the deadline to make the system mandatory ended on Sunday. FILE PHOTO

seen, which activists working in the field say is directly linked to the mandatory imposition of this payment method. The first order to enforce the system was issued on January 30, 2023, followed by extensions till February 1, March 31, June 30, August 31, and December 31. Union Rural Development Ministry data show that 34.8% of the job card holders remain ineligible for this mode of payment as on December 27.

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- **Conclusion:**

- The move towards mandatory Aadhaar-linked payments for MGNREGS workers is a significant step in the **digitization of financial processes**.
- However, **concerns about eligibility criteria, deletions, and potential denial of the right to work** underscore the need for a balanced approach that ensures digital financial inclusion without adversely impacting vulnerable workers.
- **The government must address these concerns and consider alternatives to achieve a seamless transition to ABPS** while safeguarding the interests of MGNREGA workers.

## 2. **Modernizing Broadcasting Regulations: The Centre's Vision for OTT and Digital Media**

### **GS 2 (Governance)**

- **Why in News:** The new **draft Broadcasting Services (Regulation) Bill, 2023**, signaling a comprehensive overhaul of the regulatory landscape governing traditional television, digital media, and over-the-top (OTT) platforms.
- **Purpose:** The proposed legislation aims **to replace the Cable Television Networks (Regulation) Act**, ushering in new regulations for the broadcasting sector.
- **Background**
  - The draft bill expands the **regulatory framework to encompass a wide spectrum, ranging from conventional television services to emerging technologies like OTT platforms and digital content**.
  - Released for **public consultation by the Ministry of Information and Broadcasting**, the bill aims to streamline regulations and provide a unified legal structure for various broadcasting services.
- **Need for Regulation:**
  - The government asserts that the proposed bill is essential to **enhance the ease of doing business, ensure compliance with broadcasting codes, and adapt the regulatory framework** to meet the evolving needs of the sector.
  - However, **concerns have been raised regarding potential threats to freedom of speech and censorship**, especially in the context of increased scrutiny over content deemed **"obscene and vulgar" in the digital media realm**.
- **Key Provisions of the Bill:**
  - **Intimation of Operations:**
    - All broadcasting entities, including OTT platforms, must formally register or intimate the government before providing services.
    - Cable and satellite broadcasting operators must register, and broadcasters need approval from the registering authority.
  - **Modern Broadcasting Terminologies:**
    - The bill defines key terms such as broadcasting, broadcaster, broadcasting network, broadcasting network operator, internet broadcasting network, and news and current affairs programmes
  - **Content Quality and Accessibility:**
    - Programmes must adhere to Programme Code and Advertisement Code.
    - Broadcasters need to classify their content based on various parameters, prominently displaying the classification to enable informed viewing decisions.
    - Accessibility guidelines are introduced for persons with disabilities, emphasizing measures like audio descriptions, sign language translations, and subtitles.
  - **Self-Regulation:**
    - Broadcasters and network operators are required to establish Content Evaluation Committees (CEC) for self-regulation

#### **The government's OTT oversight**



- The proposed three-tier regulatory structure includes self-regulation, self-regulatory organizations, and a Broadcast Advisory Council.
- **Provision for Inspection and Seizure:**
  - The government and authorized officers can inspect broadcasting networks and services.
  - Seizure of equipment is allowed in case of violations, with penalties imposed unless compliance is demonstrated within 30 days.
- **Penalties for Non-Compliance:**
  - Penalties include removal of objectionable content, orders, apologies, off-air periods, and even cancellation of registration.
  - Monetary penalties and imprisonment are prescribed for serious offenses, with the penalty amount based on the entity's financial capacity.
- **Main Concerns:**
  - The bill's **broad scope**, especially its application to both traditional broadcasters and the evolving OTT space, has garnered mixed reactions.
  - Concerns include **potential overreach**, increased censorship, and the impact on freedom of expression in the digital space.
  - Digital rights organizations emphasize the need for a **cautious examination of the bill**, particularly in terms of potential self-censorship and executive control over OTT content.
- While the draft Broadcasting Services (Regulation) Bill seeks to **modernize and unify regulations** for broadcasting services in India, concerns persist regarding its potential impact on freedom of expression and the dynamic nature of the digital space.
- Striking a balance between **regulatory measures and safeguarding creative expression** will be crucial as the bill progresses through consultations and potential revisions.
- **Modern broadcasting terminologies as defined in the Bill**
  - **What is broadcasting?**
    - One-to-many transmission of audio, visual or audio-visual programmes using a broadcasting network, intended to be received or made available for viewing, by the general public or by subscribers of the broadcasting network
    - A “**broadcaster**”, meanwhile is a person who provides programming services and has been provided a registration for uplinking or downlinking of programmes, in relation to Radio, OTT and terrestrial broadcasting networks.
  - **What is a broadcasting network**
    - A system used for the transmission of programmes, including cable broadcasting networks, satellite broadcasting networks, internet broadcasting networks, radio broadcasting networks and terrestrial broadcasting networks.
  - **Who is a broadcasting network operator?**
    - Any person who operates a broadcasting network, and has been granted a registration, licence or permission or who has provided an intimation to provide services using a broadcasting network.
    - This includes cable operators, multi-system operators, DTH operators, headend-in-the-sky operators, IPTV operators, OTT broadcasting service operators, radio broadcasting service operators, and terrestrial broadcasting network operators.
  - **What is an internet broadcasting network?**
    - A system for the delivery of broadcasting services and programmes using the internet, over a computer resource, or using Internet Protocol, to subscribers or viewers, and includes IPTV and OTT broadcasting services.
  - **What comes under ‘news and current affairs programmes’?**

- Audio, visual or audio-visual programmes or live programmes, including analysis about recent events primarily of socio-political, economic or cultural nature, and programmes where the context, purpose, import and meaning of such programmes implies so.
- **What about OTT?**
- A broadcasting service available on-demand or live to subscribers or users in India, and where a curated catalogue of programmes owned by, licensed to, or contracted to be transmitted, over the internet or a computer resource, not being a closed network; and where additional hardware or software or combination including a set-top-box, or dongle and software keys may be required to access content on non-smart televisions or viewing devices.

### 3. Arvind Panagariya Appointed Chairman of 16th Finance Commission Recent events of importance

- **Why in News:** Arvind Panagariya, the former Chairman of NITI Aayog, has recently been named as the head of the 16th Finance Commission.
  - **Background**
    - Arvind Panagariya served as the **Chairman of NITI Aayog**, a premier policy institution, contributing to the Indian government's policymaking process.
    - His **diverse experience and expertise in economic matters** make him a prominent figure for the role of heading the Finance Commission.
    - This significant appointment follows his departure from **the think tank in August 2017 after a notable two-year tenure.**
  - **Finance Commission in India:**
    - The Finance Commission is a constitutional body in India that plays a crucial role in fiscal federalism. Here are a few key pointers about the Finance Commission:
1. **Constitutional Mandate:**
    - The Finance Commission is constituted under **Article 280** of the Indian Constitution.
    - It is formed **every five years** or at such intervals as deemed necessary by the President.
  2. **Objective:**
    - The primary objective of the Finance Commission is to address the distribution of financial resources between the Centre and the States.
  3. **Functions:**
    - The Commission recommends the distribution of net proceeds of taxes between the Centre and the States.
    - It suggests principles governing the grants-in-aid to be given to the States out of the Consolidated Fund of India.
    - The Commission also evaluates the impact of the Centre's debt on the fiscal autonomy of States.
  4. **Composition:**
    - The Finance Commission comprises a Chairman and four other members.
    - Members are appointed by the President, and they bring diverse expertise, including economics, finance, and public administration.
  - **Panagariya's Vision for India:**
    - Earlier this year, Arvind Panagariya expressed optimism about **India's economic trajectory**.
    - He envisioned **India becoming the world's third-largest economy by 2026**.
    - According to his projections, India's GDP could **reach \$5 trillion in 2026 and \$5.5 trillion in 2027**, indicating a significant growth trajectory.

#### Centre appoints Arvind Panagariya as Chairman of 16th Finance Commission



**HARIKISHAN SHARMA**  
NEW DELHI, DECEMBER 31

THE CENTRAL government on Sunday appointed former NITI Aayog Vice Chairman Arvind Panagariya as the Chairman of the 16th Finance Commission. As per a notification issued by the Ministry of Finance, Department of Economic Affairs, Indian Administrative Service (IAS) officer Arvind Ranjan Pandey will be the secretary to the Commission. The members of the Commission will be notified separately, said the notification issued on Sunday.

"The Chairman and other members of the Commission shall hold office from the date on which they respectively assume office up to the date of submission of Report or 31st day of October, 2025, whichever is earlier," said the notification.

According to the notification, "The Commission shall make recommendations as to the following matters, namely:—(i) The distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under Chapter I, Part XII of the Constitution and the allocation between the States of the respective shares of such proceeds; (ii) It shall also make recommendations on the 'principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sum to be paid to the States by way of grants-in-aid of their revenues under article 275 of the Constitution for the purpose other than those specified in the provision to clause (1) of that article,' according to an official statement issued after the Union Cabinet meeting on November 29.

The Finance Commission is constituted under article 280 of the Constitution of India. Panagariya, a professor of Economics and the Jagdish Bhagwati Professor of Indian Political Economy at Columbia University. He was first vice-chairman of NITI Aayog from January 2015 to August 2017 and served as India's C20 Sherpa in 2017. In April 2023, he was appointed Chancellor of Nalanda University.

Days before Panagariya's term as the NITI Aayog vice-chairman came to an end on August 31, 2017, the Prime Minister appreciated his contribution in shaping NITI Aayog, and described him as his "great friend".

**FILE REPORT**  
[www.indianexpress.com](https://www.indianexpress.com)

## **4.India's textile sector and global ESG norms**

### **GS 3 (Economy)**

- **Why in News:** Small businesses in India's textile sector express concern over EU's CBAM rules and ESG norms impact.
- **What is Carbon Border Adjustment Mechanism?**
  - On **14 July 2021**, the **European Commission** published its proposal for a regulation establishing a **carbon border adjustment mechanism (CBAM)**.
  - The **core element of the CBAM** is the **obligation to pay for the greenhouse gas (GHG) emissions** embedded in certain carbon-intensive products imported into the European Union (EU) through the purchase of so-called CBAM certificates.
  - The CBAM is conceived as a measure against the risk of carbon leakage, a phenomenon whereby companies move their production abroad to avoid the costs of complying with stringent environmental standards domestically or import cheaper foreign products that were not subject to a carbon price in their country of production.
- **Sustainable Practices in Indian Textile Sector**
  - **Renewable Energy Dominance:** Tamil Nadu's textile sector contributes over 50% of the state's renewable energy capacity.
  - **Sustainable Processes in Clusters:** Tiruppur showcases nearly 300 units connected to zero liquid discharge effluent treatment plants.
  - **Recycled Fibers in Panipat:** Panipat's open-end spinners exclusively use recycled fiber, demonstrating a commitment to sustainable practices.
- **What are ESG STANDARDS?**
  - **Environmental, Social, and Governance (ESG)** goals are a set of **standards** for a company's operations that force companies to follow better governance, ethical practices, environment-friendly measures and social responsibility.
  - **Measurement of the company** is not restricted to just the **economic parameter** which includes such as shareholder return. But they are also measured by their **environmental impact, commitment to social issues** and the soundness of their corporate governance and protection of shareholder rights.
  - The evolution of ESG laws and regulations is, however, still at a nascent stage in India,
- **Challenges and Opportunities Amid ESG Shift**
  - **EU's environmental goals**, especially CBAM, pose challenges and opportunities for India's textile sector.
  - **Concerns among MSMEs** in India's textile sector regarding EU's regulations and the imperative to adopt sustainable practices.
  - Recognition that **embracing sustainability** can lead to a **paradigm shift**, solidifying India's textile sector as a top global supplier.
- **ESG Compliance**
  - ESG demands from global buyers acknowledged as significant disruptors, prompting a strategic re-evaluation.
  - Emphasis on exporters leveraging benefits through India's potential free-trade agreement with the EU by investing in sustainability.
  - Necessity for documenting existing sustainable and inclusive social practices to comply with ESG standards, ensuring industry-wide benefits.
- **Industry Response and Future Considerations**
  - **Annual Sustainability Reports:** Major garment exporters releasing annual sustainability reports, showcasing commitment to transparency and accountability.
  - **Collaborative Green Footprints:** Textile clusters like Tiruppur showcasing collective green footprints, preparing for global exhibitions with sustainability-focused exhibits.

- **Financial and Institutional Support:** Initiatives by the Ministry of Textiles, industrial associations, and financial institutions to support ESG compliance, certification, and sustainable projects.
- **Consequences of ESG norms on India's economy**
  - **Compliance Challenges:** Small and medium enterprises may face difficulties adhering to stringent ESG standards, leading to increased compliance costs and operational challenges.
  - **Global Market Access:** ESG compliance could enhance India's access to global markets, especially those with a focus on sustainable practices, potentially boosting exports.
  - **Investment in Sustainability:** Industries may need to invest in sustainable practices and technologies to meet ESG requirements, fostering innovation and resource efficiency.
  - **Financial Implications:** The implementation of ESG norms may require financial institutions to fund green and sustainable projects, impacting the cost and availability of financing.
  - **Competitiveness and Reputation:** Companies aligning with ESG norms may enhance their competitiveness and reputation, attracting environmentally conscious investors and consumers.
  - **Government Initiatives:** The government may introduce supportive policies, task forces, and interventions to facilitate ESG compliance, aligning with global sustainability trends.
  - **Shift in Consumer Behavior:** ESG awareness may influence consumer preferences, prompting a demand for sustainable products and influencing industries' production strategies.
  - **Trade Negotiations:** ESG norms might be linked to international trade negotiations, potentially acting as a barrier or facilitating trade partnerships based on shared sustainability goals.

## 5. Climate change : The hottest year

### GS 3 (Environment)

- **Why in News:** With temperatures at all-time high in 2023, 2024 will be pivotal in reducing emissions, without compromising developmental needs
- **The Urgency of Climate Action**
  - Eight years post-COP 21, the global community finds itself on the **brink of a climate catastrophe**, as the **1.5 degrees Celsius limit set in Paris** comes under threat. The alarming rise in temperatures, escalating extreme weather events, and a grim forecast for 2024 demand immediate and comprehensive action.
- **Alarming Temperature Trends in 2023**
  - **A Year of Records**
    - In 2023, **global temperatures** soared perilously close to the **critical 1.5 degrees Celsius limit**, reaching an **average of 1.46 degrees Celsius above pre-industrial levels by November**. Unprecedented heatwaves marked every month since June, with two days in November surpassing 2 degrees Celsius above pre-industrial levels.
- **World Meteorological Organisation's Verdict**
  - The World Meteorological Organisation (WMO) has unequivocally declared 2023 as the **warmest year on record**. This alarming confirmation intensifies concerns about the irreversible trajectory of climate change.
- **The Impending Heat Surge in 2024**
  - **El Niño's Rol**
    - The WMO's provisional State of the Global Climate Report highlights the **role of the warming El Niño event in 2023**, set to exacerbate global temperatures in 2024. Experts anticipate a further spike in temperatures after the El Niño peaks, underlining the urgent need for proactive measures.
  - **Critical Juncture for Climate Change**

- While the scientific community debates whether we've reached a point of no return, there is consensus that the **next seven years will be pivotal in reducing emissions and mitigating the escalating climate crisis**
  - Progress and Storage Challenges
  - **Positive Signs in Renewable Energy**
    - Encouragingly, the **International Energy Agency** forecasts that **over 35% of the world's electricity** will be generated from **renewables by 2025**. However, the challenge lies in ensuring consistent power supply when renewable sources are intermittent.
  - **Long Duration Energy Storage (LDES) Council**
    - **At COP21 in Glasgow**, nations acknowledged the necessity of **Long Duration Energy Storage (LDES) technologies**. The LDES Council was established to facilitate the commercialization of these technologies, despite many still being in the pilot stage. However, the market for such solutions is in its infancy, and cost competitiveness remains a significant hurdle.
  - **Building Resilience Amidst Climate Uncertainty**
    - **Beyond Emissions: Building People's Resilience**
      - Acknowledging the imperative for policymakers to address climate vulnerabilities, experts emphasize the importance of resilient measures. These include building sea walls, enhancing weather alert systems, upgrading urban drainage, installing irrigation systems, and promoting climate-adaptive crop choices.
    - **Balancing Development and Climate Action**
      - As the planet heats up, a delicate balance must be struck to address vulnerabilities without compromising developmental needs. Policymakers face the challenge of uplifting communities out of poverty while simultaneously adapting to a changing climate.
  - **Way Forward: A Call for Urgent, Global Action**
    - The 2023 temperature records and the looming threat of 2024 emphasize the urgency of decisive global action.
    - Policymakers, scientists, and the public must collaborate to reduce emissions, accelerate the adoption of renewable energy, and build resilience to navigate the challenges posed by an increasingly unpredictable climate.
    - The coming years will define our ability to address the climate crisis and secure a sustainable future for generations to come.
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2<sup>nd</sup> Jan, 2024

## 1. **Empowering Hatti Community and Initiatives for Economic Growth in Himachal Pradesh** **GS 2 (Governance)**

- **Why in News:** The Himachal Pradesh government has taken significant steps to address the longpending demand of granting Scheduled Tribes (ST) status to the Hatti community in the Transgiri area of Sirmaur district. It also launched a few programmes for the economic growth in the state.
- **Granting ST Status to Hatti Community:**
  - The Hatti community, residing in **154 panchayats of Sirmaur district's Transgiri area** has been advocating for ST status.
  - The government's move follows the passage of the **Constitution (Scheduled Tribes) Order (Second Amendment) Bill, 2023**, and subsequent notification by the President on August 4, 2023.
  - The delay in implementation was due to the state government seeking **clarification from the Centre**.
- **Need for Granting ST Status:**
  - The Hatti community's demand for ST status echoes similar recognition granted to the **JaunsarBawar area of Uttarakhand in 1967**.
  - Despite similarities in **social, cultural, and geographical aspects between Hatti and Jaunsari communities**, the Transgiri area was excluded.
  - The recent decision rectifies this **historical injustice**, fulfilling a promise made to the Hatti community.
- **About Hatti Community of Himachal Pradesh:**
  - The Hatti community of **Sirmaur district's Transgiri area** has a unique cultural and historical background.
  - Their demand for ST status stems from the desire for **equitable representation and socioeconomic empowerment**.
  - The recent notification granting them **Scheduled Tribes status** marks a significant milestone in their journey for recognition.
- **Initiatives for Economic Growth:**
  - The state Cabinet has launched the Phase2 of the **Rajiv Gandhi Swarozgar StartUp Yojna**.
  - This initiative aims to **provide loans** and encourage individuals aged between **21 to 45 years** to engage in businesses related to the installation of **solar power plants**.
  - The scheme, focusing on capacities ranging from 100 kW to 500 kW, aligns with the state's renewable energy targets.
  - This step is anticipated to create selfemployment opportunities and contribute to economic growth among the youth.
  - The Cabinet has also given the nod to the **'Sarkar Gaon Ke Dwar'** program, scheduled from January 8 to 12, which will be conducted across the state.

### After Centre's clarification letter, Hatties get ST tag

Abhinav Lakshman  
New Delhi

Months after President Droupadi Murmu notified the inclusion of the Hatties community in the Himachal Pradesh's Scheduled Tribes list, the state government on Monday issued the necessary directions to all departments for the implementation of the new classification, officials said on Friday.

The implementation of the inclusion had been held up for this long over a confusion in the state government as to when the Hatties of the Trans-Giri area of Sirmaur district were.

As the term 'Hatties' is also used to denote people already classified as Scheduled Castes, the confusion was over whether these communities too would be included in the ST list as Hatties.

Officials in the H.P. Tribal Development Department said the Union government clarified its stance on December 20 through a letter.

The State government's Law Department was of the opinion that SCs should be included in the definition of Hatties. But the Union government clarified that they are to be excluded.

In the Bill that included the community on the ST list, the explanation had excluded SCs but the entry added to the list only read 'Hatties of Trans-Giri Area

officials in the H.P. Tribal Development Department said the Centre clarified its stance on December 20 through a letter.

of Sirmaur district'. Interpreting the entry, the Law Department had argued this would not exclude any categories. Nevertheless, it had sought a Centre's opinion on it in a letter sent in September 2023.

In response, the Union Tribal Affairs Ministry told the State that communities already classified as SCs must be excluded from the new classification.

The Tribal Development Department official added that the State government issued necessary directions for the implementation of the classification two days after the clarification from the Union government came through.

In a statement issued on Monday, the State government said Chief Minister Sukhvir Singh Badina met with representatives

"The State government has received the clarification from the Central government last Saturday evening on the Hatties' status and within the same we have issued notification in this regard," said Mr. Sukhu, as per the statement.

It added that the Chief Minister would be making an announcement on January 3 during a visit to Sirmaur district.

## 2. Warli Tribe's Battle for Land: Clash with Shivaji Museum Project in Mumbai

### Recent events of importance

- **Why in News: The Warli tribe in Mumbai is facing a threat to their ancestral land due to the construction of the Chhatrapati Shivaji Maharaj War Art Museum.**
- **Background**
  - The project, initiated by the **Maharashtra Department of Tourism**, has sparked concerns among the Warlis, who fear the loss of their **homes and forests in Gorai**.
  - The clash highlights the ongoing struggle between **development projects and indigenous communities**.
  - In June 2023, the Maharashtra Department of Tourism announced the construction of the **Shivaji museum on 136 acres of land in Gorai with a budget of Rs. 50 crore**.
  - The Warli tribe, with a population of about **1,300 in Gorai**, resides in **six tribal hamlets, including Babar Pada and Chotadongari Pada**.
  - The project has led to the **demolition of houses and raised concerns** about the displacement of tribal communities.
- **Need for Project and backlash by the tribes:**
  - The Chhatrapati Shivaji Maharaj War Art Museum aims to celebrate the **historical and cultural significance** of the Maratha warrior king, Shivaji Maharaj.
  - However, the choice of land for the museum has triggered opposition from the **Warli community**, who argue that the land is crucial for their livelihoods and cultural practices.
  - The Warlis argue that the sanctioned land for the museum is the same land they have **depended on for generations**.
  - They express concerns about losing not only their homes but also **the forested area they have populated with fruit trees**.
  - The **conflict has intensified** as the government proceeds with the construction, leading to protests and discussions about the impact on the tribal hamlets.
- **Legal Battles and Community Mobilization:**
  - In 2011, the **Bombay High Court rejected the Maharashtra Tourism Development Corporation's (MTDC) tourism proposal to construct hotels and resorts in and around Gorai and Manori**.
  - The court highlighted the **ecological sensitivity** of these areas.
  - Currently, the **Warli tribe, along with fisherfolk**, is in the process of filing an interim application against the Shivaji museum project.
  - The tribal community has mobilized, with around 6,000 people gathering to mark the **Tribal Community Festival 2023, emphasizing their traditions and addressing the crisis**.
- **Government's Response:**
  - Collector, Mumbai Suburban, assures that tribal communities **practicing agriculture on sanctioned land will not be displaced**.
  - He believes that even if a particular place is affected, the tribes will be **rehabilitated safely**.
  - However, the **Warli community remains skeptical**, emphasizing their connection to the land and their determination to resist any illegal occupation.

Warli tribe in Mumbai objects to construction of Shivaji museum on land they live on

**Parvina Sub**  
GORAI, MUMBAI

In the last week of December, when the world was celebrating Christmas and New Year, Kanan Kisan Babar, 50, was perturbed that her husband in Babar Pada tribal hamlet in Gorai, a Mumbai suburban village, would be torn down. "Since the Shivaji museum project was announced in mid-2021, there have been several visits by Maharashtra Tourism Development Corporation (MTDC) staff along with police," said Ms. Babar, who belongs to the 300-strong Warli population that lives in the hamlet, of about 1,300 Warli in Gorai. She adds that she feels extremely insecure

"There is the constant fear of losing the land my ancestors left us." Her three sons and two daughters, with their families, have houses on the forested land that she said the tribe had populated with fruit trees. Ms. Babar, who lives with another daughter, grows vegetables and catches crabs to sell them in Borhali market in Mumbai. On June 5, 2023, the Maharashtra Department of Tourism announced the construction of the Chhatrapati Shivaji Maharaj War Art Museum across 136 acres of land in Gorai with a budget of ₹50 crore. The boundary wall of the museum is being constructed, and a few houses have been demolished.



At the entrance to Babar Pada is a tall gate with a board describing the history of the tribe living here. The external walls of the houses are covered with Warli art, a form of line drawing done in white on a brick-coloured background, depicting the life and culture of the tribe that lives in the coastal region. The beautification work was carried out by the MTDC two years ago. The Warli say the land sanctioned for the museum is their land that they have been dependent on for generations. Kanta Kolar

lekar from Bira Munda Pada, said the Adivasi community is against all kinds of urban projects built to bring tourists at the cost of the tribals. "We have no objection to the museum, but it should not be built on our land," said Ms. Kolar. In 2011, the Bombay High Court had rejected MTDC's tourism proposal to construct hotels and resorts in and around Gorai and Manori villages. The court had declared in the judgment that these places were ecologically sensitive, and had disallowed construction, said Gayatri Singh, senior advocate, Bombay HC, who had filed a public interest litigation then. "Now, the Warli tribe and fisherfolk are in the

process of filing an interim application against this project," she said. The museum will affect six tribal hamlets: Babar Pada (5 acres), Jamund Pada (5 acres), Mithadongari Pada (5 acres), Chotadongari Pada, Bira Munda Pada, and Borkhal Pada (all 1-4 acres). On January 28, 2023, the Minister of Tribal Development, District Collector, local MLA, and the Revenue Department had attended a meeting at Babar Pada and announced the hamlet as a gadchun, an area protected by the Maharashtra Land Revenue Code that disallows any development without the consent of those who reside on it. However, that has not been updated in the land records. Babar Pada is Gorai's only government-declared gadchun.

On December 24, about 6,000 tribal people from across Mumbai gathered at Babar Pada, to mark the 2023 to celebrate their traditions and discuss the crisis. Sanjay Valan, director, Waghoba Habitat Foundation, an NGO documenting and conserving traditional eco-cultural practices among Mumbai's indigenous people, said, "They are the original Mumbaiians who have been preserving the forest and living sustainably." Rajendra Bhosale, Collector, Mumbai Suburban said, "If tribal communities are practicing agriculture on sanctioned land, they will not be displaced or affected by such projects." He doesn't think the tribes needed to worry. "Even if that particular place is affected, they will be rehabilitated safely." From Chotadongari Pada, Vinita Jorwal said that they have protested for their rights in the past and they will stage protest again to save the forest that the museum project is going to raise. "The city has only got closer to our hamlets and now the government is trying to construct buildings in the name of Shreeji to occupy our land illegally. This is our home and we will not leave," she said. Mumbai has 22 Adivasi padas (tribal hamlets) of which eight are in Gorai.

### • About the Warli Community:

- The Warli, an indigenous tribe of western India, reside in mountainous and coastal areas along the **Maharashtra and Gujarat border**.
- Their **animistic beliefs, customs, and traditions** are intertwined with their unique **Warli language**.
- Known for **their Warli paintings**, the community has a rich cultural heritage, and their mural art tradition dates back to 2500 or 3000 BCE.
- The **Warli paintings, characterized by a basic graphic vocabulary**, have become a distinctive representation of their cultural identity.
- The Warli painting is recognized as the **cultural intellectual property of the tribal community**, with efforts made to preserve this traditional knowledge through initiatives like the Warli Art Foundation.

## 3. Why did FIU IND Act Against Virtual Asset Providers?

### Recent events of importance

#### • Why in News:

- On December 28<sup>th</sup>, the Financial Intelligence Unit India (FIU IND) issued show cause notices to nine offshore Virtual Digital Asset Service Providers (VDA SPs).
- These VDA SPs include **Binance, Kucoin, Huobi, Bitfinex and MEXC Global**, among others.
- The Director FIU IND wrote to the Secretary, Ministry of Electronics and Information Technology to **block the URLs of the above-mentioned entities**.

#### • What is the Premise of the Noncompliance?

- In March 2023, VDA SPs in India were brought under anti-money laundering/counter financing of terrorism regulations.
- They were **mandated to comply with Prevention of Money Laundering Act (PMLA) 2002**, verify the identities of onboarded clients, and maintain records of their financial positions and potentially suspicious transactions.
- This obligation applies to all VDA SPs operating in India irrespective of physical presence.
- Nonregistration made entities noncompliant despite serving Indian users.
- To put it in perspective, the entities "though catering to a substantial part of Indian users were not getting registered and coming under the Anti Money Laundering (AML) and Counter Financing of Terrorism Network (CFT) framework".
- Currently, 31 VDA SPs have registered with FIU IND.
- However, several offshore entities though catering to a substantial part of Indian users were not getting registered and coming under the Anti Money Laundering (AML) and Counter Financing of Terrorism (CFT) framework.

#### • Why VDA SPs have been made to Comply with PMLA 2002?

- The objective of the PMLA and its reporting obligation are to enable monitoring and tracking of financial transactions to curb money laundering and terror financing.
- Complying with the PMLA 2002 addresses one of the primary concerns of any regulator about the **purported anonymity of the crypto assets and their potential use for unlawful purpose**.
- This is also in line with India's efforts through the G20 where it has been advocating for global regulation of cryptocurrency.
- The regulation casts reporting, record keeping, and other obligations on the VDA SPs under the PML Act which also includes registration with the FIU IND.
- Mandatory KYC verifications would ensure lack of anonymity and businesses not encountering multiple hurdles.

#### • How are other Countries Regulating Virtual Assets?

### Why did FIU IND act against virtual asset providers?

How might the actions against non-compliant VDA SPs affect the users of these platforms, especially those operating in India? What potential repercussions or implications could these enforcement actions have?

**Investment Outlook**

**The story so far**  
On December 28, the Financial Intelligence Unit India (FIU IND) issued show cause notices to nine offshore virtual digital asset service providers (VDA SPs), including Binance, Kucoin, Huobi, Bitfinex and MEXC Global, among others. This was the "showing liability" notice, complying with the provisions of the Prevention of Money Laundering Act, 2002 (PMLA). It has also been written to the Secretary of the Ministry of Electronics and Information Technology to block URLs of the mentioned entities.

**What is the premise of the non-compliance?**  
In March 2023, Virtual Digital Asset Service Providers (VDA SPs) in India were brought under anti-money laundering/counter financing of terrorism regulations. They were mandated to comply with PMLA 2002, verify the identities of onboarded clients, and maintain records of their financial positions and potentially suspicious transactions. This obligation applies to all VDA SPs operating in India irrespective of physical presence. Nonregistration made entities noncompliant despite serving Indian users. To put it in perspective, the entities "though catering to a substantial part of Indian users were not getting registered and coming under the Anti Money Laundering (AML) and Counter Financing of Terrorism Network (CFT) framework". Currently, 31 VDA SPs have registered with FIU IND.

**What purpose does the PMLA compliance serve?**  
According to Rajan Adhikari, Partner at NCAI&A, the objective of the PMLA and its reporting obligation are to enable monitoring and tracking of financial transactions to curb money laundering and terror financing. The further observed, "While there is no denying that such AML and CFT measures are imperative for today's global financial ecosystem, the FIU IND should seek compliance only from

September 2023 is likely to be actioned in 2024," she said.

**What considerations emerge when looking to regulate VDA SPs?**

The Bureau for International Settlements (BIS), which is the global forum for cooperation among central banks, has a report about financial stability from crypto assets in emerging economies (August 2022). It observed that high-level policy options under consideration. These include oversight, law, regulation and supervision. BIS observed that an oversight has not yet been established. This is because of the pseudo-anonymity nature of crypto markets. There could be a possibility that regulators lose all sight of the market. Another hindrance that could be the lack of transparency and making them less predictable. Consequently, regulators would struggle to control the flows between crypto markets and traditional financial system. However, BIS argued that the strategy would not address the vulnerabilities inherent in the crypto market and could result in financial stability risks.

After regulation, nonregistration to regulate the asset sector across jurisdictions. The report finds that it must be ensured that the benefits of regulating and supervising are greater than the costs involved. Furthermore, the emerging market economies these issues are of importance, that is, defining the regulatory authority or entity and their scope, then the scope of regulation in terms of other activity or entity, and lastly, filling in the data gaps to understand the technology and interconnections.

**THE GIST**

On December 28, FIU IND issued show cause notices to nine offshore virtual digital asset service providers (VDA SPs) for operating illegally and not complying with the PMLA 2002. The objective is to monitor financial transactions, curb money laundering, and prevent terror financing.

The objective is to monitor financial transactions, curb money laundering, and prevent terror financing.

- In Dubai (UAE), they follow licensing framework. The mandatory licenses are comprehensively categorised based on the service that the entity wants to offer in the market.
  - For obtaining the mandatory license in the Emirate, it imposes an obligation to comply with AML-CFT laws relevant to “its VA activities, businesses or operations in any jurisdiction at all times”.
- In the European Union, the **Markets in Crypto-Assets Regulation (MiCA)** endeavours to institute uniform EU market rules for crypto-assets.
  - The regulation is premised around “transparency, disclosure, authorisation and supervision of transactions”.
  - It would provide measures to tackle market manipulation, prevent money laundering, terrorist financing and other criminal activities.
  - Service providers under this common law would require authorisation to operate in the region.
  - Though entered into force in June 2023, the legislation is still in consultation stages. The final report is expected in June 2024.
- Across the Atlantic, **the U.S. does not have a thorough nationwide regulatory framework at present.**
  - Some digital assets and related activities are covered under certain existing regulations, such as the Bank Secrecy Act and the Anti-Money Laundering Act of 2020.
- **What Considerations emerge when looking to Regulate VDAs?**
  - The Bureau for International Settlements (BIS), in a report about financial stability from crypto assets in emerging economies (August 2023) observed three high-level policy options under consideration.
    - These include an **outright ban, containment** and **regulation**.
  - BIS observed that an outright ban may not prove enforceable.
  - This is because of the pseudo anonymous nature of crypto markets. There could be a possibility that regulators lose all sight of the market, further shrinking their transparency and making them less predictable.
  - Containment would imply controlling the flows between crypto markets and traditional financial systems.
  - However, BIS argued that the strategy would not address the vulnerabilities inherent in the crypto markets and could result in financial stability risks.
  - About regulation, motivation to regulate the asset varies across jurisdictions.
  - The report holds that it must be ensured that the benefits of regulating and supervising are greater than the costs involved.
  - Furthermore, for emerging market economies three issues are of importance, that is:
    - Defining the (regulatory) authority or entity and their scope,
    - Scope of regulation in terms of either activity or entity,
    - Filling in the data gaps to understand the technology and interconnections.

## 4. Radiocarbon dating

### GS 3 (Science and Tech)

- **Why in News:** Radiocarbon dating brought the first verifiable way to keep time to many fields of science, significantly transforming them
- **Introduction**
  - Time is a fundamental aspect in understanding the natural universe, social systems, and technological advancements.
  - From thermodynamics to GPS, our comprehension of the world hinges on the ability to **measure and interpret the passage of time**.
  - **Radiocarbon dating**, a groundbreaking technique, has played a pivotal role in transforming various scientific fields, providing a verifiable method to **determine the age of organic materials**.
- **What is Radiocarbon Dating?**



- **Dating Methodology:** Radiocarbon dating involves determining the age of an object by analyzing the concentration of the carbon-14 isotope present in it.
- **Carbon-14 Creation:** Cosmic rays in the Earth's atmosphere create carbon-14 by interacting with nitrogen-14. This newly formed carbon-14 enters the carbon cycle through plants and animals.
- **Historical Origins:** In the early 1940s, chemists Martin Kamen and Sam Ruben synthesized carbon-14 in the lab, revealing its unexpectedly long half-life of around 5,000 years. Inspired by these findings, Willard Libby proposed using carbon-14 for dating organic materials in 1946.
- **Initial Assumptions:** Libby's concept assumed constant carbon-14 concentrations in the atmosphere over millennia and the effective diffusion of carbon-14 into Earth's ecosystems. Later studies validated these assumptions.
- **How Does Radiocarbon Dating Work?**
  - **Dynamic Equilibrium:** Living organisms constantly exchange carbon with their surroundings, maintaining a dynamic equilibrium of carbon-14. Upon death, this equilibrium is disrupted, and carbon-14 begins to decay.
  - **Decay Rate Prediction:** The decay rate of carbon-14 is predictable, allowing scientists to estimate the age of an object by measuring the remaining carbon-14 concentration.
  - **Experimental Validation:** Libby and James Arnold validated radiocarbon dating by accurately dating known-age objects such as redwood trees and an Egyptian pharaoh's funerary boat in the late 1940s.
- **Tools of Radiocarbon Dating**
  - **Geiger Counter:** Libby utilized Geiger counters to detect radioactive decay. The anti-coincidence counter enhanced precision by filtering background radiation.
  - **Modern Techniques:** Contemporary radiocarbon dating employs sophisticated methods such as accelerator mass spectrometry (AMS), offering high sensitivity and the ability to date tiny organic samples.
- **Modern Radiocarbon Dating Setup**
  - **Accelerator Mass Spectrometry (AMS):** AMS enhances mass spectrometry by utilizing a particle accelerator, enabling the isolation and precise measurement of carbon-14 in small samples.
  - **Versatility of AMS:** AMS has expanded applications beyond radiocarbon dating, allowing the dating of rocks based on isotopic ratios, contributing to geology.
- **Impact on Science**
  - **Radiocarbon Revolution:** Recognized as the first objective dating method, radiocarbon dating revolutionized archaeology and geology by providing numerical dates to organic remains.
  - **Historical Insights:** Radiocarbon dating facilitated the exploration of human migration, civilizational rise and fall, linguistic and religious evolution, human-animal interactions, and climate changes.
  - **Political Significance in India:** The technique holds political significance in India, where researchers use radiocarbon dating to date objects from temples and mosques.
  - **Ongoing Refinement:** Continuous refinement of radiocarbon dating techniques addresses potential flaws, ensuring accuracy. Recent studies have highlighted deviations in the radiocarbon cycle during specific historical periods.
  - **Time Resolution Improvement:** Innovations in atmospheric science have allowed researchers to enhance the time resolution of radiocarbon dating, providing a more detailed temporal perspective.
- **Way Forward:**

- Radiocarbon dating stands as a beacon of scientific progress, unraveling the mysteries of time and enriching our understanding of the past.
- From its humble beginnings with Geiger counters to the sophisticated AMS technology of today, this technique continues to shape our exploration of history and archaeology, offering a window into the intricate tapestry of human and natural evolution.

## 5. Agreement on the Prohibition of Attack against Nuclear Installations and Facilities GS (International Relations)

- **Why in News:** India and Pakistan exchanged the list of nuclear installations and facilities through diplomatic channels recently under the agreement on the Prohibition of Attack against Nuclear installations and facilities.
- **About Agreement on the Prohibition of Attack against Nuclear Installations and Facilities:**
  - It was **signed on December 31, 1988**, by the then Pakistani Prime Minister Benazir Bhutto and Indian PM Rajiv Gandhi.
  - The treaty **came into force on January 27, 1991**, and has two copies each in Urdu and Hindi.
- **Need for the Agreement:**
  - In 1986, the **Indian army carried out** a massive exercise '**Brasstacks**', raising fears of an attack on nuclear facilities.
  - Since then, both countries have been **negotiating to reach an understanding towards the control of nuclear weapons**, which culminated in the treaty.
- **Provisions:**
  - The agreement **mandates both countries to inform each other about any nuclear installations and facilities to be covered under the agreement on the first of January** of every calendar year, providing a confidence-building security measure environment.
  - The term 'nuclear installation or facility' **includes nuclear power and research reactors, fuel fabrication, uranium enrichment, iso-topes separation, and reprocessing facilities**, as well as any other installations with fresh or irradiated nuclear fuel and materials in any form and establishments storing significant quantities of radioactive materials.



## 6. Aadhaar-Based Payment System (ABPS) Mandatory for NREGS Workers: Govt may Consider Exemptions on Case Basis GS 2 (Governance)

- **Why in News:**
  - With the ABPS now mandatory for National Rural Employment Guarantee Scheme (NREGS) workers' payments, the government announced that it may consider exemptions on a "case-by-case basis".
  - The NREGS **provides a legal guarantee for 100 days of employment** in every financial year to adult members of any rural household willing to do public work-related unskilled manual work **at the statutory minimum wage**.
- **Aadhaar Enabled Payment System (AePS) and its Objectives:**
  - AePS is a **bank led model** which allows online interoperable financial inclusion transactions at PoS (MicroATM) through the Business correspondent of any bank using the Aadhaar authentication.
  - The only inputs required for a customer to do a transaction under this scenario are –
    - Bank Name

### Case-by-case exemption from new MGNREGS payment system: Centre

Congress terms Union government's move to make Aadhaar-linked system mandatory a 'viral New Year gift' and accuses it of weaponising technology to exclude the poor; government highlights benefits of Aadhaar seeding, says success rate higher than that of account-based payment

The Hindu Bureau

Workers will get exemption on a case-by-case basis from the Aadhaar-based payment system (ABPS) of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), the Union Rural Development Ministry said in a statement on Monday in response to a report in The Hindu that 34.8% of the registered workers and 12.7% of active workers remain ineligible for this mandatory payment method.

The push for the new system has also led to a high rate of job card deletions, as evidenced by anecdotal evidence and ground reports. The Hindu reported that 76 crore



workers have been deleted since April 2022, as per data collated by Lit Tech India, a consortium of academics and activists.

The Ministry, in its response, asserted, "job cards of household can be deleted only in certain specific conditions but not due to ABPS. Updation/deletion of job cards is a regular exercise conducted by the State/UTs."

**"Excluding poor"**

The Congress called the Centre's decision a "viral New Year gift". Party general secretary (communications) Jai Ram Ramesh accused the government of "weaponising technology" to "exclude crores of the poorest and marginalised Indians from earning a basic income".

"The Prime Minister's well-known disdain for MGNREGS has translated into a slew of experiments designed to use technology as a weapon to exclude such as the digital attendance (NAMES), ABPS, drone monitoring and the proposed integration of facial recognition to NAMES," he said. He added that no the condition or scientific piloting was done before unleashing these "experiments" on crores of beneficiaries and "make the benefits of the social welfare schemes available only to genuine beneficiaries".

The government reiterated its demand for the order to be revoked. "The Indian National Congress reiterates its demand of 30th August, 2022 that the Modi government should stop weaponising technology, especially Aadhaar, to deny the most vulnerable Indians their social welfare benefits, release delayed wage payments and implement open master rolls and social audits to improve transparency," Mr. Ramesh said.

In response to Mr. Ramesh's allegation, the government is a statement on Monday night said that Aadhaar seeding of beneficiaries is a "continuous process and is done as a de-duplication exercise to authenticate the genuine beneficiaries" and "make the benefits of the social welfare schemes available only to genuine beneficiaries".

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- Aadhaar Number
- Biometrics captured during enrolment
- **Objectives of the AePS:**
  - **To empower a bank customer to use Aadhaar** as his/her identity to access his/ her respective Aadhaar enabled bank account.
  - **To perform basic banking transactions** like cash deposit, cash withdrawal, intrabank or interbank fund transfer, balance enquiry and obtain a mini statement through a Business Correspondent
  - To sub-serve the goal of Government of India and Reserve Bank of India (RBI) in furthering **Financial Inclusion**.
  - **To sub-serve the goal of RBI in electrification of retail payments.**
  - To enable banks to route the Aadhaar initiated interbank transactions through a central switching and clearing agency.
  - **To facilitate disbursements** of Government entitlements like NREGA, Social Security pension, Handicapped Old Age Pension, etc.
  - To facilitate interoperability across banks in a safe and secured manner.
  - To build the foundation for a full range of Aadhaar enabled Banking services.
- **ABPS for NREGS:**
  - Under Mahatma Gandhi NREGS, ABPS has been in use since **2017**. **Under ABPS**, workers' 12-digit Aadhaar numbers are linked with their job cards as well as the bank accounts of NREGS workers.
  - After almost universal availability of Aadhaar numbers to every adult population, the Government of India decided to extend ABPS for beneficiaries under the scheme.
  - The payment will land through ABPS only to the account associated with ABPS, which means that **it is a safer and faster way of payment transfer**.
  - Out of the total 14.33 crore active beneficiaries, the Aadhaar has been seeded for 13.97 crore.
  - Against these seeded Aadhaar, a total 13.34 crore Aadhaar have been authenticated and 81.89% of active workers are now eligible for ABPS.
  - In the Month of July 2023, about 88.51% of the wage payment has been made through ABPS.
- **ABPS Mandatory for NREGS Workers:**
  - **The system was first made mandatory** (by the Rural Development Ministry) with effect from Feb 1 2023 but, through several extensions, the Centre allowed it until Dec 31 2023.
    - With no extension granted to states beyond Dec 31, the ABPS became mandatory from **Jan 1 2024**.
  - **The mixed route** of ABPS and National Automated Clearing House (NACH) - an interbank system, will be used for bulk payments such as subsidies and salaries.
  - The wage payment of unskilled workers through ABPS **ensures the payment of beneficiaries** into their bank accounts, **even in case of frequent change of bank account by the beneficiary**.
- **Decision to Exempt in Case of any Technical Issues:**
  - In case, if any gram panchayat is having either technical problem or Aadhaar-related problem, **the Government of India may consider exemption from ABPS on case-by-case basis till the resolution of the issue**.
  - The announcement came after the opposition parties attacked the Government, **calling the ABPS a cruel New Year gift to exclude crores of the poorest and marginalised Indians from earning a basic income**.
    - They accused the government of "weaponizing technology, especially Aadhaar".

## 7. Japan earthquake triggers tsunami warning GS 1 (Geography)

- **Why in News:**
  - Following strong earthquakes in Japan, including a preliminary one of 7.6 magnitude, both North and South Korea as well as Russia have issued a tsunami warning.
  - Tsunami waves also hit several parts of Japan's coastal areas and urgent evacuation warnings were issued.
- **Tsunami**
  - **About**

### 7.6 quake rocks Japan, wreaks havoc

Nearly 100,000 residents ordered to evacuate, one killed in building collapse

REUTERS  
TOKYO, JANUARY 1

A POWERFUL earthquake struck central Japan on Monday, killing at least one person, destroying buildings, knocking out power to tens of thousands of homes and prompting residents in coastal areas to flee to higher ground. The quake with a preliminary magnitude of 7.6 triggered waves of about 1 metre along Japan's west coast and neigh-

bouring South Korea. The Japan Meteorological Agency (JMA) initially issued a major tsunami warning - its first since the March 2011 earthquake and tsunami that struck north-east Japan killing nearly 20,000 people - for Ishikawa prefecture. It later downgraded that and eventually cut it to an advisory. The Japanese government said that as of Monday night it had ordered more than 97,000 people in nine prefectures on the western coast of Japan's main is-

land Honshu to evacuate. Japanese Prime Minister Fumio Kishida told reporters late on Monday that he had instructed search and rescue teams to do everything possible to save lives, even though access to quake-hit areas was difficult due to blocked roads. It was the strongest quake in the region in more than four decades, according to the U.S. Geological Survey. Army personnel were dispatched to help with rescue oper-

ations, government spokesperson Yoshimasa Hayashi told reporters. An elderly man was pronounced dead after a building fell down in Shika Town in Ishikawa, broadcaster NTV reported citing local police. More strong quakes in the region, where seismic activity has been simmering for more than three years, could occur over coming days, JMA official Toshihiro Shimoyama said. Russia and North Korea also issued tsunami warnings for some areas.

- Tsunami is a series of giant ocean waves caused by earthquakes or volcanic eruptions under the ocean.
- Basically, it is a series of ocean waves with extremely long wavelengths and high energy.
- Tsunamis can travel across entire ocean basins and can cause widespread destruction when they reach coastlines.
- Tsunami waves can be **hundreds of feet tall and can travel as fast as jet planes over deep waters while slowing down when reaching shallow waters.**
- **Primary factors behind the creation of tsunamis**
  - **Underwater Earthquakes**
    - When tectonic plates beneath the Earth's surface shift, they can generate seismic waves that propagate through the water, creating a tsunami.
  - **Volcanic Eruptions**
    - Volcanic activity, especially if it occurs beneath the ocean, can displace a large volume of water, triggering a tsunami.
    - This can happen when there is a sudden collapse of a volcanic island or an explosive eruption.
  - **Landslides**
    - Underwater landslides, whether caused by volcanic activity, coastal erosion, or other factors, can displace a significant amount of water and generate tsunami waves.
  - **Meteorite Impact**
    - Although rare, the impact of a large meteorite or asteroid in the ocean can displace water and create tsunami-like waves.
  - **Underwater Explosions**
    - Human activities, such as underwater explosions, can also potentially generate tsunamis.
  - **Devastation caused**
    - Once generated, the tsunami waves can travel across the open ocean at high speeds, reaching coastal areas with devastating force.
    - The energy and wavelength of these waves make them different from typical ocean waves, and they can cause widespread damage when they inundate coastlines.
  - **Tsunami preparedness**
    - Early warning systems and preparedness measures are crucial for minimizing the impact of tsunamis on coastal communities.
- **Tsunami preparedness in India**
  - **Part of the Indian Ocean Tsunami Warning System**
    - India is a part of the Indian Ocean Tsunami Warning System (IOTWS).
    - The TEWS includes a network of seismic and sea-level sensors strategically placed to detect underwater earthquakes and monitor sea level changes.
    - The information collected is used to issue timely warnings to coastal communities.
  - **Early Warning Centre**
    - **India's Tsunami Early Warning Centre (ITEWC)** is located at the Indian National Centre for Ocean Information Services (INCOIS) in Hyderabad.
    - The ITEWC provides tsunami advisories to stakeholders.
  - **Public Awareness and Education**
    - In coordination with the National Disaster Management Authority (NDMA), INCOIS conducts mock drills as well as organises workshops/trainings on tsunami awareness and preparedness.
  - **Enhancing community preparedness**
    - To enhance community preparedness, INCOIS is also coordinating the implementation of the **UNESCO-IOC "Tsunami Ready" initiative.**
    - **Venkatraipur and Noliasahi villages of Odisha have been recognised as Tsunami ready communities by the UNESCO-IOC.**
      - India is the **first country in the Indian Ocean region** to achieve this distinction.
  - **Software for monitoring earthquakes and multimode dissemination of early warning of tsunamis**

- The required software for monitoring earthquakes and multimode dissemination of early warning of tsunamis is already in place at INCOIS.
- INCOIS has also developed Decision Support System software for automatically generating and disseminating warnings for effective dissemination of tsunami early warning information.
  - E.g., INCOIS has developed interfaces to the NDMA Common Alert Protocol (CAP) system.
  - It has also developed the INCOIS mobile application known as **“SAMUDRA – Smart Access to Marine Users for ocean Data Resources and Advisories”**.
- **Why is Japan prone to earthquakes and tsunamis?**
  - Japan is situated along the **‘Pacific Ring of Fire’**, which is the most active earthquake tectonic belt in the world.
    - The ‘ring’ refers to “an imaginary horseshoe-shaped zone that follows the rim of the Pacific Ocean.
    - This is the area where many of the world’s earthquakes and volcanic eruptions occur.
  - Within the Ring of Fire, there are different tectonic belts, including the Pacific Plate, Eurasian Plate, and Indo-Australian Plate.
  - These plates keep meshing and colliding with each other, causing earthquakes, volcanic eruptions and tsunamis.
- **2011 Earthquake and tsunami in Japan**
  - In 2011, Japan was hit by a 9.0 magnitude earthquake and a resulting tsunami which devastated its northeastern coastal communities, killing around 18,000 people and displacing tens of thousands.
  - Those tsunami waves led to a nuclear meltdown at the Fukushima power plant, causing the most severe nuclear accident since the 1986 Chernobyl disaster in the Soviet Union.

## 8. XPoSat Mission

### GS 3 (Science and Tech)

#### • **Why in News:**

- Indian Space Research Organisation (ISRO) put its first polarimetry mission X-ray Polarimeter Satellite (XPoSat) on January 1.
  - ISRO's PSLV-C58 has launched XPOSAT Satellite.
- XPoSat is the **world’s second satellite-based mission** dedicated to making X-ray polarimetry measurements.

#### • **Polarisation of X-rays**

##### ○ **About**

- X-rays comprise electric and magnetic waves that are constantly in motion. Being sinusoidal waves, they do not follow a patterned direction of motion.
- Whereas, a polarised X-ray is both organised and has two waves vibrating in the same direction.

##### ○ **Sources that emit polarised X-rays**

- When magnetars or black holes emit X-rays, they encounter a wide variety of materials in the Universe.
- As X-rays pass through the thick cloud of materials, the electric component of the X-ray emits a photon in a changed direction, as it has now undergone scattering.
- In the process, the new photon has got polarised in a direction perpendicular to the plane formed between the original and scattered photon.

##### ○ **Polarisation measurements**

- The polarisation measurements – angular and degree of polarisation – are believed to provide clues about:
  - the bright X-ray emitting sources the nature of these radiations and
  - the complex process they undergo.

#### • **X-ray Polarimeter Satellite (XPoSat)**

##### ○ **About**

- It is the first dedicated satellite from ISRO to carry out research in space-based polarisation measurements of X-ray emission from celestial sources.
- It is designated for observation from low earth orbit (~ 650 km, low inclination of ~ 6 degree).

## XPoSat launch: what is ISRO's first mission of this yr

**ANJALI MARAR**  
TECHNICAL, JANUARY 1

**What do the two polaroids do?**  
POLAR is the world's first instrument designed to operate in the medium-energy band of 10 to 30 keV (electron Volt [keV] energy band). It consists of a collimator, which is the key component to filter light originating from bright sources in the field of view. Inside, there is a scintillator along with four X-ray proportional counter detectors. The X-ray, meanwhile, is expected to scatter from and high-energy X-rays, resulting in soft X-ray energy bands (0.1-10 keV). It will observe a variety of sources like X-ray pulsars, black hole binaries, low-magnetic field neutron stars, active galactic nuclei, and magnetars.

**What exactly is XPoSat?**  
The mission will allow astronomers to study the nature of X-ray emissions emitted by bright celestial sources in the medium-energy band. It comprises two payloads: Indian X-ray Polarimeter (XPOL) and X-ray Spectroscopy and Timing (XOST), built by Indian Space Research Organisation and RRI Satellite Centre, both based in Bengaluru. It is a continuation of the work done by the Indian Space Research Organisation, during which ISRO will observe sources that emit polarised X-rays. The observations will be done when the neutron stars are in transit through the Earth's shadow – for instance, during the eclipse period.

**Why is the XPoSat mission significant?**  
So far, only the timing and broad-band spectroscopy of X-ray objects were performed, using, for example, India's Astrosat. But studies for X-ray polarisation measurements were not attempted. XPoSat will be a game-changer by facilitating X-ray polarisation measurements from bright sources in the medium-energy band (10-30 keV) range.

**What is the polarisation of X-rays?**  
X-rays comprise electric and magnetic waves that are constantly in motion. Being sinusoidal waves, they do not follow a patterned direction of motion. However, a polarised X-ray is both organised and has two waves vibrating in the same direction. When magnetars or black holes emit X-rays, they encounter a wide variety of materials in the universe. As X-rays pass through the thick cloud of materials, their electric component emits a photon in a changed direction, as it has now undergone scattering. In the process, the new photon has got polarised in a direction perpendicular to the plane formed between the original and the scattered photon. Polarisation measurements are believed to provide clues about the bright X-ray emitting sources and the nature of these radiations and the complex process they undergo.

**What about other similar missions?**  
Missions on X-ray polarisation measurements have been only a handful. Some like ROSA, POLARIS, and XEP, have been balloon-based and short-duration experiments by NASA and ESA. India's first astronomy-based space mission launched in September 2015 – performed timing and broad-band spectroscopy of X-ray sources. The need for highly sensitive and precise measurements makes missions for polarisation measurements of X-ray challenging. Asmita is a Senior Communications Officer with Indian Space Research Organisation.

- It has an estimated mission life of about five years during which XPoSat will observe sources that emit polarised X-rays.
- The observations will be done when the magnetars or neutron stars (they are highly magnetic and display a wide array of X-ray activity) are in transit through the Earth's shadow, for instance, during the eclipse period.
- **Scientific payloads onboard XPoSat**
  - XPoSat comprises two payloads, including Indian **X-ray Polarimeter (POLIX)** and **X-ray Spectroscopy and Timing (XSPECT)**.
  - They have been built by Raman Research Institute and UR Rao Satellite Centre, both located in Bengaluru.
- **POLIX:**
  - It is the world's first instrument designed to operate in the medium X-ray of 8 to 30 kilo electron Volt (keV) energy band.
  - It comprises a collimator, which is the key component to filter light originating from bright sources in the field of view.
  - Moreover, there is a scatterer consisting of four X-ray proportional counter detectors (that prevent the trapped light from escaping).
  - It will observe a few tens of astronomical sources. It was conceived, designed, and built at RRI.
- **XSPECT:**
  - It is designed to conduct fast timing and high spectroscopic resolution in a soft X-ray energy band (0.8-15 keV).
  - It will observe a variety of sources like X-ray pulsars, black hole binaries, low-magnetic field neutron stars, active galactic nuclei or AGNs and magnetars.
  - AGNs are a compact region at the centre of a galaxy that emits a significant amount of energy across the electromagnetic spectrum.
- **Significance of XPoSat Mission**
  - **X-ray polarisation measurements in medium energy bands for the first time**
    - So far, polarisation of celestial sources was done either in the optical or radio bands.
    - XPoSat, however, will facilitate X-ray polarisation measurements possible from bright sources, that too, in the **medium energy band (8-30 keV) energy range**.
      - This has never been attempted ever before.
  - **Analyse two kinds of sources**
    - XPoSat will observe two kinds of sources — **persistent sources** (targeted and known sources) and **transient sources** (pulsars, active galactic nuclei, magnetars).
  - **Nature of the radiations and the multitudes of processes involved can be analysed**
    - Out in space, X-rays get polarised due to multiple causes.
      - For example, X-rays when subject to strong magnetic fields or due to the interactions with material present around black holes.
    - With the help of XPoSat, scientists can now probe the nature of the radiations and the multitudes of processes involved in the generation of these radiations.
  - **Will aid the researchers by analysing the additional parameters**
    - POLIX will undertake important measurements like the degree and angle of polarisation of X-ray photons from various potential sources.
    - These **two additional parameters, along with the spectrographic, timing and imaging data, will aid researchers** to overall improve the present understanding of the celestial bodies
- **How does XPoSat compare with X-ray experiments or missions globally?**
  - Indian astronomers, using AstroSat performed timing and broadband spectroscopy of X-ray sources but no polarisation studies were performed.
    - AstroSat is India's first astronomy-based space missions that was launched in September 2015.
  - The **lack of development of highly sensitive and precise instruments** makes missions for polarisation measurements of X-rays extremely challenging.
  - In 2021, NASA launched **Imaging X-ray Polarimetry Explorer (IXPE)**.
    - It has been designed to operate and perform X-ray polarisation measurements within the soft X-ray band (2 to 8 keV energy band).

- Besides complementing IXPE, XPoSat's payload POLIX will offer an expanded observational energy band, as **it is designated to perform X-ray polarisation in the medium X-ray band (8 to 30keV).**



3<sup>rd</sup> Jan, 2024

## 1. Truck drivers protest against new hit-and-run law

### Recent events of importance

#### • Why in News:

- The government assured the members of the transport body that the new laws have not been implemented yet and will only be implemented after consultation with AIMTC (All India Motor Transport Congress)
- Transporters and auto-driver associations in India are protesting against a new law related to hit-and-run incidents.
- The three-day strike was launched to protest against the stringent jail and fine regulations under the newly implemented Bharatiya Nyaya Sanhita (BNS) for hit-and-run cases.

#### • The Bharatiya Nyaya (Second) Sanhita, 2023

- Recently, the Bharatiya Nyaya (Second) Sanhita (BNS) has received Presidential assent, and it will replace the 163-year-old Indian Penal Code.
- However, the Central government is yet to notify the date of enforcement.
  - As per various reports, roll-out schedule of 3 new criminal codes will be notified by January 26.

#### • Key provisions of the Bharatiya Nyaya (Second) Sanhita, 2023

- **Community Service As Form Of Punishment**
  - Community service has been introduced as a form of punishment under Section 4, although it has not been defined what community service entails.
- **Offences Against Woman And Child**
  - The new BNS adds Chapter V naming "Of Offences Against Woman and Child Of Sexual Offences".
  - All the offences relating to woman and child have been placed under one chapter in the beginning of the Code, which was earlier spread under various chapters and parts.
- **Marital Rape With Minor Wife Is Offence**
  - As per exception of Rape which is Section 63 of BNS, sexual intercourse or sexual acts by a man with his own wife, where the wife is not under eighteen years of age, would not be rape.
  - However, under IPC, the age of wife to not to constitute rape was "fifteen years".
- **Sexual Intercourse By Employing Deceitful Means, etc.**
  - BNS introduces sexual intercourse by employing deceitful means, etc as offence
- **Enhanced Punishment In Case Of Gangrape Of Victim Of Under 18 Years Of Age**
  - Such acts have been punished with imprisonment for life, which shall mean imprisonment for the remainder of that person's natural life, and with fine, or with death.
- **Printing or Publishing Trial Court Proceeding Relating To Sexual Offences Without Permission Of Court Is An Offence**
- **Section 377 Deleted**
  - The BNS has completely deleted the offence, implying that forcible carnal intercourse against a man and bestiality are no longer offences under BNS.
- **Offence Of Adultery Omitted**
  - In view of Apex Court's judgement in Joseph Shine's case the offence of Adultery has been deleted, however, second BNS retains Section 498 of the IPC (Section 84) which penalises a man for enticing the wife of another man so that she may have intercourse with any person.
- **Organised Crime**
  - The new law has added organised crime under Section 111, and if the crime results in the death of any person, maximum prescribed punishment is death penalty.
- **Punishment For Being A Member of an Organised Crime Syndicate**
  - Any person who is a member of an organised crime syndicate will be punished with imprisonment for a term which shall not be less than five years but which may extend to imprisonment for life, and can also be liable to fine which will not be less than five lakh rupees.

## MHA seeks to pacify truckers protesting new hit-and-run law

Will invoke the new penal section only after consultations with the All India Motor Transport Congress. Union Home Secretary Ajay Bhatta

Vijaita Singh  
NEW DELHI

As transporters across the country struck work to protest the increase in punishment in hit-and-run cases in the yet-to-be-implemented Bharatiya Nyaya Sanhita (BNS), the Union Ministry of Home Affairs (MHA) convened a meeting with the All India Motor Transport Congress on Tuesday.

Transporters, including bus and taxi unions, have called a nationwide strike from January 30 to protest Section 106 of the BNS, which prescribes a maximum punishment of ten years in cases of rash and negligent driving. "The government wants to clarify that the new laws have not been implemented yet. We would also like to point out that the decision to invoke Section 106 (2) of the Bharatiya Nyaya Sanhita will be taken only after consultation with the All India Motor Transport Congress. I appeal to the body and transporters to return to work," Union



Stationary trucks line the roads of Lucknow as drivers respond to call to strike. SANDEEP SARKAR

### Rahul slams govt. for enacting laws without consultations

The Hindu Bureau  
NEW DELHI

Expressing solidarity with truckers, Congress leader Rahul Gandhi slammed the Centre for making laws without consulting stakeholders or the

Opposition. "The insistence on making laws without discussion with the affected class and without dialogue with the Opposition is a continuous attack on the soul of democracy," he said in a post on X. » PAGE 10

Home Secretary Ajay Bhatta said after the meeting. "Though the motor transport congress has called off the strike after the meeting, transport bodies in other States would con-

tinue with the strike, Kulan Singh Atwal, chairman, All India Motor Transport Congress, said.

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- **Petty Organised Crime**
  - BNS has also added Petty Organised Crime under Section 112.
  - Punishment prescribed for committing any petty organised crime is imprisonment for a term which shall not be less than one year but which may extend to seven years, and shall also be liable to fine.
- **Terrorist Act**
  - A major development brought about by the criminal law amendment is the addition of the "Terrorist Act," which did not find a place in the IPC.
  - BNS II has removed vaguely used words such as "intimidating the public or disturbing public order".
- **Sedition is no longer an offence**
  - Under BNS II, Sedition is no longer an offence. Instead, there is a new offence for acts endangering the sovereignty, unity and integrity of India.
- **Mob lynching**
  - 'Mob lynching' has been made a separate offence under the BNS, with a maximum punishment of death penalty.
  - Now, murder by a group of five or more persons on grounds of certain identity markers such as caste, language or personal belief will be called mob lynching.
- **Lesser Punishments To Doctors For Causing Death By Negligence Vis-A-Vis Other Offenders**
- **Stringent Punishment For Hit and Run Cases**
- **Introduced Snatching As A Distinct Offence**
- **Attempt To Suicide Is No Longer An Offence**
  - The BNS removes section 309 of the Indian Penal Code (IPC). This means that attempted suicide is no longer a criminal offense.
  - However, the BNS criminalizes attempting suicide to prevent a public servant from carrying out their duty.
- **Transgender Included In Definition Of Gender**
- **New law on hit-and-run cases**
  - The protest is primarily in response to the Bharatiya Nyay Sanhita (BNS), which replaced the Indian Penal Code (IPC).
  - Under the BNS, drivers **causing serious road accidents through negligent driving and fleeing without informing authorities can now face up to 10 years of imprisonment or a fine of Rs 7 lakh.**
  - This marks a significant increase from the previous punishment of two years under the IPC
- **Why are truck, bus and tanker drivers protesting against it?**
  - **Unjust punishments**
    - Private transport operators have claimed that the law discourages drivers and may lead to unjust punishments.
  - **Drivers may be subjected to mob violence**
    - They also claim that the drivers could be subject to mob violence when they attempt to transport the injured to hospitals.
  - **Lack of Consultation**
    - This provision is also criticized due to the lack of consultations with stakeholders before implementing the new law.
    - As per the protestors, there should be a discussion on this issue. A misleading situation is created now. People are not completely aware of the new law.

## 2. Transforming India-Myanmar Border Policies: Scrapping the Free Movement Regime GS 2 (International Relations)

- **Why in News:** The Union government has proposed significant changes in the border policies along the India-Myanmar border, aiming to replace the existing **Free Movement Regime (FMR)**. This move has been prompted by concerns about misuse of the **FMR by militants and criminals**.
- **Background**
  - India and Myanmar share a unique relationship with a largely

### Free Movement Regime at Myanmar border to end soon, entry into India will need visa

Vijal Singh  
NEW DELHI

The Union government is all set to scrap the Free Movement Regime (FMR) along the Myanmar border, a senior government official said on Tuesday. People living in border areas, who could cross over to India, will soon require visas, the official added.

India and Myanmar share an unfenced border, and people on either side have familial and ethnic



The Manipur government had already suspended the FMR in 2020, following the COVID-19 pandemic. FILE PHOTO

ties, which prompted the arrangement in the 1970s. It was last revised in 2016. The official said that around 300 km of the border will be fenced and a

tender will be issued in the next few days. A survey of the border areas with the help of drones has been completed. Amid apprehension that States such as Nagaland and Mizoram may oppose the move, the official said, "Border security is Centre's domain. We may take note of their concerns but the final decision is of the Union government. We are in talks with Myanmar."

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unfenced border of 1,643 km, passing through **Arunachal Pradesh, Nagaland, Manipur, and Mizoram.**

- The FMR, **established in the 1970s and last revised in 2016**, allowed people residing within 16 km on either side of the border to cross with a border pass, fostering familial and ethnic ties.
- The **Union Home Ministry had constituted a committee (in 2017) headed by Rina Mitra**, Special Secretary-Internal Security, to examine the rules and regulations governing the FMR.
- **Need for Change:**
  - The proposed changes come amid growing concerns about **security and misuse of the FMR.**
  - The misuse, including the smuggling of weapons, contraband goods, and fake Indian currency notes, has prompted the **Union Home Ministry to form a committee to reevaluate the existing rules and regulations.**
- **Proposed Changes:**
  - The government plans to fence **around 300 km of the border**, with a tender expected in the coming days.
  - A completed **drone survey of the border areas will inform** the implementation of these changes.
  - The move is anticipated to affect **States like Nagaland and Mizoram**, but the Centre emphasizes that **border security falls under its jurisdiction.**
- **State Perspectives:**
  - **Manipur** had already suspended the **FMR in 2020 due to the COVID-19 pandemic.**
  - Chief Minister has urged the **Ministry of Home Affairs to cancel the FMR, linking it to ethnic violence** in the state caused by the unrestricted movement of people across the border.
- The proposed changes in the India-Myanmar border policies mark a significant development in the region. **Balancing security needs with historical ties**, these changes aim to address the misuse of the Free Movement Regime, emphasizing the importance of securing the border against potential threats.

### 3. The Citizenship (Amendment) Act (CAA): Govt ready with rules for CAA GS 2 (Governance)

- **Why in News:** According to the government sources, Rules for the Citizenship (Amendment) Act 2019 will be notified much before the announcement of the Lok Sabha elections.
- **The Citizenship (Amendment) Act (CAA) 2019:**
  - **About:**
    - The Act **seeks to amend the definition of illegal immigrant** for Hindu, Sikh, Parsi, Buddhist, Jains and Christian (but not Muslim) immigrants from Pakistan, Afghanistan and Bangladesh, who have lived in India without documentation.
    - They will be **granted fast track Indian citizenship in 5 years** (11 years earlier).
    - The Act (which amends the Citizenship Act 1955) also **provides for cancellation of Overseas Citizen of India (OCI) registration** where the OCI card-holder has violated any provision of the Citizenship Act or any other law in force.
  - **Who is eligible?**
    - The CAA 2019 applies to those **who were forced or compelled to seek shelter in India due to persecution on the ground of religion.** It aims to protect such people from proceedings of illegal migration.

#### **‘CAA rules may be notified before Lok Sabha election’**

The citizenship Act was passed in 2019; Hindus from Pakistan who entered India legally but their documents expired while waiting for citizenship will also be eligible to apply online, says official

Vijayta Singh  
NEW DELHI

The rules of the Citizenship Amendment Act (CAA) are likely to be notified before the announcement of the next Lok Sabha election, a senior government official said on Tuesday.

Members of the Pakistani Hindu community who entered India legally but their documents expired while awaiting citizenship will also be eligible to apply online under the CAA, the official added.

The CAA, which was passed by Parliament in December 2019, is yet to be implemented. It is only after the rules are notified that the Act will come into force.

The Hindu had reported on December 29, 2023 that there was a one-month window for the CAA to be implemented before the next Budget Session, which is expected to start on February 1.

The legislation facilitates citizenship to undocumented people, who entered illegally without visas and passports, belonging



Almost three Hindu refugees who migrated from Pakistan's Sindh Province display their passports in Ahmedabad, 11.11.2020

to six non-Muslim communities from Pakistan, Bangladesh and Afghanistan. The CAA fast-tracks citizenship to people belonging to the Hindu, Sikh, Buddhist, Parsi, Christian, and Jain communities from the three neighbouring countries who entered India on or before December 31, 2014. The Act reduces the requirement of aggregate stay in India for applicants from the six communities seeking citizenship from 11 years to six years.

The official added that if the need arises, the 2014 cut-off can be extended by bringing in necessary legal changes. The total number of undocumented people, particularly in West Bengal and Assam, who will get citizenship under the CAA has not been specified by the Ministry.

Hindu Singh Sodha, president of Seemant Lok-Sangathan, a group that advocates for the rights of Pakistani minority migrants in India, said around 80,000 applications of Hindus from Pakistan were pending with the authorities.

"In Rajasthan, there are

35,000 people whose citizenship applications are pending. All these people came on valid papers and visa post-2000. They have been waiting for citizenship for more than 10 years," Mr. Sodha told The Hindu.

The Union Home Ministry in 2018 made the citizenship process online for applicants. Over the years, it has empowered and delegated powers to District Collectors of 31 districts and Home Secretaries to accept online applications to grant citizenship to applicants belonging to the six communities under Section 5 (registration) and Section 6 (naturalisation) of the Citizenship Act, 1955.

Despite an online process in place, the portal does not accept expired Pakistani passports, forcing people to apply to the Pakistan High Commission in Delhi to get their passports renewed for a hefty sum.

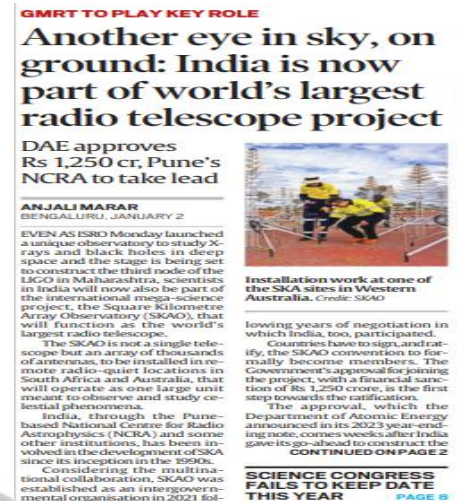
Most Pakistani Hindus and Sikhs came to the country either on long-term visas (LTV) or pilgrim visas.

- The cut-off date for citizenship is **December 31, 2014**, which means the applicant should have entered India on or before that date.
- The act **will not apply to areas** covered by the Constitution's **sixth schedule**, which deals with autonomous tribal-dominated regions in Assam, Meghalaya, Tripura, and Mizoram.
- Additionally, the act will not apply to states that have an **inner-line permit regime** (Arunachal Pradesh, Nagaland and Mizoram).
- **Implementation of the law:** The rules for implementation of the Act were never notified (and that is why the law can't be implemented) and the government sought repeated extensions for framing the rules.
- **Reasons for the Delay in the Implementation of the CAA:**
  - One of the prime reasons is the **vociferous opposition** faced by the CAA in several states including Assam and Tripura.
  - **The protests in Assam** were fuelled by fears that the legislation would permanently alter the demographics of the state.
    - The CAA is seen in Assam as a **violation of the 1985 Assam Accord** which allows foreign migrants who came to Assam after January 1, 1966 but before March 25, 1971 to seek citizenship.
    - The cut-off date for citizenship to be extended under the CAA is December 31, 2014.
  - **The protests didn't remain confined to the North-East**, but spread to other parts of the country.
    - A clutch of petitions, including by the Indian Union Muslim League, are before the Supreme Court, **challenging the constitutional validity of the CAA**.
    - The petitioners have contended that the law is **anti-Muslim, violating Article 14** (Right to Equality) of the Indian Constitution.
    - It is arbitrary as it **leaves out the persecuted Rohingya** of Myanmar, Tibetan Buddhists from China and Tamils from Sri Lanka.
- **Counterclaims in Response to the Petitions Against CAA:**
  - The Centre said the basis of the "reasonable classification" made by the 2019 Act was not religion, but "**religious discrimination**" in neighbouring countries which are "**functioning with a state religion**".
  - The Parliament, **after taking cognizance of the said issues over the course of the past 7 decades**, has taken into consideration the acknowledged class of minorities and has enacted the present amendment.
  - The CAA is a specific amendment which seeks to tackle a specific problem prevalent in the specified countries.
  - **The legislation was not meant to be an omnibus solution** to issues across the world.
    - The Indian Parliament cannot be expected to take note of possible persecutions that may be taking place across various countries in the world.
- **Rules for the CAA:**
  - The rules are now ready and the online portal is also in place.
  - Once the rules are issued, the law can be implemented and those eligible can be granted Indian citizenship.
  - **The entire process will be online** and applicants can apply even from their mobile phones.
  - The applicants will have to declare the year when they entered India without travel documents. No document will be sought from the applicants.
  - Requests of the applicants, who had applied after 2014, will be converted as per the new rules.

#### **4. Another eye in sky, on ground: India is now part of world's largest radio telescope project** **GS 3 (Science and Tech)**

- **Why in News:**
  - India, through the Pune-based National Centre for Radio Astrophysics and some other institutions, has been involved in the development of Square Kilometre Array Observatory since its inception in the 1990s
  - A Giant Leap in Astrophysics: **India, through institutions like the National Centre for Radio Astrophysics (NCRA), has joined the international mega-science project, the Square Kilometre Array Observatory (SKAO). The SKAO, the world's largest radio telescope, marks a significant milestone in India's participation in cutting-edge astrophysics.**
- **SKAO Overview:**
  - **Array of Antennas:** The SKAO is not a single telescope but an array of thousands of antennas.

- **Global Locations:** Installed in remote radio-quiet locations in South Africa and Australia, it operates as one large unit to observe and study celestial phenomena.
- **India's Involvement in SKAO:**
  - **Historical Involvement:** India has been involved in the development of SKA since the 1990s.
  - **Intergovernmental Organization:** SKAO was established as an intergovernmental organization in 2021, with India actively participating in the negotiations.
- **Government Approval and Financial Sanction:**
  - **First Step Towards Ratification:** India's government approval to join SKAO, with a financial sanction of Rs 1,250 crore, is the initial step towards formal ratification.
  - **Department of Atomic Energy's Announcement:** The approval was announced by the Department of Atomic Energy in its 2023 year-ending note.
- **Scientific Significance of SKAO**
  - **Gravitational Wave Research:** Similar to LIGO, SKAO will search for gravitational waves, but its scope extends to studying a range of celestial phenomena, allowing a deeper exploration of the universe.
  - **Unprecedented Depth:** SKAO can peer more than 3,000 trillion km into the universe, enabling detailed studies of galaxies and stars.
- **India's Contribution to SKAO**
  - **Telescope Manager Element:** India's main contribution lies in the development and operation of the Telescope Manager element, the crucial software that drives SKAO.
  - **NCRA's Expertise:** NCRA, known for operating India's largest radio telescope network (GMRT), led the international team to develop the software.
- **Success of GMRT**
  - **IEEE Milestone Recognition:** GMRT, operated by NCRA, earned recognition as only the third facility in India to receive the Institute of Electrical and Electronics Engineers (IEEE) Milestone in 2021.
  - **Scientific Achievements:** GMRT's operational success has led to significant scientific results in studying pulsars, supernovae, quasars, and galaxies.
- **SKA-India Consortium:** The SKA-India consortium involves engineers and scientists from over 20 national-level research institutions, including IIT-Kharagpur, IISER, TIFR, and others.
- **Global Collaboration:** Countries such as the UK, Australia, South Africa, Canada, China, France, Italy, and Germany are part of the global effort to build SKAO, showcasing the collaboration in cutting-edge astrophysics.



## 5. Karman Line

### GS 1 (Geography)

- **Why in News:** The Karman line lacks a specific national demarcation, resembling the concept of international waters.
- **About Karman Line:**

- Located at **100 km (62 miles) above sea level**, it is an **imaginary line that demarcates the earth's atmosphere from space**.
- It **was established** in the 1960s by a record-keeping body called the **Federation Aeronautique Internationale (FAI)**.
- It was named after aerospace pioneer Theodore von Karman.
- Though **not all scientists and spacefarers accept it** (for example, the Federal Aviation Administration, NASA, and the U.S. military place the line between outer space and the atmosphere at 80 km (50 miles) above the Earth's surface) , **a majority of countries and space organisations recognise** this boundary between earthsky and space.
- It is based on physical reality in the sense that it **roughly marks the altitude where traditional aircraft can no longer effectively fly**.
- **Anything traveling above the Karman line needs a propulsion system** that doesn't rely on lift generated by Earth's atmosphere—the air is simply too thin that high up.
- In other words, the Karman line is **where the physical laws governing a craft's ability to fly shift**.
- Anyone **who crosses this line qualifies as an astronaut**.
- **Why do we need a Karman line?**
  - The **1967 Outer Space Treaty** says that **space should be accessible to all** countries and can be freely and scientifically investigated.
  - **Defining a legal boundary** of what and where space **can help avoid disputes** and keep track of space activities and human space travel.



4<sup>th</sup> Jan, 2023

## 1. Adani-Hindenburg row

### GS 3 (Economy)

- **Why in News:** The Supreme Court of India has reinforced the Securities and Exchange Board of India's (Sebi) ongoing investigation into the Adani-Hindenburg controversy.
- **Securities and Exchange Board of India (SEBI):**
  - **About**
    - The SEBI is a **statutory regulatory body** established by the Government of India in 1992. It was given statutory powers through the **SEBI Act, 1992**.
    - SEBI was established to **keep a check on unfair and malpractices and protect the investors from such malpractices**.
  - **Objective:**
    - To regulate the securities market in India and protect the interests of investors in securities.
  - **Powers of SEBI:**
    - **Quasi-judicial powers –**
      - In case of frauds and unethical practices pertaining to the securities market, **SEBI has the power to pass judgments**.
      - The said power facilitates to maintain transparency, accountability and fairness in the securities market.
    - **Quasi-executive powers –**
      - SEBI has the power to examine the Book of Accounts and other vital documents to identify or gather evidence against violations.
      - If it finds one violating the regulations, the **regulatory body has the power to impose rules, pass judgements and take legal actions against violators**.
    - **Quasi-legislative powers –**
      - To protect the interest of investors, the **authoritative body has been entrusted with the power to formulate suitable rules and regulations**.
      - Such rules tend to encompass the listing obligations, insider trading regulations and essential disclosure requirements.
- **Adani-Hindenburg controversy:**
  - **About**
    - The controversy involves allegations of accounting fraud and stock price manipulation made by Hindenburg Research against the Adani Group.
    - Hindenburg Research is a US-based research team that offers services in forensic financial research, with a focus on equity, credit and derivatives analysis.
  - **Allegations against the Adani Group by Hindenburg Research**
    - The controversy began in January 2023, when Hindenburg Research published a report alleging corporate misgovernance and other charges.
    - The report accused the Adani Group of:
      - Engaging in large-scale stock price manipulation
      - Falsely overinflating the value of their assets
      - Controlling over 75% of their shares through different offshore shell entities controlled by the Group
    - The report accused the Adani group of companies of committing the largest con in corporate history.
  - **Controversy**
    - Soon after the Hindenburg Report was published, **Adani Group stocks plummeted by USD 140 billion**.
    - Hindenburg Research, however, profited from this crash in prices since it took a 'short position' against the **Adani Group's U.S. holdings**.

## SC upholds SEBI probe, turns the spotlight on Hindenburg's 'conduct'

Krishnaswamy Rajagopal  
NEW DELHI

The Supreme Court on Wednesday trained the spotlight on the "conduct" of Hindenburg Research, directing the Securities and Exchange Board of India (SEBI) and investigating agencies of the Centre to probe and, if necessary, take "suitable action" if the losses suffered by Indian investors due to the short position taken by the U.S.-based firm in the Adani Group through U.S.-traded bonds and non-Indian traded derivative instruments involved any infraction of law.

The direction came in a 46-page judgment based on petitions claiming "precipitate decline" in investor wealth and volatility in the share market due to a fall in the share prices of the Adani Group following a report published by "activist short seller" Hindenburg Research on January 24, 2023.

The report had alleged that the Adani Group manipulated its share prices and failed to disclose transactions with related parties in violation of the regulations framed by the SEBI and securities laws. However, even as it directed the SEBI and probe agencies to open an inquiry into Hindenburg and "other entities", a three-judge Bench headed by Chief Justice of India N.V. Chandrachud noted that the volatility in Adani

### Relief for regulator

Key takeaways from the SC judgment in Adani-Hindenburg case: SEBI directed to investigate if the short position taken by Hindenburg amounted to any infraction of law.

• Judiciary's review of regulatory framework/policies of SEBI is limited to check if there is any manifest arbitrariness or violation of fundamental rights.

• SEBI probe is comprehensive. It has completed 22 out of 24 investigations against Adani Group.

• The threshold to transfer investigation from SEBI to another agency is not present.

• Petitioners did not verify the OCCRP findings; it cannot be used as conclusive proof or credible evidence against a statutory regulator.

• Allegations of conflict of interest against members of the Justice A.M. Sapre Committee are dismissed.

### Third party reports not conclusive proof: SC

The Hindu Bureau  
NEW DELHI

The three-judge Bench of the Supreme Court on Wednesday said investigative news pieces and reports by independent groups

stocks in the aftermath of the Hindenburg report had an impact only at an individual scale and did not result in market volatility. "According to the Expert Committee (Justice A.M. Sapre Committee), the trend observed in volatility in the Indian market in comparison with the

cannot be used by petitioners in court as conclusive proof of the inadequacy of an investigation by a specialised regulator.

FULL REPORT  
PAGE 11

global volatility index has been consistent since the COVID-19 pandemic and was maintained even during the period when volatility was observed in the Adani stocks," Chief Justice Chandrachud noted.

CONTINUED ON  
PAGE 10

- Short-selling refers to selling a stock that the seller does not own at the time of the trade, with the intention of buying it back at a lower price later in the future.
- Short sellers borrow shares and sell them at market value, and buy them back when the share price falls.
- The difference in value is the profit. **To put it simply, a short-seller bets on the price of the stock going down in order to make a profit.**
- **Why does these allegations matter?**
  - The allegations imply that the Indian regulatory framework failed to stop large-scale stock manipulation and accounting fraud over the course of decades.
  - If the allegations are true, it would mean that the Adani Group, and Mr. Gautam Adani, raked in over \$100 billion in net worth through illegal means.
- **Role of Supreme Court in Adani-Hindenburg controversy**
  - **Wide range of petitions filed**
    - A wide range of petitions were filed before the SC over the Adani-Hindenburg controversy.
    - One batch of petitions alleged a conspiracy by Hindenburg Research to fraudulently make profits by crashing Adani stock prices.
    - A second batch of petitions sought an investigation by an expert committee to investigate the possibility of fraud by the Adani Group.
      - These petitions alleged that changes to **the SEBI Act had provided a shield and an excuse for the Adani Group's regulatory contraventions and market manipulations to remain undetected.**
  - **Expert committee formed by SC**
    - In March 2023, the SC formed a 6-member committee led by Justice A.M. Sapre to investigate the allegations against the Adani group and claims of regulatory failure.
      - An investigation into the claims of regulatory failure implies that the SEBI may be under scrutiny by the SC.
    - At the same time, the Bench also ruled that **SEBI may continue to conduct a separate investigation.**
  - **Report of the expert committee**
    - In its report submitted in a sealed cover, the expert committee concluded that there had been “no regulatory failure” on the part of SEBI in the matter.
    - However, SEBI sought an extension of its probe citing the complexity of the transactions involved.
- **Key highlights of the SC Judgement**
  - **No need to transfer the case**
    - The facts of this case do not warrant a transfer of investigation from Sebi.
    - In an appropriate case, this court does have the power to transfer an investigation being carried out by the authorized agency to an SIT or CBI.
    - The Sebi's status report and the details of the 24 investigations do not indicate inaction by the market regulator.
  - **SEBI to complete the remaining investigation in three months**
    - SEBI had completed the investigation in 20 out of the 22 matters in connection with the allegations leveled against the Adani group.
    - It ordered the probe into the two pending cases to be completed expeditiously, preferably within three months.
  - **SEBI and other agencies to probe Hindenburg Research**
    - The court instructed SEBI and the government's investigative agencies to investigate whether the losses faced by Indian investors, caused by Hindenburg Research and other entities taking short positions, involved any legal violations.
    - If violations were found, the court directed them to take appropriate action.

## 2. ITIs: Nurturing a Skilled Workforce for India's Industrial Growth - GS 2 (Education)

- **Why in News:** The Industrial Training Institutes (ITIs) have been a crucial element of **vocational education** in India since 1950, contributing to the skill development of the workforce.
- **Issues:**

- Despite **historical challenges and chronic under-investment**, recent initiatives are reshaping the ITI landscape, aligning it with the **evolving needs of the industrial sector**.

## • Background

- Since 2014, there has been a significant **growth of 47% in the number of ITIs**, reaching 14,993 institutions.
- The enrolment numbers **have surged from 9.46 lakh in 2014 to 12.4 lakh in 2022**, reflecting an increasing interest in vocational education.
- However, systemic challenges such as **outdated infrastructure, over-regulation, and a shortage of trainers** have hampered the full potential of ITIs.

## • Need for Transformation:

- To address the evolving needs of the economy, there has been a **paradigm shift in ITI courses, with over 40% now focusing on service sectors**.
- Strategic partnerships with **IT companies have benefited 22 lakh individuals in the last five years**.
- The **push for modernization includes the rationalization of course durations**, the introduction of new-age skills courses, and the affiliation of ITIs for drone-related programs.

## • Skilling and Skill-Industry-Efficiency Dynamics:

- To enhance the **skilling ecosystem**, a dual system of training has been implemented in 978 ITIs, facilitating learning in both industry and classrooms.
- Thirteen **memorandums with industry** partners have led to customized curriculums, aligning training with industry requirements.
- **The Bharat Skills portal**, launched in 2019, has provided digital access to educational resources, benefiting over 54 lakh ITI users and earning national recognition.

## • Global Perspective on Vocational Education:

- Globally, vocational enrolment at the **upper-secondary level is much higher**, with figures ranging from 18% to 49% in countries like South Korea, Australia, and Germany.
- In contrast, **India's vocational enrolment is estimated at less than 6%**, reflecting the need for a shift in societal perceptions and systemic improvements.

## • Challenges and Solutions:

- Despite the recent strides, a 2023 NITI Aayog study highlighted systemic challenges such as **outdated infrastructure, over-regulation, trainer shortages, and a curriculum lagging behind economic changes**.
- To address these, a **multi-faceted mission** is needed, focusing on awareness, counselling, infrastructure upgrade, trainer capacity building, and technology-enabled governance.

## • ITIs as a Relevant Contributor:

- Despite under-investment, ITIs **remain relevant for the industrial sector**.
- A 2020 ministry assessment revealed that **ITI pass-outs possess technical knowledge and a superior ability to understand job technicalities**.

## IT searches, a form of extra-constitutional power

In August 2023, a nine-judge bench of the Supreme Court, in the case of *Puttaswamy vs. Union of India*, declared the right to privacy as a fundamental right under Article 14. It was held that the right to privacy is a part of the right to life and liberty under Article 32 of the Constitution.

**Justice Indu Malhotra** is a member of the Supreme Court.

In its original colonial form, India's Income Tax Act, as amended after a 2021 revision, did not provide the revenue with a power to search and seize. When the amendment was introduced, it was referred to the Finance Committee of the Council of Ministers and the Finance Commission. The Finance Commission, in its report, stated that the government sought to modify this through the exercise of the Finance Commission's power.

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A new reading of Section 132 of the Income Tax Act suggests a breach of this principle. Although the provision has since been formally challenged, when the matter of the *Puttaswamy* case came up for discussion in 2022, it was argued that the Finance Commission's decision in *Puttaswamy* was a breach of the principle of separation of powers. A nine-judge bench of the Supreme Court, in its decision in *Puttaswamy*, held that the Finance Commission's decision was a breach of the principle of separation of powers.

A bare reading of Section 132 of the Income Tax Act, on the other hand, suggests a breach of the principle of separation of powers.

Indistinguishable from the Court's approach to the *Puttaswamy* case, the Finance Commission's decision in *Puttaswamy* was a breach of the principle of separation of powers. The Finance Commission, in its report, stated that the government sought to modify this through the exercise of the Finance Commission's power.

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- With India positioning itself as a **manufacturing powerhouse**, ITI-based vocational training gains significance, aligning with initiatives like production-linked incentives and semiconductor manufacturing.
- **Future Prospects:**
  - The **National Education Policy** envisions the integration of vocational and general education, aiming for 50% of students exposed to vocational education by 2025.
  - Scaling up past efforts and reimagining a **skilled industrial workforce** are imperative to realizing the vision of a developed India.

### 3. The blood management system needs a fresh infusion GS 2 (Health)

- **Why in News:** Prioritising access to blood and its products remains fundamental to building a resilient global health architecture
- **Building a Resilient Global Health Architecture:**
  - The COVID-19 pandemic has underscored the **existing inequities in global public health**, prompting policymakers worldwide to advocate for an enhanced global health architecture.
  - While strategies such as **increased health financing and digital health solutions** are crucial, this article emphasizes the fundamental importance of prioritizing access to blood and its products in strengthening global health systems.
- **The Issue of Blood Shortage**
  - The **World Health Organization (WHO)** recently highlighted global disparities in blood collection, revealing concerning patterns.
  - **African nations**, low-income, and lower-middle-income countries **receive disproportionately low percentages of global blood donations** compared to their populations.
  - India, despite improvements, still faces a **chronic shortage**, impacting **critical health services**.
  - In 2019-20, the **country fell short of over six lakh blood units**, endangering lives and affecting surgeries and transplants.
- **Advantages of a Hub and Spoke Model**
  - To **address blood shortages**, robust **public-private partnerships (PPP)** are essential, with innovative models like the hub and spoke model showing promise.
  - In this approach, **high-volume blood banks** serve as hubs for smaller centers, optimizing blood distribution and reducing wastage due to short shelf life.
  - This model, especially relevant for **resource-constrained settings**, enhances accessibility and availability of blood products.
  - **Data from Parliament** indicates a surplus of **30 lakh blood units discarded over three years** due to expiration and infections which can be addressed by hub and spoke model.
- **Dispelling Myths Around Blood Donation**

#### The blood management system needs a fresh infusion

**The COVID-19 pandemic** magnified the inequities in public health across the globe. Learning from experiences, policymakers across the world have rightly endorsed the need to improve the global health architecture as a tool to catalyse economic growth and secure the future of the planet. Greater health financing through international collaborations, deepening the adoption of digital health solutions, and increasing access to medical countermeasures are some of the aspects that are key to reducing the global disparity in health and strengthening the global health architecture. However, amidst these crucial strategies, prioritising access to blood and its products remains fundamental to building a resilient global health architecture.

Blood and its various products play a crucial role in a number of medical scenarios, which includes scheduled surgeries, emergency procedures, as well as in the treatment of conditions such as cancer, thalassemia, and postpartum haemorrhage (PPH). This underscores their irreplaceable significance in upholding patient health across a spectrum of health-care needs.

**The issue of blood shortage**  
A recent report by the World Health Organization (WHO) has brought attention to the global disparities in blood collection. For example, despite having 14% of the global population, countries in the WHO African region could only collect 7% of the global donations. Comparable patterns emerged in low-income and lower-middle-income nations, where these countries received 2% and 24% of the worldwide contributions, respectively, even though their populations account for only 8% and 40% of the global population, respectively.

Similarly, while India has improved its blood management ecosystem, the country still faces a perennial shortage of blood units, impacting critical health-care services. Calibrating according to WHO's standards for self-sufficiency, India collected around 1.27 crore blood units and faced a shortage of over six lakh units in 2019-20. Such shortages can have serious implications on the functioning of the health-care system and if addressed promptly, can significantly contribute to saving lives. For example, according to a study by Savitribai Prasad Pune University, an avoidable accident victim needs up to 50 units of blood. In 2009-20, the shortage was significant enough to put approximately 12,000 accident victims' lives at risk. Moreover, this deficit could impact 1,00,000 heart surgeries and approximately 30,000 bone marrow transplants.

**Advantages of a hub and spoke model**  
Inequities in access to safe and sustainable blood can be mitigated through the establishment of robust public-private partnerships (PPP). Collaborations between leading industry players hold immense potential in introducing innovative models for blood collection and distribution, effectively addressing numerous existing challenges. The hub and spoke model is one such innovative method where high-volume blood banks act as a hub for smaller blood centres. This model can be particularly relevant for resource-constrained settings in Low and Middle-income Countries (LMIC) as it can address critical gaps in blood availability and distribution, thereby enhancing the accessibility and availability of blood and its products.

Further, as the shelf life of blood and its products is short, a hub and spoke model would help in optimising their utilisation by the smaller blood centres. This innovative approach streamlines distribution, ensuring that these vital resources reach their maximum potential while reducing losses from expiration.

According to the data points tabulated in Parliament, over the course of three years, from 2018-19 to 2020-21, a surplus of 30 lakh blood units and related products were discarded. The primary reasons were expiration from not being used, degradation during storage and the presence of infections such as human immunodeficiency virus (HIV) and cytomegalovirus. Moreover, the implementation of a hub and spoke model can also improve the accessibility to safe blood and its products in community health centres and smaller sub-district hospitals, especially in geographically challenging topographies.

**Dispelling the myths around blood donation**  
Another aspect of the blood management system that perpetuates the inequities associated with it is the propagation of myths and misinformation around voluntary blood donation. Many people still refrain from donating blood voluntarily because of the fear of infections, damaging their immunity, or simply because they assume it to be a time-consuming process. These misconceptions can be dispelled through targeted awareness initiatives.

While the government and its agencies have tried to improve awareness through regular campaigns, the private sector can work closely with the government to launch dedicated awareness campaigns aimed at the grassroots. Such campaigns can leverage the power of social media and deploy innovative tools such as multi-media content to reinforce the need and benefits of regular and voluntary blood donation. These creative strategies can be effective in engaging diverse audiences and fostering a culture of informed and voluntary blood donation.

As we leave the COVID-19 pandemic behind us and align the global developmental road map for an equitable and sustainable future, the health paradigm must be prepared accordingly. Along with other modifications in the health paradigm, since blood and its products are central to modern medicine, political leaders and the policymakers must continue to take steps to strengthen the blood management ecosystem. Simultaneously, proactive engagement from industry and active participation of the citizenry should also be pivotal aspects of this concerted effort.

**Chetan Mahan**  
is Senior Vice President and General Manager, Global Blood Solutions at Fortis Blood and Cell Technologies

- **Myths and misinformation hinder voluntary blood donation**, contributing to the perpetuation of inequities in the blood management system.
- Targeted awareness initiatives, combining government efforts with private sector collaboration, can dispel these myths.
- Dedicated campaigns leveraging social media and innovative tools such as multi-lingual comics can engage diverse audiences, fostering a culture of informed and voluntary blood donation.
- **Way Forward: Strengthening the Blood Management Ecosystem**
  - As we **transition from the COVID-19 pandemic**, prioritizing blood access is vital for a resilient global health architecture.
  - **Political leaders and policymakers** must continue strengthening the **blood management ecosystem**, considering it a cornerstone of modern medicine.
  - **Proactive industry engagement** and **citizen participation** are crucial components of this concerted effort.
  - By **addressing blood shortages** and dispelling myths, the global community can build a more equitable and sustainable future for healthcare.

#### 4. **India's GSAT-20 Satellite Set for SpaceX's Falcon-9 Launch, Elevating Space Connectivity** **GS 3 (Science and Tech)**

- **Why in News:** India is gearing up for a remarkable advancement in its space capabilities with the upcoming launch of the GSAT-20 satellite. The NewSpace India Limited (NSIL), the commercial arm of the Indian Space Research Organisation (ISRO), has disclosed crucial details about this mission.
- **Details Unveiled by NSIL:**
  - NSIL, responsible for **building, launching, owning, and operating satellites** based on user demands, has shared insights into the GSAT-20 satellite mission.
  - This initiative follows the successful deployment of **GSAT-24 in June 2022**, a mission funded entirely by NSIL and securing capacity through TataPlay.
- **GSAT-20's Objectives:**
  - Scheduled for the second quarter of 2024, GSAT-20 is designed to significantly **enhance broadband connectivity in India**.
  - Additionally, it aims to support **In-Flight and Maritime Connectivity (IFMC)** and **cellular backhaul services** across the country.
- **Key Features of GSAT-20:**
  - **High-Throughput Satellite (HTS) Capacity:** The satellite boasts an impressive HTS capacity of nearly 48Gbps.
  - **Comprehensive Coverage:** **Featuring 32 beams, GSAT-20 ensures comprehensive coverage** over the entire Indian subcontinent, including the Andaman & Nicobar and Lakshadweep islands.
- **Collaboration with SpaceX:**
  - Weighing 4700 kg, GSAT-20 is being developed by ISRO and will be launched aboard **SpaceX's Falcon-9 rocket**.

#### **SpaceX's Falcon-9 to launch India's GSAT-20; satellite to spread broadband coverage**

**The Hindu Bureau**  
BENGALURU

NewSpace India Ltd. (NSIL), the commercial arm of the Indian Space Research Organisation, will launch GSAT-20 (re-named GSAT-N2), on board SpaceX's Falcon-9 rocket during the second quarter of 2024.

The GSAT-20 is a high-throughput Ka-band satellite (HTS), which will be fully owned, operated and funded by the NSIL.

The agency said GSAT-20 offers Ka-Ka band HTS capacity with 32 beams having pan-India coverage, including the Andaman and Nicobar and Lakshadweep islands. The satellite, weighing 4,700 kg, offers an HTS capacity of nearly 48 Gbps and has been specifically designed to meet the demanding service needs of remote and unconnected regions. As part of the space sector reforms announced by the Union government in



Falcon 9 is a reusable two-stage rocket. Photo shows a lift-off from Florida in 2022. REUTERS

June 2020, the NSIL was mandated to build, launch, own and operate satellites in "demand-driven mode" to meet service needs of the user.

As part of this, the NSIL successfully undertook its first demand-driven satellite mission, GSAT-24, in June 2022, and the capacity-board of the satellite was fully secured by Tata Play. GSAT-24 mission was fully

funded by the NSIL. At present, the agency owns and operates 11 communication satellites in orbit.

"On similar lines, during the second quarter of 2024, NSIL will be undertaking the GSAT-20 satellite mission to offer cost-effective Ka-Ka band HTS capacity primarily for meeting the broadband, as well as IFMC and cellular backhaul service needs. The bulk of the HTS capacity on board GSAT-20 satellite has already been secured by Indian service providers," the NSIL said.

The NSIL is realising the GSAT-20 satellite through ISRO and will be launched on board Falcon-9 under a contract between NSIL and SpaceX, USA, it said. According to SpaceX, Falcon-9 is a reusable, two-stage rocket designed and manufactured by the Elon Musk-founded company for the reliable and safe transport of people and payloads into Earth orbit and beyond.

- This collaboration emphasizes the **growing global partnerships in the space industry** and underscores the significance of international cooperation in advancing space technology.
- **Commercial Demand:**
  - Indian service providers have already **pre-booked the bulk of the high-capacity bandwidth** offered by GSAT-20.
  - This indicates a strong demand for **improved connectivity**, hinting at the potential transformative impact on the region.
- **Significance of GSAT-20 Mission:**
  - The mission holds particular significance as it aims to meet the **challenging service requirements of remote and previously unconnected regions**.
  - By **bridging the digital divide**, GSAT-20 contributes to fostering inclusive growth.

## 5. Buxa Tiger Reserve, Tiger Spotted after 4 years

### GS 3 (Environment)

- **Why in News:** Experts say an increase in its prey base, expansion of the grassland, and controlling human interaction are potential reasons for the tiger's comeback.
- **Tiger's Return Sparks Hope for Buxa National Park:**
  - The elusive big cat was captured on camera traps, renewing hopes for its permanent residence in the park. This development has raised expectations of potential relocations of villages from the core area, signaling positive changes in the ecosystem.
- **Previous Disappointment and Recent Sighting: A Two-Year Journey**
  - In December 2019, a brief sighting of a tiger in Buxa National Park left wildlife enthusiasts longing for more. Disappointment ensued as the big cat disappeared from view.
- **Buxa Tiger Reserve: Vital Statistics and Geographical Significance**
  - Covering **760 square kilometers**, Buxa Tiger Reserve and National Park are situated in **North Bengal's Alipurduar district**.
  - Its strategic location along the **border with Bhutan** and **connectivity corridors** with neighboring forests make it an essential part of the **larger tiger territory** stretching into Bhutan and connecting with **Manas Tiger Reserve** and **Jaldapara National Park**.
- **Wildlife Conservation Initiatives: Creating an Ideal Habitat**
  - The Field Director of Buxa Tiger Reserve, highlights ongoing efforts to **reduce human interference, enhance grasslands, and increase the prey base**.
  - The reserve, characterized as a **"low density" area**, has **introduced spotted deer, expanded grasslands, and created watering holes** to foster an **ideal habitat for tigers**.
- **Future Plans and Prospects**
  - The additional chief conservator of forest, North Bengal, shares plans to **relocate villages from the core area**.
  - This strategic move aims to **minimize human presence**, creating an environment conducive to the natural behavior of tigers.

## Tiger zinda hai: Big cat's return brings hope in Bengal reserve

RAVIK BHATTACHARYA  
KOLKATA, JANUARY 3

TWO YEARS ago, a fleeting glimpse of a tiger gave way to disappointment in West Bengal's Buxa National Park, as the big cat was not to be seen again. Then, on December 28, forest officials got an early New Year's gift as one of the camera traps in the national park captured a tiger crossing a dry riverbed. And three days later, on December 31, the tiger was captured at night, on a different camera.

The previous sighting, on December 12, 2021, was after 23 years of the big cat going missing from the tiger reserve. Experts



Caught on camera trap on December 28



are now hopeful that the tiger has returned for good, and what could follow is relocation of villages from inside the core area. Experts say an increase in its

**KUNO CHEETAH GIVES BIRTH TO THREE CUBS**  
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- The **tiger augmentation and monitoring project**, initiated in 2018, has been instrumental in these conservation efforts.

## 6. Kochi-Lakshadweep islands submarine optical fiber connection project

### GS 3 (Infrastructure)

- **Why in News:** Recently, the Prime Minister of India in Kavaratti, Lakshadweep, inaugurated Kochi-Lakshadweep islands submarine optical fiber connection (KLI-SOFC) project.
- **About Kochi-Lakshadweep islands submarine optical fiber connection project:**
  - It is the submarine cable connectivity project from **Mainland (Kochi)** to **eleven Lakshadweep Islands** namely, Kavaratti, Agatti, Amini, Kadmat, Chetlet, Kalpeni, Minicoy, Androth, Kiltan, Bangaram and Bitra has been extended.
  - The project is **funded by Universal Services Obligation Fund (USOF)**, Department of Telecommunication.
  - **Bharat Sanchar Nigam Limited (BSNL)** was the Project Executing Agency and the work was awarded to M/s NEC Corporation India Pvt Ltd through Global Open Tendering process.
  - The major activities related to the project include Marine Route Survey, Submarine Cable laying, Civil Construction of CLS stations, Installation, Testing and Commissioning of End Terminals (SLTE).
- **Significance of the project**
  - The KLI-SOFC project will lead to an **increase in internet speed** unlocking new possibilities & opportunities.
  - For the first time since independence, Lakshadweep will be connected through Submarine Optic Fibre Cable.
  - The dedicated submarine OFC will ensure a paradigm shift in **communication infrastructure** in the Lakshadweep islands, enabling faster and more reliable internet services, telemedicine, e-governance, educational initiatives, digital banking, digital currency usage, digital literacy etc.

## PM opens Lakshadweep optical fibre connection

The Hindu Bureau  
NEW DELHI

Prime Minister Narendra Modi on Wednesday inaugurated the Kochi-Lakshadweep islands submarine

optical fibre connection project, which will connect the islands to high-speed internet for the first time, after years of relying on limited satellite bandwidth.

## 7. Namibian Cheetah Aasha gives Birth to 3 Cubs in Kuno

### GS 3 (Environment)

- **Why in News:** Three cubs were born to the **Namibian cheetah Aasha** at Kuno National Park in Madhya Pradesh's Sheopur district, indicating that animals are acclimatising.
- **What is the Cheetah Reintroduction Plan/Project Cheetah?**
  - Discussions to bring the Cheetah back to India were initiated in **2009** by the Wildlife Trust of India.
  - Under the '**Action Plan for Reintroduction of Cheetah in India**', 50 cheetahs will be brought from African countries to various national parks over 5 years.
  - **Most suitable site - Kuno Palpur National Park (KNP) in Madhya Pradesh:**
    - Amongst the surveyed sites of the central Indian states, KNP has been rated the highest, because of its suitable habitat and adequate prey base.
    - It is assessed to be capable of supporting **21 Cheetahs** and is likely the **only wildlife site in the country** where villages have been completely relocated from within the park.
    - Kuno also provides the possibility of **harbouring four of India's big cats** - tiger, lion, leopard and Cheetah, enabling them to coexist as they have in the past.
  - **The other sites recommended are** - Nauradehi Wildlife Sanctuary, Madhya Pradesh; Gandhi Sagar Wildlife Sanctuary - Bhainsrorgarh Wildlife Sanctuary complex, Madhya Pradesh; Shahgarh bulge in Jaisalmer, Rajasthan; Mukundara Tiger Reserve, Rajasthan.
  - As part of this project, **20 Cheetahs** (8 from Namibia and 12 from South Africa) were Introduced in the KNP (since last year) to establish a free-ranging population for the first time since their extinction in India 70 years ago.
- **What is the Significance of Bringing Back Cheetahs?**

## Aasha, wild at heart cheetah from Namibia, gives birth to 3 cubs in Kuno

ANAND MOHANA  
BHOPAL, JANUARY 3

THREE CUBS were born to the Namibian cheetah Aasha at Kuno National Park in Madhya Pradesh's Sheopur district, indicating that animals are acclimatising. Principal Chief Conservator of Forests (Wildlife) Anand Mohana said. The cheetah has also given the wildlife monitoring team a lot of trouble in the past - after it was moved into Sheopur district, a team which tracked it down to a village was attacked by angry villagers who mistook them for dacoits.

Union Minister for Environment, Forest and Climate Change Bhupendra Patel said. "The cheetah arrived in Kuno on September 17, 2022 as a female named 'Aasha'. The tiger 'Tito' was a confident animal that has travelled over 200 km after



Namibian cheetah Aasha gave birth to three cubs at the Kuno National Park in MP Union Environment Minister Bhupendra Patel shared a video of the cubs on X.

being released into the wild in March last year. Wildlife officials had suspected the beginning of the project that Aasha was pregnant after an interaction with a male cheetah, Pawan, on February 1 last year. Both remained together till March 11 but Aasha did not deliver any cubs, officials said.

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Union Minister for Environment, Forest and Climate Change Bhupendra Patel said. "The cheetah arrived in Kuno on September 17, 2022 as a female named 'Aasha'. The tiger 'Tito' was a confident animal that has travelled over 200 km after

matings to the Indian cheetah and have made Kuno their habitat. "They have accepted this habitat. I think that the conditions are favourable. This is very good news for us. We are fully confident they will be able to survive in the wild," Shrivastava said. Indeed, this is good news for wildlife officials who have been grappling with a string of deaths at Kuno National Park.

Last year, Namibian cheetah Aasha had given birth to four cubs after a mating interaction with another cheetah named Gaurav. However, three of its cubs died in May due to extreme weather conditions. The surviving ten-month-old cub is being looked after by Kuno park officials since its mother rejected it, after it was taken away by wildlife officials for treatment.

"Till the time the mother - that can be seen as a benefit" - One year ago, on September 17, 2022, 20 cheetahs from Namibia and South Africa were introduced to Kuno National Park. Shrivastava said.

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- Besides conserving the big cat, the initiative in itself is a **boon to the ecosystem**.
- In saving Cheetahs, it is **necessary to save not just its prey base** (including certain threatened species), but also other endangered species of grasslands.
- They are not a threat to humans and do not attack large livestock either.
- **Why are Cheetahs Coming from Southern Africa and Challenges?**
  - **Reasons behind re-introducing cheetah from southern Africa:**
    - The **locally extinct** Cheetah-subspecies of India is found in Iran and is categorised as **critically endangered**.
    - Since it is not possible to source the critically endangered Asiatic Cheetah from Iran without affecting this subspecies, **India will source Cheetahs from Southern Africa**.
    - Southern African Cheetahs have the **highest observed genetic variety** among extant Cheetah lineages, which is critical for a founding population stock.
    - Furthermore, Southern African Cheetahs have been **determined to be the ancestors of all other Cheetah lineages**, making them suitable for India's reintroduction programme.
  - **Challenges of bringing back Cheetahs:**
    - Based on the evidence available, it is **impossible to conclude** that the choice to bring the African Cheetah into India is scientifically sound.
    - As a result, the Supreme Court of India (in 2020) permitted **an experimental release** of Cheetahs in a suitable habitat.
- **News Summary**
  - It was over a year ago, on Sept 17 2022, that 20 cheetahs from Namibia and South Africa were relocated to Kuno National Park. **Six have died since March 2023**.
  - Aasha arrived in a crate marked **"Aasha – The Hope"**. It is said to be a confident animal that has travelled over 200 km after being released into the wild in March last year.
  - The cheetah has also troubled the wildlife monitoring team in the past – after it ventured into Shivpuri district. A team which tracked it down to a village was attacked by angry villagers who mistook them for dacoits.
  - **The birth of 3 cubs to Aasha is a roaring success for Project Cheetah**, envisioned to restore ecological balance.
  - The birth of the cubs is an **important indicator that the cheetahs are acclimatising to the Indian climate and have made Kuno their habitat**.
  - This is good news for wildlife officials who have been grappling with a string of deaths at Kuno National Park.
    - Last year, Namibian cheetah Jwala gave birth to four cubs. However, three of its cubs died in May due to extreme weather conditions.
    - The surviving ten-month-old cub is being looked after by Kuno park officials since its mother rejected it, after it was taken away by wildlife officials for treatment.

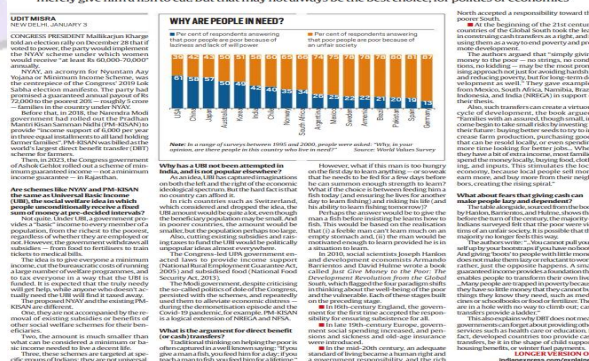
## 8. Universal Basic Income Programme

### GS 2 (Governance)

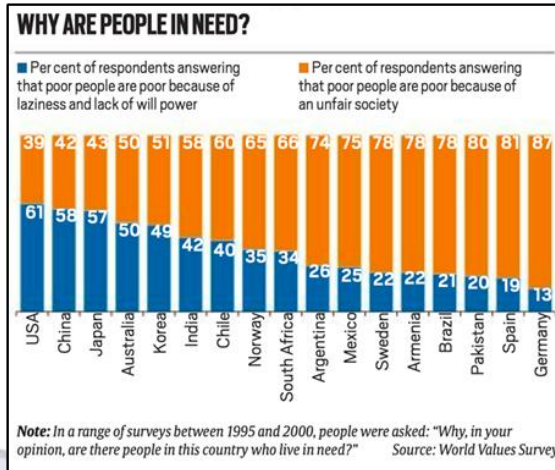
- **Why in News:**
  - President of a prominent political party told an election rally that if voted to power, his party would implement the NYAY scheme under which women would receive at least Rs 60,000-70,000" annually.
  - Earlier, in 2018, the then government had rolled out the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) to provide income support of 6,000 per year in the three equal installments to all land holding farmer families.
    - PM-KISAN was billed as the world's largest Direct Benefit Transfer (DBT) scheme for farmers.
- **Are Schemes like NYAY and PM-KISAN the same as Universal Basic Income (UBI)?**

### How (and why) DBT works

Be it NREGA, PM-KISAN, or the Congress promise of NYAY, why do politicians rush to give direct benefits — cash — to the poor? Traditional thinking suggests it is better to teach a man to fish rather than to merely give him a fish to eat. But that may not always be the best choice, for politics or economics



- Under UBI, a government provides a **basic income to every member of a population**, from richest to the poorest, regardless of whether they are employed or not.
- However, the **government withdraws all subsidies** – from food to fertilizers to train tickets to medical bills.
- The idea is to give everyone a minimum income, cut the bureaucratic costs of running a large number of welfare programmes, and to tax everyone in a way that the UBI is funded.
- On the other hand, PM-KISAN and NYAY programmes are different.
  - One, they are not accompanied by the removal of existing subsidies or benefits of other social welfare schemes for their beneficiaries.
  - Two, the amount is much smaller than what can be considered a minimum or basic income needed to live a decent life.
  - Three, these schemes are targeted at specific groups of Indians; they are not universal
- **Why has UBI not been Implemented in India, and is not Popular elsewhere?**
  - In rich countries like Switzerland, which considered and dropped the idea, the UBI amount be quite a lot, even though the beneficiary population may be small.
  - And in poorer countries, the amount would be smaller, but the population perhaps too large.
  - Also, cutting existing subsidies and raising taxes to fund the UBI would be politically unpopular ideas almost everywhere.
  - **Arguments in favour of UBI:**
    - UBI reduces poverty and income inequality, and improves physical and mental health.
    - UBI leads to positive job growth and lower school dropout rates.
    - UBI guarantees income for non-working parents and caregivers, thus empowering important traditionally unpaid roles, especially for women.
  - **Arguments against UBI:**
    - UBI takes money from the poor and gives it to everyone, increasing poverty and depriving the poor of much needed targeted support.
    - UBI is too expensive.
    - UBI removes the incentive to work, adversely affecting the economy and leading to a labor and skills shortage.



## 9. Indian Science Congress been postponed

### Recent events of importance

- **Why in News:**
  - The Indian Science Congress has been postponed. The five-day event will not begin on its customary date, January 3rd.
  - The Science Congress is the biggest meeting of scientists and science students in the country and has been a regular event for over a century.
  - Also, there is no firm word on when — and whether — the congress will meet this year.

### Indian Science Congress (ISC)

- **About**
  - ISC is a one-of-its-kind event in the country which brings together the scientific communities on a platform for their interaction with students and the general public on matters related to science.
- **Organised by**
  - The event is organized by the **Indian Science Congress Association (ISCA)**.
  - ISCA is an independent body functioning with the support of the Department of Science and Technology (DST) in the central government.

### Why has the 110-yr-old Indian Science Congress been postponed?

**ANONIMA DUTTA & AMITABH SINHA**  
16 JANUARY 2023

**Unprecedented**  
Through the Science Congress has faced more criticism in recent years due to the declining standards in its discourse, the postponement is unprecedented. While the event is a one-of-its-kind, the Indian Science Congress Association (ISCA), the organisers, and the central government's Department of Science and Technology (DST) have been unable to agree on the date for the event. The Science Congress is a one-of-its-kind event, which brings together scientists and students from across the country to present their research and interact with the general public. It is the largest scientific gathering in India and has been a regular event for over a century.

**The postponement**  
The postponement is due to the scheduled dates between ISCA and the DST. In September 2022, the DST withdrew its funding support to the congress, alleging "financial irregularities". ISCA had been in discussion and had challenged the DST's decision to withdraw funding. The DST's representative was in any case present when the DST was in the process of withdrawing funding. The DST's decision was not final, and the DST was in the process of withdrawing funding. The DST's decision was not final, and the DST was in the process of withdrawing funding.

**Steady decline**  
The Science Congress has been in steady decline over the past several years. Random speakers have used the platform to make outlandish claims and promote pseudoscience. The papers that are presented at the congress are of low quality and are often not peer-reviewed. The congress has been criticised for its lack of scientific rigour and for its focus on promoting pseudoscience. The congress has been criticised for its lack of scientific rigour and for its focus on promoting pseudoscience.

**Explained Science**  
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**End of the road?**  
ISCA general secretary Rungta Kumar Sharma has said while the postponement is unfortunate, it does not mean the end of the Science Congress. "We will hopefully be able to organize the Science Congress before March 31 and we are hopeful that the Prime Minister will attend the event," he added. A government official said the Indian Science Congress could continue. "Discussions for collaboration will continue for the Science Congress scheduled for 2025," he said.

- **Permanent fixture on the calendar**
  - Dubbed as the largest gathering of scientists and students in the country, the Science Congress is an annual five-day event from January 3 to 7, a permanent fixture on the Prime Minister's calendar.
  - The **first session of the Indian Science Congress was held in 1914** at the premises of the Asiatic Society, Calcutta
- **Declining glory of ISC**
  - In more recent times, the event has attracted attention for all the wrong reasons:
    - lack of serious discussion, the promotion of pseudoscience, outlandish claims by random speakers, and the absence of useful outcomes.
  - As a result, several top scientists have advocated the discontinuation of the event, or at least withdrawal of government support.
    - For organising the Science Congress, the government provides an annual grant.
    - Besides this, the government has no role to play in organising the ISC.
- **The government's dilemma**
  - The ISCA is an independent body, and the government has no role to play in the selection of the panelists or speakers, the papers to be presented etc.
  - But at the same time, **the ISCA runs with DST support**. Besides the annual grant for the Science Congress, the government also pays the salaries of the ISCA's permanent staff.
  - And because the congress is inaugurated by the PM and attended by other ministers and senior officials, it is perceived as being closely associated with the government.
  - As such, every time the event lands in controversy the government is blamed.
  - Also, while the event is presented as a showcase scientific forum in India, its proceedings often **convey an embarrassing picture of Indian science internationally**.
- **Postponement of the Indian Science Congress - a big deal**
  - **Postponement is unprecedented**
    - With the exception of the two years following the outbreak of the Covid-19 pandemic— 2021 and 2022 — the Indian Science Congress has been held every year since 1914.
    - The 108th edition of the Congress was held in Nagpur from January 3-7, 2023.
  - **Permanent fixture on the PM's calendar**
    - The congress is inaugurated by the Prime Minister. It is a permanent fixture on the PM's calendar, and is usually his/her first public engagement of the new year.
- **Why has the Science Congress been postponed this year?**
  - The crisis is the fallout of an unresolved disagreement between the Indian Science Congress Association (ISCA), and the Department of Science and Technology (DST) in the Union Ministry of Science and Technology.
    - ISCA - a registered society that organises the event.
    - DST - the main funder of the congress.
  - In September 2023, **the DST pulled funding support to the congress, alleging financial irregularities**.
  - The ISCA denied the accusation, and challenged the DST's directive that government funds should not be spent on anything related to the Science Congress, in court.
  - This only deepened the rift. The lawsuit remains pending.

5<sup>th</sup> Jan, 2024

## 1. Rules for allocation of symbols to unrecognised political parties

### GS 2 (Elections)

#### • Why in News:

- The Election Commission of India introduced new regulations for allocating symbols to Registered Unrecognised Political Parties (RUPPs).
- Now, these parties must provide:
  - audited accounts from the last three financial years,
  - expenditure statements from the last two elections, and
  - the signature of the authorized party official along with their symbol application.

#### • Registered Unrecognised Political Parties (RUPPs)

- **Registration of political parties**
  - **Article 324 of the Indian Constitution grants the ECI the authority to register political parties.**
  - The registration of all political parties is governed by the provisions of **Section 29A of the Representation of the People Act, 1951.**
  - According to the ECI, any party seeking registration must file an application (to the Secretary to the ECI) within 30 days of its formation.
- **About RUPPs**
  - These parties include:
    - newly registered ones,
    - those that haven't gained sufficient votes to be a state/national party, and
    - those that have never participated in elections since their registration.
  - Such parties do not enjoy all the benefits extended to the recognised parties.
    - A recognised political party shall either be a National party or a State party if it meets certain laid down conditions.
- **Allotment of election symbols to political parties in India**
  - **Responsibility of ECI**
    - The Election Commission of India (ECI) is responsible for the allotment of symbols.
    - This is done under **The Election Symbols (Reservation and Allotment) Order, 1968.**
    - This rule is meant to provide for specification, reservation, choice and allotment of symbols at elections in Parliamentary and Assembly Constituencies, for the recognition of political parties.
    - Symbols can be either reserved, meaning they are exclusive to a recognised political party, or 'free'.
      - A political party can be recognized as a national or state party if it meets the certain criteria.
    - The EC publishes lists specifying the parties and their symbols through a notification in the Gazette of India.
  - **Unrecognised registered parties and election symbol**
    - Unrecognised registered parties' candidates can choose from free, non-exclusive symbols.
    - After being selected by parties, in subsequent elections, **these symbols are declared free again for others to choose.**
  - **Recognised parties and election symbol**
    - Recognised national and state parties get exclusive symbols.
  - **Unregistered parties and election symbol**
    - These are supposed to give the names of ten symbols, in order of preference, out of the list of free symbols notified by the commission.
    - As per the 1968 order, party may also propose three new symbols of their choice, with the names and clear design and drawings of symbol, in the order of preference.
    - The Commission, then, may consider these symbols for allotment as its common symbol if there is, in its opinion, no objection in allotting such symbol.
      - Symbols proposed by the parties should have no resemblance to the **existing reserved symbols or free symbols, or any religious or communal connotation, or depict any bird or animal.**

## New rules for granting symbols to new parties

**The Hindu Bureau**  
NEW DELHI

The Election Commission of India (ECI) on Thursday brought in new rules for the allocation of symbols to registered unrecognised political parties (RUPPs), making it mandatory for them to furnish audited accounts of the last three financial years, expenditure statements of the last two elections, and the signature of the authorised office-bearer of the party along with the application form for symbols. The new rules would come into effect from January 11.

- **Split of a recognised political party and the issue of election symbol**
  - Para 15 of the Symbols Order, 1968 **empowers EC to decide on the claim of rival factions in case of split.**
    - EC decides on the issue after taking into account all the available facts and circumstances of the case and hearing their representatives.
  - **The decision of the Commission is binding** on all such rival sections or groups.
  - For splits in **registered but unrecognised parties**, the ECI usually advises the warring factions to resolve their differences internally or to approach the court.
- **Key highlights: Rules for allocation of symbols to unrecognised political parties**
  - **Existing practice**
    - Common symbols are provided to RUPPs based upon an undertaking that they would put up at least 5% of total candidates with regard to said Legislative Assembly election of a State.
  - **Steps taken in 2014 to bring more transparency**
    - In order to ensure transparency, the EC had in 2014 given directions that RUPPs wanting to avail the benefits of having a common symbol have to submit:
      - the proof of having filed up-to-date contribution reports,
      - audited annual accounts,
      - update of election expenditure statements, and
      - their latest organisation details.
  - **What changes now**
    - Earlier the RUPPs were giving the above-mentioned details separately.
    - Now these details are being made part of the format of application for common symbol.
    - The new rules would come into effect from January 11 this year.

## 2. PM's School Becomes Base for Residential Programme for Students GS 2 (Education)

- **Why in News:**
  - The Ministry of Education launched '**Prerana**', an experiential learning programme.
  - This programme will operate from the vernacular school in Prime Minister Narendra Modi's birthplace **Vadnagar, Gujarat** where he studied when he was a student.
- **About 'Prerana' Programme:**
  - Department of School Education & Literacy, Ministry of Education, Government of India has launched '**Prerana: An Experiential Learning Program**'.
  - **Objective:** To offer a meaningful, unique, and inspiring experience to all participants, thereby empowering them with leadership qualities.
  - Prerana is driven by a strong commitment to integrate principles of Indian education system and the philosophy of **value-based education** which is a corner stone of the **National Education Policy (NEP) 2020**.
- **Features of 'Prerana' Programme:**
  - **Duration, number of participants and nature of the programme**
    - Prerana is a **week-long residential program** for selected students of class IX to XII.
    - A batch of 20 selected students (10 boys and 10 girls) will attend the program, every week from various parts of the country.
    - It is an experiential and inspirational learning program for students with the best-in-class technology where heritage meets innovation.
  - **Theme**
    - The **curriculum of Prerana School prepared by IIT-Gandhinagar is rooted in nine value-based themes:**
      - Swabhiman and Vinay,
      - Shaurya and Sahas,
      - Parishram and Samarpan,
      - Karuna and Sewa,

### Programme for students to begin soon at PM's school

**The Hindu Bureau**  
NEW DELHI

The Ministry of Education on Thursday launched 'Prerana', an experiential learning programme, which will operate from the vernacular school in Prime Minister Narendra Modi's birthplace Vadnagar, Gujarat where he had studied. A weekly residential programme, it will host 20 students (10 boys and 10 girls) from across the country on a rotational basis in the town.

The programme, which has the best-in-class technology where heritage meets innovation, caters to students from Classes 9 to 12, a Ministry spokesperson said. Students can register through the portal – prerana.education.gov.in. – wherein applicants can fill the requisite details to be a part of the programme.

The day-wise programme schedule will feature yoga, mindfulness, followed by and hands-on interesting learning activities.

- Vividhta and Ekta,
- Satyanishtha and Shuchita,
- Navachar and Jigyasa,
- Shraddha aur Vishwas, and
- Swatantrata and Kartavya.
- The program based on above themes will inspire the youth and foster respect for Bharat's unity in diversity, embodying the spirit of "**VasudhaivaKutumbakam**".
- It will **contribute by making the youth of today, a flame holder for Viksit Bharat**.
- **Mentors**
  - Towards this endeavour, the **participants will be guided by mentors from prestigious institutions**.
- **Other features**
  - The day-wise program schedule will feature yoga, mindfulness, and meditation sessions, followed by experiential learning, thematic sessions, and hands on interesting learning activities.
  - Evening activities will include visits to ancient and heritage sites, inspirational film screenings, mission life creative activities, talent shows etc. ensuring a holistic learning approach.
  - Apart from this, students will engage in diverse activities, embracing indigenous knowledge systems, latest State-of-Art technologies, and learnings from inspirational personalities.
  - Students can register through the portal, wherein applicants can fill the requisite details to be a part of the ambitious and aspirational Prerana program.
- **Institution from where this programme will run**
  - Prerana program will run from a Vernacular School, established in 1888, in one of the oldest living cities of India, **Vadnagar, district Mehsana, Gujarat**.

### 3. Health Ministry seeks data on single women taking the Assisted Reproductive Technology route

#### GS 2 (Health)

- **Why in News:** The Ministry had also sought category-wise figures on couples and single women who opted for surrogacy successfully following the implementation of the Surrogacy Act, 2021.
- **Enhancing Transparency and Inclusivity in India's Fertility Sector**
  - **Ministry's Data Collection Initiative**
    - The Union Health Ministry in India has taken a significant step towards assessing the **effectiveness of recent reproductive healthcare legislation**.
    - Specifically, the Ministry has sought comprehensive data from all States and Union Territories on the **utilization of Assisted Reproductive Technology (ART)** following the **implementation of the Surrogacy Act, 2021**
  - **Focus on Single and Unmarried Women**
    - In a noteworthy move, the Ministry has extended its inquiry to include a **breakdown of successful ART cases** among single women (divorcees/widows) and unmarried women.
    - This **inclusive approach** has been welcomed by fertility experts, as it sheds light on a **previously underrepresented segment** of the population seeking fertility treatments.
  - **The Role of the National Assisted Reproductive Technology and Surrogacy Board**
    - Established under the ART Act, the **National Assisted Reproductive Technology and Surrogacy Board** play a pivotal role in regulating ART clinics and technology banks.
    - The Board aims to **prevent misuse, ensuring the safe and ethical practice of ART services**.

#### Health Ministry seeks data on single women taking the ART route

Bindu Shalan Perappadan  
NEW DELHI

To assess the functioning of the Assisted Reproductive Technology (ART) Act, 2021, the Union Health Ministry has sought data from all States and Union Territories on the total number of single women (those divorced and widows) and unmarried women who have successfully used the technology.

Fertility experts have welcomed the move, along with the inclusion of single women and unmarried women as a category.

The Health Ministry had also sought category-wise figures of the total number of couples and single women who used surrogacy successfully following the implementation of the Surrogacy Act, 2021.

The letter issued by the Health Ministry in December last year had sought the information on a priority basis, to be submitted by January 1.

Speaking of the Ministry's initiative, Shobhit Agarwal, CEO, Nova IVF



**Giving Life:** ART is offered as a treatment for infertility. FILE PHOTO

Fertility, said that transparency was one of the core values of the sector, wherein complete information was shared with patients, and realistic expectations set to help them take well-informed decisions in their treatment and care.

ART is offered as a treatment for infertility, and to prevent congenital abnormalities, etc. However, it has raised concerns over parameters that limit the number of available donors. India, like the rest of the world, is facing a dip in fertility rates, and increasing costs of ART cycles.

- The Ministry has further reinforced the **regulatory framework** by notifying the **Assisted Reproductive Technology (Regulations) Amendment Rules, 2023**.
- **Addressing Concerns in the Fertility Sector**
  - While ART serves as a **crucial treatment for infertility and preventing congenital abnormalities**, concerns have arisen regarding parameters limiting the number of available donors.
  - The fertility sector in India, mirroring global trends, faces challenges such as declining fertility rates and the rising costs associated with ART cycles.
- **Future Trends: Inclusion of Single Women**
  - Fertility experts anticipate a growing trend in the **inclusion of single women in ART procedures**.
  - While currently in a nascent stage, inquiries from single women about **procedures like egg freezing** are expected to rise in the coming years.
  - The Ministry's proactive approach in categorizing and analyzing successful ART cases among single and unmarried women reflects a positive and welcome trend in the evolving landscape of reproductive healthcare in India.

#### 4. Aditya L1 set to be placed in final orbit tomorrow GS 3 (Science and Tech)

##### • Why in News:

- Aditya L1, India's first mission to study the Sun, is inching closer to its destination, and would be injected into its final orbit on January 6 evening.
- The spacecraft was launched on September 2 and it would get into what is known as a 'halo orbit' around the Lagrange Point 1 (L1)
  - L1 is one of the five spots in the moving Sun-Earth system, where the gravitational effects of the two bodies roughly balance each other.

##### • Aditya-L1 Mission

##### ○ About

- Aditya (in Sanskrit means Sun) is a planned coronagraphy spacecraft to study solar atmosphere (solar corona - outermost part).
- It has been designed and developed by ISRO and various other Indian research institutes.
- It is the first dedicated Indian mission to observe the Sun. It was launched aboard a **PSLV-XL** launch vehicle on September 2, 2023.

##### ○ Objective

- The suits of Aditya L1's payloads are expected to provide crucial information for understanding the phenomenon of:
  - coronal heating, coronal mass ejection, pre-flare and flare activities and their characteristics,
  - the dynamics of space weather, propagation of particles and fields etc.

##### ○ Study conducted by Aditya L1

- The spacecraft carries seven payloads to observe:
  - **the photosphere** [the deepest layer of the sun we can directly observe],

#### ISRO to perform crucial manoeuvre tomorrow to bind Aditya-L1 into L1 orbit

The Hindu Bureau  
BENGALURU

With the Aditya-L1 spacecraft expected to reach the Lagrangian Point (L1) on Saturday, the Indian Space Research Organisation (ISRO) will attempt a crucial manoeuvre to bind the spacecraft to an orbit around L1.

Aditya-L1, the first Indian space-based observatory to study the sun, was launched on September 2, 2023 from the Satish Dhawan Space Centre in Sriharikota. Subsequently, ISRO Telemetry Tracking and Command Network (IS-TRAC) in Bengaluru carried out four earth-bound manoeuvres between September 3 and 15 last year.

L1 is about 1.5 million km from earth and the distance of L1 from the planet is approximately 1% of the earth-sun distance.

Around 4 p.m. on Saturday, ISRO scientists and engineers from the Mission Operations Complex of IS-TRAC will perform the crucial manoeuvre which will bind Aditya-L1 to an orbit around L1.

The propulsion system of the spacecraft comprises the 440 Newton Liquid Apogee Motor (LAM) engine plus eight 22 Newton thrusters and four 10 Newton thrusters which will be intermittently fired to perform the manoeuvre.

According to the agency, a satellite placed in the halo orbit around the L1 point has the major advantage of continuously viewing the sun without any occultation/eclipse. This will provide a greater advantage of observing the solar activities continuously.

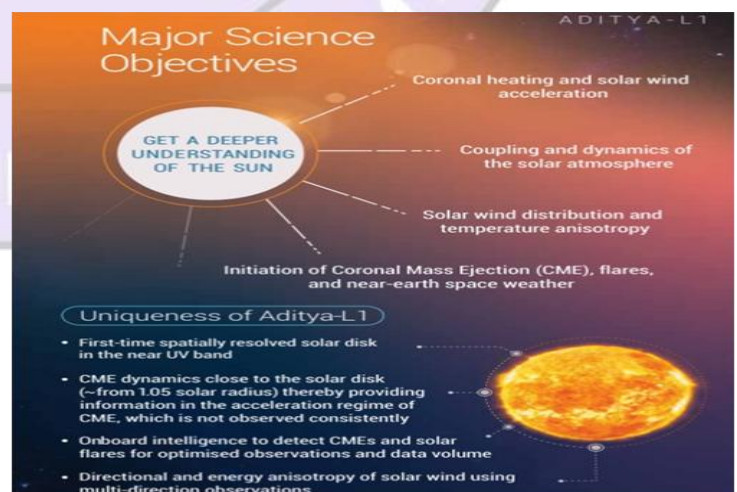
Aditya-L1 carries seven payloads to observe the photosphere, chromosphere, and the outermost layers of the sun (the corona) using electromagnetic and particle detectors.

Using the special vantage point of L1, four payloads will directly view the Sun and the remaining three payloads will carry out in-situ studies of particles and fields at the L1.

Aditya-L1 has a mission life of five years.



From Earth: A satellite placed in halo orbit around L1 point has the advantage of viewing the Sun without any eclipse. S K MISHRA/ANNA



- **chromosphere** [the layer about 400 km and 2,100 km above the photosphere], and
- the **outermost layers of the Sun** (the corona), using electromagnetic and particle and magnetic field detectors.
- Of the seven payloads, **four will directly study the Sun, and the remaining three will in situ study particles and fields at the Lagrange point L1.**
- **Remote sensing payloads which will study the sun**
  - **Visible Emission Line Coronagraph (VELC)** for corona/imaging and spectroscopy;
  - **Solar Ultraviolet Imaging Telescope (SUIT)** for photosphere and chromosphere imaging;
  - **Solar Low Energy X-ray Spectrometer (SoLEXS)**, which is a soft X-ray spectrometer for Sun-as-a-star observation; and
  - **High Energy L1 Orbiting X-ray Spectrometer (HEL1OS)**, which is a Hard X-ray spectrometer for Sun-as-a-star observation
- **The payloads to study the L1 in situ**
  - **Aditya Solar wind Particle Experiment (ASPEX)**, for solar wind/particle analyzer protons and heavier ions with directions;
  - **Plasma Analyser Package For Aditya (PAPA)**, for solar wind/particle analyzer electrons and heavier ions with directions; and
  - **Advanced Tri-axial High Resolution Digital Magnetometers** for in situ
- **Significance of Aditya L1 Mission**
  - **India in the big league**
    - It is the first space-based Indian mission to study the Sun.
    - So far, **only two other space agencies** have had their spacecraft reach L1 or the Lagrange point: **USA's National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA).**
  - **Need to study sun from space**
    - Studying the Sun from space is essential because the Sun emits various forms of radiation, energetic particles, and magnetic fields in all wavelengths.
    - Earth's atmosphere and magnetic field act as protective shields against harmful solar radiation, making space-based observations crucial for comprehensive understanding.
  - **Understanding space weather**
    - Every planet, including Earth and the exoplanets beyond the Solar System, evolves — and this evolution is governed by its parent star.
    - The solar weather and environment affect the weather of the entire system.
    - Variations in this weather can change the orbits of satellites or shorten their lives, interfere with or damage onboard electronics, and cause power blackouts and other disturbances on Earth.
    - Knowledge of solar events is key to understanding space weather
- **Lagrange points**
  - A Lagrange point is a position in space where the **gravitational pull of two large masses precisely equals the centripetal force required for a small object to move with them.**
    - i.e., at that point, the gravitational attraction and repulsion between two heavenly bodies is such that an object placed between them will effectively stay in the same relative position while moving with them.
  - These points in space can be used by spacecraft to **reduce fuel consumption needed to remain in position.**
  - The Lagrange points are named in honour of Italian-French mathematician Joseph-Louis Lagrange, and there are five of them: **L1, L2, L3, L4, and L5.**
    - The L1 point of the Earth-Sun system affords an uninterrupted view of the Sun.
    - It is currently home to the **Solar and Heliospheric Observatory Satellite SOHO.**
    - NASA's James Webb Space Telescope is at L2.

## 5. India-Nepal signed power pact and energy MOU GS 2 (International Relations)

- **Why in News:** Nepal signed a long-term agreement for the export of 10,000 MW power to India in the next 10 years and an MoU for cooperation in renewable energy.
- **About the pact -**
  - India and Nepal reached a significant milestone in their bilateral relations by signing a ground-breaking power pact and a Memorandum of Understanding (MoU) in renewable energy.
  - **The agreement**, signed during the 7th meeting of the Nepal-India Joint Commission, outlines a plan for Nepal to export 10,000 MW of power to India over the next decade. Simultaneously, an MoU for collaboration in renewable energy was inked between the Nepal Electricity Authority and India's National Thermal Power Corporation Limited.
- **Deeper and multi-level cooperation**
  - This strategic move not only reinforces economic ties but also signifies a deeper level of cooperation in crucial sectors.
  - The bilateral discussions between the countries covered various aspects, including trade, economic relations, connectivity projects, defense, security, agriculture, energy, power, water resources, disaster management, tourism, civil aviation, people-to-people exchanges, and cultural partnerships.
  - The virtual inauguration of three cross-border transmission lines—132 kV Raxaul-Parwanipur, 132 kV Kushaha-Kataiya, and New Nautanwa-Mainahiya—underscores the collaborative efforts between India and Nepal in enhancing connectivity and infrastructure.
- **Optimism and Vibrant relations**
  - India's External Affairs Minister expressed optimism about the multifaceted engagement, highlighting the positive impact on overall bilateral ties.
  - The sentiment was echoed by Nepal's Prime Minister, who hailed the power agreement as a major breakthrough in Nepal's power sector.
  - The main contours of India-Nepal bilateral relations include a comprehensive approach encompassing trade, economic cooperation, and shared development goals.
  - This recent agreement not only addresses energy needs but also serves as a testament to the enduring friendship and mutual benefit between the two nations.

### India, Nepal sign power pact, MoU in renewable energy

YUBARAJ GHIMIRE  
KATHMANDU, JANUARY 4

NEPAL ON Thursday signed a long-term agreement for the export of 10,000 MW power to India in the next 10 years and an MoU for cooperation in renewable energy while External Affairs Minister S Jaishankar and his Nepal counterpart N P Saud jointly inaugurated 3 cross-border transmission lines. Jaishankar is on a two-day visit to the Himalayan nation. India's Energy Secretary Pankaj Agrawal and his Nepal counterpart Gopal Sigdel signed the bilateral agreement. The power export agreement was signed during the 7th meeting of the Nepal-India Joint Commission. On Thursday, an MoU for cooperation in renewable energy was also signed by the Nepal Electricity Authority and National Thermal Power

Corporation Limited, India. "Discussions focused on our overall bilateral ties, trade and economic relations, land, rail and air connectivity projects, cooperation in defence and security, agriculture, energy, power, water resources, disaster management, tourism, civil aviation, people to people and cultural exchange and development partnership," Jaishankar said on X. Nepal PM Pushpa Kamal Dahal Prachanda called the agreement a major breakthrough in Nepal's power sector. Nepal's Foreign Ministry said on X: "Various aspects of Nepal-India relations were discussed on the occasion." Jaishankar and Saud virtually inaugurated 3 cross-border transmission lines completed with India's help—132 kV Raxaul-Parwanipur, 132 kV Kushaha-Kataiya and New Nautanwa-Mainahiya lines, officials said. WITH PTI INPUTS

## 6. Grievance Redressal Committees (GRCs) under Street Vendors Act GS 2 (Governance)

- **Why in News:** The non-implementation of grievance redressal envisaged under street vendor act.
- **About the Issue-**
  - Despite a decade since the inception of the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014, a crucial provision—the establishment of Grievance Redressal Committees (GRCs) in all urban

local bodies—remains largely unimplemented. This raises concerns about the effectiveness of safeguarding street vendors' rights and addressing grievances.

- The Act mandates state governments to form GRCs, consisting of a retired civil judge or judicial magistrate as the chairperson and two professionals. These committees serve as a recourse for street vendors facing issues like harassment by police and local authorities.

## 10 years on, grievance redressal panels for street vendors yet to be set up across states

**DAMINI NATH**  
NEW DELHI, JANUARY 4

NEARLY 10 years after the Act to protect livelihoods of street vendors came into force in March 2014, one of the key provisions of the law — the establishment of grievance redressal committees (GRCs) in all urban local bodies — is yet to be implemented.

Under the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014, state governments are required to constitute "one or more

committees" comprising a retired civil judge or a judicial magistrate as the chairperson along with two other professionals.

Street vendors having grievances, including instances of harassment by police and other local authorities, can approach GRCs and submit a written application regarding the same. The GRC is authorised to conduct an enquiry and redress the grievance. However, GRCs have only been set up in 17 states, and that too, not in all urban local bodies of those states, according to sources.

During the first national seminar



**Union minister Hardeep Singh Puri**

inar on the issue of implementation of GRCs on Thursday, Housing and Urban Affairs Minister Hardeep Singh Puri said, "Only 17 states have constituted such committees so far... These GRCs have the potential to foster a more inclusive and supportive environment." He also said that the seminar was with

an aim to alert states that have not implemented GRCs yet.

According to sources, the Ministry of Housing and Urban Affairs (MoHUA) is likely to issue guidelines to states for an effective implementation of GRCs; and issues such as payment of honorarium to chairpersons of different GRCs are likely to be addressed.

Arbind Singh, national coordinator of the National Association of Street Vendors of India (NASVI) — which has been demanding the implementation of GRCs across cities — said rules enacted by states also had many "gaps".

### • Who are the street vendors?

- Street Vendor is a person who offers goods for sale to the public at large without having a permanent built-up structure from which to sell.
- Street vendors may be stationary in the sense that they occupy space on the pavements or other public/private spaces or, they may be mobile in the sense that move from place to place by carrying their wares on push carts or in baskets on their heads.

### • Emergence of Street Vendors:

- Primarily, the surge in street vendors can be attributed to the dearth of employment opportunities and prevalent poverty in rural areas, prompting individuals to migrate to urban centers for better prospects.
- Many of these migrants lack the necessary skills and education for formal employment, compelling them to engage in the informal sector.
- Additionally, individuals who formerly held jobs in the formal sector find themselves joining the informal sector due to industry closures, downsizing, or mergers, as they struggle to secure livelihoods.

### • Current Scenario:

- While GRCs have been established in only 17 states, their presence is not universal within those states, creating gaps in the grievance redressal mechanism.
- During a national seminar, Hardeep Singh Puri, Minister of Housing and Urban Affairs, emphasized the need for wider GRC implementation, citing their potential to foster inclusivity and support.

### • Challenges Encountered by Street Vendors

- **Space Constraints:**
  - The urban planning in our cities, influenced by Western marketing concepts, often neglects to designate spaces for vendors and hawkers, disregarding indigenous practices.
- **Navigating Multiple Authorities:**
  - Street vendors contend with various authorities such as municipal corporations, police (both regular and traffic divisions), regional development bodies, district administrations, and local panchayats. This multiplicity leads to exploitation and extortion.
  - Positive initiatives by one authority are sometimes nullified by conflicting actions from others.
- **Frequent Evictions:**

- Regular eviction drives conducted by district or municipal administrations create an atmosphere of fear among vendors. The eviction teams, known by different local names, are viewed with apprehension.
- **Extortion Challenges:**
  - The informal sector faces the burden of 'rangdari tax' and 'hafta' in various cities. Vendors often have to part with significant amounts of money to continue their trade.
- **Importance of GRCs:** GRCs play a pivotal role in providing street vendors with a formal channel to address grievances, ensuring protection from harassment, and fostering a supportive environment for their livelihoods. The Act envisions GRCs as a key element in the regulatory framework for street vending.
- **The Way Forward:**
  - To bolster the livelihoods of street vendors, it is imperative to streamline the implementation of GRCs across all states.
  - The Act envisions vibrant town vending zones, demarcated vending zones, and issued certificates of vending as mechanisms to formalize and protect street vending activities.
  - As India seeks to enhance the lives of street vendors, the effective implementation of GRCs becomes paramount.
  - By addressing existing challenges and providing comprehensive guidelines, the government can ensure that the Street Vendors Protection Act fulfills its intended purpose of safeguarding the livelihoods of this important section of society.
- **The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014**
  - Is a legislative framework aimed at safeguarding the rights and regulating the activities of street vendors in India
  - Enacted to address the socio-economic concerns of this informal sector, the key provisions of the Act include:
    - **Grievance Redressal Committees (GRCs):**
      - Mandates the formation of GRCs in urban local bodies to address grievances faced by street vendors.
      - Comprises a chairperson, typically a retired civil judge or judicial magistrate, and two other professionals.
    - **Grievance Redressal Mechanism:**
      - Provides street vendors with a formal mechanism to report and seek redressal for issues, including harassment by police and local authorities.
    - **Regulation of Street Vending:**
      - Aims to strike a balance between the rights of street vendors and the regulation of their activities in public spaces.
    - **Empowerment of Urban Local Bodies:**
      - Empowers urban local bodies to demarcate vending zones, issue certificates of vending, and regulate street vending activities.
      - Envisions GRCs as instruments to foster a more inclusive and supportive environment for street vendors.

## 7. Reshaped By AI: How AI Is Changing What Sovereignty Means

### GS 4 (Ethics)

#### • Why in News:

- The year 2023 has seen and left behind an uncertain global landscape marked by conflicts, environmental concerns, and technological advancements.
- Therefore, to address such issues, AI governance in particular, a significant effort is underway to shape the ethical use of Artificial Intelligence (AI) and related frontier technologies.
- The United Nations (UN) has taken an important role in this endeavour, exemplified by the joint session of the High-Level Committee on Programmes and the High-Level Committee on Management in October 2023.

#### • Key Features of the UN's Commitment to an Ethical Framework

- Represents a Cornerstone in Ethical Use of AI
  - The UN commitment to an ethical framework for AI governance represents a cornerstone in shaping the responsible and human-centric development of emerging technologies.
  - Rooted in the principles laid out in the UNESCO declaration, this ethical framework provides a comprehensive guide for the use and governance of AI within the UN system.
- Respect for Human Rights and Fundamental Freedoms
  - The foundation of the ethical framework is the unequivocal commitment to respecting, protecting, and promoting human rights and fundamental freedoms.
  - The acknowledgment of the inherent dignity of individuals serves as a guiding principle to ensure that AI technologies do not infringe upon basic human rights.
- Promotes Diversity and Inclusiveness
  - To counteract biases and discriminatory practices, the framework underscores the importance of diversity and inclusiveness.
  - It advocates for AI systems that are designed to be inclusive, considering a diverse range of perspectives, cultural contexts, and individual experiences to prevent the perpetuation of societal inequalities.
- Good Governance and Just Development
  - The ethical framework extends its reach to the broader aspects of governance and development
  - Emphasising good governance principles, it calls for transparent, accountable, and participatory decision-making processes in the development and deployment of AI.
  - Additionally, it advocates for AI to contribute to just and equitable development, ensuring that the benefits of technological advancements are shared across all segments of society

#### • Transformation of Territorial Sovereignty into Digital Sovereignty and its Implications

- Transformation of Territorial Sovereignty
  - There has been a subtle yet profound transformation in the principle of territorial sovereignty.
  - As nations navigate the digital age, control over information and data becomes a central aspect of sovereignty.
  - The traditional understanding of territorial boundaries expands to encompass control over digital mediums.
- Efforts to Accumulate Classified Data
  - Digital sovereignty also involves the accumulation and control of classified data.
  - There are potential risks associated with this data accumulation, raising concerns about privacy, security, and the potential misuse of sensitive information.
  - In diplomacy, the control over classified data becomes a form of soft power, shaping nations' ability to influence global narratives and secure their interests in the digital domain.
- Disinformation and Diplomatic Challenge
  - In recent time there has been a prevalence of disinformation, misleading information, and hate speech in the digital realm.

## Reshaped by AI

Principle of territorial sovereignty is transforming into digital sovereignty. No tech governance can ignore this



UPENDRA BAXI

AMIDST COMPETITIVE GLOBAL politics, as the world struggles to contain the threat of 2023 — civil regional wars, civil conflicts and undeniable incidents of anthropogenic harms — technologies, economic, and human rights across the world continue to evolve and launch quest initiatives pertaining a better and larger future for human rights. One such initiative led, in early October 2023, to the Report of the High-Level Committee on Programmes and the High-Level Committee on Management joint session on the use and governance of AI and related frontier technologies. Hosted, significantly, by the United Nations Children's Fund (UNICEF), of course, the UN system had already begun to work on "frontier technologies" and artificial intelligence (AI), including the development, in 2019, of a United Nations system-wide strategic approach and road map for supporting capacity development of AI. The principle for the ethical use of AI in the United Nations system were advanced in the General Assembly Declaration which prescribes many values and principles, chief among the following: Respect, protect and promote human rights and fundamental freedoms and human dignity; ecological sustainability; diversity and inclusiveness. These range across eleven areas of specific concerns that include good governance and just development. A "system-wide normative and operational framework on the use of AI in the United Nations system, based on these principles for the ethical use of AI" was finally recommended. Important though these are for humanity, it is the development and application of AI, they would be sheer flights of fancy if further work on this code were to ignore all talk of "digital sovereignty" and performance of digital diplomacy. Live and let another the principle of territorial sovereignty is slowly but surely being transformed into that of digital sovereignty. Inadequate, outdated governance use of AI at the very heart of corporate governance and sovereignty over people and nations is being transformed into matters of accumulated classified data. Disinformation, misleading information, and even hate

AI has now irreversibly "revolutionised" warfare: The use of unmanned lethal autonomous weapons systems, abbreviated in an unconscious irony by the US Defence Department as LAWS, illustrates complete machine-learning dependence and dehumanisation of the means of warfare, setting back the project of international humanitarian law. The overall project of "humanising" AI applications in all contexts, civil or military, must continue lest, as the poet T.S. Eliot said in 'The Waste Land, we lose it in the awful darning of a moment's surrender which an age of prudence can never retract'.

speech, are the order of the day and the big question now is how to prevent these evils in governance and development so that some truth and accountability is ensured. Karl Marx and Lenin's Rights, in a 2019 article in the 'Wall Journal of Law and Technology' pertain to some machine detail the threat, "hurdling growing deployment" of AI tools that lead to "transformation of the procedures and levels of democracy" and "threats to decisional and informational privacy." At the origin, behind Big Data Analytics and the Internet of Things, "While massive consumer benefits ensue, their principal function at present is to capture personal information, create detailed behavioural profiles and sell on goods and agenda." Privacy, anonymity and autonomy remain the "main causes of AI's ability to manipulate choices in economic and political decisions" to the extent that, unless determined steps at global, regional, and national levels are taken now, privacy and democracy will rapidly become victims of the past.

The present digital war between the US and China, in fact, represent three different "digital empires" in simplicity as well as complexity, as few scholars analyse in a book-length study of China, the US and EU law and regulation regimes (digital regimes, 2021). The US shows that the free digital model of the US, which amounts to complete freedom to the AI industry (the techno-optimistic model) is not the model of free-market freedom to the market of free-market freedom to the market, leaving the firm and content entirely open to market forces. Free market fundamentalism has nurtured the growth and globalisation of the social media industry which (according to the Business Research Company) rose from \$11.22 billion in 2001 to \$211.1 billion in 2021, and is expected to grow to \$454.72 billion in 2025. All this techno-optimistic war "will" is yielding to the appeal of an "authoritarian" model of regulatory reach, based on surveillance and intelligence gathering by private companies. The Chinese state-driven regulatory model is on "the ascent worldwide, leading to growing concern in the US, the EU, and the rest of the democratic world about the

implications of that ascent." The worry that "China's regulatory model will prevail is real, both tentatively and descriptively" because while China's technological development is impressive, its way of "harnessing that technology is often deeply oppressive". The Chinese state-driven model also "appeals to many developing, authoritarian countries" because it "combines political control with tremendous technological success". In contrast, the very few actively rising "non-occident" societies seem to prefer the EU model, seen as providing the "necessary building blocks of a more equitable and human-centred, digital economy". The EU Declaration on Development on November 22, 2021, privileges a human rights-based approach to development, prioritising respect for human rights as "a precondition for the achievement of inclusive and sustainable development".

Readers might ask about the possibility of a new era of the technological, although it remains open "whether surveillance capitalism, digital authoritarianism, or liberal democratic values will prevail as a foundation for human development and for our society as we advance further into the digital era". We would need to go far ahead even beyond to look at the uses of AI technologies for war or terror purposes perspectives, but AI has now irreversibly "revolutionised" warfare. The use of unmanned lethal autonomous weapons systems, abbreviated in an unconscious irony by the US Defence Department as LAWS, illustrates complete machine-learning dependence and dehumanisation of the means of warfare, setting back the project of international humanitarian law. The overall project of "humanising" AI applications in all contexts, civil or military, must continue lest, as the poet T.S. Eliot said in 'The Waste Land, we lose it in the awful darning of a moment's surrender which an age of prudence can never retract'.

The writer is professor of law, University of Hyderabad, and former vice-chancellor of Universities of South Gujarat and Delhi

- In diplomacy, these challenges pose significant hurdles in maintaining transparent and constructive international relations.
- **Manipulation of Democratic Processes**
  - Karl Manheim and Lyric Kaplan's article emphasises the growing threat of AI tools in manipulating the preconditions and levers of democracy.
  - As AI becomes more prevalent in political processes, there is a risk that it may be employed to manipulate public opinion, influence elections, and undermine the democratic principles that govern transparent and fair governance.
  - This manipulation poses a fundamental threat to the democratic fabric of societies worldwide.
- **Threats to Decisional and Informational Privacy**
  - The deployment of AI, particularly in the context of Big Data Analytics and the Internet of Things, poses threats to both decisional and informational privacy.
  - AI's principal function, at present, is to capture personal information and create detailed behavioural profiles.
  - This jeopardises individuals' autonomy and privacy, as decisions and actions become subject to surveillance and analysis, potentially leading to the erosion of personal freedoms.
  - The ongoing digital conflicts between the US and China underscore the existence of three distinct "digital empires."
- **The Ongoing Conflict Among Major Digital Empires**
  - Anu Bradford's analysis suggests that the US, with its techno-optimistic model emphasising freedom for the AI industry, contrasts with China's state-driven regulatory model, characterized by surveillance and control.
  - The global rise of China's model raises concerns about its normative and descriptive influence, particularly in authoritarian countries.
  - The European Union's model, prioritising a human rights-based approach, offers an alternative that aligns with a more equitable and human-centric digital economy.
- **Consequence of the Ongoing Conflict Among Digital Empires**
  - **Techno-Optimism Could be Dangerous**
    - While there are potential benefits of AI, an overly optimistic approach may lead to the neglect of ethical considerations, resulting in the unchecked growth of industries that prioritize profit over principles.
    - This techno-optimism run wild could lead to a future where privacy and democracy become relics of the past.
  - **Points to an Uncertain Future**
    - As the world grapples with divergent models of AI governance, Bradford prompts reflection on the uncertain future of the technopolitical landscape.
    - The competition between surveillance capitalism, digital authoritarianism, and liberal democratic values remains unresolved.
    - It raises the question as to which foundation will underpin human engagement and societal development in the digital era.
- **Ways Ahead to Prevent These Challenges**
  - **Establishment of Transborder Governance of AI**
    - There is need for the centrality of transborder governance in the regulation of AI technologies.
    - As AI transcends geographical boundaries, it becomes imperative to establish international frameworks that govern its ethical development and use.
    - The discussions within the United Nations committees exemplify a concerted effort to create a global consensus on the norms and regulations governing AI.
    - Moreover, it recognises that unilateral approaches are insufficient in addressing the transnational nature of these technologies.
  - **A Shift Towards Digital Diplomacy**
    - The evolving dynamics of digital sovereignty necessitate a re-evaluation of traditional diplomatic practices.
    - Digital diplomacy becomes a crucial aspect of international relations, encompassing efforts to navigate the challenges posed by digital technologies while leveraging them for diplomatic purposes.
    - Nations must engage in strategic digital diplomacy to safeguard their interests, project influence, and build alliances in the digital age.
- **Conclusion**

- As the world confronts the challenges posed by AI, **the need for a delicate balance between progress and ethics becomes apparent.**
- The future of the technopolitical landscape hangs in the balance, **and global collaboration is essential to navigate the uncharted waters of AI development and application.**

## 8. Refusal of Enforcement Directorate summons

### Recent events of importance

- **Why in News:** Delhi Chief Minister and Jharkhand CM Hemant Soren have declined Enforcement Directorate (ED) summonses in separate cases, citing various reasons. The ED in response, faces legal intricacies regarding the nature of the summonses and the consequences of non-compliance.
- **Examination of Refusal and ED Summons in Focus:**
  - Delhi CM in relation to the Delhi excise policy case, points to the ED's 'non-disclosure' and 'non-response' approach, along with the upcoming Rajya Sabha elections and Republic Day celebrations. Similarly, Hemant Soren (CM Jharkhand) has refused seven summonses in a money laundering case.
- **Provisions of Summons and Powers of ED:**
  - The summonses are issued under Section 50 of the Prevention of Money Laundering Act (PMLA), empowering ED officials to inspect, enforce attendance, compel record production, and receive evidence.
  - The provision specifies that the summoned individuals must attend in person or through authorized agents.
- **Refusal Consequences:**
  - Refusing to appear may result in penalties under Section 63 (2) (C) of the PMLA, ranging from Rs 500 to Rs 10,000.
  - Non-cooperation can also lead to proceedings under Section 174 of the Indian Penal Code, stipulating a jail term of one month and/or a fine of Rs 500.
- **Arrest Possibilities:**
  - While arrest under Section 63 of the PMLA is a potential consequence, it is a complex process requiring a fresh case under Section 174 of the IPC, followed by a trial.
  - Courts have emphasized that Section 50 does not grant ED the power to arrest a summoned person directly.
- **Court Interpretations:**
  - The Delhi High Court clarified that ED's power to issue summonses (Section 50) does not inherently include the authority to arrest (Section 19).
  - The court emphasized the distinctiveness of these provisions and highlighted that the apprehension of arrest does not justify resistance to summons.
- In navigating the complexities of ED summonses, legal interpretations, and potential consequences, the Kejriwal and Soren cases shed light on the delicate balance between investigative powers and individual rights, prompting a closer examination of legal frameworks and due process.

## Kejriwal, Soren refuse ED summonses: what now

Is the ED bound to reveal whether it is summoning someone as an accused or a witness? What can ED do if they don't cooperate? Can not appearing lead to arrest?

DEEPTI MANI TRIVARI  
NEW DELHI, JANUARY 4

DELHI CHIEF MINISTER Arvind Kejriwal has declined Enforcement Directorate (ED) summons to appear before the agency to investigate the Delhi excise policy case. Similarly, Jharkhand Chief Minister Hemant Soren has refused seven summonses in a money laundering case.

The provisions of the Prevention of Money Laundering Act (PMLA) under which summonses are issued to people to assist in investigations, however, do not specify that agency must decide whether they are being called as accused or as witnesses. Also, the provisions are not clear as to whether the summons are to restrict the grounds for questioning. In practice, however, the ED always mentions the case in which a person is being summoned to give evidence. "How can we declare a person as witness or accused even before questioning him or conducting proper investigation? Following the probe, we may reach a conclusion that the person is not a witness or a witness, let alone be assigned as an accused," said ED official said.

**What if the person refuses to appear?**  
The law has provisions for penalty of up to Rs 10,000 and/or imprisonment for up to one month under Section 63(2)(C) of the PMLA. A person who refuses to appear for summons issued by ED may be considered as a witness or evidence or a person who is not a witness or evidence is demanded by the "shall pay by way of penalty, a sum which shall not be less than the hundred rupees but which may extend to ten thousand rupees for each such default or failure".

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**How can ED arrest non-cooperatives?**  
There are no express provisions in the PMLA to arrest a non-cooperative. There is also no limit to how many summonses the agency must issue before reaching the conclusion that the person concerned is not cooperating. The law is clear that an arrest can be made only if the officer is convinced that the person is guilty of the offence of money laundering.

**How have courts interpreted this?**  
Section 19 of the PMLA says, "If the Director, Deputy Director, Assistant Director or any other officer authorised in this behalf by the Central Government by general or special order, has on the basis of material in his possession, reason to believe the reasons for such belief to be recorded in writing that any person has been guilty of an offence punishable under this Act, he may arrest such person and shall, as soon as may be, inform him of the grounds for such arrest."

6<sup>th</sup> Jan, 2024

## 1. Indian Navy thwarts hijacking attempt in Arabian Sea GS 2 (Security)

### • Why in News:

- Indian warship INS Chennai and its marine commandos thwarted the attempted hijack of a Liberia-flagged merchant vessel.
- It safely rescued its 21 crew members, including 15 Indians, in north Arabian Sea.

### • Maritime Piracy

- As per the UN Convention on the Law of the Sea (UNCLOS), maritime piracy is when people on a private boat or ship commit crimes like kidnapping, violence, or robbery for personal gain.
  - UNCLOS is an international treaty which was adopted and signed in 1982 in Montego Bay, Jamaica
  - It lays down a comprehensive regime of law and order in the world's oceans and seas establishing rules governing all uses of the oceans and their resources.
- This happens on the open sea and is targeted at another vessel or its people and property.
- Threats posed by maritime piracy**
  - Physical Harm, Kidnapping and Associated Humanitarian Concerns:**
    - Pirates can physically harm crew members and passengers, and they often kidnap individuals for ransom.
    - Crew members and passengers may experience trauma and psychological distress as a result of piracy incidents
  - Disruption of Trade**
    - Piracy can disrupt maritime trade routes, causing delays in the delivery of goods and impacting global trade.
  - Economic Losses**
    - Businesses may suffer financial losses due to stolen cargo, **ransom payments**, **increased insurance premiums**, and the cost of implementing anti-piracy measures.
  - Impact on Fishing Industry**
    - Pirates sometimes target fishing vessels, affecting the livelihoods of fishermen and the availability of seafood.
  - Environmental Risks**
    - Pirates may engage in illegal activities, such as oil theft or dumping pollutants, posing environmental threats to marine ecosystems.
  - Security Concerns**
    - The presence of piracy raises security concerns for coastal regions and international waters, requiring increased naval and maritime security efforts.
  - Global Security**
    - Piracy can be linked to broader security issues, such as terrorism and organized crime, creating challenges for international security.

### • Steps taken by India

- Operational steps**
  - Indian govt has deployed naval ships with armed helicopters to patrol the piracy prone areas.
  - The Indian Navy commenced anti-piracy patrols in the Gulf of Aden from October 2008.
  - In recent years, **task Groups comprising destroyers and frigates** have been deployed to undertake maritime security operations and render assistance to merchant vessels in case of any incident.
  - Also, aerial surveillance by long-range maritime patrol aircraft and Unmanned Aerial Vehicles has been enhanced to have a complete maritime domain awareness.
- India participates in the various multilateral fora set up to combat piracy**
  - The **Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP)** is a government-to-government agreement that aims to enhance multilateral cooperation among 16 regional countries.

## Navy thwarts hijacking attempt in Arabian Sea

Marine commandos evacuate all 21 crew members on board *Lila Norfolk* after Indian Navy's patrol aircraft issued a 'forceful warning' to the pirates; destroyer *INS Chennai* renders support

Dinakar Peri  
NEW DELHI

### Ships in distress

In the last month of 2023, India responded to three distress calls from ships



**Dec 14:** Multi-flagged vessel m.v. Ruvi, with an 18-member crew, sent a mayday message indicating boarding by about six unknown persons around 700 nautical miles from the Indian coast

**Dec 21:** m.v. Chon Pluto, with 21 Indian and 1 Vietnamese crew members, reported a projectile attack around 217

**Dec 23:** A Gabon-flagged crude oil tanker m.v. Sol with an 18-member crew heading to India was hit by a one-way attack drone in the southern Red Sea; no injuries were reported

**Safe and secure:** The cargo ship *Lila Norfolk*, after the rescue, prepares to move to the next port of call. PTI

power generation and propulsion, and commence her voyage to next port of call."

The bulk carrier *Lila Norfolk* had sent a message on UKMT0 (U.K. Maritime Trade Operations) portal on Thursday evening,

when it was 460 nautical miles off the coast of Eyl, Somalia, indicating boarding by approximately five to six unknown armed persons, the Navy said. Responding to the call, the Indian Navy diverted destroyer *INS Chennai*


which was on anti-piracy patrol in the region while an MPA overflew the vessel in the morning and established contact, ascertaining the safety of the crew.

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- The **Regional Maritime Security Initiative (RMSI)** is a partnership between regional nations with varying capabilities and capacities.
- **Institutions created by India**
  - The Navy's **Information Management and Analysis Centre (IMAC)** and **Information Fusion Centre for Indian Ocean Region (IFC-IOR)** are institutions involved in maintaining maritime security.
  - Besides, Indian Navy also coordinates with Coast Guard to maintain enhanced surveillance within the Exclusive Economic Zone (EEZ).
- **Legislative steps**
  - India enacted the **Maritime Anti-Piracy Act, 2022** to give effect to arrest and prosecute pirates and strengthen the fight against piracy.
  - Also, the government's **SAGAR (Security and Growth For All in the Region) Doctrine** provides a framework for maritime co-operation in the Indian Ocean region.
- **Key highlights**
  - The ship, Lila Norfolk, sent a message via the UK Maritime Trade Operations portal when it was about 460 nautical miles off the coast of Eyl, Somalia.
  - The message reported a possible boarding by five to six unknown armed individuals.
  - In response, the Indian Navy diverted the INS Chennai, a destroyer on anti-piracy patrol nearby.
  - Additionally, a Maritime Patrol Aircraft (MPA) flew over the ship in the morning and made contact, ensuring the safety of the crew.
- **Recent hijacking incident in the region**
  - There have also been a series of attacks on merchant ships by Houthi rebels in Yemen in the Red Sea as well as the Arabian Sea.

## Ships in distress

In the last month of 2023, India responded to three distress calls from ships in trouble



**Dec 14:** Malta-flagged vessel m.v. *Ruen*, with an 18-member crew, sent a mayday message indicating boarding by about six unknown persons around 700 nautical miles from the Indian coast

**Dec 23:** m.v. *Chem Pluto*, with 21 Indian and 1 Vietnamese crew members, reported a projectile attack around 217 nautical miles southwest of Porbandar. Initial investigation by the Navy indicated a drone attack

**Dec 23:** A Gabon-flagged crude oil tanker m.v. *Sai Baba* with an all-Indian crew heading to India was hit by a one-way attack drone in the Southern Red Sea; no injuries were reported

**Safe and secure:** The cargo ship *Lila Norfolk*, after the rescue, prepares to move to the next port of call. PTI

## 2. Digi Yatra Initiative Faces Controversy as Airport Staff Enroll Passengers Without Consent

### GS 2 (Governance)

- **Why in News:** The Digi Yatra initiative, aimed at digitizing and streamlining passenger processing at airports through facial recognition, has come under scrutiny as reports reveal instances of passengers being enrolled without their knowledge or consent.
- **Background**
  - The Digi Yatra initiative **promotes paperless and seamless travel through airports.**
  - The process involves **passengers scanning their boarding passes and faces at the entry point**, creating a biometric face token for subsequent checkpoints.
  - However, recent incidents indicate that **private airport staff and security personnel are actively enrolling passengers without obtaining informed consent.**

### Centre's Digi Yatra enrolment takes off as airport security staff sign up flyers without their consent

Jagriti Chandra  
NEW DELHI

Next time you visit an Indian airport, beware of security personnel and private staff at the entry gate of passenger buildings who may be collecting your facial biometrics without your knowledge or consent.

As year-end travel peaked at some of the busiest airports in the country last month, air travellers took to social media to express their shock and anger at the flagrant infringement of their privacy at airports, largely through the Digi Yatra initiative being aggressively promoted by the Union government.

The app, which allows for digital processing of passengers, promoting paperless and seamless movement through airports, was rolled out as an entirely



**Privacy concerns:** Passengers say their biometric data is being collected without their knowledge or consent. SPECIAL ASSIGNMENT

voluntary programme in December 2022.

On Christmas Eve, Tavish Pattanayak, an aerospace engineering scholar in the U.S., was scheduled to fly with IndiGo out of Delhi. He skipped the queue dedicated for Digi Yatra users, who have downloaded and registered on the app, allowing them to enter the passenger building through electronic gates equipped with cameras that scan their boarding passes and faces.

However, Mr. Pattanayak soon realised that passengers in his line were also being requested to look into a camera, following which the CISF personnel would click a button on the screen to give consent on their behalf for a one-time sign-up for Digi Yatra.

"The security person checked my identity document and ticket and asked me to look at a screen to capture my photo. At the bottom of the screen, in tiny fonts, you are asked whether you want to enrol for Digi Yatra. It is impossible to read the text and the camera interface takes up the entire screen, but I had read the text when there was another family ahead of me, so I quickly proceeded to click no," Mr. Pattanayak told *The Hindu*.

However, many passengers in a rush to catch their flight were not aware of what was going on and did not ask any questions, he said.

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- This controversial practice, observed at various Indian airports, has raised concerns about privacy infringement and data security.
- **About Digi Yatra:**
  - The **Digi Yatra Foundation, a not-for-profit entity** with shareholders including the Airports Authority of India and private airports, aims to enhance operational efficiency and security.
  - By enabling passengers to **navigate checkpoints effortlessly**, the initiative seeks to reduce congestion, lower operational costs, and improve security standards.
  - Initially launched at **three airports in December 2022**, the Digi Yatra initiative has expanded to 11 airports, with plans for further expansion to 14 more in the coming months.
  - The **project receives funding from the airports** rather than the government.
- **Recent Controversy :**
  - Instances where airport staff collected facial biometrics **without explicit consent**.
  - The Central Industrial Security Force (**CISF**) **denies involvement**, leading to contradictory statements from airport officials.
  - Concerns about **data security and privacy violations** persist, especially in light of past large-scale data breaches in India.

### 3. Discovery of paleolithic quartzite tools

#### GS 1 (History)

- **Why in News:** The recent floods in the Mulugu district of Telangana has led to a fresh discovery of paleolithic quartzite tools.
- **What were the findings?**
  - The tools or hand axes were found in the sand bed of a stream that dried up after the flood. The stone axe measuring 15.5cm in length, 11cm in width and 5.5cm in thickness.
  - The hand axes were found in the stream between Gurrevula and Bhupatipuram villages in Mulugu district. The tools got exposed as the stream has dried up.
  - The new discovery pushes back the understanding about human habitations in Telangana and central India.
- **Dating of the tools and Palaeolithic Period**
  - The stone axe belongs to the Lower Paleolithic period and is about 30 lakh years ago. Paleolithic Age is also known as Old Stone Age or Early Stone Age. It dates back to about 33 lakh years BC. It lasted for 10,000 years.
  - Palaeolithic hunter gatherers used heavy quartzite and large tools. Similar hand axes as these have been discovered worldwide. The tools were used for cutting wood and killing animals for food.
  - In 1863, the East India Company's Geological Survey team found a paleolithic site at Attirampakkam near Madras (present-day Chennai) with bifacial hand-axes made of stone by early humans.
  - The tools were about 15 lakh years old. Paleolithic culture has been labelled as Madras Hand-Axe Industry or Madrasian Culture.
- **Palaeolithic Period**

#### Discovery of palaeolithic tools adds to understanding of human settlements

Serish Naniyeti  
HYDERABAD

The recent floods in the Mulugu district of Telangana has led to a fresh discovery of palaeolithic quartzite tools. "The tools or hand axes were found in the sand bed of a stream that dried up after the flood," said Sriramouli Haragopal, who led the team of amateur historians in the effort. The new discovery adds to understanding about human habitations in Telangana and central India.

Large parts of Mulugu, Jayashankar Bhupalpally districts in the north-eastern parts of Telangana



One of the palaeolithic tools discovered in Mulugu district in Telangana. SPECIAL ARRANGEMENT

Bhupatipuram villages in Mulugu district. The stone axe measuring 15.5cm in length, 11cm in width and 5.5cm in thickness was found by researcher Elessary waram "Janardanachari," informed Mr. Haragopal of Kotha Telangana Charitra Brundam.

According to paleontologist Ravi Korinettar, the stone axe belongs to the Lower Paleolithic period and is about 30 lakh years ago. Palaeolithic Age is also known as Old Stone Age or Early Stone Age. It dates back to about 33 lakh years BC. It lasted for 10,000 years. "We identified the tools based on chipping style,

the material and the size of tools. Palaeolithic hunter gatherers used heavy quartzite and large tools. Similar hand axes as these have been discovered worldwide. The tools were used for cutting wood and killing animals for food," informed Mr. Haragopal. In 1863, the East India Company's Geological Survey team found a palaeolithic site at Attirampakkam near Madras (present-day Chennai) with bifacial hand-axes made of stone by early humans. The tools are about 15 lakh years old. Palaeolithic culture has been labelled as Madras Hand-Axe Industry or Madrasian Culture.

- Also known as Old Stone Age. It has been divided into 3 parts: Lower palaeolithic, Middle and Upper Palaeolithic Age.
- In this period early humans were roaming and they lived a life of hunter and gatherers. It is called Stone Age due to chief tool which was used by human were made of stone.
- **Sites in India**
  - Bori in Maharashtra is considered the oldest one- dating 20 lakh years.
  - Bhimbetka Caves: Located in Madhya Pradesh, Bhimbetka is home to some of the earliest rock paintings, providing valuable insights into the life of Paleolithic humans.
  - Homo Erectus: Fossil evidence suggests the presence of Homo erectus in the Indian subcontinent. The Narmada Valley and the Soan Valley are significant sites associated with these early humans.
  - Tool Varieties: The tools used by Paleolithic humans were largely made of stone, but the sophistication increased over time. Handaxes, cleavers, scrapers, and blades were essential for their survival.
  - Hunting and Gathering: Paleolithic communities were predominantly engaged in hunting animals and gathering plant resources for sustenance.
  - The Paleolithic period laid the foundation for human evolution and adaptation, setting the stage for the subsequent cultural and technological developments in the Indian subcontinent.

#### 4. **Nurturing Innovation: National Deep Tech Startup Policy** **GS 2 (Governance)**

- **Why in News:** In pursuit of fostering innovation and technological advancement, the Principal Scientific Adviser to the Government the draft National Deep Tech Startup Policy (NDTSP) will be put for Cabinet Approval soon.
- **Background**
  - The term '**Deep Tech**' refers to advanced and sophisticated technologies that have a significant impact on various industries.
  - These technologies, including **AI, robotics, nanotechnology, quantum computing, biotechnology, and renewable energy solutions**, are characterized by their complexity, innovation-driven nature, and the need for interdisciplinary collaboration.
- **Need for National Deep Tech Startup Policy (NDTSP):**
  - The draft policy addresses the **challenges in funding** deep tech startups, highlighting that unlike startups in fintech or retail software, deep tech startups require significantly larger funding.
- **Global Advocacy and Trade Policy Alignment**
  - The NDTSP advocates a coordinated, comprehensive **strategy to engage with international partners and multilateral institutions** to foster a supportive global environment for India's deep tech ecosystem.
- **Current Landscape**
  - The draft policy addresses the **lack of a precise definition for 'deep tech'** by emphasizing its complexity and **reliance** on new scientific breakthroughs.

#### **'Deep tech' policy to be sent to Cabinet for approval, says scientific adviser**

**NEW DELHI**

The government will send a note on a new deep tech policy for India in the coming weeks to the Union Cabinet for approval, Ajay Kumar Sood, Principal Scientific Adviser, said at an event on Friday.

In July 2023, the government unveiled a draft of the policy for public comment. Following feedback from industry, a final version is reportedly ready. "Deep tech" is a buzzword in tech and start-up circles with no precise definition as yet.

The draft policy cites those that have developed intellectual property that provides an outside impact but are yet to be realised and premised on new scientific breakthroughs.

Mr. Sood however expressed disappointment at the number of such deep tech start-ups in India. "Currently about 10% of start-ups are deep tech. That is not a very good sign and it will take more effort and handholding," he said at the event meant to commemorate 40 years since the founding of the Department of Scientific and Industrial Research (DSIR). The latter is affiliated to the Council of Scientific and Industrial Research (CSIR) and was set up to link scientific and technological developments in the CSIR laboratories to industry.

The DSIR would in the coming days focus on transferring technology to medium and small scale industries, while the CSIR would target industry at large, and the National Research and Development Corporation, also a CSIR entity, would focus on start-ups, said N. Kalaiselvi, Director-General, CSIR. "In this way we can do justice to India's science and technology systems," she added.

- It **distinguishes deep tech startups from others** by focusing on those that have developed intellectual property promising substantial impact, based on novel scientific advancements.
- The policy refers to Startup India's database, revealing that out of 10,298 recognized startups, only around **10% fall under the 'deep tech' category**.
- This indicates the need for concerted efforts to **boost the presence and impact** of deep tech startups in India.
- **Objectives of NDTSP:**
  - The NDTSP aims to secure India's position in the global deep tech value chain. It focuses on areas such as semiconductors, Artificial Intelligence (AI), and space tech. Key objectives include:
    - **Focus on Fundamental and Technical Problems:** Prioritize support for deep tech startups addressing fundamental and technical challenges.
    - **Financing Support:** Address critical financing needs during the pre-market phase when deep tech startups introduce their products or ideas.
    - **Streamlined Intellectual Property Regime:** Simplify the intellectual property landscape to encourage innovation without undue complexities.
    - **Ease of Regulatory Compliance:** Propose measures to ease regulatory requirements, creating a conducive environment for growth.
    - **Commercialization Support:** Provide assistance and resources for the effective management and commercialization of technologies developed by deep tech startups.
- **Measures to Promote Deep Tech Startups:**
  - **Export Promotion Board:** Establish an Export Promotion Board to facilitate entry into foreign markets for Indian deep tech startups.
  - **Coordinated Oversight:** Create an "Inter-Ministerial Deep Tech Committee" to review and coordinate requirements effectively, streamlining the ecosystem.
  - **International Collaboration and Market Access:** Promote strategic international collaborations to enhance market access for Indian deep tech startups globally.
  - **Defense and Space Sector Focus:** Specifically target deep tech startups in defense and space sectors, aiming to enhance contributions to national security and space exploration.
- **Attracting Global Talent and Expertise:**
  - **Networking Opportunities:** Provide networking opportunities to international deep-tech startups and experts interested in contributing to India's local ecosystem.
  - **Resource-Intensive Approaches:** Emphasize resource-intensive measures to attract global talent, strengthening India's deep tech capabilities.
  - **Visa and Immigration Facilitation:** Propose simplifying visa and immigration processes to attract foreign experts and investors.

## **5. 'PRITHVI' Initiative: A Comprehensive Approach to Earth Sciences Research**

### **GS 2 (Governance)**

- **Why in News:** The Union Cabinet, has granted approval for the 'Prithvi Vigyan' initiative, an integrated framework that consolidates five ongoing sub-schemes related to earth sciences.

- **Aim:** This initiative, with a budget of **Rs 4,797 crore over a five-year period (2021-26)**, aims to streamline and enhance the research efforts of the Ministry of Earth Sciences (MoES).

- **Background**

- The MoES currently manages various sub-schemes, including
  - 'Atmosphere and Climate Research-Modelling Observing Systems and Services,'
  - 'Ocean Services, Modelling Application, Resources and Technology,'
  - 'Polar Science and Cryosphere Research,'
  - 'Seismology and Geosciences,' and
  - 'Research, Education, Training and Outreach.'
- The new 'PRITHVI' initiative will provide the **ministry with the flexibility to allocate funds** and pursue research projects seamlessly across these domains.

- **Need for 'PRITHVI':**

- **Integrated Earth System Sciences:**
  - The 'PRITHVI' initiative shifts the **focus from separate verticals such as atmosphere, cryosphere, geosphere, and ocean science to an integrated approach.**
  - This allows for **cross-disciplinary projects and the combined utilization** of funds allocated for different verticals, fostering a holistic understanding of earth system sciences.
- **Facilitating Ease of Research:**
  - The scheme aims to facilitate **ease of doing research** by providing a unified platform for integrated multi-disciplinary earth science research and innovative programs.
  - This streamlining is expected to **enhance collaboration and coordination** among different MoES institutes.

- **Objectives of 'PRITHVI':**

- The overarching 'PRITHVI' scheme aims to address grand challenges in various earth science domains:
  - **Augmentation and sustenance of long-term observations** of the atmosphere, ocean, geosphere, cryosphere, and solid earth to monitor vital signs and changes in the earth system.
  - Development of **modeling systems** for understanding and predicting weather, ocean, and climate hazards.
  - Exploration of **polar and high seas regions** to discover new phenomena and resources.
  - Development of technology for **exploration and sustainable harnessing of oceanic resources** for societal applications.
  - Translation of knowledge and insights from **earth systems science into services for societal, environmental, and economic benefit.**

- **Implementation and Collaboration:**

- The integrated research and development efforts under 'PRITHVI' will involve collaborative endeavors across different MoES institutes, including the **India Meteorological Department, National Centre for Medium Range Weather Forecasting, and others.**
- The ministry's **fleet of oceanographic and coastal research vessels** will provide essential support for research initiatives.
- By consolidating **sub-schemes and promoting cross-disciplinary projects**, it aims to address critical challenges, **contribute to scientific knowledge**, and **harness earth's resources sustainably.**

## Cabinet gives nod to 'Prithvi' programme for earth observation

The Hindu Bureau  
NEW DELHI

The Union Cabinet on Friday cleared a ₹4,797-crore programme called 'Prithvi' (Earth) that is expected to subsume five existing schemes of the Ministry of Earth Sciences (MoES). These programmes are to improve and increase long-term observations of the atmosphere, ocean, geosphere, cryosphere, and solid earth to track changes in the planet; develop models to understand and predict weather, ocean and climate hazards; and understand the science of climate change; explore polar and high-seas regions of the earth to discover new phenomena and resources; develop technology for exploration and sustainable harnessing of oceanic resources for societal applications; and translate knowledge and insights from earth system science into services for societal, environmental, and economic benefit.

"A major component of the Ministry is the Deep Ocean Mission or DOM (one of whose objectives is to send a manned submersible 6,000 metres into the Indian Ocean). The Prithvi programme broadly subsumes all of our other major activities," M. Ravichan-

dran, Secretary, MoES, told *The Hindu*. "The DOM was cleared by the Cabinet in 2021 at an outlay of ₹4,000 crore for five years. The research and development and operational (services) activities of the Ministry are carried out by its 10 institutes. They are the India Meteorological Department, the National Centre for Medium Range Weather Forecasting, the Centre for Machine Learning Research and Ecology, the National Centre for Coastal Research, the National Centre for Seismology, the National Institute of Ocean Technology, the Indian National Centre for Ocean Information Service, the National Centre for Polar and Ocean Research, the Indian Institute of Tropical Meteorology, and the National Centre for Earth Science Studies. A fleet of oceanographic and coastal research vessels provide required research support for the schemes."

**Satellite for Mauritius:** The Cabinet also approved an agreement between the Indian Space Research Organisation and the Mauritius Research and Innovation Council to jointly develop a "small satellite". It is expected to cost ₹20 crore and be ready in 15 months.

## 6. Fuel Cell

### GS 3 (Science and Tech)

- **Why in News:** ISRO recently said it has successfully tested a futuristic fuel cell-based power system.
- **About Fuel Cell:**
  - A fuel cell is a device that **generates electricity by a chemical reaction**.<sup>4</sup>
  - Fuel cells can be used in a **wide range of applications**, providing **power for applications** across multiple sectors, including transportation, industrial/commercial/residential buildings, and **long-term energy storage for the grid** in reversible systems.
  - **Working:**
    - A fuel cell **consists of two electrodes**—a negative electrode (or **anode**) and a positive electrode (or **cathode**).
    - Both electrodes must be immersed in and **separated by an electrolyte**, which may be a liquid or a solid but must, in either case, **conduct ions between the electrodes** in order to complete the chemistry of the system.
    - **A fuel, such as hydrogen, is supplied to the anode, where it is oxidised, producing hydrogen ions and electrons.**
    - **An oxidizer, such as oxygen, is supplied to the cathode, where the hydrogen ions from the anode absorb electrons from the latter and react with the oxygen to produce water.**
    - The **difference between the respective energy levels at the electrodes** (electromotive force) **is the voltage per unit cell.**
    - The **amount of electric current** available to the external circuit **depends on the chemical activity and amount of the substances supplied as fuel.**
    - **A single fuel cell generates a tiny amount of direct-current (DC) electricity.** In practice, **many fuel cells are usually assembled into a stack.**
  - **Advantages of Fuel Cells:**
    - Fuel cells have **lower or zero emissions** compared to combustion engines. Hydrogen fuel cells **emit only water**, addressing critical climate challenges as there are **no carbon dioxide emissions**.
    - There are also **no air pollutants** that create smog and cause health problems during the operation of a fuel cell.
    - They are **quiet during operation** as they have few moving parts.
    - They can **operate at higher efficiencies** than combustion engines.
    - A fuel cell resembles a battery in many respects, but it can **supply electrical energy over a much longer period of time.**
      - This is **because a fuel cell is continuously supplied with fuel and air** (or oxygen) from an external source, whereas a battery contains only a limited amount of fuel material and oxidant that are depleted with use.

### ISRO tests fuel cell-based power system in space

**The Hindu Bureau**  
BENGALURU

The Indian Space Research Organisation (ISRO) has successfully tested a 100 W-class Polymer Electrolyte Membrane Fuel Cell-based Power System (FCPS) in its orbital platform, POEM3, which was launched on board PSLV-C58 on January 1.

The FCPS payload is significant as it has potential applications in India's space station which is proposed to come up by 2035.

"During the short-duration test, 180 W power was generated from hydrogen and oxygen gases stored in high-pressure vessels. It provided a wealth of data on the performance of various static and dynamic systems that formed part of the power system and the physics at play," it said.

8<sup>th</sup> Jan, 2024

## 1. Child Marriage in India

### GS 2 (Social Issues)

#### • Why in News:

- One in five girls and one in six boys are still getting married below the legal age of marriage in India.
- This has been highlighted by a new study published in the Lancet Global Health on December 15th, 2023.

#### • Child Marriages in India:

- In India, **child marriage reduced from 47.4% in 2005-06 to 26.8% in 2015-16.**
- In the last five years, it declined by 3.5% points to reach 23.3% in 2020-21, according to the latest National Family Health Survey-5 data.
- There is a growing trend for decline in the overall prevalence of child marriage, but 23.3% is still a disturbingly high percentage in a country with a population of 141.2 crore.
- Eight States have a higher prevalence of child marriage than the national average:
  - West Bengal, Bihar and Tripura** top the list with more than 40% of women aged 20-24 years married below 18, according to NFHS data.
- Some States have shown a reduction in child marriages, like **Madhya Pradesh** (23.1% in 2020-21 from 32.4% in 2015-16), **Rajasthan** (25.4% from 35.4%) and **Haryana**.

#### • Global Scenario:

- According to data from UNICEF, the **total number of girls married in childhood stands at 12 million per year.**
- The 2030 UN Sustainable Development Goals aim to eliminate all harmful practices, such as child, early and forced marriage and female genital mutilations, under goal 5.
- While it is encouraging that in the past decade great progress has been made in South Asia, where a girl's risk of marrying before she is 18 has dropped by more than a third, from nearly 50% to below 30%, it is not enough, and progress has been uneven.

#### • Impact of Child Marriage:

- While child marriage is considered a human rights violation and a recognised form of sexual and gender-based violence, the **adverse impact of child marriage is manifested across maternal and child health.**
- Recently, 10 infants died at Murshidabad Medical College and Hospital in a span of 24 hours.
  - The hospital authorities said the majority of the children were born with extremely low birth weight.
- Murshidabad, one of the economically poorer districts of the State, has one of the highest numbers of child marriages in West Bengal.
- The NFHS - 5 points out that 55.4% of women aged 20-24 years are married before the age of 18 years in the district.
- The district saw a rise from NFHS-4 numbers, which stood at 53.5 %.

#### • Legal Intervention in India:

- There are several laws including the **Prohibition of Child Marriage Act, 2006** and the **Protection of Children from Sexual Offences Act, 2012**, which aim at protecting children from violation of human and other rights.
- The **Prohibition of Child Marriage (Amendment) Bill, 2021** seeks to **increase the marriage age of women from existing 18 years to 21 years.**

#### • Why Minimum Age of Marriage for Females should be Increased?

- Lack of access to education and employment:**
  - Women face inequalities when it comes to access to education and employment as a consequence of their early marriages.
  - It is often the case that women are denied access to education and an economic means of livelihood after entering into the institution of marriage at an early age.

### Rise in child marriages in West Bengal

Why are girls getting married early despite receiving an education? Have the cracks in the system for girls made any headway? What is the feedback from the districts? Is it a social problem or a problem of law? What is the link between child marriage and poor maternal health?



- Increasing the minimum age for marriage will lead to more women pursuing higher education and opt for employment.
- **Impact of early marriage on health of women and children:**
  - An early age of marriage and consequent early pregnancies have a substantial impact on the nutritional levels of mothers and their children, along with their overall health and mental wellbeing.
  - Underage mothers are at a higher risk of reproductive health challenges, malnutrition, postpartum haemorrhage, and a susceptibility to sexually transmitted diseases.
- **Schemes/ Policies for Preventing Girl Child Marriage:**
  - **Sukanya Samriddhi Yojana (SSY):**
    - Sukanya Samriddhi Yojana (SSY), was launched in 2015, in order to promote the welfare of girl child.
    - It encourages parents **to invest and build funds for the future studies and marriage expenses of the girl's children.**
  - **Balika Samriddhi Yojana:**
    - Balika Samriddhi Yojana is another central government scheme to support girls in financially vulnerable sections of society.
    - This scheme ensures the enrolment and retention of girl child in primary and secondary schools.
    - It aims at the **prosperity of a girl's child and provides them with a better quality education.**
  - **Beti Bachao Beti Padhao:**
    - Among all the other girl's child welfare schemes, Beti Bachao Beti Padhao is the most popular.
    - This scheme celebrates girl children, literally translating to Save the Girl Child, Educate the Girl child. It believes in women empowerment and creating an inclusive ecosystem for the same.
    - This scheme is **to promote girl children's safety before and after they are born.**
- **News Summary:**
  - One in five girls and one in six boys are still getting married below the legal age of marriage in India, as per a new study published in the Lancet Global Health.
    - The researchers used data from five National Family Health Surveys from 1993, 1999, 2006, 2016, and 2021 to compile the study.
- **Key highlights of the report**
  - There remains an urgent need for strengthened national and state-level policy to **eliminate child marriage by 2030**, say the researchers.
  - Researchers have noted that substantial variation exists in the prevalence of girl and boy child marriages across the states and Union Territories during the study period.
  - All states, except Manipur, experienced a decline in the prevalence of girl child marriage between 1993 and 2021.
  - According to researchers in 2021, the headcount of child marriage in girls was 13,464,450 and 14,54,894 in boys.
  - Four states – Bihar (16.7%), West Bengal (15.2%), Uttar Pradesh (12.5%), and Maharashtra (8.2%) – accounted for more than half of the total burden of child marriages in girls.
    - For boys, Gujarat (29%), Bihar (16.5%), West Bengal (12.9%), and Uttar Pradesh (8.2%) accounted for more than 60 per cent of the burden.
  - **Jharkhand** had the **largest percentage increase in headcount (53.1%) between 1993 and 2021.**
  - Most states and Union Territories saw a decrease in headcount of child marriage in girls between 1993 and 2021.
  - **Uttar Pradesh** had the most substantial absolute decrease, which accounted for an estimated one-third of the all-India decrease in headcount of child marriage in girls observed between 1993 and 2021.
  - **West Bengal** saw the **largest absolute increase with over 500000 more girls married as children.**

## 2. Maldives govt suspends three ministers

### GS 2 (International Relations)

- **Why in News:** The Maldives government suspended three deputy ministers after they took to social media to make derogatory remarks against PM Modi.
- **Background:**
  - **Social media war**
    - It all started with a series of posts on X from Indian Prime Minister, promoting tourism in Lakshadweep islands.
    - Soon after PM Modi's post, some prominent Maldivian social media users responded to it with offensive, racist, xenophobic and derogatory comments.
      - These comments were targeted at Indians at large, as well as the Indian PM.
    - Among them were the three Maldivian Ministers
  - **Accusation against India by the social media users of Maldives**
    - Some Maldivian social media users began levelling accusations against India of attempting to compete with their country as a choice for a tropical vacation for travellers.
    - These posts also instigated other social media users into posting a wide range of racist remarks against Indians and Indian tourists who travel to the Maldives.
- **Lakshadweep**
  - **About**
    - India's smallest Union Territory Lakshadweep is an archipelago consisting of 36 islands with an area of 32 sq km.
    - It is a **uni-district UT** and is comprised of **12 atolls, three reefs, five submerged banks and ten inhabited islands.**
    - The capital is Kavaratti and it is also the principal town of the UT.
  - **Geographical location**
    - It is located between 8° – 12° 13" North latitude and 71° – 74° East longitude, 220 to 440 Kms. away from the coastal city of Kochi in Kerala.
      - The maritime boundary between the **Maldives and Minicoy (India)** runs through the **Eight Degree Channel.**
      - **Nine Degree Channel** separates the island of Minicoy from the main Lakshadweep archipelago.
  - **Coral Atolls**
    - The islands are predominantly coral atolls, formed by coral reefs that surround a lagoon.
  - **Demography**
    - According to the 2011 Census, Lakshadweep has a population of 64429 persons.
    - More than 93% of the population who are indigenous, are Muslims and majority of them belong to the Shafi School of the Sunni Sect.
    - **Malayalam** is spoken in all the islands **except Minicoy** where people speak Mahl which is written in Divehi script and is spoken in Maldives also.
    - **The entire indigenous population has been classified as Scheduled Tribes.**
      - There are no Scheduled Castes in this Union Territory.
  - **Climate**
    - The climate of Lakshadweep is **tropical**, with a warm and humid climate throughout the year.
- **Significance of Lakshadweep for India**
  - **Strategic Location**
    - Its proximity to major international shipping routes enhances India's strategic maritime influence.

#### OFFENSIVE REMARKS AFTER PM's LAKSHADWEEP PHOTOS

### Maldives suspends 3 ministers after row over their remarks against Modi

Muizzu govt faces backlash at home; Solih, Nasheed flag age-old India ties

DIVYAA  
NEW DELHI, JANUARY 7

UNDER FIRE and grappling with a situation fast turning into a diplomatic row, the Maldives government of President Mohamed Muizzu, whose party rode to power last year on an 'India Out' poll campaign, suspended three ministers Sunday for making derogatory remarks about Prime Minister Narendra Modi and the people of India.



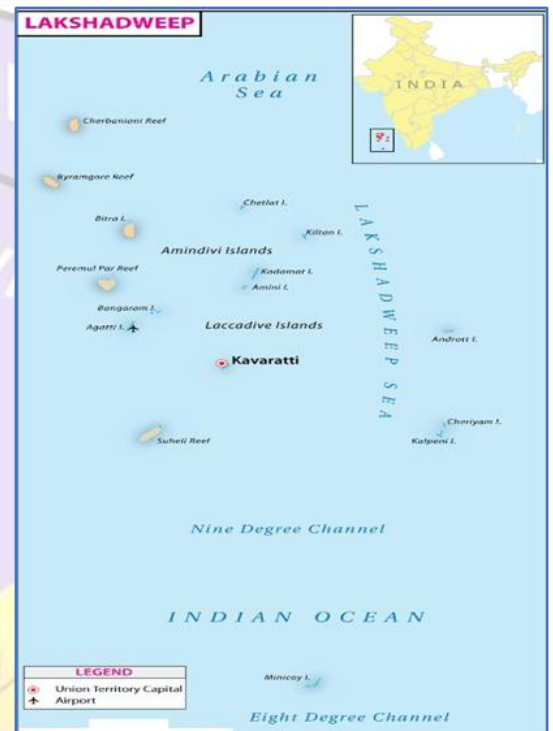
President Muizzu's govt distanced itself from the ministers' remarks, it said.

Ministers Mariyam Shiina, Malsha Shareef and Mahzoom

Muizzu were suspended with immediate effect, hours after the Maldives government distanced itself from the remarks made by the ministers and MPs who joined a social media spat over Lakshadweep vs Maldives in the wake of Prime Minister Modi's photographs from Lakshadweep. On Sunday, the Indian High Commission in Male, sources said, raised the matter with the Foreign Office there and expressed concern over comments about the Prime Minister by certain ministers of the Maldives government. President Muizzu was leaving for China Sunday on

CONTINUED ON PAGE 2

**Choppy waters**  
THIS ROW comes at a time when all eyes are on what Muizzu does next. Unlike his predecessors, India has not been his first stop after entering office — he has been to Turkey, UAE, and now China. He has asked India to withdraw its military from Maldives, and decided not to renew a pact for a survey of Maldivian waters.



- Nine Degree Channel is the important passage for shipping between Middle East, Europe and Western Asia with Southeast Asia.
- **Exclusive Economic Zone (EEZ)**
  - The islands contribute to India's EEZ, granting the country rights over the exploration and use of marine resources in the surrounding waters.
    - Due to Maldives, India gets access to 20000 square kilometres of sea.
  - This includes fisheries, oil and gas exploration, and other economic activities.
- **Maritime Security**
  - The Indian Navy and Coast Guard use the islands as a base.
- **Economic significance**
  - The picturesque beauty of Lakshadweep makes it a significant tourist destination.
  - The islands contribute to India's overall fishery resources.
- **Biodiversity and Marine Life**
  - The coral atolls and surrounding waters of Lakshadweep are home to diverse marine life, including coral reefs and various fish species.
- **Dependency of Maldives on tourism**
  - The **Maldives is heavily dependent on tourism and the industry accounts for over 28 percent of its GDP.**
  - According to official figures by the Maldives' government, Indian tourists have consistently remained among the top ten nationalities who travel to the island every year.
  - **In 2023 alone, among the tourists who travelled to the Maldives, Indians formed the largest group of tourists with over 200,000 travellers.**
    - This was followed by tourists from Russia and China.
- **Anti-India sentiments among a section of the Maldives' population**
  - Sometime in 2020, the **India Out campaign** started as on-ground protests in the Maldives which later spread widely across social media platforms.
  - By the second half of 2021, it had developed into an active and visible political campaign.
  - The supporters of the campaign had claimed that it had been started to protest against what they called Indian military presence in the country.
    - They had actively targeted all aspects of India-Maldives bilateral relations.
  - In December 2023, on the sidelines of the COP28 climate summit, the President Muizzu said that India's government has agreed to withdraw its soldiers from the Maldives
    - These soldiers were in the country to **operate and manage two helicopters and a Dornier aircraft given to the Maldives by India.**

### 3. Justice Gavai nominated as SC Legal Services Committee Chairman

#### GS 2 (Judiciary)

- **Why in News:** Supreme Court Justice BR Gavai has been nominated as the Chairman of the Supreme Court Legal Services Committee (SCLSC).
- **Need for legal services**
  - **Constitutional provision**
    - Article 39A says that the government must make sure that the legal system promotes justice for everyone, giving equal opportunities.
    - It emphasizes providing free legal help through laws, plans, or any other means so that all citizens can access justice, regardless of economic or other challenges.
  - **State must ensure equality before the law and a legal system**
    - Articles 14 and 22(1) also make it obligatory for the State to ensure equality before the law and a legal system that promotes justice based on equal opportunity.
      - Article 14 – Right to equality

**SUPREME COURT LEGAL SERVICES COMMITTEE**  
A mechanism to provide free and competent legal services to weaker sections of society

**KHADILJA KHAN**  
NEW DELHI, JANUARY 7

JUSTICE B R GAVAI has been nominated Chairman of the Supreme Court Legal Services Committee (SCLSC), replacing the top court's senior most puisne judge, Justice Sanjay Khanna.

The Department of Justice announced Justice Gavai's nomination in exercise of powers conferred by Section 3A of the Legal Services Authorities Act, 1987 read with Rule 10 of the National Legal Services Authority (NALSA) Rules, 1995. The former provision allows a central authority to constitute the SCLSC; the latter deals with the number, experience, and qualifications of members of the SCLSC.

**What is the SCLSC?**  
The Supreme Court Legal Services Committee was constituted to provide free and competent legal services to the weaker sections of society in cases falling under the jurisdiction of the top court. The committee comprises a sitting SC judge, who is the chairman, and other members with experience and qualifications prescribed by the Centre.

Under the Act, the chairman and other members will be nominated by the Chief Justice of India (CJI), who shall also appoint the Secretary to the committee, having the prescribed experience and qualifications.

Rule 10 of the NALSA Rules lays down the number, experience, and qualification of SCLSC members. Under Section 27 of the 1987 Act, the Centre is empowered to make Rules in consultation with the CJI, to carry out the provisions of the Act.

**Members of SCLSC**  
Under Rule 10 of the NALSA Rules, the SCLSC shall consist of not more than nine members, including ex-officio members such as the Attorney General for India; Joint Secretary, Department of Justice; Ministry of Law and Justice; Additional Secretary, Department of Expenditure; Ministry of Finance; or his nominee; and the Registrar General of the SC.

Under the provision, the Centre can nominate, in consultation with the CJI, other members from among those having the requisite qualifications and experience. However, only an eminent person in the field of law, a person of repute especially interested in implementing the Legal Services Schemes, or an eminent social worker engaged in the uplift of weaker sections can qualify.

**Why SCLSC is needed**  
Besides the SLSC, several other bodies too carry out the task of dispensing free legal services to people across the country at different levels.

Article 30A of the Constitution states, "The State shall secure that the operation of the legal system promotes justice, on a basis of equal opportunity, and shall, in particular, provide free legal aid, by suitable legislation or schemes or in any other way, to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities."

Articles 14 and 22(1) make it obligatory for the state to ensure equality before the law, and a legal system that promotes justice based on equal opportunity. Although the idea of a legal aid programme had been floated since the 1950s, it was finally in 1980 that a committee at the national level was established under the chairmanship of then SC Judge, Justice P N Bhagwati. The committee was called the Committee for Implementing Legal Aid Schemes, and started monitoring legal-aid activities throughout India.

**Dispensing of services**  
The Legal Services Authorities Act, 1987, came into force on November 9, 1995, to establish a nationwide uniform network for providing free and competent legal services to the weaker sections.

It also aimed to organise Lok Adalats and constitute legal services authorities. On December 5, 1995, the NALSA was constituted under the 1987 Act to monitor and evaluate the implementation of legal-aid programmes and to lay down policies and principles for making legal services available under the Act.

Subsequently, in every state, State Legal Services Authorities were established to implement NALSA's policies and directions.

- Article 22 (1) - Rights to be informed of grounds for arrest.
- **Supreme Court Legal Services Committee (SCLSC)**
  - **Background**
    - The idea of a legal aid programme was earlier floated in the 1950s.
    - However, it was in 1980 that a committee at the national level was established under the **chairmanship of then SC judge Justice PN Bhagwati**.
    - The Committee for Implementing Legal Aid Schemes started monitoring legal aid activities throughout India.
  - **Legal backing**
    - The Supreme Court Legal Services Committee was constituted under Section 3A of the Legal Services Authorities Act, 1987.
  - **Aim**
    - To provide free and competent legal services to the weaker sections of society in cases falling under the top court's jurisdiction.
  - **Composition**
    - Section 3A of the Act states that the Central Authority (the **National Legal Services Authority or NALSA**) shall constitute the committee.
    - The committee consists of a sitting SC judge, who is the chairman, along with other members possessing the experience and qualifications prescribed by the Centre.
    - Both the chairman and other members will be nominated by the CJI. Further, the CJI can appoint the Secretary to the Committee.
    - The Committee, in turn, can appoint officers and other employees as prescribed by the Centre, in consultation with the CJI.
  - **Role of centre**
    - Under Section 27 of the 1987 Act, the Centre is empowered to make rules in consultation with CJI, by notification, to carry out the provisions of the Act.
- **Legal Services Authorities Act**
  - **Aim**
    - In 1987, the Legal Services Authorities Act was enacted to give a **statutory base** to legal aid programmes.
    - It aims to provide free and competent legal services to eligible groups, including **women, children, SC/ST and EWS categories, industrial workers, disabled persons, and others**.
  - **Constitution of NALSA in 1995**
    - Under the Act, NALSA was constituted to monitor and evaluate the implementation of legal aid programmes and to lay down policies for making legal services available.
    - A nationwide network has been envisaged under the Act for **providing legal aid and assistance**.
    - It also **disburses funds and grants to State Legal Services Authorities and NGOs for implementing legal aid schemes and programmes**.
    - The CJI is the patron-in-chief of NALSA.
  - **Constitution of State Legal Services Authorities (SLSA)**
    - In every state, State Legal Services Authorities (SLSA) were established to:
      - implement NALSA's policies and directions;
      - give free legal services to people, and conduct Lok Adalats.
    - An SLSA is headed by the Chief Justice of the respective High Court and includes the senior HC judge as its Executive Chairman.
      - **The HC Chief Justice is the patron-in-chief of the SLSA.**
    - **District Legal Services Authorities (DLSAs)**
      - DLSA has been constituted to implement Legal Services Programmes in the District. It is situated in the District Courts Complex and chaired by the District Judge of the respective district.
    - **Taluka or Sub-Divisional Legal Services Committees**
      - The Taluka or Sub-Divisional Legal Services Committees are headed by a senior civil judge.
  - Collectively, these bodies organise legal awareness camps, provide free legal services, and supply and obtain certified order copies and other legal documents, among other functions.

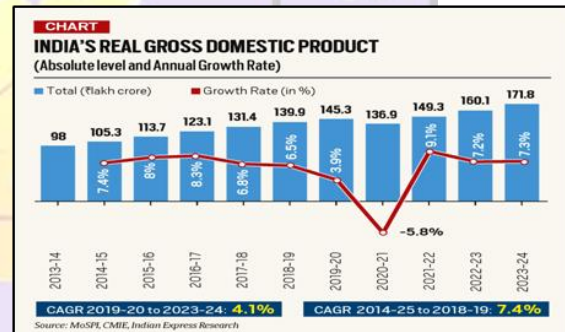
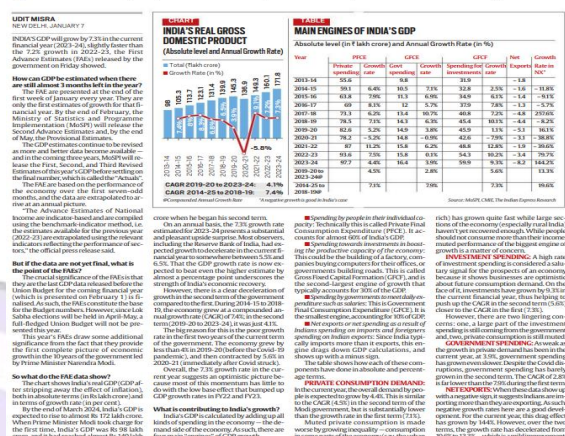
## 4. First Advance Estimates of India's GDP

### GS 3 (Economy)

- **Why in News:** According to the First Advance Estimates (FAEs) released by the Government of India, India's GDP will grow by 7.3% in the current financial year (2023-24), slightly faster than the 7.2% growth in 2022-23.
- **What is the Gross Domestic Product (GDP) Estimates?**
  - The FAE is **presented at the end of the first week of January** every year and are only the first estimates of growth for that financial year.
  - By the end of February, the Ministry of Statistics and Programme Implementation (MoSPI) will release the **Second Advance Estimates** and, by the end of May, the **Provisional Estimates**.
  - **The GDP estimates continue to be revised** as more and better data become available and in the coming 3 years, MoSPI will release the 1st, 2nd and 3rd Revised Estimates of this year's GDP before settling on the "Actuals"/ final number.
- **What are the FAEs and their Significance?**
  - The FAE are based on the **performance of the economy over the first 7-odd months**, and the data are **extrapolated** to arrive at an annual picture.
    - This means that the estimates available for the previous year (2022-23) are extrapolated using the relevant indicators reflecting the performance of sectors.
  - **The crucial significance of the FAEs** is that they are the last GDP data released before the Union Budget for the coming financial year (which is presented on February 1) is finalised.
    - As such, the FAEs constitute the base for the Budget numbers.
    - However, since Lok Sabha elections will be held in April-May (2024), a full-fledged Union Budget will not be presented this year.
  - **This year's FAEs draw some additional significance** from the fact that they provide the first complete picture of economic growth in the 10 years of the present government.
- **What does the FAE Data Show?**
  - **The chart shows India's real GDP** (GDP after excluding the effect of inflation), both in absolute terms (in Rs lakh crore) and in terms of growth rate.
  - By the end of March 2024, India's GDP is expected to rise to almost **Rs 172 lakh crore** as compared to Rs 98 lakh crore in 2014 and Rs 140 lakh crore in 2019.
  - On an annual basis, **the 7.3% growth rate** estimated for 2023-24 presents a substantial and pleasant upside surprise.
    - During 2014-15 to 2018-19, the Indian economy grew at a compounded annual growth rate (CAGR) of 7.4%; and during 2019-20 to 2023-24, it was just 4.1%.
    - The big reason for this is that the economy grew by less than 4% in 2019-20 (before the Covid-19 pandemic), and then **contracted by 5.6% in 2020-21** (immediately after Covid struck).
- **How India's GDP Growth is Calculated?**
  - India's GDP is calculated by adding up all kinds of spending in the economy - **the demand side of the economy**.
  - As such, there are four main "engines" of GDP growth.
    - **Spending by people in their individual capacity/** Private Final Consumption Expenditure (PFCE). It accounts for almost 60% of India's GDP.

## What the GDP data show

The First Advance Estimates are the last GDP data released before the Union Budget is presented. They also provide the first complete picture of economic growth in the 10 years of the Narendra Modi government



- **Spending towards investments in boosting the productive capacity of the economy/** Gross Fixed Capital Formation (**GFCF**). It accounts for 30% of the GDP.
- **Spending by governments to meet daily expenditures such as salaries/** Government Final Consumption Expenditure (**GFCE**). It is the smallest engine, accounting for around 10% of GDP.
- **Net exports:** Since India typically imports more than it exports, this engine drags down GDP calculations, and shows up with a minus sign.
- **What is Contributing/Dragging India's Current GDP Growth?**
  - **PFCE:** In the current year, the overall demand by people is **expected to grow by 4.4%**. This is similar to the CAGR (4.5%) in the 2nd term of the present government but is substantially lower than the growth rate in the 1st term (7.1%).
    - **Muted private consumption is made worse by growing inequality** (consumption among the urban rich has grown quite fast while rural India hasn't yet recovered enough)
    - While people should not consume more than their income, the muted performance of the biggest engine of growth is **a matter of concern**.
  - **GFCF:** Investments have grown by 9.3% in the current financial year, thus helping to push up the CAGR in the second term (5.6%) closer to the CAGR in the first (7.3%).
    - However, **there are two lingering concerns:** one, a large part of the investment spending is still coming from the government and, two, private consumption is still muted.
  - **GFCE:** As weak as the growth in private demand has been in the current year, at 3.9%, government spending has grown even slower.
  - **Net exports:** When data for any particular year shows up with a negative sign, it suggests Indians are importing more than they are exporting.
    - With global growth remaining weak, the external sector remains a major drag on India's growth, with net exports **contributing negatively to real GDP growth** (at -3 percentage points).

## 5. Trichoderma

### GS 3 (Science and Tech)

- **Why in News:** The Indian Institute of Spices Research (IISR) Kozhikode has successfully developed a new granular lime-based Trichoderma formulation.
- **About Trichoderma:**
  - The **formulation named 'Tricholime'**, integrates **Trichoderma and lime** into a single product, making the application easier for farmers.
  - Trichoderma is a **fungal biocontrol agent**, has proven **effective in suppressing several soil-borne plant pathogens** and serves as a successful **bio-pesticide** and **bio-fertilizer** in crop production.
  - Recognizing the importance of Trichoderma and the challenges posed by traditional lime applications, the scientists at IISR developed 'Tricholime' to integrate lime and Trichoderma.
- **Significance of Tricholime**
  - It can successfully eliminate the need for a time-consuming two-step process.
  - This lime-based formulation **neutralises the soil acidity** while promoting plant growth and shields crops from soil-borne pathogens, all in a single application.
  - This formulation also benefits the crop by **improving the physical condition of the soil**, enhancing secondary nutrient availability and by boosting soil microbial activity, he added.
  - IISR hopes that the technology behind this product can also be extended to include other beneficial bio-agents, opening new possibilities in product development to support sustainable organic farming.

## 6. Sponge farming

### GS 3 (Agriculture)

- **Why in News:** Warming oceans forced women in Zanzibar to switch from seaweed to climate-resilient sponge farming to stay afloat.

- **About Sponge farming:**

- Sponge farming is a relatively new business opportunity that does not harm the marine environment.
- A sponge is a **living animal** which is made of loosely arranged cells that surround a skeleton of fibres.
- The specialised cells nestled within thousands of tiny chambers act as microscopic pumps, and tirelessly drawing water into the sponge's body with their whip-like tails.
- Sponges **provide homes for many other animals**, plants, and microorganisms. In many cases, they all work together in a mutual **symbiotic relationship**.
- Sea sponges exist in all oceans around the world and make up 20% of the global silicon biological sink.
- This unique pumping mechanism, which helps sponges extract nutrition and oxygen, also purifies the ocean water by removing impurities, including sewage.
- **Uniqueness:** Sponges, unlike seaweed, possess remarkable **resilience to climate change**, **require minimal maintenance**, and command premium market prices.
- **Reproduction:** Most sponges are **hermaphrodites**, harbouring both male and female reproductive organs, enabling them to self-propagate effortlessly.
- New sponges emerge from small buds that detach from the parent sponge and begin independent growth. Even damaged or fragmented sponges can regenerate into new individuals.
- This remarkable regenerative ability underpins the ease and feasibility of commercial sponge farming.
- **Uses:**
  - These sponges are **used for bathing and general hygiene** because they are naturally antibacterial and antifungal and can resist odours.
  - Research has also shown that the spongy creatures play an important role themselves in **combating climate change**.
  - Their skeletons break down into microscopic pieces of silicon, which helps control the carbon cycle in the ocean and reduces the greenhouse effect.
  - Dissolved silicon is critical for the growth of diatoms, tiny organisms which absorb large amounts of CO<sub>2</sub> in the ocean using photosynthesis.

## 7. Hog deer

### GS 3 (Environment)

- **Why in News:** In a significant discovery, the hog deer has been spotted for the first time at the Rajaji Tiger Reserve.
- **About Hog deer:**
  - It is a **solitary creature** but sometimes spotted feeding in small groups in open fields when food there is plentiful.
  - For the most part it is sedentary and does not migrate.
  - Males tend to be territorial and mark their territory with **glandular secretions**.
  - This species exhibits sexual dimorphism. The females are slightly smaller than males and lack antlers.
  - **Distribution**
    - It has a native geographic range **throughout India**, including the Himalayan foothills and Southeast Asia.
    - Humans have introduced free-ranging populations of this deer in Sri Lanka, Australia and the United States, including Texas, Florida, and Hawaii.
  - **Habitat:**
    - It appears to **prefer dense forests**; however, they are often observed in clearings, grasslands and occasionally wet grasslands.
    - This variation is usually associated with time of year and food distribution.
  - **Conservation status**
    - **IUCN: Endangered**
    - **Wildlife Protection Act 1972: Scheduled I**
- **Key facts about the Rajaji Tiger Reserve**
  - It is spread over three districts of **Uttarakhand**: Haridwar, Dehradun and Pauri Garhwal.
  - It is situated along the hills and foothills of the **Shiwalik ranges**.

- In the year 1983, Rajaji Wildlife Sanctuary was merged with Motichur and Chilla wildlife sanctuaries and made into Rajaji National Park.
- It was named after the famous freedom fighter **Rajgopalachari** popularly known as "Rajaji"
- It's location in a **transition zone** between **temperate western Himalaya and central Himalaya** enhances the species diversity.
- **Vegetation:** The area is covered with diverse forest types ranging from semi-evergreen to deciduous and from mixed broad-leaved to Terai grassland and has been classified as Indus-Ganges Monsoon Forest type.
- **Flora:** Rohini, Palash, Shisham, Sal, Sandan, Khair, Arjun, Baans, Semul, Chamaror etc.
- **Fauna:** Tiger and Asian Elephants. Leopard, Jungle cat and Himalayan Black Bear etc.



10<sup>th</sup> Jan, 2024**1. Majority of cities far from clean air target****GS 3 (Environment)**

- **Why in News:** In 49 cities whose particulate matter numbers were consistently available for five years, 27 cities showed a decline in PM 2.5, while only four had met or exceeded the targeted decline, according to the analysis
- **Assessment of India's National Clean Air Programme Reveals Mixed Progress**
  - **Overview of National Clean Air Programme (NCAP)** An analysis by Respirer Living Sciences and Climate Trends sheds light on the progress of India's ambitious National Clean Air Programme (NCAP) aiming to reduce particulate matter concentrations by 40% by 2026
  - **Varied Performance Across Cities** Among 49 cities with consistent PM 2.5 data for five years, only four have met or exceeded the targeted decline. Cities like Delhi, Navi Mumbai, and Mumbai report marginal declines or even increases in pollution levels, posing challenges to NCAP's objectives.
- **Data and Information:**
  - **NCAP Goals and Shift in Deadlines:**
    - NCAP initially aimed for a 20-40% reduction in pollution by 2024 but later extended the deadline to 2026.
    - The program targets a 40% reduction in average particulate matter concentrations in 131 cities compared to 2017 levels.
  - **City-wise Progress and Challenges:**
    - Delhi, despite efforts, observes a mere 5.9% decline in annual PM 2.5 levels.
    - Navi Mumbai records a concerning 46% rise, while Mumbai and Ujjain report 38.1% and 46% increases, respectively.
    - Some cities in Uttar Pradesh, including Varanasi, Jodhpur, and Kanpur, show more than a 40% reduction in PM 2.5 levels.
  - **Impact of Monitoring Stations:**
    - The availability and spread of continuous ambient air quality monitors significantly influence reported pollution levels.
    - Cities like Mumbai and Delhi, with numerous monitoring stations, provide a more comprehensive picture compared to those with fewer than five stations.
  - **Geographical Influences and Meteorological Factors:**
    - Variations in PM 2.5 and PM 10 levels are attributed to geographical locations, diverse emission sources, and meteorological influences.
    - Cities in the Indo-Gangetic Plain (IGP) continue to dominate the list of top 20 cities with the highest PM 2.5 levels.
  - **Unclear Impact of Actions:**
    - While reductions in PM 2.5 and PM 10 levels are noted in some highly polluted cities, the actual translation of cities' actions into improved air quality remains unclear.

**'Most Indian cities are far from clean air target'**Jacob Koshy  
NEW DELHI

The Centre's ambitious attempt to improve air quality in some of India's most polluted cities suggests that a majority of Indian cities are far from making significant progress. In 49 cities whose particulate matter numbers were consistently available for five years, 27 showed a decline in PM 2.5 – considered the most dangerous grade of pollutant – while only four had met or exceeded the targeted decline, according to an analysis by Respirer Living Sciences and Climate Trends, released early on Wednesday.

The stated goal of the ₹9,631-crore National Clean Air Programme (NCAP) is to reduce average particulate matter concentrations 40% by 2026 (compared to 2017) in 131 cities. When the programme was initiated, the aim was to cut pollution 20-

**Lagging behind**

The table shows PM 2.5 levels (annual average) in India's most polluted cities from 2019 to 2023. It remained higher than the acceptable level of 40 micrograms per cubic metre in all the years

Rank in 2023	City	2019	2020	2021	2022	2023	AP
1	Delhi	108.4	95.3	107.6	95.5	102	
2	Patna	119.6	72.5	76.5	91.3	89.5	
3	Faridabad	94.5	87.6	95.6	95.3	87.9	
4	Muzaffarpur	108.1	67.4	122.6	85.7	83.6	
5	Noida	113.8	97.9	100.8	79.3	83.6	

40% by 2024 in this cities but this goalpost was later shifted to 2026.

While the deadline is still three years away, some of India's biggest cities are reporting marginal declines or even increasing pollution loads. Delhi, for instance, has seen average, annual PM 2.5 levels decline only 5.9%. Navi Mumbai, a suburb of Mumbai, has – instead of a decline – seen a 46% rise in PM 2.5 levels;



Mumbai – a 38.1% rise and Ujjain, a 46% rise. Jaipur and Visakhapatnam saw PM 2.5 increase 13% and 12% rise respectively and Pune 10%. Among the cities that showed a sharp decline in PM 2.5 from 2019-2023 were Varanasi, with a 72% average reduction in PM 2.5 levels and 69% reduction in PM 10 levels.

CONTINUED ON  
» PAGE 12

- Strengthened monitoring, as cities add new air quality stations, is expected to provide a clearer understanding of the effectiveness of mitigation measures.

## Way Forward and Analysis:

- Despite positive strides in addressing air pollution, persistent challenges exist as some urban areas experience an increase in pollution concentrations.
- The revised goal of a **40% reduction in particulate matter by 2026 reflects the commitment to ambitious environmental targets.**
- The analysis underscores the need for **ongoing efforts, strengthened monitoring, and comprehensive strategies** to achieve the **NCAP objectives** and enhance air quality across Indian cities.

## 2..The government has trapped Project Tiger, now 50, in a tough spot.

### GS 3 (Environment)

- Why in News:** Violations of the Wildlife (Protection) Act and the Forest Rights Act have exacerbated conflicts in Tiger Reserves between the forest bureaucracy and forest-dwellers

## The Complex Dynamics of India's Tiger Conservation: Balancing Successes and Challenges

- India's **Project Tiger**, launched in 1973, has been celebrated as a **global success story in environmental conservation**, but it comes with its **set of challenges and conflicts.**
- The subsequent **legal frameworks**, particularly the **Wildlife (Protection) Act** and the **Scheduled Tribes and Other Traditional Forest Dwellers Act**, have played pivotal roles in shaping the landscape of tiger reserves in the country.

## Evolution of Tiger Reserves:

- 1973 - Project Tiger Inception:** Aims and initial implementation.
- 2006 - Statutory Recognition:** Tiger Reserves elevated to statutory status, marking a turning point.
- 2022 - Impressive Growth:** From 9 reserves in 1973 to 54 in 2022, covering 2.38% of India's land area.
- Tiger Population:** 1972 - 1,827 tigers; 2022 - 3,167-3,925 tigers. India claims three-quarters of the world's tiger population.

## Legal Framework and Amendments:

- 1972 - Wildlife (Protection) Act:** Establishment of **National Parks and Wildlife Sanctuaries.**
- 2006 - Tiger Task Force:** Acknowledging failures and amending the Wildlife (Protection) Act to create the **National Tiger Conservation Authority (NTCA).**
- 2006 - Scheduled Tribes and Other Traditional Forest Dwellers Act:** Recognizing customary forest rights, introducing '**Critical Wildlife Habitat**' (CWH).
- Critical Tiger Habitats (CTH) and Buffer Areas:**
  - Original Intent:** Democratic and scientific basis for Tiger Reserves.
  - CWH Establishment:** Scientific evidence of **irreversible damage** guides CTH establishment.
  - Buffer Area Importance:** Balancing **human-animal coexistence** while respecting local rights.
  - Problems in Implementation:** Lack of informed consent leading to conflict.
- Relocation and Rehabilitation Challenges:**

## A look at Project Tiger, 50 years on

The Indian government's violation of the Wildlife (Protection) Act and the Forest Rights Act have exacerbated conflicts in tiger reserves between the forest bureaucracy and forest-dwellers, ultimately endangering India's tigers and the people who coexist with them

**FULL CONTEXT**

**C.A. Brief**

A tiger, tiger reserve introduced in 1973, has been celebrated as a global success story in environmental conservation, but it comes with its set of challenges and conflicts. The subsequent legal frameworks, particularly the Wildlife (Protection) Act and the Scheduled Tribes and Other Traditional Forest Dwellers Act, have played pivotal roles in shaping the landscape of tiger reserves in the country.

**THE GIST**

India's Project Tiger, launched in 1973, has been celebrated as a global success story in environmental conservation, but it comes with its set of challenges and conflicts. The subsequent legal frameworks, particularly the Wildlife (Protection) Act and the Scheduled Tribes and Other Traditional Forest Dwellers Act, have played pivotal roles in shaping the landscape of tiger reserves in the country.

**Evolution of Tiger Reserves:**

- 1973 - Project Tiger Inception:** Aims and initial implementation.
- 2006 - Statutory Recognition:** Tiger Reserves elevated to statutory status, marking a turning point.
- 2022 - Impressive Growth:** From 9 reserves in 1973 to 54 in 2022, covering 2.38% of India's land area.
- Tiger Population:** 1972 - 1,827 tigers; 2022 - 3,167-3,925 tigers. India claims three-quarters of the world's tiger population.

**Legal Framework and Amendments:**

- 1972 - Wildlife (Protection) Act:** Establishment of National Parks and Wildlife Sanctuaries.
- 2006 - Tiger Task Force:** Acknowledging failures and amending the Wildlife (Protection) Act to create the National Tiger Conservation Authority (NTCA).
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  - Problems in Implementation:** Lack of informed consent leading to conflict.
- Relocation and Rehabilitation Challenges:**

- **Legal Framework:** Provisions of Wildlife (Protection) Act and Scheduled Tribes and Other Traditional Forest Dwellers Act.
- **Compensation Issues:** Discrepancies between legal requirements and government initiatives.
- **Relocation Plans:** Limited to the **2008 Revised Guidelines**, falling short of legal mandates.
- **Conflict Resolution and Challenges Ahead:**
  - **Recognition of Forest Rights:** Resistance within Tiger Reserves to the recognition of forest rights.
  - **Guidelines for CTH: Conflicting orders and resolutions** regarding rights recognition.
  - **Environmental Clearance Controversy:** Discrepancies in requiring clearances for public utilities.
  - **Future Challenges:** Anticipating anxiety and conflict as tiger habitats expand.
- **Way Forward:**
  - India's journey in tiger conservation reflects a **delicate balance between environmental preservation and the rights of indigenous communities.**
  - As tiger habitats grow, the need for a **comprehensive and inclusive approach** becomes paramount to **avoid conflicts that could undermine the success of Project Tiger.**

### 3.Momentum investing

#### GS 3 (Economy)

- **Why in News:** Many academic studies have shown that momentum investing can generate high returns that comfortably beat the benchmark indices.
- **About Momentum investing:**
  - It refers to a style of investing wherein **investors purchase assets** such as stocks or bonds that are **consistently rising in price** while selling assets **whose prices are falling.**
  - Momentum investors **buy** assets with **rising prices** in the hope that the upward price momentum of these assets would continue, thus allowing them to sell these assets at higher prices in the future to make profits.
  - It is based on the philosophy that there can be discernible trends in asset prices and that these trends tend to persist over time.
  - The persistence of such trends gives investors an opportunity to recognise and participate in them early enough to make significant profits from their investments.
  - Similarly, they sell assets that are falling in price expecting the fall in prices to continue for some time.
  - Momentum investors generally **do not conduct a deep analysis** of the fundamental or intrinsic value of the assets in which they invest their money.
  - They invest purely based on whether the price of an asset is showing a strong trend, either upward or downward, that they can ride on.
  - The **“buy high, sell higher”** philosophy of momentum investing **is in stark contrast** to the traditional **“buy low, sell high”** advice given to investors.

### **Momentum investing: when investors buy assets which are steadily rising in price**

Traditionally, experts have advised investors to buy assets when they are selling at low prices, such as during times of a financial crisis, as assets could be found selling at prices well below their intrinsic value. Momentum investing is in stark contrast to this traditional logic

#### **Prasanth Personal**

**M**omentum investing refers to a style of investing wherein investors purchase assets such as stocks or bonds that are consistently rising in price while selling assets whose prices are falling. Momentum investors buy assets with rising prices in the hope that the upward price momentum of these assets would continue, thus allowing them to sell these assets at higher prices in the future to make profits. Similarly, they sell assets that are falling in price expecting the fall in prices to continue for some time.

Momentum investing is based on the philosophy that there can be discernible trends in asset prices and that these trends tend to persist over time. The persistence of such trends gives investors an opportunity to recognise and participate in them early enough to make significant profits from their investments.

#### **Counter-logic**

Traditionally, experts have advised investors to buy assets when they are selling at low prices, such as during times of a financial crisis when most investors are scared and hence assets could be found selling at prices well below their intrinsic value. It was believed that investors could later sell these

undervalued assets at higher prices when the general market enters a bull phase. The “buy high, sell higher” philosophy of momentum investing is in stark contrast to the traditional “buy low, sell high” advice given to investors. Momentum investors often invest money in assets whose prices have scaled new all-time highs, even if these assets are trading at prices that are far above their intrinsic value. Many academic studies have shown that momentum investing can generate high returns that comfortably beat the benchmark indices.

Momentum investors generally do not conduct a deep analysis of the fundamental or intrinsic value of the assets in which they invest their money. They invest purely based on whether the price of an asset is showing a strong trend, either upward or downward, that they can ride on. For this reason, many critics argue that momentum investing can cause an unsustainable rise or fall in prices as momentum investors are blind to the actual value of these assets. This, they argue, can eventually lead to heavy losses for investors who are late to sell when the prices of these momentum-driven assets correct suddenly to catch up with the assets' intrinsic value.

Some investors may combine value investing, which is based on assessing the

intrinsic value of an asset, with momentum investing. These investors believe that taking into account the existing trend in the price of an asset can help save time and boost investment returns. It should be noted that traditional value investors believe in purchasing assets that are undervalued and selling them when the price of the asset has risen to match the asset's intrinsic value. It might, however, take many years before the price of an asset rises to fully match its intrinsic value.

Investors who combine value investing with momentum investing may be able to purchase an undervalued asset at just about the time when its price starts to trend upwards to intrinsic value. This prevents investor money from being locked in for years in assets whose prices go nowhere.

**Value in Index funds**

Momentum investors also argue that passive investing strategies that recommend investing in benchmark indices such as the Dow Jones and the S&P 500 through index funds are in reality based on momentum. Many value investors, including American billionaire Warren Buffett, have recommended retail investors to invest in index funds that mimic these benchmark indices, arguing that these indices are composed of

high-quality companies that have shown consistent earnings growth. But the actual construction of these indices, it should be noted, is not based on the earnings of companies, but based on their market capitalisation. India's Nifty 50, for instance, is basically a collection of stocks whose prices have consistently risen over time and made them one of the top 50 companies in the market in terms of market capitalisation.

Momentum investors, it should be noted, use a variety of methods to gauge an asset's price momentum. The simplest method of momentum investing is to buy assets whose prices have shown the highest percentage gains over the last three to six months while selling assets whose prices have witnessed the steepest percentage losses. An asset's price momentum can also be gauged by analysing how well the asset's price has performed compared to the benchmark indices. More sophisticated momentum investors might look into the price chart of an asset and try to gauge the strength of the upward or downward trend exhibited by the asset's price.

The price of an asset may not always trend, however. It can just move sideways, and during such times momentum investors may decide to stay away from the market and simply hold cash.

## 4. Aligarh Muslim University (AMU's) Minority Character

### Recent events of importance

#### • Why in News:

- Supreme Court is hearing the case related with issue of AMU status as minority institution dating back 57 years.
- The legal dispute over Aligarh Muslim University's (AMU) minority character, dating back 57 years, stems from the interpretation of Article 30(1) of the Constitution, which empowers religious and linguistic minorities to establish and administer educational institutions. This dispute has seen multiple court interventions, shaping the trajectory of AMU's status as a minority institution.
- Historical Background:** AMU's origins trace back to the Muhammadan Anglo-Oriental (MOA) College, established in 1875 by Sir Syed Ahmad Khan. It aimed to address educational backwardness among Muslims, evolving into a university in 1920 under the AMU Act. The Act acknowledged its role as a "teaching and residential Muslim University."
- Genesis of Dispute:** The legal challenge emerged in 1967, questioning amendments to the AMU Act made in 1951 and 1965. Changes altered the University's structure, provoking a Supreme Court ruling that, in 1967, declared AMU was not established or administered by the Muslim minority. The court emphasized that while Muslims may have initiated the university, its recognition by the Indian government necessitated a central Act.
- Persistent Dispute:** Post the 1967 ruling, nationwide protests ensued, prompting a 1981 amendment affirming AMU's minority status. This led to Section 2(I) explicitly stating it was "an educational institution of their choice established by the Muslims of India." However, legal challenges persisted, with the Allahabad High Court overturning a reservation policy in 2005, citing the 1967 verdict. The Union government, along with other petitioners, contested this decision in the Supreme Court in 2006.

#### • The Importance of Minority Institutions:

- Preserving Diversity:** Minority institutions play a pivotal role in preserving cultural and religious diversity by providing a platform for communities to impart education aligned with their ethos.
- Inclusive Education:** These institutions contribute to inclusive education, offering students from minority communities an environment that respects and values their cultural identity.
- Empowerment:** Recognizing minority institutions empowers communities to actively participate in the educational landscape, fostering a sense of ownership and agency.
- Constitutional Intent:** While Article 30(1) emphasizes minority rights, the AMU case raises questions about the balance between autonomy and state recognition, as the 1967 verdict highlighted the central Act's role.
- Policy Implications:** The legal tussle has implications for reservation policies and the autonomy of minority institutions, with potential ramifications on inclusive education.
- Educational Autonomy:** The dispute has implications for the autonomy of educational institutions and the extent to which the government can regulate their character.
- Minority Rights:** It raises broader questions about minority rights and the interpretation of these rights in the context of educational institutions.

#### • Recent Developments

- In 2019, the Supreme Court referred the matter to a seven-judge Bench, acknowledging the complexity of the issue.

## The long-running legal dispute over the minority character of AMU

**WHEN AND HOW WAS AMU SET UP?**  
AMU's origins can be traced back to the Muhammadan Anglo-Oriental (MOA) College established by Sir Syed Ahmad Khan in 1875. Initially, it was a teaching and residential institution for Muslims. In 1920, it was upgraded to a university under the AMU Act. The Act acknowledged its role as a "teaching and residential Muslim University."

**WHY DOES THE DISPUTE CONTINUE?**  
The dispute stems from the interpretation of Article 30(1) of the Constitution, which empowers religious and linguistic minorities to establish and administer educational institutions. The AMU case raises questions about the balance between autonomy and state recognition, as the 1967 verdict highlighted the central Act's role.

**WHAT IS THE 'MINORITY CHARACTER' OF AN EDUCATIONAL INSTITUTION?**  
Article 30(1) of the Constitution empowers all religious and linguistic minorities to establish and administer educational institutions. This provision reinforces the Union government's commitment to foster growth and development of minority communities by guaranteeing that will be determined by going on as the basis of their being 'minority institutions.'

**WHEN DID THE UNIVERSITY'S MINORITY CHARACTER COME UNDER DISPUTE?**  
The legal dispute over AMU's minority status dates back to 1967 when the Supreme Court (5:4) in *Syed Hameed and another versus Union of India*, led by then Chief Justice of India K.V. Visvesvaray, was reviewing changes made in 1951 and 1965 to the AMU Act of 1920. These amendments altered how the university was run. For instance, originally, the 1920 Act said that the Governor General of India would be the head of the University. But in 1951, it was changed to replace 'Governor' with 'Visitor', and this Visitor would be the President of India. Further, a provision that said only Muslims could be a part of the University Court was removed, allowing non-Muslims to join. Additionally, the amendments reduced the authority of the University Court and increased the powers of the Executive Council of AMU. As a result, the Court eventually became a body appointed by the 'Visitor'.

**EXPLAINED**  
These alterations to the AMU's structure led to a legal challenge in the Supreme Court. The petitioners argued primarily on the grounds that Muslims established AMU and, therefore, had the right to manage it. It was made in 1951 and 1965 to the AMU Act of 1920. These amendments altered how the university was run. For instance, originally, the 1920 Act said that the Governor General of India would be the head of the University. But in 1951, it was changed to replace 'Governor' with 'Visitor', and this Visitor would be the President of India. Further, a provision that said only Muslims could be a part of the University Court was removed, allowing non-Muslims to join. Additionally, the amendments reduced the authority of the University Court and increased the powers of the Executive Council of AMU. As a result, the Court eventually became a body appointed by the 'Visitor'.

**WHY WAS AMU NOT RECOGNIZED AS A MINORITY INSTITUTION?**  
The highest court determined that in 1920, Muslims could have set up a university, but that would not have guaranteed that the degrees from that university would be officially recognized by the Indian government. Hence, the court emphasized, AMU was established through a central Act to ensure the government's recognition of its degrees. So while the Act may have been passed as a result of the efforts of the Muslim minority, it does not mean that the University, under the 1920 Act, was established by the Muslim minority. The SC ruled.

**ADDITIONALLY,** according to the 1920 Act, the SC stated, the university was not solely operated by Muslims. Instead, its administration was entrusted to the Lord Rector and other statutory bodies. Even the University Court, which had only Muslim members, was directly appointed by the government, not solely by Muslims, the Supreme Court noted.

**WHY DOES THE DISPUTE CONTINUE?**  
The SC ruling triggered nationwide protests from Muslims. In response, political authorities yielded in 1981 and introduced an amendment to the AMU Act, explicitly affirming its minority status. The amendment introduced Section 2(I) and Subsection 5(2)(c), which stated that the university was "an educational institution of their choice established by the Muslims of India" and "subsequently incorporated" as the AMU.

**IN 2005,** the AMU implemented a new admission policy, reserving 50% of seats for post-graduate medical courses for Muslim candidates. This was challenged in the Allahabad High Court, which, in the same year, overturned the reservation and nullified the 1981 Act. The Court reasoned that the AMU could not maintain an exclusive reservation because, according to the Supreme Court's verdict in the *Syed Hameed* case, it did not qualify as a minority institution.

**SUBSEQUENTLY,** in 2006, a set of eight petitions, including one from the Union government, contested the High Court's decision before the Supreme Court.

**IN 2019,** the NCA government informed the SC that it was withdrawing the appeal filed by the government, saying, "we can't be seen as setting up minority institutions in a vacuum."

**ON FEBRUARY 12, 2019,** a three-judge bench presided over by then Chief Justice of India Dipak Singh, referred the matter to a seven-judge bench. On Tuesday, the bench, comprising Chief Justice of India D.Y. Chandrachud, and Justices Sanjay Kumar, Surya Kant, J. Indu Malhotra, Rajendra Kumar, Manu Mishra, and Santhosh Chandra Sharma, started hearing the case.

- The ongoing hearings explore the nuanced interplay between minority rights, constitutional provisions, and the institutional autonomy of AMU.
- The AMU dispute encapsulates the delicate balance between minority rights, constitutional provisions, and the need for state recognition. Recognizing the importance of minority institutions is crucial for fostering a diverse and inclusive educational landscape in India.
- The ongoing legal deliberations will shape not only AMU's future but also influence the broader discourse on minority rights and educational autonomy.

## 5. Why 2023 was the Warmest Year Ever?

### GS 3 (Environment)

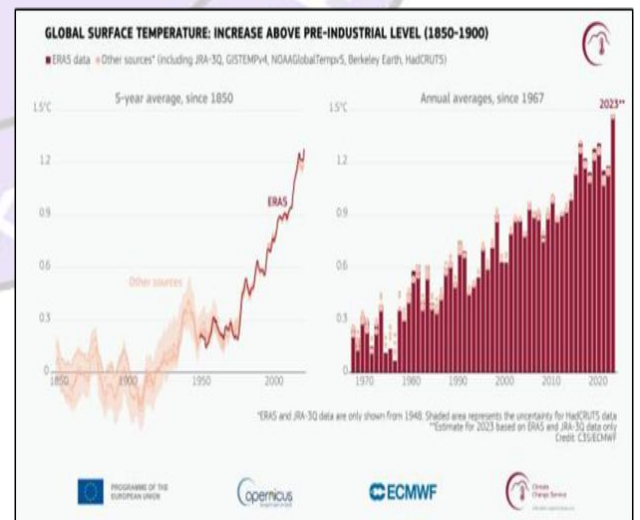
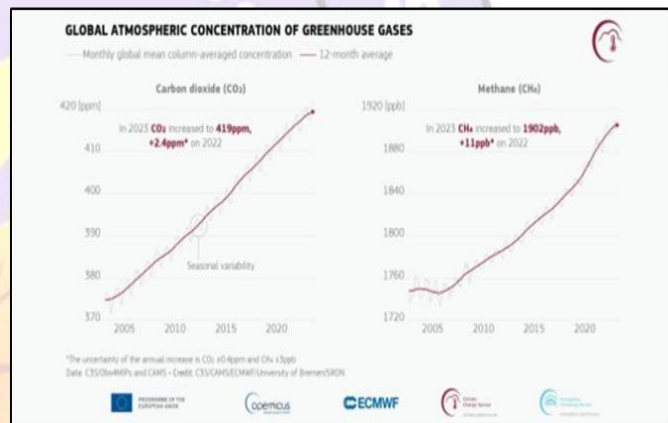
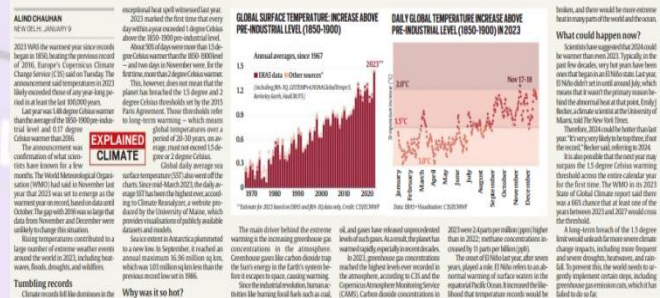
#### • Background:

- As per the Europe's Copernicus Climate Change Service (C3S), 2023 was the warmest year since records began in 1850, beating the previous record of 2016.
- The announcement said **temperatures in 2023 likely exceeded those of any year-long period in at least the last 100,000 years.**
- Last year was 1.48 degree Celsius warmer than the average of the 1850-1900 pre-industrial level and 0.17 degree Celsius warmer than 2016, C3S said.
- The announcement was confirmation of what scientists have known for a few months.
- The **World Meteorological Organisation (WMO)** had already said in November that 2023 was set to emerge as the warmest year on record, based on data until October.
- Rising temperatures contributed to a large number of extreme weather events around the world in 2023, including heatwaves, floods, droughts, and wildfires.
- Canada had its most destructive wildfire season (May to September) on record, with more than 45 million acres burned.

#### • Reasons Behind 2023 Being the Warmest Year:

- The main driver behind the extreme warming is the **increasing greenhouse gas concentrations in the atmosphere.**
- Greenhouse gases like carbon dioxide and methane, and water vapor trap the Sun's energy in the Earth's system before it escapes to space, causing warming.
- Since the industrial revolution, human activities like burning fossil fuels such as coal, oil, and gases have released unprecedented levels of such gases.
- As a result, the planet has warmed rapidly, especially in recent decades.
- **In 2023, greenhouse gas concentrations reached the highest levels ever recorded in the atmosphere,** according to C3S and the Copernicus Atmosphere Monitoring Service (CAMS).
- Carbon dioxide concentrations in 2023 were 2.4 parts per million (ppm) higher than in 2022; methane concentrations increased by 11 parts per billion (ppb).

### Why 2023 was the warmest year on record, and what happens now



- The onset of El Nino last year, after seven years, also played a key role.
  - **El Nino refers to an abnormal warming of surface waters in the equatorial Pacific Ocean.**
  - It increased the likelihood that temperature records would be broken, and there would be more extreme heat in many parts of the world and the ocean.
- **What Could Happen Now?**
  - Scientists have suggested that **2024 could be warmer than even 2023.**
  - Typically, in the past few decades, very hot years have been ones that began in an El Nino state.
  - Last year, El Nino didn't set in until around July, which means that it wasn't the primary reason behind the abnormal heat at that point. Therefore, 2024 could be hotter than last year.
  - It is also possible that the next year may surpass the 1.5-degree Celsius warming threshold across the entire calendar year for the first time.
  - The WMO in its 2023 **State of Global Climate report** said **there was a 66% chance that at least one of the years between 2023 and 2027 would cross the threshold.**
  - A long-term breach of the 1.5-degree limit would unleash far more severe climate change impacts, including more frequent and severe droughts, heatwaves, and rainfall.
  - To prevent this, **the world needs to urgently implement certain steps, including greenhouse gas emission cuts, which it has failed to do so far.**

## **6. International Classification of Diseases**

### **GS 2 (Health)**

- **Why in News:** World Health Organization's International Classification of Diseases (ICD) 11 TM Module 2, Morbidity Codes launch event will be held in New Delhi on 10th January, 2024.
- **About International Classification of Diseases:**
  - It is developed by the **World Health Organization (WHO)** to classify diseases internationally.
  - The global data on diseases currently available is mainly based on healthcare practices to be diagnosed through **modern biomedicine.**
  - It serves a broad range of uses globally and provides critical knowledge on the extent, **causes and consequences of human disease** and death worldwide via data that is reported and coded with the ICD.
  - Clinical terms coded with ICD are the main basis for health recording and statistics on disease in **primary, secondary and tertiary care**, as well as on cause of death certificates.
  - These data and statistics support payment systems, service planning, and administration of quality and safety, and health services research.
  - Diagnostic guidance linked to categories of ICD also standardised data collection and enables large scale research.
  - The classification of data and terminology relating to diseases based on Ayush systems such as Ayurveda, Siddha, Unani etc. is not yet included in the WHO ICD series.
  - **Central Bureau of Health Intelligence (CBHI)** is an agency under **the Ministry of Health and Family Welfare** that serves as the WHO Collaboration Centre for ICD-related activities.
    - It facilitates the collection and dissemination of data on various diseases and mortality.
- **TM2 module of ICD11**
  - The Ministry of Ayush has developed the Code for Ayurveda, Siddha, and Unani Medicine through the **National Ayush Morbidity and Standardised Electronic Portal (NAMASTE).**
  - The Ministry of Ayush in collaboration with WHO has prepared a categorization of data and terminology related to diseases based on Ayush - Ayurveda, Siddha, and Unani systems under TM2 module of ICD11 series.
  - The Ministry of AYUSH has also **signed a Donor Agreement with the World Health Organization** for the same.

## 7. Prasadam

### GS 1 (Art and Culture)

- **Why in News:** Union Minister for Health & Family Welfare recently inaugurated the country's first healthy & hygienic food street, 'Prasadam', at Neelkanth Van, Mahakal Lok, in Ujjain, Madhya Pradesh.
- **About Prasadam:**
  - It is the **country's first "Healthy and Hygienic Food Street"**.
  - It has been opened at Neelkanth Van, **Mahakal Lok, in Ujjain, Madhya Pradesh**.
  - It will **connect people** in every corner of the country **with pure and safe local and traditional food**.
  - Spread over **939 square metres with 19 shops**, Prasadam offers convenient and **culturally rich dining options for the 1-1.5 lakh devotees who visit the Mahakaleshwar Temple daily**.
  - The food street is designed to provide **various facilities, including a kids' play area, drinking water facility, CCTV surveillance, parking, public conveniences, and seating spaces**.
- **Key Facts about Mahakaleshwar Temple:**
  - It is a **Hindu temple dedicated to Shiva**.
  - **Location:**
    - It is located in the ancient city of **Ujjain**, in the state of **Madhya Pradesh**.
    - The temple is situated **beside the Rudra Sagar Lake**.
  - It is **one of the twelve Jyotirlingas** of Lord Shiva.
  - Mahakaleshwar **idol is Dakshina Mukhi, facing south**, unlike all the other Jyotirlingas.
  - The temple, which is **spread over five levels**, sees a huge throng of devotees during the **Maha Shivaratri festival**.
  - **Architecture:**
    - The temple complex comes with a **spacious courtyard** that is adorned with the **finest sculptures** that are believed to be **influenced by the Chalukya, Maratha, and Bhumija styles of structural design**.
    - The **foundation and platform are built of stones**. Most of the upper structure rests on the strong and well-designed pillars and plasters.
    - It is complete with impressive **lingam sculptures of Mahakaleshwar**
    - The **images of Ganesh, Parvati, and Kartikeya** are installed in the west, north, and east of the sanctum sanctorum.
    - The temple also **houses a tank constructed in the sarvatobhadra style**.

11<sup>th</sup> Jan, 2024

## 1. Maharashtra Speaker gives verdict on Shiv Sena split GS 2 (Political Party)

### • Why in News:

- Maharashtra Speaker Rahul Narwekar ruled that the Eknath Shinde faction was the legitimate and real Shiv Sena, having the support of the majority of the party's MLAs.
- He was pronouncing his verdict on 34 petitions, filed by the two rival Shiv Sena factions against each other.
  - These petitions were seeking the disqualification of 54 MLAs in total arising out of the party's 2022 split.

### • 2016 Nabam Rebia judgment

#### ○ About

- In Nabam Rebia case (2016), the SC held that a **speaker will be disabled from deciding disqualification petitions** under the anti-defection law (10th schedule of the constitution) if a notice for their removal is pending.
- In other words, this judgement stopped a Speaker facing removal notice from deciding disqualification pleas against members of legislatures under anti-defection law.

#### ○ Criticism

- This ruling gave a window to defecting legislators to stall or circumvent the Tenth Schedule by seeking removal of the Speaker when disqualification proceedings are anticipated, thus effectively tying the hands of the Speaker.

### • Background: Maharashtra Speaker gives verdict on Shiv Sena split

#### ○ Split of Shiv Sena

- The seeds of the conflict were planted when the Uddhav Thackeray-led (united) Shiv Sena joined the Maha Vikas Aghadi government.
- In June 2022, a group of Shiv Sena MLAs led by Eknath Shinde rebelled against Uddhav Thackeray.
  - Eknath Shinde and a group of 34 Sena MLAs rebelled against Uddhav.
- Within hours, Uddhav's side passed a resolution removing Shinde as leader of the party in the Maharashtra House and appointed a new chief whip.
- At the same time, the Shinde group also passed a resolution affirming Shinde's leadership and appointing a different person as the chief whip.

#### ○ Shinde became the CM

- After being unable to placate Sena rebels, Uddhav resigned as Chief Minister on June 29 and his government fell.
- Shinde took oath as Maharashtra CM a day later, allied with the BJP.

#### ○ Disqualification pleas before the speaker

- The very first set of pleas were filed by the Uddhav faction two days after the Sena split.
  - These pleas sought the disqualification of Shinde and other MLAs who allegedly ignored whips issued by the chief whip appointed by the Uddhav faction.
- On the other hand, the Shinde Sena claimed that its MLAs never received any such whip.
  - As per them, the split was borne out of legitimate grievances held by Sena supporters against the direction that the party took under Uddhav.
  - Hence, it did not violate legislative rules inviting disqualification.
  - It responded in kind, seeking the disqualification of 14 MLAs of the Uddhav faction instead.

#### ○ Matter goes to SC

- The chief whip, appointed by the Uddhav faction, challenged these petitions in the Supreme Court.
- He also challenged:
  - the decision of the Maharashtra Governor to call for a trust vote,
  - the swearing-in of Eknath Shinde as the Chief Minister of the Government with BJP backing, and
  - the appointment of Narwekar as new Maharashtra speaker.

## Shinde's faction is real Sena: Speaker

In a huge setback to the Uddhav faction, Rahul Narwekar refuses to disqualify 30 MLAs from both factions, citing lack of valid grounds

Abhinav Deshpande  
MUMBAI

In a huge setback to Shiv Sena (UBT) leader Uddhav Thackeray, Maharashtra Assembly Speaker Rahul Narwekar ruled on Wednesday that Chief Minister Eknath Shinde's faction was the 'real Shiv Sena' when the rival factions emerged on June 21, 2022. He further refused to disqualify 30 Shiv Sena MLAs from both factions, including Mr. Shinde, citing a lack of valid grounds.



Thus pronounced: Rahul Narwekar pronounces the verdict in the Shiv Sena MLAs' disqualification case, in Mumbai. ANI

Reading out his ruling on the disqualification petitions filed by the rival factions against each other's MLAs, Mr. Narwekar also said that Sunil Prabhu, who belonged to the Thackeray faction, had ceased to be the whip from June 21, 2022, and Bharat Gogawale of the Shinde group had then become the authorised whip.

ing... We are challenging it in the apex court," he said. His alliance partners, the Congress and the NCP, came out in his support.

Mr. Shinde, meanwhile, noted that numbers were important in a democracy.

CONTINUED ON  
PAGE 12

- The Uddhav faction also argued that **Nabam Rebia judgement enables defecting MLAs to stall disqualification proceedings by issuing a notice seeking the speaker's removal.**
- **Verdict of SC**
  - **On disqualification of MLAs**
    - The Supreme Court said while cannot interfere in the proceedings.
    - The **Speaker of the Maharashtra Assembly must decide** on the issue of the disqualification of the 16 MLAs.
    - The Speaker must consider the version of the party constitution which was submitted to the ECI with the consent of both factions.
    - This will obviate a situation where both factions attempt to amend the constitution to serve their own ends.
    - The court told the Speaker to not decide based on which faction possesses the majority in the Assembly, and not as per the Election Commission of India's interim order recognising the Shinde faction as a political party.
  - **On restoring Uddhav Thackeray govt**
    - The SC held since Uddhav Thackeray resigned as the chief minister and did not face the floor test, his government cannot be reinstated.
    - It said had Thackeray refrained from resigning from his post, the court could have restored his government.
  - **On governor's role in calling floor test**
    - The court held that by calling the floor test, the then Maharashtra governor did not act in accordance with the law as **he had no objective material to doubt the confidence of the Thackeray government in the House.**
    - It said that the power of the **Governor to act without the aid and advice of the Council of Ministers is of an extraordinary nature, and must be exercised with circumspection within the limits of law.**
    - It also said that **the Governor is not empowered to enter the political arena and play a role in inter or intra party disputes.**
  - **Appointment of whip from Shinde group illegal**
    - The top court held the appointment of Bharat Gogawale (by Shinde Faction) as the Chief Whip of the Shiv Sena to be illegal.
  - **Speaker and EC can adjudicate issues concurrently**
    - The court said it **could not accept the contention that the EC was barred from deciding on the party symbol dispute** until the Speaker decided the disqualification pleas before him.
  - **Referral of issues in Nabam Rebia judgement to larger bench**
    - The five-judge bench referred certain issues related to its 2016 judgment in the **Nabam Rebia case to a larger bench.**
    - One of the issues is whether a notice for removal of a Speaker would restrict the powers of the Speaker to issue disqualification notices to MLAs.
- **Verdict of speaker on Shiv Sena split**
  - **Shinde faction was the real political party**
    - Maharashtra Speaker Narwekar held that the 1999 constitution was the last relevant constitution submitted to ECI.
    - He held that Shinde faction had an overwhelming majority of 37 of 55 MLAs when rival factions emerged.
  - **Rejected the disqualification petitions**
    - He rejected the disqualification petitions filed by Uddhav's faction against the Shinde Sena.
    - He also dismissed the disqualification petitions against MLAs of Uddhav faction on procedural grounds.
- **Analysing the verdict**
  - With this verdict, the Shinde Sena gets further legitimacy as a political party, after the Election Commission also recognised it.
  - While no MLA was eventually disqualified, Uddhav's side is likely to take up the matter in court.

## 2. Unrest in Manipur: Kuki-Zo Tribe's Scheduled Tribe Status Sparks Conflict

### Recent events of importance

- **Why in News:** The state of Manipur in India is currently grappling with ethnic tensions, particularly surrounding the proposed reconsideration of the Scheduled Tribe (ST) status of the Kuki-Zo community.
- **Background**
  - The Manipur conflict, which commenced in early May, stemmed from a **High Court order suggesting the consideration of ST status for the Meitei community.**
  - This proposition faced **opposition from the Kuki-Zo tribe**, who perceive it as a potential dilution of their privileges due to the political and numerical dominance of the Meiteis in the state.
  - Chief Minister's suggestion to **review ST status** has triggered strong reactions from Kuki-Zomi organizations, intensifying the ongoing ethnic conflict in the region.
- **Need for Review:**
  - The controversy emerged when Maheshwar Thounaojam, a Meitei leader of the Republican Party of India (Athawale), submitted a **representation to the Union Ministry of Tribal Affairs, urging the exclusion of Kukis from Manipur's ST list.**
  - The Ministry forwarded the representation to the state government, emphasizing the **need for the state's recommendation before any further action.**
- **Government's Response:**
  - Possibility of forming a **committee to discuss the ST status of Kukis in Manipur.**
  - This move, however, has been met with strong opposition from Kuki-Zomi organizations, accusing the **state government of supporting Meiteis and exacerbating the existing ethnic conflict.**
- **Kuki-Zo Tribe's Perspective:**
  - The **Indigenous Tribal Leaders' Forum (ITLF)** and Kuki Inpi, the apex body of Kuki tribes in Manipur, condemned any attempt to alter the ST status of the Kuki-Zo community.
  - The ITLF accused the government of a **coordinated effort with Meitei groups**, asserting that removing the community from the ST list violates constitutional safeguards and perpetuates injustice and discrimination.
- **Zomi Council Steering Committee's Opposition:**
  - The **Zomi Council Steering Committee (ZCSC)** joined the condemnation, considering the move a blatant attempt to rewrite history and widen existing divides.
  - The ZCSC also opposed Chief Minister request to remove the **Free Movement Regime along the Myanmar border**, viewing it as a diversion from addressing the root cause of ethnic violence – the Meitei community's hunger for ancestral tribal lands and privileges.
- **Kuki-Zo Tribe:**
  - The Kuki-Zo tribe, primarily **residing in Churachandpur district**, has a rich cultural heritage.
  - Comprising various tribal bodies, the **ITLF serves as a significant voice for the Kuki-Zo community.**
  - Their demand for **preservation of ST status aligns** with their commitment to upholding constitutional safeguards and protecting their rights and land.

### Kuki-Zo tribal bodies against review of ST status of certain tribes

The Hindu Bureau  
NEW DELHI

The Indigenous Tribal Leaders' Forum (ITLF) and the Zomi Council Steering Committee (ZCSC) on Wednesday strongly condemned the move to review the Scheduled Tribe (ST) status of certain Kuki-Zo communities in Manipur amid the ongoing ethnic conflict in the State.

The ITLF issued a statement where it referred to the Meitei community to say, "First, they tried to become like us... Now, they are trying to erase our status as tribals." The ZCSC sent a memorandum with its objections to the Prime Minister's Office.

The Manipur Tribals' Forum Delhi, another representative body of the Kuki-Zo community, also endorsed the ITLF statement.

**New committee**  
This comes after *The Hindu* reported that the Manipur government had been asked by the Centre to examine a representation for delisting certain Kuki and Zo communities from the State's ST list. Following this, Chief Minister N. Biren Singh told reporters in Imphal that a committee would be formed to look into this representation, which would consist of representatives of all 34 recognised STs of the State.

In its statement, the ITLF said, "The communal Biren Singh administration has now opened a new front by pushing for the removal of the Kuki-Zo com-

**'Biren gov't's bid to deprive Kuki-Zo tribals of their rights and land will only widen divide'**

munity from India's Scheduled Tribes list."

The ITLF, a conglomerate of Kuki-Zo tribal bodies in Churachandpur district, alleged that this was a "well-coordinated" move by the Manipur government and the Meitei groups, while asserting that removing a community from the ST list is "no small task".

Given that the representation called for review of criteria for STs, the ITLF argued, "The Manipur government is now trying to push for changing the criteria in its attempt to displace and deprive Kuki-Zo tribals of their rights and their land."

"Any further attempts by Biren Singh to use the State machinery to target the Kuki-Zo community will only escalate the conflict," it added.

In its memorandum to the PMO, the ZCSC called the move to trigger a review of ST status of Kuki and Zo communities a "blatant attempt to rewrite history to suit the majoritarian narrative". "This would only end up widening the existing divide," it added.

The Zomi body also opposed Mr. Singh's request to remove the Free Movement Regime along the Myanmar border and the Union government's "ready compliance".

### 3. North India is grappled with dense fog, halts of Normal life GS 3 (Environment)

- **Why in News:** According to Indian Metrological department, minimum temperatures in Punjab, Haryana, and the northern reaches of Rajasthan and Uttar Pradesh hovered around 6-9 degrees C
- **Dense fog:** It is generally a thick white cloud that forms close to the land or sea. Temperatures should be lower and abundant moisture should be available near the surface."
- **Mechanism:** The land surface cooling down at night which also led the air close to the surface also cools down. As cooler air cannot hold as much moisture as warm air (supersaturation), the water vapour in the air condenses and form fog.

#### Why did north India fog heavily in last weeks of 2023?

What are the factors which contribute to the formation of fog? How were flights and trains affected?

**Archana Bhat**

**The story so far:**  
A winter fogged in grip on northern India, a blanket of fog descended on several States in the last days of 2023 and first of 2024, creating challenging conditions for residents and travellers alike.

**Where was fogging reported?**  
According to weather reports in late December 2023, minimum temperatures in Punjab, Haryana, and the northern reaches of Rajasthan and Uttar Pradesh hovered around 6-9 degrees Celsius. In New Delhi, with Rajasthan, and north Madhya Pradesh, some places recorded minimum temperatures in the range of 10-12 degrees Celsius, according to the India Meteorological Department (IMD). At the same time, most of North India also experienced a dense fog that reduced visibility in many areas to as little as 50 metres for several days. Haryana, including Chandigarh, plus isolated

pockets of Uttar Pradesh, Bihar, Jharkhand, and Madhya Pradesh reported fog with visibility reduced to under 200 metres. Other States including Jammu & Kashmir, Himachal Pradesh, Odisha, Chhattisgarh, Jharkhand, and Uttarakhand also reported fog for a few hours in the morning, the IMD reported.

**What effects did the fog have?**  
The fog's principal effect was on air travel: nearly 450 flights were delayed or cancelled on December 27 at India's Indira Gandhi International Airport as a dense layer of fog enveloped the city. On December 28 and 29, almost a 100 and 80 flights, respectively, were delayed from Delhi. The arrival and departure of several Delhi-bound trains were also delayed by poor visibility and dense fog on December 28.

The IMD reported on December 29 that at least eight trains that were supposed to have reached the national capital the previous night didn't, while a few trains scheduled to reach on the

morning of December 29 had been delayed by a few hours.

**What is fog?**  
A fog is a collection of small droplets of water produced when evaporated water has cooled down and condensed.

According to Madhavan Nair Rajarajan, former director of the IMD and current Vice-Chancellor of Anna University, "Fog is nothing but a thick cloud, but very close to the earth's surface. For a thick fog to form, temperatures should be lower and abundant moisture should be available near the surface."

Fog materialises whenever there is a temperature disparity between the ground and the air. This happens frequently during Indian winters – fog is created when the temperature drops at night and in the early morning, aerosols present in the atmosphere condense. High humidity, combined with an ample presence of water vapour or moisture, encourages foggy conditions.

The process by which it cools plays a

primal role in the formation of fog. One primary mechanism contributing to fog formation is called infrared cooling. It typically occurs when the weather is transitioning from summer to winter. In the summer, the ground absorbs radiation from the sun, becomes warmer, and moistens the air passing over it. When cooler weather kicks in, this mass of warm, moist air comes in contact with processes that cool it. The 'cooling' prompts the water vapour in the air to condense rapidly, giving rise to fog.

Another type of fog, known as radiation fog, is prevalent and occurs when an unusually warm day with high humidity is followed by rapidly dropping temperatures.

The specific type of fog, its duration, and its effects are contingent on various environmental conditions.

**Why is northern India prone to fogging?**  
"The entire Indo-Gangetic plains are prone to formation of fog during winter season, in all the conditions – low temperatures, low wind speed, moisture availability and plenty of aerosols – are present in this region", Dr. Rajarajan wrote in an email to The Hindu.

"Moisture invasion into this region can happen once a Western Disturbance – a precipitation pattern that brings rain to north India during winter months – moves across northern parts. Sometimes, moisture incursion can happen from the Arabian Sea also."

#### THE GIST

Most of North India experienced a dense fog that reduced visibility in many areas to as little as 50 metres for several days. Haryana, including Chandigarh, plus isolated pockets of Uttar Pradesh, Bihar, Jharkhand, and Madhya Pradesh reported fog with visibility reduced to under 200 metres.

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The fog's principal effect was on air travel: nearly 450 flights were delayed or cancelled on December 27 at India's Indira Gandhi International Airport as a dense layer of fog enveloped the city.



- **Condition for fog formations:**
  - Low temperature
  - Abundant moisture near the surface
  - High humidity (some instance where at lower humidity it may result in fog)
- **North India a rich ground of Fog Formation in winter, Why?**
  - Main area include the Indo-Gangetic plains due to
    - low temperatures
    - low wind speed
    - moisture availability (Due to western Disturbances which brings Precipitation North India in winter)
    - Indian ocean region (Arabian sea brings the moisture)

### 4. 30 NGOs got FCRA clearance GS 3 (Economy)

- **Why in News:**
  - After 1,111 NGOs got FCRA nod in 2023, 30 get clearance in January. Registration under FCRA is mandatory to receive foreign donations. The NGO must have a definite cultural, economic, educational, religious or social Programme to get registered.

- NGO works in the field of providing human rights, voters' rights, and healthcare to needy. They cover the multiple areas which also includes the preventing cruelty to animals. NGOs can be funded by donations and grants.

- **Registration mechanism:**

- These organisations are not a part of the government. They are registered under the specific Act (Societies Registration Act, 1860 in India) of the government.
- They may include Registered Societies formed for specific purposes, Charitable Organizations and Trusts, Local Stakeholders Groups, Microcredit and Thrift Enterprises, Self Help Groups, Professional Self-Regulatory Bodies, Cooperatives, Bodies without having any formal organizational structure Government promoted Third Sector Organizations.

- **Regulatory Oversight of NGOs:**

- **Foreign Contribution (Regulation) Act (FCRA), 2010**
  - Foreign funding of voluntary organizations is implemented by Ministry of Home Affairs through FCRA act.
  - The acts mandate the organisation those are recipients of foreign contributions should adhere to the stated purpose for which such contribution has been obtained.
  - Act requires organisations to register themselves every five years
- **Foreign Exchange Management Act, 1999**
  - It is an Act of the Parliament of India whose objectives includes consolidate and amend the law relating to foreign exchange with the objective of facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India . **A transaction under FEMA is called a fee or a salary while the same under FCRA is called a grant or a contribution.**
  - In 2016, the powers of Ministry of Finance to monitor NGOs were placed under the FEMA. Philosophy behind these changes ensures better monitoring and regulations.

- **Key Achievements of NGOs**

- **Strengthen the child rights(CRY (Child Rights and You))**
- **Bringing social entrepreneurship and women Empowerment ( Goonj )**
- reducing poverty and social injustice. (Care India)
- Increasing the Social audit Mechanism (Parham Report )

- **Issues with NGOs**

- Conflict with centuries old Traditions (Ban of Jallikattu, after the PIL by PETA )
- Lack of self-Originating funds, dilutes the willingness of NGOs to speak out against the government.
- Accreditation related Problem (Non state actor, bad intention )
- NGOs have acted as a cover for organized crime in past and are often seen as fronts for fundamentalist causes.
- Foreign funded NGOs have been responsible for organising agitations and scuttling development projects in India.

- **Way forward:**

- A Single National Authority Council consisting of academicians, activist, retired bureaucrats should be made to ensure compliance by NGOs.

## After a record 1,111 NGOs got FCRA nod in 2023, 30 get clearance in Jan.

Taiwan-headquartered Buddhist religious trust, Fo Guang Shan Cultural and Educational Centre, received registration under 'religious, cultural, economic, educational and social purpose' category

Vijaita Singh  
NEW DELHI

A Taiwan-headquartered Buddhist monastic order in Delhi has been granted clearance under the Foreign Contribution (Regulation) Act (FCRA), 2010, enabling the organisation to receive foreign funds. The Fo Guang Shan Cultural and Educational Centre has received FCRA registration for its "religious, cultural, economic, educational and social" programme. The Fo Guang Shan monastic order originated in Taiwan in the 1960s and the Delhi centre was established in 2008. "It is a Buddhist religious trust. Presently, we are imparting training to 80 children to become novice monks. We had applied for FCRA registration in 2016 as well, but it was



rejected. Now that the FCRA registration has been granted in the second attempt, it will help us in getting foreign funds," said Jaganjith, managing trustee of the cultural centre. In all, 30 non-governmental organisations (NGOs) and associations have been granted FCRA registration in the first month of the year. Last year, a record number of 1,111 NGOs were granted permission to receive foreign donations, the highest since 2014. Registration under FCRA is mandatory to receive foreign donations. The NGO must have a definite cultural, economic, educational, religious or social programme to get registered. Ministry data show 3,294 associations were granted fresh registration from 2014 to 2023. The Ministry informed the Lok Sabha on December 19 that of the 1,615 ap-

plications received for registration under the FCRA in 2021 and 2022, 722 were granted clearance while 225 applications were rejected. "The refusal of these applications was due to not fulfilling the eligibility criteria in accordance with the provisions of the FCRA, 2010 and rules made thereunder," the Ministry said. It added that a total of 13,520 associations received foreign contributions worth ₹55,741.51 crore across the financial years 2019-2020, 2020-21, and 2021-22. As of January 10, there were 46,987 FCRA-registered NGOs active in the country. The FCRA registrations of nearly 6,000 NGOs had become inoperative from January 1, 2022, as the Ministry refused to renew their application or the NGOs did not apply for one.

- Agile coordination between Ministries of Home Affairs and Finance in terms of monitoring and regulating illicit and unaccounted funds.
- A Transparent regulatory mechanism to keep a watch on the financial activities of NGOs and voluntary organizations.
- Citizens Led promotion to promote social justice, gender equity, inclusion etc.

## 5. SC finds multiple loopholes in measures taken for Disability Sector

### GS 2 (Social Issues)

- **Why in News:** SC report exposes severe gaps in accessibility for people with disabilities at courts across India.

- **Current state of Disability in India**

- As per Census 2011, in India, around 2.68 Cr persons are 'disabled' ( 2.21% of the total population)
- The Constitution of India ensures equality, freedom, justice and dignity of all individuals which ensures inclusive society for all, including persons with disabilities. Even after many initiative of Indian government, effects are very limited to ensure rights to disabled person.

- **Existing measures taken by Government:**

- Rights of persons with disabilities act 2016 :
  - The act, increased number of include disabilities from 7 to 21
  - Includes provision for reservation in higher education and government jobs, free education for children between 6 to 18 years.
- **The National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999:**
  - To enable and empower persons with disability to live as independently and as fully as possible within and as close to the community to which they belong.
- **Mental Healthcare Act 2017:** it provides the rights of mentally challenged during delivery of mental healthcare and services.
- **The Rehabilitation Council of India Act, 1992:**
  - The Council act regulates and monitors the training of rehabilitation professionals and personnel and promotes research in rehabilitation and special education.
- **National Action Plan for Skill development:** It aims to cover 2.5 million persons with disabilities by the year 2022 through various stakeholders.
- **Related Schemes:**
  - **Scheme for Implementation of Persons with Disabilities act (SIPDA):**
    - To provide financial assistance to the states for implementation of act.
  - **Rashtriya Vayoshri Yojana:**
    - It ensures Physical Aids and Assisted-living Devices for Senior citizens belonging to BPL category.

## SC report exposes severe gaps in accessibility for disabled persons across courts in India

**Solham Rocky Singh**  
NEW DELHI

More than half of the district court complexes in the country do not have ramps, only 25.2% have wheelchairs, and just 5.1% have tactile paving to assist persons with visual disabilities in navigating the court building, said a recent report by the Centre for Research and Planning of the Supreme Court.

The first-of-its-kind report, released on December 15, sheds light on the glaring inadequacies in the infrastructure of district courts across India, raising serious concerns about the impediments faced by people with disabilities in accessing justice.

**Poor navigation**  
The report said that while accessible toilets for people with disabilities hold fundamental importance, only 30.4% of court com-



**Not so friendly:** Only 25.2% of courts in the country have wheelchairs, and just 5.1% have tactile paving. FILE PHOTO

plexes have separate disabled-friendly toilets. It highlighted that only 5.1% of district courts have tactile paving to assist persons with visual disabilities in navigating the court building.

Inclusivity and accessibility to justice can be ensured to persons with visual impairment by giving them instructions that are accessible to the tactile or

auditory senses," the report said. In a first, the Supreme Court in September allowed a lawyer with hearing disabilities to argue virtually with the help of a sign language interpreter. The Delhi High Court too last year engaged the services of a sign language interpreter to enable a petitioner to understand the proceedings.

While these may be positive signs, as per the report, sign language interpreters who could be engaged to assist persons with hearing disabilities in accessing court proceedings are available in only 2.8% districts in India.

**Infrastructure lacunae**  
The report revealed that out of a total sanctioned strength of 25,081 judges in the district judiciary, there are 30,821 courtrooms highlighting an infrastructure gap of 4,250 cour-

rooms across India. The report said 73.5% of the available court premises are owned by the judiciary, 13.3% are owned by the respective state government, 2.6% (626 courtrooms) are rented premises, and 10.6% are under construction.

**In J&K and Ladakh**  
As per information received from the High Court of Jammu & Kashmir and Ladakh, 35 courts in the district judiciary of the two Union Territories are functioning on an ad-hoc arrangement in rented accommodation or otherwise.

The report said when courts function in private rented buildings or stop-gap arrangements, they not only face the challenge of non-availability of amenities but also of a secure work environment due to which all the stakeholders face inconvenience. While the required pro-

visions for people with disabilities are being made in the newly constructed buildings, with respect to the existing buildings, a few High Courts have said that it is difficult to make alterations in the old buildings or those functioning from temporary accommodations owing to structural limitations and space constraints.

The report said that the data signify a "critical shortcoming" in the judicial infrastructure in the country with respect to accessibility, necessitating concerted attention and action.

"There is a need for regular inspection by the agencies concerned like the Public Works Department in coordination with the District Judges to explore modifications that can be made in existing court buildings to make the judicial infrastructure disabled-friendly," it said.

- **Accessible India Campaign:**
  - To help make buildings and other infrastructure disabled friendly.
- **Sugamya Pustakalaya:** Online library for persons with disabilities.
- **Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances (ADIP) Scheme:** it ensures distribution of aids and assistive devices.
- **Economical measure:** creation of National fund for Person with disabilities.
- **Other Measures:**
- **Corporate Social responsibility:** Deendayal Disabled Rehabilitation Scheme: Promote Voluntary Action by releasing grant-in aid to NGOs.
- **Existing loopholes**
  - **Definition of Disability in India:** The definition of disability which is approved in India is ambiguous and problematic.
  - **Gender Aspect:** Biologically, it is true that disability affects all irrespective of one's gender identity. However, it is important to see that the socio-cultural aspects and the repercussions associated with disability are affected by gender concerns
  - **Caste issues and disability:** The 2011 census states that disability is higher among the scheduled castes in all age groups.
  - **Urban-rural divide:** The 2011 census states that the population of disabled is higher in rural areas than that of the urban areas.
- **Way Forward:**
  - **Preventive programs**
    - All children health related screening at a young age. (Kerala as a role model)
  - **Disabled adults need to be empowered with employable skills.**
    - The private sector needs to be encouraged to employ them.
  - **Safety measures**
    - IT includes road safety, safety in residential areas, public transport system etc, should be taken up.
  - **Institutional monitoring mechanisms and accountability of public funds.**

## 6. Complete transplant process in 6-8 weeks, says Delhi HC

### GS 2 (Health)

- **Why in News:**
  - Delhi High Court has prescribed an ideal timeline of 6-8 weeks to complete the process of transplanting organs from living donors.
  - In a judgment passed recently, HC said that prolonged delays can cause significant mental and physical anguish for donors, recipients, and their families.
  - It directed the Ministry of Health and Family Welfare to ensure that timelines under **The Transplantation of Human Organs and Tissues Act, 1994, and Rules, 2014** are prescribed for all steps in the process of considering organ-donation applications.
- **Regulatory frameworks guiding the organ transplantation in India**
  - **Legislation**
    - In 1994, The **Transplantation of Human Organs Act (THOA)** was promulgated by the government of India.

#### ORGAN TRANSPLANTS: WHY DELHI HC HAS PRESCRIBED 6-8 WEEK TIMELINE

KHADILJA KHAN  
NEW DELHI, JANUARY 10

DELHI HIGH COURT has prescribed an ideal timeline of 6-8 weeks to complete the process of transplanting organs from living donors. In a judgment passed on January 4, Justice Pratibha M Singh said prolonged delays can cause mental and physical anguish for donors, recipients, and their families, and directed the government to ensure that timelines under The Transplantation of Human Organs and Tissues Act, 1994, and Rules, 2014 are prescribed for all steps in the process of considering organ-donation applications.

**The Act of 1994**  
The law governs the transplantation of human organs and tissues, including donation after death. It lays down regulations for healthcare providers and hospitals, and penalties for violations. In most cases, the Act allows living donations from close relatives – parents, siblings, children, spouses, grandparents, and grandchildren. Altruistic donations from distant relatives, friends, long-time friends are allowed after additional scrutiny.

**Authorisation Committee**  
Stringent checks are in place to ensure there is no financial exchange in transplants. The Authorisation Committee, which oversees and approves procedures involving donors and recipients who are not near relatives, has a key role in the process. The approval is crucial especially in cases where donations are made for reasons of affection, altruism, or other special circumstances, to ensure ethical compliance and prevent illegal practices.

**Case before Delhi HC**  
The court ruled on a plea filed by a se-

vered IAF officer diagnosed with kidney failure in 2017. By 2018, two hospitals had advised him to get a renal transplant. However, his application seeking approval for transplant was rejected by the Army Hospital in Delhi due to the non-availability of a "near relative" donor in terms of Sections 2(1) and 2(1) of the 1994 Act. Section 2(1) defines a "near relative" as a "spouse, son, daughter, father, mother, brother, sister, grandfather, grandmother, grandson or granddaughter". Section 2(1) says that without the Committee's prior approval, no organ or tissue can be removed from a donor's body before death and transplanted into a recipient unless the donor is a "near relative".

In 2020, the petitioner approached the HC seeking the transplant and/or a direction to the panel to grant approval.

In February 2021, the HC directed the Authorisation Committee to decide the petitioner's application within two weeks. In October 2021, the court was informed that the petitioner had passed away.

**What the court said**

The court ruled that everything from conducting interviews to processing forms and circulars should be done within fixed timelines, and not in an "expanded or shrunken" manner. Section 2(1) of the Act reflected in provisions like Rule 2(3) which requires a final decision to be taken within 24 hours of the meeting, the court said.

It suggested that after 4-6 weeks of receiving the application, the Committee can schedule interviews within 2 weeks, during which it will facilitate meetings of family members of the donors and recipients and conduct more than one interview. The "entire process, from submission to decision, ought not to be delayed to 8 to 10 weeks," the court said.

**LONGER VERSION**  
indianexpress.com/exp/india

- The **Transplantation of Human Organs Rules** followed in 1995 and were last amended in 2014, increasing the scope of donation and including tissues for transplantation.
- The act made **commercialization of organs a punishable offence** and legalized the concept of brain death in India allowing deceased donation by obtaining organs from brain stem dead person.
- **Institution**
  - **National Organ and Tissue Transplant Organization (NOTTO)** is a national level organization set up under Ministry of Health and Family Welfare.
  - Besides laying down policy guidelines and protocols for various functions, it coordinates all the activities associated with organ donation at national level.
- **Organ transplant rules**
  - In February 2023 the govt modified national organ transplantation guidelines.
  - The new guidelines have done away with the 65-year age limit for registration of patients seeking organs from a deceased donor.
    - **There was no age cap for living donor transplants**, where family members donate organs like kidneys and livers.
    - However, people over the age of 65 years couldn't register to receive organs from deceased donors as per guidelines of NOTTO.
  - It has asked states to **remove the domicile criterion for registering those seeking organs from deceased donor for transplant procedures**.
    - Now the needy person can go to any state of the country and register for getting organ and also get the transplant done.
    - The patient will be allotted a unique ID by NOTTO on registering.
    - This will get carried forward even if the patient changes multiple hospitals in different States.
  - Noting that some states have been charging fees ranging between Rs 5,000 to 10,000 for registering such patients, this guideline has asked them not to charge money.
- **The Transplantation of Human Organs and Tissues Act, 1994**
  - **About**
    - The law governs the transplantation of human organs and tissues in India, including the donation of organs after death.
    - It lays down regulations governing healthcare providers and hospitals, and stipulates penalties for violations.
  - **Key highlights**
    - A transplant can be either from a pool of organs of **deceased persons** donated by their relatives or from **a living person** who is known to the recipient.
    - In most cases, the Act allows **living donations from close relatives** such as parents, siblings, children, spouses, grandparents, and grandchildren.
    - **Altruistic donations from distant relatives**, in-laws, or long-time friends are allowed after additional scrutiny to ensure there is no financial exchange.
    - **Living donations from close relatives involving Indians or foreigners** must be accompanied by documents establishing their identities, family trees, and pictures that prove the donor-recipient relationship.
      - Donors and recipients are also interviewed.
    - Donations from unrelated persons require documents and photographic evidence to prove their long-term association or friendship with the recipient.
      - These are examined by an external committee to prevent illegal dealings.
  - **Punishment**
    - Following activities can attract a jail term up to 10 years and a fine up to Rs 1 crore:
      - offering to pay for organs or supplying them for payment;
      - initiating, negotiating, or advertising such arrangements;
      - looking for persons to supply organs; and abetting in preparing false documents.
  - **Role of Authorisation Committee**
    - The Authorisation Committee oversees and approves organ transplant procedures involving donors and recipients who are not near relatives.

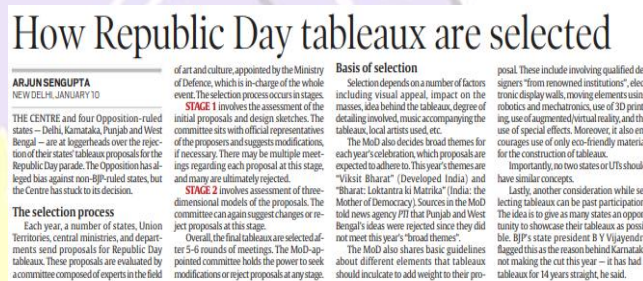
- This approval is crucial, especially in cases where organs are donated for reasons of affection, attachment, or other special circumstances, **to ensure ethical compliance and prevent illegal practices**
  - The act authorises the Central Government to decide on the composition of the Authorization Committee.
  - State and Union Territories must form one or more Authorization Committees with members chosen by them.
- **2014 Rules**
    - Rule 7 of the 2014 Rules provides for the constitution of the Authorisation Committee and the nature of enquiry and evaluation conducted by it.
    - Rule 7(3) says the Committee must ensure there is no commercial transaction involved in cases where the donor and recipient are not near relatives.
    - But Rule 7(5) says that if a recipient is in a critical condition and needs transplantation within a week, the hospital can be approached for an expedited evaluation.
    - For living donor transplantations, Rule 10 describes the application process, which requires joint applications by the donor and recipient.
    - Rule 21 requires the Committee to personally interview applicants and determine their eligibility to donate.

## 7. Selection of Tableaux for the Republic Day Parade

### Recent events of importance

- **Why in News:**

- The latest tussle between the Central government and opposition ruled States over the rejection of tableaux proposals for this year's Republic Day parade has taken a political tone.
- In light of the Opposition's accusations of bias against the central government, we shall attempt to explain the process of selecting tableaux for the Republic Day parade.



- **About the Republic Day Parade:**

- The Delhi Republic Day parade is the largest and most important of India's Republic Day celebrations.
- Every year on **January 26th**, the parade takes place on the Kartavya Path (formally Rajpath) in New Delhi. The first parade took place in 1950 and it has taken place every year since.
- The parade marches along the Kartavya Path from the Rashtrapati Bhawan to India Gate and then to the Red Fort.
- Among other things, **tableaux representing the cultures of various states are displayed**

- **Republic Day Parade: How are Tableaux Selected?**

- According to a **Ministry of Defence (MoD)** circular, a select number of "State govts/UTs/Central ministries or departments" send their tableaux each year to the Republic Day parade.
- **There is a rigorous application process** which begins with interested parties submitting a concept note, along with design blueprints to the MoD.
- **The tableaux proposals received are evaluated** by a committee of experts appointed by the MoD, comprising prominent persons in the field of art, culture, painting, sculpture, music, architecture, choreography, etc.
- **The selection process happens in a phased manner.**
  - **STAGE 1**
    - It involves the assessment of the initial proposals and the design sketch/blueprint.
    - The Committee suggests modifications (if necessary) and a number of proposals may be rejected in this stage itself.
  - **STAGE 2**
    - It involves assessment of 3-D models of the proposals.
    - If the Committee is satisfied with the model, then the tableau is selected and further sent for fabrication.
- Crucially, while the process is envisioned to be collaborative, **the Committee has the final say on which tableaux are chosen** (approx. 15 every year), and can order any modifications they feel are required.

- **What is the Basis of Selection of Republic Day Parade Tableaux?**
  - Each year, **the MoD comes up with an overarching theme**, under which participants can showcase elements relevant to their respective state/UT/department in their tableaux.
  - This year's theme is **"Viksit Bharat"** (Developed India) and **"Bharat: Loktantra ki Matrika"** (India: the Mother of Democracy).
  - Importantly, the tableaux of two different states/ UTs must not be too similar and eco-friendly material must be used for their construction
- **A Memorandum of Understanding (MoU) Signed Between MoD and States:**
  - Under a MoU signed between the MoD and governments concerned, **all the states and UTs will get equal opportunity to display their tableaux** in the next 3 Republic Day celebrations at Kartavya Path.
  - **The 3-year rolling plan** (2024-2026) was finalised so that every state and UT gets a chance - on a rotational basis - to showcase its tableau during the Republic Day parade.
  - **An expert committee**, comprising reputed artists recommended by Indira Gandhi National Centre for the Arts and Indian Council for Cultural Relations was constituted for selecting the tableau
- **Politics over Rejection of Tableaux:**
  - **A State can pitch multiple proposals to the committee**, but only one is chosen for the final parade.
  - The Defence Ministry argues that only a limited number of tableaux can be selected **due to time constraints and to ensure the participation of the best ones**.
  - However, the exclusion of proposals from Opposition-ruled States has led to accusations of **'discrimination'** by several State governments.
  - This year, tableau proposals by Punjab, Delhi and West Bengal - all non-BJP ruled States - failed to make the final cut.
  - While the Centre is yet to release the final list of tableaux for the parade, **it has rejected the criticism as "baseless"** and claimed that the rejected proposals **didn't align with this year's broader theme**.

12<sup>th</sup> Jan, 2024

## 1. South Africa's genocide case against Israel at the ICJ GS 2 (International Relations)

### • Why in News:

- The International Court of Justice (ICJ) has been asked to consider whether Israel is committing genocide against the Palestinians in Gaza.
- South Africa brought the case to the court.

### • International Court of Justice (ICJ)

#### ○ About

- The ICJ is the principal **judicial organ** of the United Nations (UN).
- It was established in June 1945 by the Charter of the United Nations and began work in April 1946.
- The seat of the Court is at the **Peace Palace in The Hague (Netherlands)**.
  - It is the only one of the six principal organs of the UN that is not located in New York City.
- **English and French** are the ICJ's official languages.

#### ○ Background:

- ICJ is the successor to the Permanent Court of International Justice (PCIJ).
  - PCIJ was brought into being by the League of Nations.
- After World War II, the League of Nations and PCIJ were replaced by the United Nations and ICJ respectively.
- The PCIJ was formally dissolved in April 1946, and its last president, Judge José Gustavo Guerrero of El Salvador, became the first president of the ICJ.

#### ○ Role:

- To settle, in accordance with international law, legal disputes submitted to it by States and
- To give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies.

#### ○ Judges

- The ICJ has **15 judges** who are elected to **nine-year terms** by the UN General Assembly and Security Council, which vote **simultaneously but separately**.
- To be elected, a candidate must receive a majority of the votes in both bodies, a requirement that sometimes necessitates multiple rounds of voting.
  - A third of the court is elected every **three years** and elections are held at the UNHQ in New York during the annual UNGA meeting.
  - The judges elected at the **triennial election** commence their term of office on February 6 of the following year.
- The president and vice-president of the court are elected for three-year terms by secret ballot. **Judges are eligible for re-election.**

#### ○ Indian Judges at ICJ

- Four Indians have been members of the ICJ so far.
- **Justice Dalveer Bhandari**, former judge of the Supreme Court, has been serving at the ICJ since 2012.

#### ○ Members and Jurisdiction

- All members of the UN are automatically parties to the ICJ statute. However, this does not automatically give the ICJ jurisdiction over disputes involving them.
  - The **ICJ gets jurisdiction only if both parties consent to it.**
- The judgment of the **ICJ is final & technically binding** on the parties to a case.
  - There is no provision of appeal. It can at the most, be subject to interpretation or, upon the discovery of a new fact, revision.

CASE MOTIVATED BY SOUTH AFRICA'S APARTHEID HISTORY: RAMAPHOSA

## ICJ begins hearing SA's genocide case against Israel as Gazans return to ruins

Israel says South Africa speaks for Hamas, which Pretoria says is untrue

REUTERS

GAZA, THE HAGUE, JANUARY 11

SOUTH AFRICA accused Israel on Thursday of carrying out genocide in Gaza and demanded that the UN's top court order an emergency suspension of Israel's devastating military campaign in the Palestinian enclave.

Meanwhile, first responders turned to northern areas where Israeli forces have begun withdrawing, leaving behind scenes of total devastation.

On the first of two days of hearings at the International Court of Justice (ICJ), South Africa said Israeli's offensive, which has demolished much of the coastal enclave and killed 21,400 people according to Gaza health authorities, aimed to bring about "destruction of the population" of Gaza.

"The intent to destroy Gaza has been maintained at the highest level of state," Tembeka Ngcukaitobi, advocate of the High Court of South Africa, said.

He said Israel's political and military leaders, including Prime Minister Benjamin Netanyahu, were among "the genocidal inciters".

Lead reporters the accusations of genocide as false and baseless

and said South Africa was speaking on behalf of Hamas - which Pretoria said was untrue. PM Netanyahu on Thursday condemned South Africa's genocide case against Israel in Gaza as "hypocritical and false".

South African President Cyril Ramaphosa said they were driven to bring the case by the "ongoing slaughter" of Gazans and due to their own apartheid history.

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The South African and Israeli delegations at the International Court of Justice on Thursday.

## Path to Palestinian state best way to stabilise region, isolate Iran: Blinken

REUTERS

CAIRO, JANUARY 11

OFFERING A pathway to a Palestinian state is the best way to stabilise the wider region and isolate Iran and its proxies, U.S. Secretary of State Antony Blinken said on Thursday, as he ended a five-day regional tour over the Gaza war in Cairo.

Speaking to reporters, Blinken said the region faced two paths, the first would see "Israel integrated, with security assurances, from regional countries and as well from the U.S. and Palestinian state - it is a pathway".

The other path is to continue to see the region, addressed by Iran," he said.

"If you pursue the first path... that's the single best way to isolate, to marginalize Iran and the proxies that are making so much trouble - for us and for pretty much everyone else in the region," the US top official said.

US Secretary of State Antony Blinken

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- It was launched by the Ministry of Housing and Urban Affairs (MoHUA) with Quality Council of India (QCI) as its implementation partner.
- The SBA was launched (on 2nd October 2014) to make India clean and free of open defecation by 2nd October 2019.
- The SBA was split into two - rural (**SBA-Gramin**, monitored by the Department of Drinking Water and Sanitation under the **Ministry of Jal Shakti**) and urban (**SBA-Urban**, overseen by the **MoHUA**).
- **SBM-U 2.0** was recently launched on 1st October, 2021, focused on ensuring complete access to sanitation facilities for all.
  - The vision of a **Garbage Free India** is an initiative under SBM-U 2.0.
- **The first survey was undertaken in 2016** (covering 73 cities), which had grown to cover 4242 (by the 2020 survey).
- The methodology for measuring cleanliness rests on two main criteria – **citizen feedback and field assessment**.
- **Objectives of Swachh Survekshan:**



#### • Swachh Survekshan 2023

- The President Droupadi Murmu conferred Swachh Survekshan awards 2023 at Bharat Mandapam, New Delhi hosted by Ministry of Housing and Urban Affairs (MoHUA).
- The **theme** for the year 2023 was – **“Waste to Wealth”**.
  - For 2024, the theme is “Reduce, Reuse and Recycle”.

#### • Performance of cities in Swachh Survekshan 2023

- The **Mhow Cantonment Board in Madhya Pradesh** was adjudged the cleanest cantonment board.
- **Varanasi and Prayagraj**, both in Uttar Pradesh, won the **top two awards amongst the cleanest Ganga towns**.
- **Chandigarh** walked away with the award for the **Best Safaimitra Surakshit Sheher (safest city for sanitation workers)**.
- Twenty zonal awards were bestowed upon medium and small cities.

#### • Case study of Indore

- When the Awards first began in 2016, Indore ranked at number 25. However, the city leapfrogged in the rankings in a year and has maintained its top position since then.
- Indore targeted the various indicators mapped in the survey early on.
- A slew of measures included changes to the sanitation and waste collection system, as well as popularising these initiatives among citizens to build better habits around sanitation.
- **Segregation and disposal of waste**
  - Terminating the private contract given for the collection and disposal of solid waste, Nagar Nigam took on this work and drew new strategies.
  - The routes of municipality garbage disposal vehicles were changed such that they directly collected waste — dry and wet separated — from the households.
    - In some instances, corporation workers refused to collect households’ garbage bags unless they had been segregated.
    - The wet waste was entirely converted into compost and sold by Indore municipality.
    - A new treatment plant was set up in 2016 at Devguradiya to tackle dry waste.



- NGOs were also involved and went door-to-door to **make people aware of handing over their garbage directly to the municipality vehicles**, for a monthly charge for each household.
- Indore also addressed the **issue of legacy waste** by clearing and treating of nearly 13 lakh metric tonnes of waste at the Devguradiya ground in just about six months.
  - For a five-star rating in Swachh Bharat, one of the criteria is that 75 per cent of the waste be treated at the dumping site.
- **Installing new toilets, dustbins**
  - The NGOs also did the groundwork for identifying areas in the city in need of urinals and toilets to tackle the challenge of open defecation.
  - Around 1,000 free dustbins were distributed to vehicle owners to encourage them to not throw waste out of windows.
- **Building habits among citizens**
  - Public officials held multiple meetings with citizens and administered the oath of cleanliness to lakhs of people.
  - Indore Municipality also issued spot fines from Rs 250 to Rs 500 against people spitting on roads, urinating in the open, or littering.
  - In order to give a message to **habitual offenders**, public shaming was used as a tool for deterrent.
  - Municipalities started publishing the names of such offenders in newspapers and broadcasting them over radio.

### 3. Mumbai Trans Harbour Link (MTHL): India's Longest Sea Bridge Opens Today

#### GS 3 (Infrastructure)

#### • Why in News:

- The PM of India will inaugurate the country's longest bridge over the sea - the 22 km Mumbai Trans Harbour Link (MTHL), officially the **Atal Setu Nhava Sheva Sea Link**.
- The bridge that was first conceptualised six decades ago will cut the travel time between Sewri (Mumbai) and Chirle (Raigad) to under 20 minutes.

#### • About the MTHL:

- It is a **22-km-long twin-carriageway six-lane bridge** over the **Thane Creek** in the **Arabian Sea**, connecting Sewri in the island city of Mumbai to Chirle in Raigad district on the mainland.
- **The MTHL includes** a 16.5 km sea link and viaducts on land at either end with a cumulative length of 5.5 km.
- While the project's contractors sourced engineers and experts from across the globe, most of the **labourers hired were from states** such as Bihar, Orissa, Uttar Pradesh, Punjab and Maharashtra.
  - On an average, **5,403 individuals worked daily** on the four packages of the project.
- **The objective of the project** is to **improve connectivity** in the Mumbai Metropolitan Region which comprises the districts of Mumbai, Thane, Palghar, and Raigad, and promote the region's **economic development**.
- **The Idea of a Bay Crossing Connecting Mumbai to the Mainland:**
  - It was first floated in **1963** by the American construction consultancy firm Wilbur Smith Associates, but no follow-up action was initiated.
    - The plan was revived in the **late 90s**, and the **first tenders were floated in 2006**.
  - In **2008**, Anil Ambani's Reliance Infrastructure emerged as the preferred bidder after promising to build and recover the cost of building the (then) Rs 6,000 crore bridge in about 10 years through a PPP model.
    - However, Ambani withdrew from the project months later.

#### PM NARENDRA MODI TO INAUGURATE ATAL SETU THAT LINKS MUMBAI AND NAVI MUMBAI

#### India's longest sea bridge opens today



### SEALINK & VIADUCTS

**MUMBAI TRANS HARBOUR LINK** is a 22 km long 6-lane (3+3-lane) bridge, with an emergency lane on each side, connecting Sewri in the island city to Chirle on the mainland.

**THE SEA LINK IS 16.5 KM LONG**; the viaducts on land on both sides are cumulatively 5.5 km long.

**INTERCHANGES ARE LOCATED AT** Sewri on the Mumbai side, and at Shivaji Nagar and Jaisai SH-54 (Uran-Panvel Road) and Chirle on NH-34S (JNP Road) on the mainland side.

#### STEEL & CONCRETE

- Trucks that moved the concrete for the project travelled a distance equal to that from Earth to Moon.
- Reinforcing bars (used in reinforced concrete) used in the project could have built 17 Eiffel Towers.
- Length of prestressed steel wire in project is equal to four times the diameter of the Earth.
- 55,000 tonnes of orthotropic steel used in the deck, the weight of more than 155 Boeing 747 jumbo jets (without passengers or fuel).

- **Multiple unsuccessful bidding processes followed**, and the nodal agency was changed from the Maharashtra State Road Development Corporation (MSRDC) to the Mumbai Metropolitan Region Development Authority (MMRDA).
- **The project finally got moving** after MMRDA entered into an agreement with Japan International Cooperation Agency (JICA), which agreed to fund 80% of the project cost (rest to be borne by the state and central govts).
  - The project was executed by the MMRDA on an Engineering Procurement Contract (EPC) basis.
- While the Indian PM laid the foundation stone of the project in (Dec) 2016, the deal and tendering were finally completed in (Dec) 2017, and work commenced in early 2018.
  - **A total Rs 21,200 crore has been spent on the project**, of which Rs 15,100 is loan from JICA.
- **Challenges Encountered During the Construction of the MTHL Project:**
  - The most arduous part of the project was the **construction of the segments that lie in the marine portion**.
    - Here, engineers and workers **had to dig as deep as 47 metres** in the sea bed to provide strong foundations to hold up the massive girders and deck of the bridge.
  - The fact that the bridge lies close to **sensitive establishments like ONGC, JNPT and BARC** made the construction of these segments more difficult.
    - Engineers have to take care that they **do not damage any underwater installations** such as pipelines or communication cables.
  - According to reports submitted by the MMRDA, **seven labourers were killed in six accidents during the project**.
- **How will MTHL Help?**
  - The MTHL **will bring down the average travel time** between Sewri and Chirle from 61 minutes currently to less than 16 minutes and will **decongest the existing route** over the Vashi bridge.
  - The project is expected to **facilitate greater economic integration** of Navi Mumbai with Mumbai, with benefits extending to **Panvel, Alibaug, Pune, and Goa**.
  - **It will significantly improve connectivity** between South Mumbai and the under-construction Navi Mumbai International Airport, the Mumbai Pune Expressway, the Mumbai-Goa Highway, and the main hinterland in general.
    - **It will also provide improved access to Jawaharlal Nehru Port**
- **Some Questions that Remain about MTHL:**
  - While the project has obvious benefits, there are doubts on **whether it will be of help to regular commuters** who travel between Mumbai and Navi Mumbai every day.
    - **The Rs 250 toll for a one-way crossing** of the Trans Harbour Link is deemed to be high.
    - Also, the landing points of the bridge on the mainland side are more than 10 km away from the main residential areas.
  - **No public transport facilities**, such as buses on a dedicated lane, have been announced on the bridge yet.



#### 4. Aligarh Muslim University (AMU)

##### Recent events of importance

- **Why in News:** The Supreme Court recently said that over the last hundred years, Aligarh Muslim University (AMU) has continued to be an institute of national importance, without the minority tag, and asked how it matters for the people whether it is a minority institution or not.
- **About the Aligarh Muslim University (AMU):**
  - It is a **government-run** education institution situated in **Aligarh, Uttar Pradesh**.
  - **History:**



- It was **originally established by** social reformer **Sir Syed Ahmad Khan** as the **Mohammedan Anglo-Oriental College in 1875**.
- In the aftermath of the 1857 Indian War of Independence, the College was **built on Khan's conviction** that it was **important for Muslims to gain education** and become involved in public life and government services in India.
- **Raja Jai Kishan helped Sir Syed** in establishing the college.
- Muhammadan Anglo-Oriental College **became AMU in 1920, following the Aligarh Muslim University Act**.
- From its very inception, it has kept its door **open to members of all communities** and from all corners of the country and the world. The university is open to all irrespective of caste, creed, religion, or gender.
- AMU is **recognised by the University Grant Commission (UGC)** and the **Association of Indian Universities (AIU)**.
- AMU offers **more than 300 courses in the traditional and modern branches of education**.
- It has **three off-campus centres: AMU Malappuram Campus (Kerala), AMU Murshidabad Centre (West Bengal), and Kishanganj Centre (Bihar)**.

## 5. India-US Trade Policy Meet

### GS 2 (International Relations)

- **Why in News:** Representatives of the Government of India and the US Government are set to meet at the Trade Policy Forum (TPF) — India's bilateral platform with the US.
- **Significance of Trade Policy Forum for India:**
  - The US is the single largest trade partner of India and the **only large economy where India exports more than it imports**.
  - At a time when goods exports are slowing in the West due to the Russia-Ukraine war, India predominantly depends on the US demand for export earnings.
  - India is also banking on the US-led **Indo-Pacific Economic Framework for Prosperity (IPEF)** trade pact to counter China's influence on trade in Asia.
    - IPEF aims to strengthen economic partnership among participating countries to enhance resilience, sustainability, inclusiveness, economic growth, fairness, and competitiveness in the Indo-Pacific region.
    - The IPEF was launched in 2021 with a dozen initial partners who **together represent 40% of the world GDP**.
    - The IPEF is not a Free Trade Agreement (FTA) but allows members to negotiate the parts they want to.
  - Closer trade ties with the US could help India attract more foreign direct investment (FDI).
  - Also, in the absence of a free trade agreement (FTA) with the US, such trade policy forum meetings are among the few platforms **to resolve trade tensions and push for tangible export growth**.
- **Restoration of Generalized System of Preferences (GSP):**
  - GSP is the largest and oldest US trade preference programme, **designed to promote economic development by allowing duty-free entry for thousands of products from designated beneficiary countries**.
  - It is an umbrella that comprises the bulk of preferential schemes granted by industrialized nations to developing countries.
  - India had lost GSP benefits in 2019 when former US President Donald Trump began introducing radical trade measures citing widening trade gap with India and China.
  - Donald Trump's trade war was detrimental to India as it was the largest beneficiary of GSP status in 2017 with \$5.7 billion worth of imports into the US given duty-free status.
  - **While it was widely expected that the US under the Joe Biden administration would reverse Trump-era measures, GSP was not restored.**
  - GSP restoration was discussed during the last India-US trade policy forum last year too.
- **US' Concerns w.r.t. India's Laptop Import Monitoring System:**
  - Even though India has clarified that it will not impose restrictions on laptop imports, the **US continues to raise questions on the purpose of the "monitoring system" that has been proposed as an alternative**.

### India-US trade policy meeting starts today: GSP, laptop import monitoring system on table

RAVI DUTTA MISHRA  
NEW DELHI, JANUARY 11

INDIA AND THE US are set to take up a number of sticky trade issues — ranging from New Delhi's long-pending demand seeking the restoration of Generalized System of Preferences (GSP) that was revoked under former US President Donald Trump to Washington's objection on India's laptop import monitoring system — at the trade policy forum meet that begins today.

**Why is the trade policy forum meeting crucial?**

The US is India's single largest trade partner and the only large economy where India exports more than it imports. At a time when goods exports are slowing in the West due to the Russia-Ukraine war, India predominantly depends on the US demand for export earnings and is also banking on the US-led Indo-Pacific Economic Framework for Prosperity (IPEF) trade pact to counter China's influence on trade in Asia. With the US firms increasingly adopting the on-going supply chain reset, closer trade ties with the US could help India attract more foreign direct investment (FDI). Moreover, in the absence of a



free trade agreement (FTA) with the US, such trade policy forum meetings are among the few platforms to resolve trade tensions and push for tangible export growth.

**Why is restoration of GSP a key demand from Indian exporters?**

India had lost GSP benefits in 2019 when former US President Donald Trump began introducing radical trade measures citing widening trade gap with India and China. Trump's trade war was detrimental to New Delhi as it was the largest beneficiary of GSP status in 2017 with \$5.7 billion worth of imports into the US given duty-free status. While it was widely expected that the US under the Joe Biden administration would reverse Trump-era measures, GSP was not restored. GSP restoration was discussed

during the last India-US trade policy forum last year too.

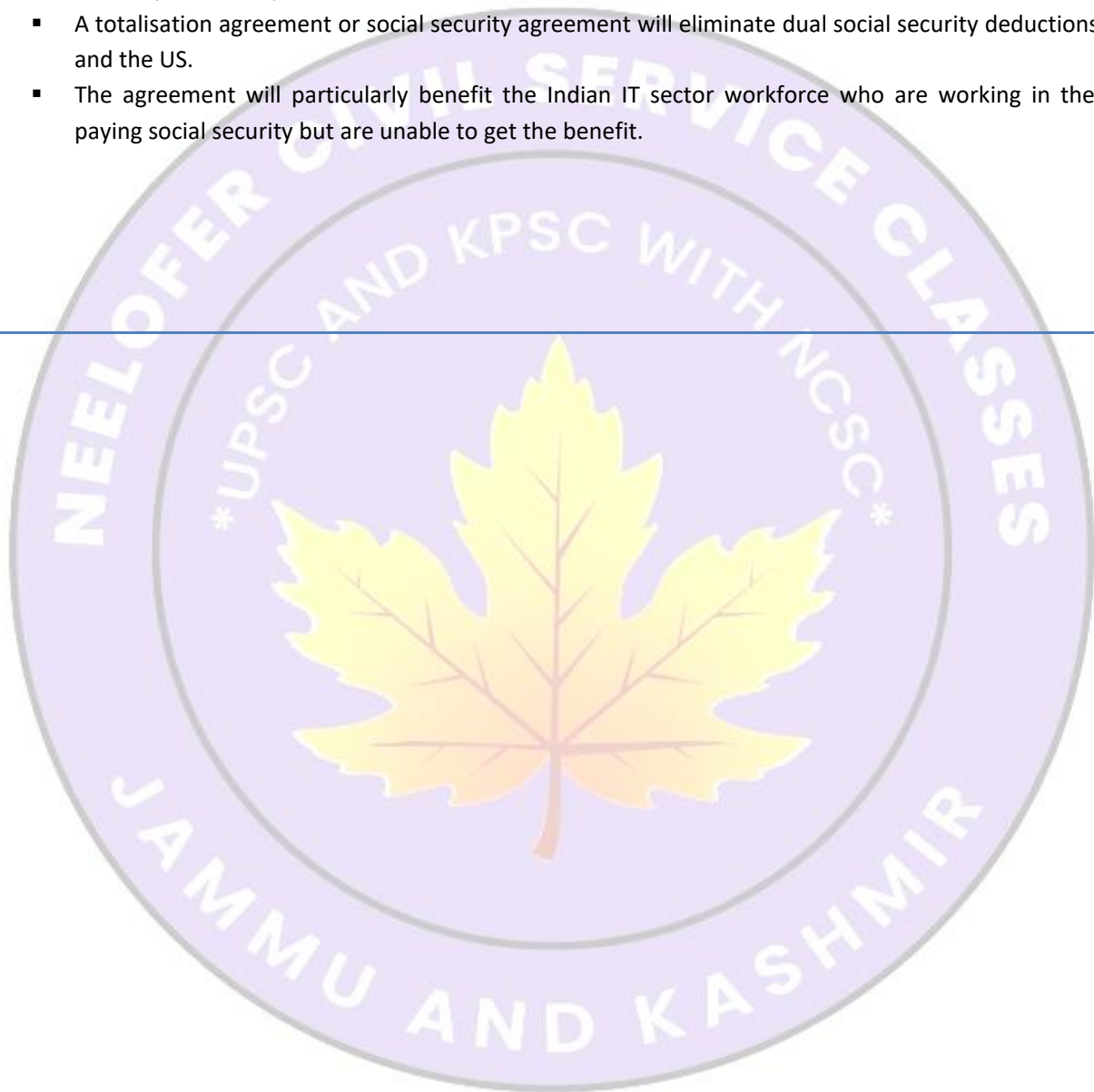
**Why is the US concerned about India's laptop import monitoring system?**

Even as India clarified that it will not impose restrictions on laptop imports, the US continues to raise questions on the purpose of the "monitoring system" that has been proposed as an alternative. This is likely to be taken up in the trade policy meeting as such measures are seen as a non-tariff measure. India has said that the aim to impose such a system is to ensure that the IT products come from "trusted geographies".

**How is India looking to boost service trade with the US?**

Ajay Sahai, Director General & CEO of the Federation of Indian Export Organisations, said India is seeking liberal visa regime to boost service trade. India's services exports have been on the rise and healthy export numbers largely due to the US demand has helped lower the current account deficit. However, visa delays to Indians surged to record levels during Covid-19. Visas are a key concern for the US as immigration is a politically sensitive issue in the election year.

- This is likely to be taken up in the trade policy meeting as such measures are seen as a non-tariff measure.
- India has said that the aim to impose such a system is to ensure that the IT products come from “trusted geographies”.
- **How is India looking to boost service trade with the US?**
  - Firstly, **India is seeking liberal visa regime to boost service trade.**
    - India’s services exports have been on the rise and healthy export numbers largely due to the US demand has helped lower the current account deficit.
    - However, visa delays for Indians surged to record levels during Covid-19.
    - Visas are a key concern for the US as immigration is a politically sensitive issue in the election year.
  - Secondly, **India is also set to reiterate its longstanding demand for a totalisation agreement that will provide social security to Indian professionals in the US.**
    - A totalisation agreement or social security agreement will eliminate dual social security deductions in India and the US.
    - The agreement will particularly benefit the Indian IT sector workforce who are working in the US and paying social security but are unable to get the benefit.



13<sup>th</sup> Jan, 2024

## 1. SC refuses to stay new law excluding CJI from Selection Panel to elect CEC and EC

### GS 2 (Governance)

- **Why in News:** Government enacted a new law, The Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023 to select the CEC and EC through Selection Panel committee
- **Importance of Election Commission:** Its functioning determines the quality of governance and strength of democracy.
- **Key Highlights of the New Law -**
  - Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023, replaces the Election Commission (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991.
  - **Appointment Process:** The CEC and ECs will be appointed by the President upon the recommendation of a Selection Committee.
    - The Selection Committee includes Prime Minister, a Union Cabinet Minister, and the Leader of Opposition/leader of the largest opposition party in Lok Sabha.
    - Recommendations of the Selection Committee will be valid even if there is a vacancy in this Committee.
    - A Search Committee headed by the Cabinet Secretary will propose a panel of names to the Selection Committee.
    - Eligibility Member should be equivalent to the Secretary to the central government.
  - **Salary and Conditions:**
    - The salary and conditions of service of the CEC and ECs will be similar to that of the Cabinet Secretary.
    - Earlier in 1991 Act, it was equivalent to the salary of a Supreme Court Judge.
  - **Removal Process:**
    - Existing constitutional provisions under (Article 324(5)) which allows the CEC to be removed like a Supreme Court Judge, while ECs can only be removed on the recommendation of the CEC by President
  - **Safeguards of CEC and ECs:**
    - CEC and EC are immune to legal proceedings related to actions taken during their tenure, provided such actions were part of the discharging of official duties.
    - The amendment aimed to shield these officials from civil or criminal proceedings related to their official functions.
  - **Major Concern:**
    - SC in March 2023 held that the CEC and ECs shall be appointed on the advice of a committee comprising the Prime Minister, Leader of Opposition in the Lok Sabha and the Chief Justice of India. (New Law dilutes SC Observation)
    - Lacks Independent Mechanism (Violates free and fair election)
    - Violates separation of power is also the basic structure of the Constitution

## SC refuses to stay law on CEC, EC selection; issues notice to govt.

Petitioner said the Act diluted earlier judgment of top court in the matter by replacing CJI with a Union Cabinet Minister in selection committee

Krishnadas Rajagopal  
NEW DELHI

The Supreme Court on Friday declined to stay a new law which brushed aside a top court judgment to include the Chief Justice of India as a member of the high-powered selection committee to appoint the Chief Election Commissioner (CEC) and Election Commissioners (ECs).

"How can we stay a statute?" Justice Sanjiv Khanna, leading a Bench comprising Justice Dipankar Datta, asked petitioner Jaya Thakur's lawyers. The Bench, however, issued notice to the Union of India and listed the case for hearing in April.

### Points of contention

A look at what the Sections 7 and 8 of the CEC and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023 say



Section 7 mandates the selection committee to consist of the Prime Minister, a Union Cabinet Minister, and the Leader of the Opposition or the leader of the largest Opposition party in the Lok Sabha

Section 8 allows the selection committee to regulate its own procedure in a transparent manner and consider persons other than those suggested by the search committee

"The CEC and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023 has diluted the Supreme Court judgment by replacing the

Chief Justice of India with a Union Cabinet Minister," Ms. Thakur, a Congress party leader, argued.

CONTINUED ON  
PAGE 12

## 2. Assam's Kaziranga National Park records 27% increase in waterbirds

### GS 3 (Environment)

- **Why in News:** The tiger reserve is now among the top five habitats of resident and winter migratory birds in India.
- **Background**
  - Kaziranga National Park and Tiger Reserve, renowned for safeguarding the greater one-horned rhinoceros, has recently reported a remarkable 27% increase in the number of resident and winter migratory waterbirds.
  - The findings, unveiled through the fifth waterbird census, conducted under the citizen scientist initiative, reveal a flourishing avian community within the 1,302 sq. km wildlife preserve.
- **A Birdwatcher's Haven: Kaziranga's Waterbird Census Results**
  - The census, showcased a **substantial rise in the waterbird population**, recording a total of 84,839 birds. This marked an 18,063 increase from the previous census conducted in 2021-22.
- **Kaziranga Among the Top Waterbird Habitats**
  - Park officials announce that the recorded surge in waterbird numbers places Kaziranga among the top five habitats for waterbirds in the country.
- **Extensive Survey Efforts**
  - The census was conducted simultaneously across **115 waterbodies in three divisions of the Kaziranga Tiger Reserve - Eastern Assam Wildlife, Nagaon Wildlife, and Biswanath Wildlife.**
- **Analysis:**
  - The substantial **increase in the waterbird population** is indicative of Kaziranga's robust conservation efforts and the health of its unique terrestrial and aquatic habitats.
  - With over **50% of its landmass under grasslands and numerous water bodies**, Kaziranga provides an ideal environment for both resident and migratory birds.
  - The **park's ecological significance**, acknowledged by organizations like the **Bombay Natural History Society and BirdLife International**, reaffirms its standing as an Important Bird Area.
- **Notable Wetlands and Species**
  - Wetlands adjoining the tiger reserve, including **Kaziranga-Hukuma Beel and Joysagar Doloni**, recorded **3,049 and 1,765 birds**, respectively.
  - Other significant wetlands, like **Gonak Beel, Sahala Beel, and Sisubari Beel**, also contributed to the overall bird presence.
- **Rich Avian Biodiversity**
  - Kaziranga sustains **more than 500 avian species**, making it a **popular destination for birders.**
  - Unique and endangered species reported during the census include **Baer's pochard, Baikal teal, greater scaup, gull-billed tern, and black stork.**
- **Analysis:**
  - The **variety of wetlands** and the diverse species **recorded in Kaziranga highlight the park's commitment to the conservation and protection of its avian inhabitants.**
  - The presence of **rare and endangered species** underlines the importance of Kaziranga in maintaining biodiversity.

## Census records 27% increase in waterbirds at Kaziranga

Rahul Karmakar  
GUWAHATI

The Kaziranga National Park and Tiger Reserve, known as the safest address of the greater one-horned rhinoceros, has recorded a 27% increase in the number of resident and winter migratory waterbirds.

The fifth waterbird census conducted through the citizen scientist initiative from January 9-10 across the 1,302 sq. km wildlife preserve revealed the presence of 84,839 birds, which was 18,063 more than the number recorded in 2021-22.

This, park officials said, places Kaziranga among the top five habitats of waterbirds in the country.

The census was conducted simultaneously across 115 waterbodies in three divisions of the re-



**Winged visitors:** The fifth waterbird census was conducted on January 9 and 10. SPECIAL ARRANGEMENT

serve – Eastern Assam Wildlife, Nagaon Wildlife, and Biswanath Wildlife. The exercise was launched by Environment and Forest Minister Chandra Mohan Patowary on January 9.

Forest officials said 108 enumerators and 354 volunteers and Forest officials and staff were engaged in the survey. While 37,606 birds across 155 species were recorded in the Eastern Assam Wildlife Division, 12,002 birds across

82 species were spotted in the Biswanath Wildlife Division.

"This time, we decided to carry out the census in major wetlands adjoining and within the reserve. The Kaziranga-Hukuma Beel in Biswanath recorded 3,049 birds, while the Joysagar Doloni in Kaliabor recorded 1,765 birds, highlighting their conservation and protection," Kaziranga's field director, Sonali Ghosh said.

### • Way Forward:

- Kaziranga National Park's success in the **waterbird census** not only signifies a thriving **avian ecosystem** but also emphasizes the park's commitment to preserving its unique biodiversity.
- As a **UNESCO World Heritage Site** and a **haven for wildlife enthusiasts**, Kaziranga continues to play a pivotal role in wildlife conservation and ecological balance.

## 3. AN-32 Aircraft

### Recent events of importance

- **Why in News:** The Indian Air Force (IAF) recently located the wreckage of an An-32 aircraft that went missing nearly seven-and-a-half years ago.

- **About the AN-32 Aircraft:**

- The AN-32 (Antonov AN-32) is a **Soviet-origin military transport aircraft**.
- It is designed and **manufactured by the Antonov Design Bureau of Ukraine for the Indian Air Force (IAF)**.
- It was **purchased by India** from the erstwhile Soviet Union in 1984. The **IAF has a fleet of around 100 AN-32 planes**.
- Its **NATO reporting name is Cline**.
- **Features:**
  - The aircraft is designed to **manoeuvre day and night in tropical and mountainous regions, even in hot climatic conditions** (up to 55°C).
  - It is **powered by two single-shaft turboprop engines**.
  - An-32 can fly at a **maximum speed of 530 km/h**, and its cruise speed is 470 km/h.
  - **The range** and service ceiling of the aircraft are **2,500km** and 9,500m, respectively.
  - The aircraft weighs around 16,800 kg, and its maximum take-off weight is 27,000 kg.
  - It can **take off and land on rough airfields and dirt runways**.
  - The aircraft can **transport either 7.5 tons of cargo**, 50 passengers, 42 paratroopers, or 24 patients and three medical crews over domestic and international air routes.
  - It also has a **limited bombing role** and is used for **paratrooping operations**.

### Possible debris of IAF aircraft located in Bay of Bengal after 7 years

The An-32 transport aircraft was on its way to Port Blair from Chennai when it went missing on July 22, 2016; there were 29 personnel on board

Dinakar Perli  
NEW DELHI

**A**lmost seven years after an Indian Air Force (IAF) An-32 transport aircraft with 29 personnel on board went missing over the Bay of Bengal while going to Port Blair from Chennai, debris possibly of the aircraft has been located by an autonomous underwater vehicle (AUV) on the sea bed approximately 340 nautical miles from the Chennai coast, the IAF said on Friday.

The An-32 medium transport aircraft (registration K-2743) took off on a routine courier flight from Chennai to Port Blair on July 22, 2016 at 8.30 a.m. with 29 personnel but never reached the destination. A massive search-and-rescue effort by ships and aircraft over several days could not locate any missing personnel or aircraft debris.

The National Institute of Ocean Technology (NIOT), which functions under the Ministry of Earth Sciences, had recently deployed the AUV with deep-sea exploration capability at the last-



Mission mode: An IAF An-32 aircraft stationed at the airbase in Srirangar, in this file photo.

known location of the missing An-32, the IAF said in a statement.

"This search was conducted at a depth of 2,400 m using multiple payloads, including a multi-beam SONAR (Sound Navigation and Ranging), synthetic aperture SONAR and high resolution photography. Analysis of search images had indicated the presence of debris of a crashed aircraft on the sea bed approximately 140 nautical miles, approximately 340 km, from the Chennai coast."

The search images were scrutinised and found to be conforming with an An-32 aircraft, the IAF said, adding that this discovery at the probable crash site,

with no other recorded history of any other missing aircraft report in the same area, pointed to the debris as possibly belonging to the crashed An-32.

**300 sorties**  
As part of the search effort, then, the IAF had flown over 300 sorties and more than 1,000 hours over the area of interest in addition to efforts by the Navy and other agencies.

An underwater search too was carried out by two research vessels, *Sarmadra Ratnakar* of the Geological Survey of India and *Sagar Nidhi* of the NRO, and a remotely operated vehicle which scanned up to depths of 3.5 km but without success.

## 4. New Generation Akash missile

### GS 3 (Science and Tech)

- **Why in News:** Defence Research and Development Organisation (DRDO) conducted a successful flight-test of the New Generation AKASH (AKASH-NG) missile from the Integrated Test Range (ITR), Chandipur off the coast of Odisha.

- **About New Generation Akash missile:**

- It is surface-to-air new generation missile.
- The missile intercepted the **high-speed unmanned aerial vehicle** at a very low altitude.
- The test has validated the functioning of the complete weapon system consisting of a missile with an indigenously developed radio frequency seeker, launcher, multi-function radar and command, control and communication system.
- This was the first trial of the missile against a live target, which was successfully intercepted and destroyed.
- **Features**



### DRDO conducts successful flight test of Akash missile

The Defence Research and Development Organisation (DRDO) conducted a successful flight test of the new generation Akash surface-to-air missile (SAM) from the Integrated Test Range (ITR), Chandipur, off the coast of Odisha, on Friday. "The flight test was conducted against a high-speed unmanned aerial target at very low altitude. The target was successfully intercepted by the weapon system and destroyed. It has validated the functioning of the complete weapon system consisting of the missile with indigenously developed radio frequency seeker, launcher, multi-function radar and command, control & communication system," the DRDO said in a statement. The successful flight test has paved the way for user trials, it stated.

- It is a new generation state-of-the-art **surface-to-air missile (SAM)** for the Indian Air Force (IAF) to destroy high manoeuvring low radar cross section agile aerial threats.
- This advanced variant comes with an active electronically scanned array (AESA) **multi-function radar** that features all three functions - search, track and fire control in one platform.
- It can defend an area 10 times better compared to any short-range SAM and is capable of **engaging up to 10 targets simultaneously**.
- It can strike **targets up to 40 km** as against the earlier variant's maximum range of 30 km.

## 5. Pulses Production in India

### GS 3 (Agriculture)

- **Why in News:** Various representatives of governments, as well as commercial and nonprofit organisations involved in the production and processing of pulses will attend the **Global Pulse Convention** to be held in New Delhi in February.

- **About Pulses:**

- Pulses are annual leguminous crops yielding between one and 12 grains or seeds of variable size, shape and color within a pod, used for both food and feed.
- The term "pulses" is limited to crops harvested solely for dry grain, thereby excluding crops harvested green for food, which are classified as vegetable crops.
- Besides serving as an important source of protein for a large portion of the global population, **pulses contribute to healthy soils and climate change mitigation through their nitrogen-fixing properties**.
- Bengal Gram (Desi Chick Pea / Desi Chana), Pigeon Peas (Arhar / Toor / Red Gram), Green Beans (Moong Beans), Chick Peas (Kabuli Chana), Black Matpe (Urad / Mah / Black Gram), Red Kidney Beans (Rajma), Black Eyed Peas (Lobiya), Lentils (Masoor), White Peas (Matar) are **major pulses grown and consumed in India**.

- **Climate Requirement:**

- Pulse crops are cultivated in Kharif, Rabi and Zaid seasons of the Agricultural year.
  - Rabi crops require mild cold climate during sowing period, during vegetative to pod development cold climate and during maturity / harvesting warm climate.
  - Similarly, Kharif pulse crops require warm climate throughout their life from sowing to harvesting. Summer pulses are habitants of warm climate.
- Seed is required to pass many stages to produce seed like germination, seedling, vegetative, flowering, fruit setting, pod development and grain maturity / harvesting.

- **Pulses Production in India:**

- India is the **largest producer** (25% of global production), **consumer** (27% of world consumption) and **importer** (14%) of pulses in the world.
- Pulses account for around 20 per cent of the area under foodgrains and contribute around 7-10 per cent of the total foodgrains production in the country.
- Though pulses are grown in both Kharif and Rabi seasons, **Rabi pulses contribute more than 60 per cent of the total production**.
- Gram is the most dominant pulse having a share of around 40 per cent in the total production followed by Tur/Arhar at 15 to 20 per cent and Urad/Black Matpe and Moong at around 8-10 per cent each.

- **Government Programme w.r.t. Pulses in India:**

- Department of Agriculture & Farmers Welfare is implementing **National Food Security Mission (NFSM)-Pulse**.

### Lentil production set to touch all-time high: Consumer secy

Production stood at 1.56 million tonne in the 2022-23 crop year

EXPRESS NEWS SERVICE  
NEW DELHI, JANUARY 12

INDIA IS set to become the world's largest producer of lentil (masoor) during the 2023-24 crop year on account of higher acreage, Consumer Affairs Secretary Rohit Kumar said Friday. This is significant for India which, despite being among the world's top five lentil growers, second only to Canada, depends on imports to meet its domestic demands.

"I was looking at the lentil numbers, masoor production numbers, and this year, the numbers are going to be at an all-time high. And I was told by experts yesterday that our lentil production may probably be the highest in the world as a country this year," Singh said during a roadshow ahead of the Global Pulse Conference (GPC), being held in February in New Delhi.

India's lentil production has tapered since 2017-18 when the country recorded its highest output of 1.62 million tonne. According to official data, in the 2022-23 crop year, the country's lentil production stood at 1.56 million tonne.

With the government incentivising farmers to grow more pulses, the country has reported a higher area under lentil crop during the current year. Data from the Agriculture Ministry shows 19.45 lakh hectares under

lentil till January 12, 2024. This is 1.06 lakh hectare (or about 6%) higher from last year's area of 18.39 lakh hectare, and 37% higher than the normal area (14.37 lakh hectare) under lentil.

Speaking during the roadshow, NAFED managing director Ritesh Chauhan said India was now on "the path to self-sufficiency." "As the Home Minister (Amit Shah) has said... if a farmer grows pulses he will have a full fertiliser factory in his field due to inherent benefits of the crop and we firmly believe in the same," he said.

According to the data available with the Food and Agriculture Organization (FAO), the world top lentil growers in 2022 were Canada (2.3 million tonnes), India (1.26 million tonnes), Australia (0.99 million tonnes), Turkey (0.44 million tonnes), and Russia (0.26 million tonnes) during 2022.

Despite being the second largest producer of lentil, India has so far been relying on imports to meet its domestic requirements, buying mainly from Australia, Canada, Russia, Singapore, and Turkey. During the current year, it also imported some quantities of lentil from UAE, USA, Sri Lanka and Nepal.

During the April-October period of the current financial year (2023-24), India imported 9.46 lakh tonne of lentils, 159% higher than the 3.65 lakh tonne imported in the same period last year.

Year	Production (Lakh Tonnes)
2019-20	230.25
2020-21	254.63
2021-22	273.02
2022-23*	275.04

- It has been launched with the objectives of increasing production through area expansion and productivity enhancement.
  - Under NFSM-Pulses, assistance is given through States/UTs to the farmers for interventions like cluster demonstrations on improved package of practices, demonstrations on cropping system, seed production and distribution of HYVs/hybrids, etc.
- In order to increase the productivity potential of pulses crops in the country, the **ICAR is undertaking basic and strategic research on these crops.**
  - The idea is to develop location-specific high yielding varieties and match production packages.
  - During 2014-2023, 343 high yielding varieties/hybrids of Pulses have been notified for commercial cultivation in the country.
- Further to ensure remunerative prices to farmers, Government implements an umbrella scheme PM-AASHA comprising **Price Support Scheme (PSS), Price Deficiency Payment Scheme (PDPS) and Private Procurement Stockist Scheme (PPSS)** in order to ensure **Minimum Support Price (MSP)** to farmers for their produce of notified oilseeds, pulses and copra.
- During the year 2021-22, a total of 30.31 lakh tonnes of pulses were procured under PSS benefitting 13,90,737 farmers, while during 2022-23 (as on 31.07.2023) 28.33 lakh tonnes of pulses have been procured so far, benefitting 12,43,977 farmers.
- **News Summary:**
  - The **Global Pulse Convention** is scheduled to be held in New Delhi in February.
  - The Global Pulse Convention is jointly organised by the National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) and the Global Pulse Confederation (GPC).
  - The conference will see experts in the field sharing their views and experiences with various stakeholders and policymakers.

## 6. To Combat Climate Challenges, the Finance Commission Needs to Step Up

### GS 3 (Environment)

#### Why in News:

- In recent years, **India has emerged as a significant player in global efforts to combat climate change and enhance forest cover.**
- This has not only contributed to environmental sustainability but also bolstered the resilience of communities and ecosystems.
- As India faces the challenges posed by climate change, **fiscal federalism, particularly through the role of the Finance Commission (FC), has played a pivotal role in incentivising states to prioritise conservation efforts.**

#### Overview of FC's Role in Fiscal Federalism and Forest Conservation

- **Incentivising Conservation Efforts**
  - The FC's initiatives have been **instrumental in providing concrete incentives for states to invest in forest conservation.**
  - By allocating specific funds dedicated to this cause, the **FC acknowledges the intrinsic link between healthy forests, sustainable ecosystems, and the overall well-being of the nation.**
  - This financial support acts as a catalyst, encouraging states to prioritize conservation efforts without compromising their economic interests.
- **Revenue Capacities and Expenditure Needs**
  - Forest resources are not just a repository of biodiversity; **they are also economic assets for states.**
  - **The FC recognises that the conservation of standing forests and the augmentation of forest cover density have direct implications for the revenue capacities and expenditure needs of states.**
  - **Striking a balance between the economic exploitation of forest resources and their conservation becomes imperative** to ensure both environmental sustainability and economic prosperity.
- **Past Instances of FC Initiatives in Forest Conservation Efforts**
  - **The 12th FC (2005-10) allocated Rs 1,000 crore** for forest conservation, setting the stage for subsequent efforts.



- **The 13th FC (2010-15) increased this allocation to Rs 5,000 crore**, emphasising the growing importance of environmental conservation.
- **The 14th FC (2015-20) introduced a significant shift by dedicating 7.5%** of the divisible central tax pool to ecology and forests, reflecting a more comprehensive approach.
- **The 15th FC (2021-26) further increased this share to 10%**, making it the largest payment for ecosystem services (PES) system globally.
- **Challenges in Navigating the Complexities of Fiscal Federalism and Environmental Conservation in the Current Scenario**
  - **Balancing Conservation Costs with Economic Needs**
    - The **opportunity costs** associated with conservation efforts can be substantial, particularly for states facing economic hardships.
    - The **financial burden of dedicating resources to forest preservation may strain state budgets**, posing a challenge in garnering widespread commitment.
  - **To Innovate Financing Models for Conservation**
    - The traditional models of financing conservation efforts may not be sufficient or sustainable in the long run.
    - **Relying solely on grants may create dependencies and hinder the development** of self-sustaining mechanisms for conservation.
    - **Climate-Induced Economic Vulnerabilities**
      - The impacts of climate change pose **significant threats to economic stability, especially for states reliant on sectors sensitive to climate variations.**
      - Unpredictable weather patterns, floods, and forest fires can exacerbate existing vulnerabilities.
  - **Strategic Allocation of Resources**
    - **The FC faces the intricate task of allocating resources strategically** to maximise both environmental and economic benefits.
    - **Ensuring that funds are directed toward key conservation initiatives** while supporting state development goals **requires a nuanced approach.**
  - **Integrating Environmental Goals with Fiscal Capacity:** States may struggle to align their environmental goals with their fiscal capacity, leading to a potential disconnect between aspiration and implementation.
  - **Ensuring Equitable Participation:** There is a risk that states with greater fiscal capacities might disproportionately benefit from conservation incentives, widening existing economic disparities.
- **Potential Role of 16<sup>th</sup> Finance Commission**
  - **Incorporating Climate Parameters into Tax Devolution Formula**
    - The 16th FC **can introduce a paradigm shift by incorporating climate vulnerability and emission intensity as key parameters** in the tax devolution formula.
    - By doing so, the commission aligns the fiscal incentives directly with India's Nationally Determined Contributions (NDCs) under the Paris Agreement, creating a powerful mechanism for states to actively contribute to the country's climate goals.
  - **Performance-Based Grants for Crucial Sectors**
    - Recognising that specific sectors play a pivotal role in achieving NDCs and Sustainable Development Goals (SDGs), the **16th FC can consider introducing performance-based grants.**
    - These **grants can be tailored for sectors such as clean energy, sustainable land and forest management, and initiatives combating air pollution.**
    - This approach provides targeted financial support, ensuring that states actively engage in transformative actions.
  - **Address Challenges in Emission Reduction**
    - The **commission can prioritise emission reduction by emphasising the decarbonisation of key sectors**, such as energy and transport.
    - This involves not only incentivizing states to adopt clean energy practices but also fostering innovation to address the seemingly intractable problem of crop burning.
    - By allocating funds strategically, **the 16th FC can drive tangible progress in mitigating the sources of emissions.**
  - **Fund Innovations for Ecological Challenges**
    - The 16th FC **can allocate funds to innovative solutions for ecological challenges induced by climate change.**

- **Whether it be mangrove restoration to counter weather vagaries or addressing the increasing incidents of forest fires, the commission can serve as a catalyst for research, development, and implementation of sustainable strategies.**
- **Utilise Scientific Data for Informed Decision-Making**
  - In an era of advanced technology, **the 16th FC can leverage scientific data, pollution inventories, and remote sensing to ascertain the vulnerability of states and their mitigation efforts.**
  - This **data-driven approach ensures that fiscal decisions are grounded in empirical evidence, enabling the commission to design a performance-based system for fund allocation** that is both effective and equitable.
- **Transform into an Orchestrator of Climate Readiness**
  - Beyond its conventional role as a fiscal arbitrator, **the 16th FC can transform into an orchestrator of India's climate readiness.**
  - This **transformation involves actively participating in the design and implementation of a fiscal blueprint that balances economic growth with environmental imperatives.**
  - The commission can become a guiding force in shaping policies that balance the needs of the present without compromising the ability of future generations to meet their own needs.
- **Conclusion**
  - As India stands at the crossroads of economic growth and environmental sustainability, **the Finance Commission's role in fiscal federalism becomes crucial.**
  - **The 16th FC, with its potential to shape tax distribution principles and incentivise climate action, holds the key to a harmonious balance** between economic development and environmental preservation.
  - Through strategic initiatives and innovative approaches, **the FC can transform into a formidable force in India's journey towards climate resilience.**

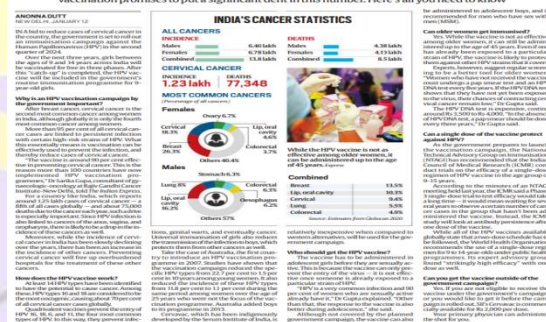
## 7. Centre set to roll out vaccine drive to fight cervical cancer

### GS 2 (Health)

- **Why in News:**
  - The government is set to roll out a human papillomavirus (HPV) vaccination campaign for girls in the 9-14 years age group.
  - It is a significant step which has potential to reduce the incidence of cervical cancer in India.
- **Cervical cancer**
  - Almost all cervical cancer cases are linked to certain strains of HPV, a common virus that is transmitted through sexual contact.
  - The body's immune system usually gets rid of the HPV infection naturally within two years.
  - However, in a small percentage of people the virus can linger over time and turn some normal cells into abnormal cells and then cancer.
  - It is preventable as long as it is detected early and managed effectively.
- **Prevalence**
  - Cervical cancer is the second most common cancer type and the second leading cause of cancer death in women of reproductive age (15-44) worldwide.
  - According to the World Health Organization's International Agency for Research on Cancer (IARC-WHO), **India accounts for approximately one-fifth of the global burden.**
  - India witnesses 1.25 lakh cases and approximately 75,000 deaths each year (one woman every eight minutes).
  - About 83 per cent of invasive cervical cancer cases are attributed to HPV 16 or 18 in India
- **Prevention**
  - Cervical cancer screening and vaccination are two effective preventive measures.
  - There is still little awareness among women about this cancer prevention, and less than 10% of Indian women are screened.

### Why HPV vaccine push matters

Cervical cancer is the second most common type of cancer among women in India. Universal HPV vaccination promises to put a significant dent in this number. Here's all you need to know



- All women aged 30-49, regardless of symptoms, should be screened for cervical cancer and their adolescent daughters vaccinated against HPV.
- **News Summary:**
  - **Vaccination drive planned in three phases over three years**
    - The immunisation drive, planned in three phases over three years.
      - Every year for three years, one-third of girls aged 9 to 14 will get vaccinated.
      - Also, in states where this happens, each new group of 9-year-olds will receive the vaccine during these three years.
  - **Vaccines to be available for free**
    - Currently, the two-dose HPV vaccine is available commercially for about Rs 2,000 per dose.
    - But once the government includes it in its immunisation programme, it will be available for free.
  - **Vaccine to be used in the immunisation drive**
    - **Cervavac**, an indigenously developed quadrivalent vaccine by the Serum Institute of India (SII) in Pune, will be used for this drive.
      - Cervavac offers protection against four HPV strains – 16, 18, 6 and 11.
    - Besides CERVAVAC, two vaccines licensed globally are available in India;
      - a quadrivalent vaccine (Gardasil, marketed by Merck) and
      - a bivalent vaccine (Cervarix, marketed by Glaxo Smith Kline).
      - These vaccines are costly and hence are unaffordable for the vast majority of Indians.
  - **Place of vaccination**
    - The immunisation drive will be conducted through schools and existing vaccination points.
  - **Single dose vaccination drive**
    - While none of the HPV vaccines available globally recommend a single-dose schedule, the World Health Organisation says that a single-dose regimen can be followed for public health programmes.
- **Challenges**
  - **Production for public vaccination**
    - At present, SII has a production capacity of about 2-3 million doses of Cervavac per year.
    - However, it needs to increase this capacity, with a target of 60-70 million doses.
  - **Allocation of resources**
    - The biggest task will be in allocating adequate resources and manpower for vaccinating the massive demographic of adolescent girls aged between 9 and 14.
  - **Awareness**
    - There is a huge need for stepping up awareness about the disease and the vaccine in the community.
    - Unlike Covid and the vaccination programme, there is very little awareness about cervical cancer.
    - There is an urgent need to have a communication strategy in place and to ensure that any myths circulating online are promptly busted.

## 8. China – Taiwan Relation

### GS 2 (International Relations)

- **Why in News:**
  - On January 13, Taiwan will vote to elect its next President and legislature.
  - With Taiwan's complicated ties to China and rising global tensions, the election result could be a big deal for the island.
  - China, despite never ruling Taiwan, insists it's theirs and has not ruled out using force to claim it, home to

### In Taiwan's presidential election, the question of relations with China

**EXPLAINED GLOBAL**

**History of China & Taiwan**

After the Communists led by Mao Zedong seized power in 1949, Chinese nationalists fled to Taiwan, which is located off China's east coast, which, at the time, was still under the Nationalist government. During the early decades of the Cold War, the government in Taipei was a crucial ally of the West. This situation changed in 1979, when the US, seeking to normalise ties with the People's Republic, moved its

**Candidates on Saturday**

President Tsai is constitutionally barred from running again. The DPP's presidential candidate is ex-Vice President Lai Ching-te, popularly known as William Lai. Lai has been the DPP's presidential candidate for more than 10 years, who has occupied many important positions in Taiwanese politics, opposing, among other things, the US-backed military aid to Taiwan. He is also a member of the KMT, a former police officer who was raised among mainlanders but has a "Taiwanese flavor". The KMT

**Despite the tensions, China is Taiwan's largest commercial partner.** A large number of Taiwanese have familial and commercial ties across the strait. However, surveys have indicated an increase in the proportion of individuals who identify as Taiwanese rather than Chinese. Recently, all candidates want to ensure Taiwan's independence. While Lai supports closer connections with Taiwan's allies, he also has no greater emphasis on re-energising ties with Beijing, which China has

**Following the inauguration of Tsai in 2016,** Under President Tsai, China has gradually shifted its stance against Taiwan, moving from threats of an invasion. Beijing is keen to see the ruling party overthrown in the election. Increasingly, recent events have cast a shadow over the election. Beijing's national security law for Hong Kong in 2020 and its significant re-orientation of political and civil liberties, despite promising "a high degree of autonomy" for the territory. This has made Taiwanese who are used to democratic freedoms nervous. Second, the Chinese resistance against Russia, though lagging somewhat in recent months, has been seen by some Taiwanese leaders as evidence of the ability of smaller nations to exert autonomous power. Beijing would also have to reach more than 60% of the island's population now identifies exclusively as Taiwanese, with 30% identifying as both Taiwanese and Chinese, and only 2.5% as Chinese. For the first time, all presidential candidates are native Taiwanese.

24 million people.

- **Geographical location of Taiwan:**

- Taiwan is located **north of the Philippines and the South China Sea.**
- It is about 180 km off the south-eastern coast of China.
- It is separated from the mainland by the **Taiwan Strait.**



- **China – Taiwan Dispute**

- **Background**

- The island seems to have first appeared in Chinese records in AD239, when an emperor sent an expeditionary force to explore the area.
  - This **evidence is used by Beijing to back its territorial claim.**
- After a relatively brief spell as a Dutch colony (1624-1661), Taiwan was administered by **China's Qing dynasty from 1683 to 1895.**
- In 1895, Japan won the First Sino-Japanese War, and the Qing government had to cede Taiwan to Japan.
- After World War Two, Japan surrendered and relinquished control of territory.

- **Civil War**

- When Japan surrendered, The Chinese Nationalist Party (also known as the Kuomintang, KMT) began ruling Taiwan with the consent of its allies, the US and UK.
  - **Chiang Kai-shek** was the ruler of this party.
- However, almost immediately following Japan's surrender, the Chinese Civil War broke out between the KMT and the Chinese Communist Party (CPC).
- Chiang and the remnants of his Kuomintang government **fled to Taiwan in 1949.**

- **Disagreement and confusion about Taiwan**

- China regards Taiwan as a **breakaway province** which it has vowed to retake, by force if necessary.
  - China has repeatedly insisted that **Taiwan should be called Chinese Taipei**, in efforts to prevent international recognition of Taiwan as a country.
- But Taiwan's leaders argue that it is a sovereign state. Taiwan continues to participate in international events and dialogues separately.
- It has its own constitution, democratically-elected leaders, and about 300,000 active troops in its armed forces.

- **Who recognises Taiwan?**

- Initially, Chiang Kai-shek's Republic of China (ROC) government held China's seat on the United Nations Security Council.
  - In the Cold War, the Taiwanese government in Taipei emerged as a crucial ally of the United States and took over China's seat on the UN Security Council.
- However, all that changed in 1979 when the US, as part of its efforts to normalise ties with mainland China, moved its recognition from Taipei to Beijing.
  - Officially, the US recognises Beijing's belief that Taiwan is a part of China under the 'one China' theory.
  - However, it maintains close connections with Taiwan.
- Since then, the number of countries that recognise the ROC government diplomatically has fallen drastically to about 15.

- **India-Taiwan relations**

- India **does not have formal diplomatic ties** with Taiwan. Like most countries, it maintains commercial ties with Taiwan.
- In 1995, New Delhi set up the India-Taipei Association (ITA) in Taipei to promote interactions between the two sides.
  - The aim of ITA was to facilitate business, tourism, and cultural exchanges.
  - ITA has also been authorized to provide all consular and passport services.
- In the same year, Taiwan too established the **Taipei Economic and Cultural Centre in Delhi.**

- **Taiwan's transition to democracy**

- From 1949 to 1996, Kai-shek's KMT ruled Taiwan under a de facto dictatorship but in **1996, the country held its first direct presidential election.**
- Since then, it has undergone three peaceful transfers of power in 2000, 2008, and 2016.

- Taiwan's current President, **Tsai Ing-wen**, made history in 2016 by becoming the first woman to be elected to the top office.
  - She is constitutionally barred from running again.
- **China – Taiwan Relation: Current Status**
  - **Commercial ties**
    - Despite the tensions, China is Taiwan's largest commercial partner. A large number of Taiwanese have familial and commercial ties across the strait.
  - **Concerns of Beijing remain**
    - Beijing remained concerned by different demographic factors.
    - Over 60% of the island's population now identifies exclusively as Taiwanese, with 30% identifying as both Taiwanese and Chinese, and only 2.5 % as Chinese.
    - For the first time ever, all of the presidential contenders are native Taiwanese, which means their ancestors immigrated to the island nation prior to the Chinese Civil War.

## 9. Yuva Nidhi Scheme Of Karnataka

### GS 2 (Governance)

- **Why in News:** It provides financial support to **educated unemployed youth** in the state. It offers economic security to the youth and reduces their dependency on others for their financial needs.
- **Provisions:**
  - Monthly financial Assistance through DBT till they got employment or till 2 year ( only graduates and diploma holders are Eligible)
  - Rs. 3,000/month for unemployed graduates.
  - Rs.1,500/month for diploma pass-outs.
  - Beneficiary of similar schemes will not be eligible

## Karnataka govt. launches 'Yuva Nidhi' scheme

**The Hindu Bureau**  
SHIVAMOGGA

Karnataka Chief Minister Siddaramaiah on Friday launched the 'Yuva Nidhi' scheme, the fifth and final poll guarantee of the Congress government which provides financial assistance for educated unemployed youth of the State. He said the idea behind the five schemes were premised on the concept of universal basic income, prevailing in European countries. Every month, the Chief

Minister said, around 1.5 crore families in the State get ₹5,000 to ₹6,000 under the five guarantee schemes. "In European countries, this amount is referred to as universal basic income. We have implemented a similar principle here," he said, launching the scheme with Deputy Chief Minister D.K. Shivakumar in Shivamogga.

**High unemployment**  
The rate of unemployment has grown at an alarming rate since 2014, he said.



**Fifth poll guarantee:** Karnataka Chief Minister Siddaramaiah at the launch of 'Yuva Nidhi' scheme in Shivamogga on Friday.

"The unemployment rate was 5.5% in 2014. Now it stands at 10.5%. Hence, we have come up with 'Yuva

Nidhi' to help the youth. The scheme offers financial assistance, besides training programmes to

develop skills and seek jobs. We will also hold job fairs so that youth get jobs in India and abroad," Mr. Siddaramaiah said.

The scheme offers financial aid and training to graduates and diploma holders, who are yet to get a job, for a maximum of two years. The government has promised ₹3,000 per month to degree holders and ₹1,500 per month to diploma holders who were unable to get a job in the past six months and are not pursuing higher studies.

## 10. Longest sea bridge Atal Setu Started for commuters

### GS 3 (Infrastructure)

- **Why in News:** History created, India's longest sea bridge Atal Setu opens, earlier known as 'Atal Bihari Vajpayee Sewari-Nhava Sheva Atal Setu, in Mumbai
- **Key Facts to know :**
  - **Length :** 22 km , also known as Mumbai Trans Harbour Link (MTHL)
  - Saves around 1 hour of daily time.
  - Provides **Energy security (fuel saving )** and helps to reduce carbon emission.
  - Enabled with **Lightening Protection system** in event of Lightning and thunderstorm
  - Noise and view Barrier provided around sensitive areas passing through **BARC and flamingo** area
  - Helps in Indian economy to achieve **the 5 trillion target** through better infrastructure

15<sup>th</sup> Jan, 2024

## 1. Maldives asks India to withdraw troops by March 15 GS 2 (International Relations)

### • Why in News:

- Maldivian President Mohamed Muizzu has asked India to withdraw its troops from the island nation by March 15.
- This announcement was made even as the India-Maldives High Level Core Group held its first meeting, in Malé.
  - The High-Level Core Group was set up when the Maldivian President and PM Modi met on the sidelines of the UN climate summit in Dubai.

### • India – Maldives Bilateral Relation

- India and Maldives share ethnic, linguistic, cultural, religious and commercial links and enjoy close, cordial and multi-dimensional relations.
- **India was among the first to recognise Maldives after its independence in 1965** and to establish diplomatic relations with the country

### • India as a first responder and net security provider

- India's prompt assistance during the 1988 coup attempt, led to development of trust and long-term and friendly bilateral relations with the Maldives.
  - Under **Operation Cactus** the Indian Armed Forces helped the Government of Maldives in the neutralization of the coup attempt.
- India was the first to assist Maldives during the 2004 Tsunami as well as the water crisis in Male in Dec 2014.
- India had swift dispatch of 30,000 doses of measles vaccine in Jan 2020 to prevent an outbreak in the Maldives.
- India's rapid and comprehensive assistance to the Maldives during COVID-19 pandemic further reinforced India's credentials of being the first responder.

### • Security & Defence Cooperation

- A comprehensive Action Plan for Defence was also signed in April 2016 to consolidate defence partnership.
- India provides the largest number of training opportunities for Maldivian National Defence Force (MNDF), meeting around 70% of their defence training requirements. India has trained over 1500 MNDF trainees over the past 10 years.
- Annual Defence Cooperation Dialogue at level of Defence Secretary was initiated in July 2016.

### • Development Cooperation

- The major completed and ongoing development assistance projects executed by India are
  - Indira Gandhi Memorial Hospital
  - Maldives Institute of Technical Education (now called the Maldives Polytechnic)
  - India-Maldives Faculty of Hospitality & Tourism Studies
  - Technology Adoption Programme in Education Sector in Maldives
  - National College for Police and Law Enforcement (NCPL)
- **Infrastructure & Connectivity Projects under Exim Bank Line of Credit of US\$ 800 million**
  - The following projects are being implemented under these LoCs:
    - Water and Sanitation in 34 Islands
    - Addu Development Project (Roads and Land Reclamation)
    - Cancer Hospital
    - Gulhifalhu Port project
    - Hulhumalé Cricket Stadium: During PM visit in June 2019, it was committed that the Stadium will be built under Indian assistance.
- **Greater Male Connectivity Project**

## Muizzu sets March 15 deadline for India to withdraw troops

India, however, says both nations discussed a 'solution' at Sunday's meet; the Maldives, in contrast, says they agreed to fast-track the withdrawal



Mohamed Muizzu and Narendra Modi. The India-Maldives High-Level Core Group, set up after their December meet, met on Sunday. PTI

Meera Srinivasan  
COLOMBO

Maldivian President Mohamed Muizzu has asked India to withdraw its troops from the island nation by March 15, a top official said on Sunday, posing the latest in a series of diplomatic challenges from Male to New Delhi since his September election win.

will no longer be permitted to reside in the Maldives, according to Male-based media.

The senior official's announcement was made even as the India-Maldives High-Level Core Group – set up when Mr. Muizzu and Prime Minister Narendra Modi met on the sidelines of the UN climate summit (COP-28) in Dubai – held its first meeting in Male. However, a statement issued by the Ministry of External Affairs after the meeting made no mention of a request for Indian troops' withdrawal. Instead, it noted that both

sides discussed "finding [a] mutually workable solution to enable continued operation of Indian aviation platforms that provide humanitarian and medical [medical evacuation] services to the people of Maldives".

In contrast, the press statement issued by the Maldives' Ministry of Foreign Affairs said: "Both sides expressed willingness to intensify cooperation and agreed to fast-track the withdrawal of Indian military personnel."

CONTINUED ON  
» PAGE 10

- The project aims to connect Male to Villingili, Gulhifalhu and Thilafushi islands through a series of bridges, causeways and roads.
- It is funded through a separate \$ 400 million LoC and \$ 100 million grant from India.
- **Bilateral Economic and Trade Relations**
  - India emerged as Maldives' **2nd largest trade partner** in 2022. The total bilateral trade between the two countries stood at \$501.82 million in 2022 (Jan – Dec).
    - During this period, India's export to Maldives stood at \$ 495.40 million and import from Maldives was \$ 6.42 million.
  - In November 2022, India, amid the economic challenges faced by the Maldives, handed over a financial assistance of US\$ 100 million.
  - In December 2022, the RBI signed a Currency Swap Agreement with the Maldives Monetary Authority (MMA).
    - This agreement enabled MMA to make drawals in multiple tranches up to a maximum of USD 200 million from the RBI.
- **Tourism**
  - In 2023 alone, among the tourists who travelled to the Maldives, Indians formed the largest group of tourists with over 200,000 travellers.
- **Indian Community:**
  - Indians are the second largest expatriate community in Maldives with an approximate strength of around 22,000.
  - About 25% of Doctors and Teachers in Maldives are Indian nationals.
- **How many Indian troops are in the Maldives?**
  - There are 88 Indian military personnel in the Maldives.
  - Indian soldiers have been sent to the Maldives at various points for **training Maldivian troops, in both combat and reconnaissance and rescue-aid operations.**
- **Anti-India sentiments among a section of the Maldives' population**
  - In 2020, the **India Out campaign** started as on-ground protests in the Maldives which later spread widely across social media platforms. By the second half of 2021, it had developed into an active and visible political campaign.
  - The supporters of the campaign had claimed that it had been started to protest against what they called Indian military presence in the country.
    - They had actively targeted all aspects of India-Maldives bilateral relations.
- **What are the major factors behind the fear and suspicion?**
  - **Controversy over 2 Dhruv Advanced Light Helicopters (ALF)** given by India to Maldives.
    - Indian officers had been sent to the Maldives to train the Maldives National Defence Force, under whose command these helicopters operate.
    - However, it was portrayed that by gifting these helicopters, India was creating military presence in the country.
  - **Perceived Lack of transparency of previous govt about its dealings with India**
  - **UTF Harbour Project agreement signed between India and Maldives in Feb 2021**
    - Under this agreement, India was to develop and maintain a coastguard harbour and dockyard at Uthuru Thilafalhu, a strategically located atoll near the capital Malé.
    - Sections of Maldivian media had speculated that the UTF project would be turned into an Indian naval base.

## **2. India's oldest living city found in Vadnagar**

### **GS 1 (Art and Culture)**

- **Why in News:** A joint study by the IIT (Kharagpur) has **found evidence of cultural continuity in Vadnagar even after the Harappan collapse.**
- **About the findings**
  - Deep archaeological excavation has found evidence of a human settlement that is as old as 800 BCE contemporary to late-Vedic/pre-Buddhist Mahajanapadas or oligarchic republics.
  - **The excavations indicated the various aspects concerned with central Asian invasions** into India and attributed some of them to severe change in climate like rainfall or droughts.

- Excavation revealed the presence of seven cultural stages (periods) namely:
  - Mauryan, Indo-Greek,
  - Indo-Scythian or **Shaka-Kshatrapas (AKA 'Satraps', descendants of provincial governors of ancient Achaemenid Empires,**
  - Hindu-Solankis,
  - Sultanate-Mughal (Islamic)
  - Gaekwad-British colonial rule and the **present settlement.**
- One of the oldest Buddhist monasteries has been discovered during the excavation.
- Further findings revealed the characteristic archaeological artefacts, potteries, copper, gold, silver and iron objects and intricately designed bangles. Also found were coins moulds of the Greek king **Appollodatus during the Indo-Greek rule at Vadnagar.**
- **Why these findings are significant?**
  - **Busts the myth of Dark Age:**
    - The evidence of cultural continuity in Vadnagar showed — even after the Harappan collapse, thus making it likely that the “Dark Age” was a myth.
    - The period between the collapse of the Indus Valley Civilisation and the emergence of the Iron Age and cities like Gandhar, Koshal, and Avanti is often depicted as a Dark Age by archaeologists.
  - **Rare archaeological evidence:**
    - Archaeological records are rare, the earliest one being the rock-inscription of Emperor Ashoka during the Mauryan period (320-185 BCE) at Sudarsana Lake, Girnar hill, Gujarat.
    - This makes Vadnagar the oldest living city within a single fortification unearthed so far in India.
    - Some of our recent unpublished radiocarbon dates suggest that the settlement could be as old as 1400 BCE contemporary to very late phase of post-urban Harappan period.

### **3. Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN) GS 2 (Governance)**

- **Why in News:**
  - In continuation of its tribal outreach ahead of Lok Sabha elections, the government will release the first installment for **pucca houses** amounting to Rs 540 crore to one lakh beneficiaries under the PM-JANMAN.
  - On this occasion, the PM will virtually interact with the beneficiaries of PM-JANMAN - the flagship central scheme launched in (Nov) 2023 for socio-economic welfare of particularly vulnerable tribal groups (PVTGs).
- **Background in which the PM-JANMAN was Launched:**
  - **India has a ST population of 10.45 crore as per 2011 census, out of which 75 communities** located in 18 States and the UT of Andaman and Nicobar Islands have been categorised as **PVTGs**.
    - It was in 1960-61 that the **Dhebar Commission** identified disparities among Scheduled Tribes, leading to the creation of the Primitive Tribal Groups (PTG) category.
    - In **2006**, this category was renamed PVTGs - **characterised by pre-agricultural lifestyles, low literacy, small or stagnant populations, and subsistence economies.**
    - These PVTGs continue to face **vulnerability in social, economic and educational fields.**
  - As announced in the **Budget Speech 2023-24**, to improve socio-economic conditions of the PVTGs, the **PM PVTG of Development Mission** will be launched.



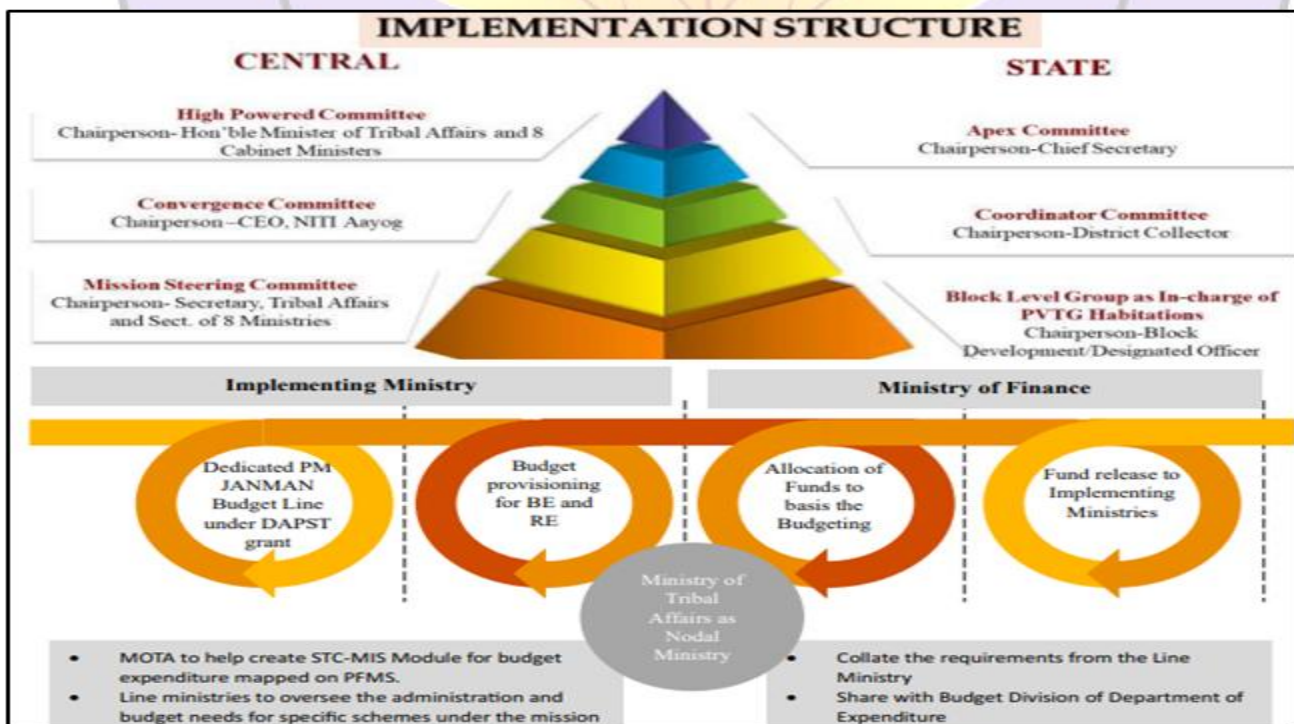
#### **Modi to release ₹540 crore for PM-JANMAN beneficiaries**

Prime Minister Narendra Modi on Monday will release ₹540 crore – the first instalment of funding – for pucca homes under the Pradhan Mantri Awas Yojana-Gramin (PMAY-G) to one lakh Particularly Vulnerable Tribal Group (PVTG) beneficiary families as part of the recently launched PM-JANMAN package for the overall development of PVTG habitations. A statement from the Ministry of Tribal Affairs said that Mr. Modi would release the first instalment through video conferencing at noon, following which he was set to interact with the PVTG beneficiaries of the package.

- This will saturate PVTG households and habitations with **basic facilities** such as safe housing, clean drinking water and sanitation, improved access to education, health and nutrition, etc.
- An amount of Rs.15,000 crore will be made available to implement the Mission in the next three years under the Development Action Plan for the Scheduled Tribes (**DAPST**).
- **What is the Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN)?**
  - The Union Cabinet during November 2023 approved PM JANMAN with total outlay of Rs.24,104 crore (Central Share: Rs.15,336 crore and State Share: Rs.8,768 crore) to be implemented during FY 2023-24 to 2025-26.
  - The PM-JANMAN (comprising Central Sector and Centrally Sponsored Schemes) to focus on **11 critical interventions through 9 Ministries** including Ministry of Tribal Affairs which are as follows:

S.No.	Activity	No. of Beneficiary / Targets	Cost norms
1	Provision of pucca houses	4.90 lakh	Rs 2.39 lakhs /house
2	Connecting roads	8000 KM	Rs 1.00 Cr/Km
3a	Piped Water Supply	All PVTG habitations including 4.90 lakhs HHs to be constructed under the mission	As per schematic norms
3b	Community water supply	2500 Villages/ habitations with population of less than 20 HHs	As per actual cost arrived
4	Mobile Medical Units with medicine cost	1000 (10/district)	Rs 33.88 lakhs/MMU
5a	Construction of hostels	500	Rs 2.75 Cr/hostel
5b	Vocational education & skilling	60 Aspirational PVTG blocks	Rs 50 lakhs/block
6	Construction of Anganwadi Centers	2500	Rs 12 lakhs/AWC
7	Construction of Multipurpose Centers (MPC)	1000	Rs 60 lakhs/MPC Provision of ANM and Anganwadi worker in each MPC
8a	Energization of HHs (Last mile connectivity)	57000 HHs	Rs 22,500/HH
8b	Provision of 0.3 KW solar off-grid system	100000 HHs	Rs 50,000/HH or as per actual cost
9	Solar lighting in streets & MPCs	1500 units	Rs 1,00,000/unit
10	Setting up of VDVks	500	Rs 15 lakhs/VDVK
11	Installation of mobile towers	3000 villages	As per schematic norms cost

- Other than the interventions mentioned above, the following intervention of other Ministries will be part of Mission:
  - The Ministry of Ayush will set up **Ayush Wellness Centre** as per existing norms and Ayush facilities will be extended to PVTG habitations through Mobile Medical Units.
  - The Ministry of Skill Development and Entrepreneurship will facilitate **skill and vocational training** in PVTG habitations, Multipurpose centres and hostels as per the suitable skills of these communities.
- **Implementation structure:**



- News Summary Regarding the Implementation of the PM-JANMAN:
  - In the two months since the launch of the scheme on November 15, **the government has sanctioned projects worth over Rs 4,700 crore** through nine ministries under the PM-JANMAN package.

- In order to reach out to every household, **more than 7,000 camps were organised in PVTG habitations** of all 188 districts, to
  - Facilitate their Aadhaar cards, Jan Dhan accounts, Ayushman Bharat cards, and
  - Enable registration for different schemes under the mission.
- Under the PM-JANMAN mission,
  - The government has already sanctioned the building of 1,207-km roads in PVTG habitations;
  - Approved schemes to connect all left out PVTG households to the PM Jal Jeevan Mission; and
  - Sanctioned 916 anganwadi centres, 816 of which are expected to be operational by the end of this month.

#### **4. Makar Sankranti** **GS 1 (Art and Culture)**

- **Why in News:** Cultural celebrations are held across many states of India under different names – Makar Sankranti, Pongal, Magh Bihu, etc. on January 14.
- **About the Makar Sankranti:**
  - It marks the **Sun changing directions and shifting its trajectory** towards the north, therefore, entering the Makara or Capricorn zodiac sign.
  - The day is a marker for a **change of season** – warmer months are close and we are moving away from winter, which is seen as a period of inactivity in many ways.
  - It is said that the **northward journey of the sun** (Uttarayan) begins on this day.
  - Unlike most festivals that follow the lunar cycle, Makar Sankranti **follows the solar cycle** and thus, is celebrated almost on the same day every year.
  - Astronomically, the Earth revolves around the Sun in an elliptical orbit that requires about 365 1/4 days to complete, as it continues to rotate on its own axis.
  - The earth's spin axis is tilted with respect to its orbital plane. This, along with its distance from the Sun, determines the change in seasons for life on Earth.
  - For the Northern Hemisphere, the axis points most toward the sun in June (specifically around June 21), and away from the sun around December 21.
  - This corresponds to the **Winter and Summer Solstice** (solstice is Latin for "the sun stands"). For the Southern Hemisphere, this is reversed."
  - It is also called as –
    - **Paush Parbon** in Bengal
    - **Pongal** in Tamil Nadu,
    - **Uttarayan** in Gujarat,
    - **Bhogali Bihu** in Assam,
    - **Lohri** in Punjab and Jammu,
    - **Makar Sankramana** in Karnataka,
    - **Saen-kraat** in Kashmir.
    - **Khichdi Parwa** in parts of Bihar, Jharkhand and Uttar Pradesh.

#### **5. Kalaram temple** **GS 1 (Art and Culture)**

- **Why in News:** Recently, the Prime Minister of India visited the Kalaram Mandir on the banks of the Godavari in the Panchavati area of Nashik, Maharashtra.
- **About Kalaram temple:**
  - The Kalaram temple derives its name from a black statue of the Lord — Kala Ram translates literally to "Black Ram".
  - It was built in 1792 with the efforts of Sardar **Rangarao Odhekar**.
  - It is located on the **banks of Godavari** in the Panchavati area of the city.
  - **Features**

- The sanctum sanctorum has statues of Ram, Sita, and Lakshman, and a black idol of Hanuman at the main entrance.
- The main temple has 14 steps, which represent the 14 years of Ram's exile. It has 84 pillars, which represents the cycle of 84 lakh species that one has to complete in order to be born as a human.
- **Historical Significance**
  - This temple is the site of a landmark agitation led by **Babasaheb Ambedkar** demanding **temple entry rights for Dalits** more than 90 years ago.
  - In 1930, **B R Ambedkar** and the Marathi teacher and social activist **Pandurang Sadashiv Sane**, known as Sane Guruji, led an agitation to demand access for Dalits to Hindu temples.
  - This movement aimed to challenge the oppressive caste norms prevalent during the time.
  - During the satyagraha, Ambedkar, along with his 15,000 Dalit followers, peacefully picketed the temple.

## 6. **Kachchhi Kharek**

### **GS 1 (Art and Culture)**

- **Why in News:** Kachchhi Kharek, the indigenous variety of dates of Kutch, has become the second fruit of Gujarat to get a geographical indication (GI) tag from the Controller General of Patents, Designs and Trade Marks (CGPDT) of India.
- **About Kachchhi Kharek:**
  - The presence of dates in Kachchh (Kutch) is believed to be around **400-500 years old**.
  - It is believed that date palm groves along **the north-western border of India** have developed from the seeds thrown by the settlers, who used to visit Middle-East countries for Haj.
  - It is also probable that the **Arab gardeners** working in the palaces of the former rulers of Kachchh might also have contributed to the import of the date seeds and offshoots from Arab countries.
  - **Features**
    - Dates grown in Kutch are **harvested at the khalal stage**, the stage when fruits have matured, accumulated sucrose, and have turned red or yellow but are still crisp.
    - The Kutch date season typically commences on June 15 each year, and the trees are known for their **tolerance to salinity and adaptability to extreme drought** and heat conditions.
    - In other countries, they are allowed to ripen further till they become soft and dark brown or black in colour.
    - Kachchh is the only place around the globe where fresh dates are economically cultivated, marketed, and consumed.
    - There are around two million date palms in Kutch today and around 1.7 million of them are seedling-origin palms of deshi (indigenous) varieties.
    - They are seedling propagated palms, each of them is a unique palm in itself, representing a vast range of diversity in characteristics.
    - The area accounts for more than 85 % of total date palm cultivation in India.
    - These dates in Kutch have to be harvested at khalal stage as **they can't withstand moist weather**.

## 7. **New Coral Snake Species**

### **GS 3 (Environment)**

- **Why in News:** Researchers from Mizoram University's zoology department have discovered a new species of coral snake in Mizoram.
- **About New coral snake species:**
  - It has been named **Sinomicrurus gorei** after British Indian doctor Gore.
  - The reptile is **locally known as 'Rulthihna'** due to its striking resemblance to a Mizo traditional amber necklace called 'Thihna'.
  - There are a total of **nine species** of Sinomicrurus coral snakes that have been **discovered worldwide**, and out of these, only one species called Sinomicrurus maclellandi is found in Northeast India.
  - It has unique patterns and different scales, hemipenis, DNA, and skull.

- Until this research, *Sinomicrurus gorei* was considered the same species as *Sinomicrurus macclellandi* due to their close resemblance.
- The new study also revealed that while *Sinomicrurus macclellandi* can lay 6-14 eggs at a time, *Sinomicrurus gorei* lays up to three eggs.
- In Mizoram, ***Sinomicrurus macclellandi*** is primarily found in hilly or elevated areas, while *Sinomicrurus gorei* is found in both low-lying and hilly areas.

## **8. Punganur Cow**

### **GS 3 (Environment)**

- **Why in News:** The Prime Minister was recently seen feeding several Punganur cows with fodder with his own hands at his residence in New Delhi.
- **About Punganur Cow:**
  - Standing at just around **70-90 cm tall** and weighing **less than 200 kg**, it is **among the world's most dwarf cattle breeds**.
  - It is **native to Punganur village** in the Chittoor district of **Andhra Pradesh**.
  - It has **high resilience to drought** and can **adapt to low-quality feed**.
  - It is also **prized for its milk**, which boasts a **higher fat content**, making it ideal for producing ghee.
    - A Punganur cow can give **around 1 to 3 litres a day**, and the **milk fat content is 8 percent** as compared to **3 to 4 percent in other native breeds**.
    - The milk is also **rich in nutrients** such as Omega fatty acids, calcium, potassium, and magnesium.
  - **Body colour:** It is **white, grey, or light brown to dark brown or red in colour**. Sometimes, animals with white colour mixed with red, brown, or black patches are also seen.
  - It has a **broad forehead and short horns**. The **horns are crescent-shaped** and often lose curving backward and forward in males and lateral and forward in females.
  - Punganur cows are **considered eco-friendly, requiring less water, feed, and space** compared to hybrid breeds.
  - **Cultural Significance:** Even today, **many temples** in Andhra Pradesh, **including the famous Tirupati Tirumala Temple**, use the milk of a Punganur cow for **Ksheera Abhishekam** (milk offering to the deity).

## **9. Genetic Engineering Appraisal Committee (GEAC)**

### **Recent events of importance**

- **Why in News:** The Supreme Court recently questioned the Centre on why reports of the court-appointed Technical Experts Committee (TEC) on the biosafety of genetically modified (GM) crops were not looked into by the Genetic Engineering Appraisal Committee (GEAC).
- **About Genetic Engineering Appraisal Committee (GEAC):**
  - It is the **statutory committee** constituted under the "Rules for the Manufacture, Use/Import/Export and Storage of Hazardous Microorganisms/Genetically Engineered Organisms or Cells (Rules, 1989)" framed **under Environment (Protection) Act, 1986**.
  - It functions under the **Ministry of Environment, Forest, and Climate Change (MoEF & CC)**.
  - **Functions:**
    - It is responsible for the **approval of activities involving large-scale use of hazardous living microorganisms and recombinants in research and industrial production** from an environmental perspective.
    - The committee is also responsible for **the appraisal of proposals relating to the release of genetically engineered (GE) organisms and products** into the environment, **including experimental field trials**.
    - **Clearance of GEAC is mandatory for the environmental release of GM crops.**
  - The committee or any person authorised by it has the **power to take punitive action under the Environment Protection Act**.
  - **Composition:**
    - GEAC is **chaired by the Special Secretary/Additional Secretary of MoEF&CC** and co-chaired by a representative from the Department of Biotechnology (DBT).

- Presently, it has **24 members** and **meets every month** to review the applications in the areas indicated above.
- The members comprise experts from other ministries as well as institutions such as the ICAR, ICMR, CCMB, and so on.



16<sup>th</sup> Jan, 2024

## 1. Snow Leopards in India

### GS 3 (Environment)

- **Why in News:** The Padmaja Naidu Himalayan Zoological Park (PNHZP) in Darjeeling has made headlines for successfully breeding 77 snow leopards since the 1980s.
- **About Snow Leopard:**
  - Snow leopard, also called **ounce**, are large Asian cat, classified as **Panthera uncia** in the family Felidae.
  - It preys on animals such as marmots, wild sheep, ibex, and domestic livestock.
  - Snow leopards act as an indicator of the health of the mountain ecosystem in which they live, due to their position as the top predator in the food chain.
  - **Habitat:**
    - Snow leopard is native to the mountain ranges of Central and South Asia.
    - In India, their geographical range encompasses a large part of the **western Himalayas** including the territories of Jammu and Kashmir, Ladakh, Himachal Pradesh, Uttarakhand and Sikkim and Arunachal Pradesh in the **eastern Himalayas**.
  - **Threats to survival:**
    - Experts say there are **4,000 to 6,500 snow leopards** remaining in the wild out of which around 500 are in India.
    - The expansion of human settlement, especially livestock grazing, has led to increased conflict.
    - Climate change is raising the average temperature across the snow leopard's home range.
    - Their lives are also threatened by poaching, driven by illegal trades in pelts and in body parts used for traditional Chinese medicine.
  - **Protection Status:**
    - IUCN Red list: **Vulnerable**
    - CITES: **Appendix I**
    - Wildlife (Protection) Act, 1972: **Schedule I**
  - **Conservation efforts:**
    - **Project Snow Leopard** was launched by the Government of India in 2009 to safeguard and conserve the population of snow leopards and their habitats by promoting conservation through participatory policies and actions.
    - In 2020, under the **SECURE Himalaya** project of the United Nations Development Program (UNDP), a project to set up **India's first Snow Leopard Conservation Centre was started in Uttarkashi, Uttarakhand**.
- **About Padmaja Naidu Himalayan Zoological Park (PNHZP):**
  - The PNHZP was formerly known as Himalayan Zoological Park and was established in August, 1958 in Darjeeling (West Bengal).
  - The Park is striving for the maintenance of ecological balance in the Eastern Himalayas with the following objectives:
    - Ex-situ Conservation and Captive Breeding of endangered Himalayan animal species.
    - Educating, motivating and initiating awareness campaign among the local people as well as visitors on the importance of conservation of Himalayan Eco-system.
    - Initiating applied research on animal biology, behaviour and health care.
  - The zoo has been a pioneer for conservation breeding of endangered Eastern Himalayan Species in India.
    - The first ex-situ conservation breeding program started in 1986 as a **Snow Leopard conservation breeding project**.
    - The **Red Panda project** was started in the year 1990.

### Darjeeling zoo's snow leopards success: why wild cats are fussy breeders

JAY WADZONIAH

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- It is the largest high-altitude zoo in the country.
- **News Summary:**
  - The Padmaja Naidu Himalayan Zoological Park (PNHZP) in Darjeeling has made headlines for successfully breeding 77 snow leopards since the 1980s.
  - This places the PNHZP next only to New York's Bronx Zoo, which has produced 80 snow leopard cubs since it started breeding experiments with the species in the 1960s.
  - Presently, the PNHZP has 14 snow leopards while the Bronx Zoo has 10.
  - This success story at Darjeeling Zoo, however, has not been overnight. The conservation breeding programme for snow leopards, the first and the only in the country, was launched at Darjeeling Zoo in 1985.
  - Four years later in 1989, the Conservation Breeding Centre (CBC), which is currently spread across five hectares at Topkeydara, recorded the first birth of a snow leopard.
  - Since then, 77 snow leopards have been born in the zoo. While some died of natural causes, others were transferred to other zoos in the country.
  - The Darjeeling Zoo has been the coordinating zoo for snow leopards in the country since 2007.
  - Its breeding center practices **highest biosecurity protocols that include regular screening of scats for parasites and deworming.**
  - Biosecurity protocols for all captive animals include blow flaming of shelters twice a month, using virucidal spray twice a month, daily use of UV lights, daily cleaning of shelters with disinfectants, burning of turmeric, use of potassium permanganate as foot baths, according to the zoo authorities.

## 2. India - Russia Bilateral Relations: Modi-Putin discuss 'special strategic' ties, future roadmap GS 2 (International Relations)

- **Why in News:**
  - The Indian PM and Russian President had a good conversation on various regional and global issues, including Russia's Presidency of the BRICS in 2024.
  - They discussed a range of aspects related to the "special and privileged strategic partnership" between the two countries.
- **Overview of India - Russia Bilateral Relations:**
  - Russia has been a **longstanding and time-tested partner for India** and development of India-Russia relations has been a key pillar of India's foreign policy.
  - Since the signing of the "**Declaration on the India-Russia Strategic Partnership**" in **2000**, India-Russia ties **have acquired a qualitatively new character** with enhanced levels of cooperation in almost all areas of the bilateral relationship.
  - During the visit of the Russian President to India in **2010**, the Strategic Partnership was elevated to the level of a "**Special and Privileged Strategic Partnership**."
  - During his recent visit to Russia, the Indian Foreign Minister said that India-Russia relations remain "**very steady, very strong and mutually beneficial**" and are based on "**strategic convergence**" and "**geopolitical interests**".
- **Different Areas of Cooperation in the India - Russia Bilateral Relations:**
  - **Political relations:**
    - **The India-Russia Intergovernmental Commission (IRIGC)** has two divisions – the Trade, Economic, Scientific, Technological and Cultural Cooperation and the Military & Military-Technical Cooperation.
    - In 2021, a new dimension to the bilateral cooperation was added with the first **2+2 Dialogue** (Foreign and Defence Ministers of both countries) taking place.
    - Both countries remain in touch at **multilateral engagements** as well. **For example**, they met on the sidelines of the East Asia Summit in Jakarta, **BRICS** in South Africa, **SCO** in Goa and **G20** in New Delhi in 2023.
  - **Trade and Economic relations:**
    - In April-December 2022, the bilateral trade reached an all-time high of **\$45 billion** with a **trade deficit of \$35bn in Russia's favour.**



- **Major items of export from India** include pharmaceuticals, organic chemicals, electrical machinery and mechanical appliances, iron & steel, etc.
- **Major items of import from Russia** include oil and petroleum products, fertilisers, mineral resources, precious stones and metals, vegetable oils, etc.
- **Defence and security cooperation:**
  - India has longstanding and wide-ranging cooperation with Russia in the field of defence and is guided by the **Agreement on the Programme for Military Technical Cooperation**.
  - The Agreement for 2021-2031 was signed during the inaugural meeting of India-Russia 2+2 Dialogue which was held in Delhi in 2021.
  - **Bilateral projects include** the supply of S-400, licensed production of T-90 tanks and Su-30 MKI, supply of MiG-29 and Kamov helicopters, production of Ak-203 rifles in India and BrahMos missiles, etc.
- **Science and technology cooperation:**
  - After India's independence, the erstwhile Soviet Union's assistance was crucial to the establishment of **Bhilai Steel Plant, Indian Institute of Technology (Bombay) and India's space program**.
  - Today, India and Russia work together on basic sciences, materials science, mathematics and cutting-edge areas like
    - India's manned spaceflight program (**Gaganyaan**),
    - Nanotechnologies and
    - Quantum computing.
  - India's only nuclear power plant established with another country (Russia) is the **Kudankulam Nuclear Plant** in Tamil Nadu.
- **Education:** Education is a major source for the Indian population in Russia. As per most recent data, there are **around 25,000 Indian nationals** of which a **majority** are Indian students studying **medicine**.
- **Cultural cooperation:**
  - In recent times, **Indian cinema** has begun to make a gradual comeback with more frequent film screenings across Russia.
  - **Yoga** is immensely popular across Russia as well with very enthusiastic and large gatherings of participants each year on **International Day of Yoga**
- **Some Recent Challenges for India-Russia Ties:**
  - **India and Russia have an annual summit at the leaders' level**, where the Indian PM and the Russian President visit each other's country every alternate year.
  - However, **after the war in Ukraine broke out**, the Indian PM did not travel to Russia for the annual summit in 2022 and Putin could not come for the G20 summit in Delhi in September last year.
  - While it is the Indian PM's turn to visit Russia for the annual summit, the visit didn't take place last year. **The last summit was held in 2021 in Delhi, during Putin's visit.**
- **News Summary:**
  - The phone call between the two leaders comes a day after a meeting of the national security advisors of almost 80 countries in Davos to discuss a peace formula for Ukraine.
  - In a post on X, Modi said he and Putin also agreed to **chalk out a roadmap for future initiatives** and expressed interest in further intensifying mutually beneficial bilateral ties.
  - Both leaders emphasised their **"readiness to closely coordinate their approaches to the BRICS agenda"**, adding that "India intends to help implement the goals and objectives of Russia's chairmanship".
  - The leaders also touched on several other international issues, including the situation around **Ukraine**. During his conversations with Putin, Modi has said that it is not a time of war.

### 3. India's multidimensional poverty rate GS 2 (Health)

- **Why in News:** As per a discussion paper by NITI AYOOG, India's multidimensional poverty rate down to 11.28% in 2022-23 from 29.17% in 2013-14.

- **Key Highlights -**

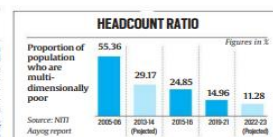
- **India's Progress in Multidimensional Poverty Reduction**
- **Remarkable Decline in Multidimensional Poverty:** India's population living in multidimensional poverty dropped from 29.17% in 2013-14 to 11.28% in 2022-23, with an estimated 24.82 crore people escaping poverty in the last nine years.
- **State-wise Improvements:** Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan witnessed significant reductions in the number of people classified as poor based on the Multidimensional Poverty Index (MPI).
- **Severity of Deprivation and Trends:** The severity of deprivation declined, albeit at a slightly lower rate between 2015-16 and 2019-21 compared to the previous period. The discussion paper also analyzes long-term poverty trends.
- **Impact of COVID-19 and Sustainable Development Goals (SDG)**
  - **COVID-19's Influence:** The paper acknowledges that the impact of the COVID-19 pandemic might not be fully reflected in the data, as NHFS-5 data collected between 2019-21 was obtained before the pandemic.
  - **Achieving SDG Target 1.2:** India is likely to achieve Sustainable Development Goals (SDG) Target 1.2, reducing the proportion of people living in poverty in all dimensions ahead of the 2030 deadline.

### India's multidimensional poverty rate down to 11.28% in 2022-23 from 29.17% in 2013-14

AGAM WALIA  
NEW DELHI, JANUARY 15

THE SHARE of India's population living in multidimensional poverty is estimated to have fallen to 11.28 per cent in 2022-23 from 29.17 per cent in 2013-14, according to a discussion paper released by NITI Aayog on Monday. In absolute numbers, NITI Aayog estimates a total of 24.82 crore people escaped multidimensional poverty in the last nine years.

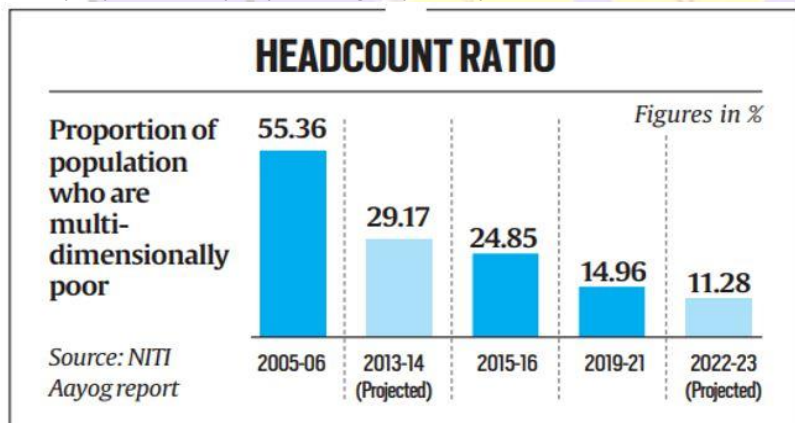
States like Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan recorded the sharpest decline in the number of people classified as poor based on the Multidimensional Poverty Index (MPI), which considers twelve different indicators of poverty included under three broad dimensions, namely health, education, and standard of living. The discussion paper also notes that the severity of deprivation declined at a slightly lower rate between 2015-16 and 2019-21 compared to 2005-06 and 2013-14. Severity of deprivation measures deprivations the average multidimensionally poor person suffers from. At the same time, reduction of deprivation was faster after 2015-16 in terms of reduction in share of MPI poor out of total population compared to the decade before, owing to a lesser



number of years. In 2005-06, the share of MPI poor in India's total population was 55.34 per cent. The discussion paper, which uses previously released MPI data based on National Family Health Surveys (NFHS) conducted in 2015-15 and 2019-21, also uses NFHS-5 data from 2005-06 to understand long-term poverty trends. Based on these three NFHS datasets, NITI Aayog estimated the share of MPI poor in the years 2013-14 and 2022-23 with technical inputs from Oxford Policy and Human Development Initiative (OPHI) and United Nations Development Programme (UNDP). The discussion paper was released by NITI Aayog Member Prof. Ramesh Chand in the presence of NITI Aayog CEO B.R. Subrahmanyam. Prof. Chand noted that without the impact of the coronavirus pandemic, the share of MPI poor in 2022-23 would have been much lesser. The paper also notes that it "may not fully reflect the impact of Covid on the economy" as part of NFHS-5 data collected between 2019-21 was collected before the pandemic. BVR Subrahmanyam added that India is likely to achieve Sustainable Development Goals (SDG) Target 1.2, which calls for reducing "at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions" much ahead of 2030.

As per the paper, indicators in the standard of living dimension showed highest levels of deprivation in 2005-06. For instance, 74.4 per cent of the population was deprived of cooking fuel in 2005-06, which fell to 58.47 per cent in 2015-16, and further to 43.9 per cent between 2019-21. Similarly, 70.92 per cent of the population was deprived of adequate sanitation facilities in 2005-06, which reduced to 51.88 per cent in 2015-16, and further to 30.93 per cent between 2019-21. The sharpest decline between two periods was recorded by the indicator measuring deprivation of access to bank accounts, which fell to 9.66 per cent in 2013-14 from 58.11 per cent in 2005-06.

According to the estimated share of MPI poor in 2013-14 and 2022-23, Bihar recorded a 53 per cent drop from 56.3 per cent share of MPI poor in 2013-14 to 26.59 per cent in 2022-23. Jharkhand also recorded a 50 per cent drop from 47.13 per cent share of MPI poor to 23.34 per cent. Uttar Pradesh, which had a lesser share of MPI poor in 2022-23 than Bihar, Jharkhand, and Meghalaya, recorded a decline to 17.4 per cent from 42.59 per cent in 2013-14. India's definition of multidimensional poverty is measured using twelve indicators including nutrition, child & adolescent mortality, maternal health, years of schooling, school attendance, drinking water, electricity, housing, and assets. MPI seeks to measure poverty in a more holistic manner as opposed to solely relying on income levels to assess deprivation.



- **Indicators and Holistic Measurement of Poverty**

- **Standard of Living Dimension Improvements:** Indicators related to the standard of living, such as cooking fuel and sanitation facilities, showed significant improvements over the years.
- **Impact of Indicators on MPI:** The sharpest decline was observed in the indicator measuring deprivation of access to bank accounts.
- **State-wise Comparison:** Bihar, Jharkhand, and Uttar Pradesh recorded substantial drops in the share of MPI poor, reflecting positive trends in multidimensional poverty reduction.
- **Definition of Multidimensional Poverty:** India's definition incorporates twelve indicators covering nutrition, mortality rates, maternal health, education, and living conditions, providing a comprehensive assessment beyond income levels.

- **The Global Multidimensional Poverty Index:**

- The index is an international measure of acute multidimensional poverty covering over 100 developing countries.
- It complements traditional monetary poverty measures by capturing the acute deprivations in health, education, and living standards that a person faces simultaneously.

- **How we can measure poverty?**

- Poverty can be defined as a condition in which an individual or household lacks the financial resources to afford a basic minimum standard of living.
- Economists and policymakers estimate “absolute” poverty as the shortfall in consumption expenditure from a threshold called the “poverty line”.
- The official poverty line is the expenditure incurred to obtain the goods in a “poverty line basket” (PLB).
- Poverty can be measured in terms of the number of people living below this line (with the incidence of poverty expressed as the head count ratio). The “depth” of poverty indicates how far the poor are below the poverty line.
- Six official committees have so far estimated the number of people living in poverty in India
  - The working group of 1962
  - V N Dandekar and N Rath in 1971
  - Y K Alagh in 1979
  - D T Lakdawala in 1993
  - Suresh Tendulkar in 2009
  - C Rangarajan in 2014
- The government did not take a call on the report of the Rangarajan Committee; therefore, poverty is measured using the Tendulkar poverty line.
- As per this, 21.9% of people in India live below the poverty line.

- **How poverty impacts India's economy?**

- Less number of people getting resources.
- Growth inclination as rich becomes richer and poor becomes poorer
- Low income generation
- Drop in standard of living conditions
- Cheap labour and man-power available
- Gender inequality
- Low rate of education

- **Expected Aftermath of reducing Multidimensional Poverty**

- **Socio-Economic Transformation**
  - **Enhanced Quality of Life:** Reduction in multidimensional poverty indicates an improvement in health, education, and living standards, contributing to an overall enhancement in the quality of life for millions of individuals.
  - **Increased Human Capital:** Improved education and health outcomes result in a more skilled and healthy workforce, potentially boosting productivity, innovation, and contributing to economic growth.
  - **Empowerment of Marginalized Communities:** Poverty reduction often leads to greater empowerment of marginalized communities, fostering social inclusion, equity, and reduced socio-economic disparities.
- **Economic Impact**
  - **Economic Growth:** A healthier and more educated population is often correlated with increased productivity and economic growth, as individuals become more capable contributors to the workforce.

- **Higher Consumer Demand:** As people move out of poverty, there tends to be an increase in consumer spending, driving demand for goods and services and positively impacting various sectors of the economy.
- **Public Health and Education**
  - **Improved Public Health:** Reduced poverty implies better access to healthcare services, leading to a decline in disease prevalence and improvements in overall public health indicators.
  - **Educational Attainment:** Poverty reduction is associated with increased school attendance and educational attainment, fostering a more educated and skilled populace.
- **Social and Environmental Implications**
  - **Social Cohesion:** Poverty reduction can contribute to greater social cohesion as communities experience improved living conditions, leading to a more stable and harmonious society.
  - **Environmental Stewardship:** With improved living standards, there may be increased awareness and capacity for environmental stewardship, as communities focus on sustainable practices and conservation.

#### **4. Cauvery basin**

##### **GS 1 (Geography)**

- **Why in News:** The National Green Tribunal (NGT) has served notices to Karnataka, Tamil Nadu and Kerala governments, based on a report by the Indian Institute of Science (IISc) that has highlighted the massive reduction of green cover in the Cauvery basin over the past five decades.
- **About Cauvery basin:**
  - It extends over states of **Tamil Nadu, Karnataka, Kerala and Union Territory of Puducherry**.
  - It is bounded by the **Western Ghats on the west**, by the **Eastern Ghats on the east** and the south, and by the ridges separating it from Krishna basin and Pennar basin on the north.
  - The Cauvery River is one of the major rivers of the peninsula.
  - **Origin:** It rises at an elevation of 1,341 m at **Talakaveri on the Brahmagiri range** near Cherangala village of Kodagu district of Karnataka.
  - The river drains into the Bay of Bengal at Poompuhar in the Mayiladuthurai district of Tamil Nadu.
  - **Major left bank tributaries:** Harangi, the Hemavati, the Shimsha and the Arkavati.
  - **Major right bank tributaries:** Lakshmantirtha, the Kabbani, the Suvarnavati, the Bhavani, the Noyil and the Amaravati.
  - The basin can be divided into three parts – the **Western Ghats, the Plateau of Mysore and the Delta**.
  - The delta area is the most fertile tract in the basin.
  - The principal soil types found in the basin are **black soils, red soils, laterites, alluvial soils**, forest soils and mixed soils. Red soils occupy large areas in the basin. Alluvial soils are found in the delta areas.
  - **National Parks in this basin:** Bandipur National Park, Nagarhole National Park and Bannerghatta National Park.

#### **5. Instrument Landing System**

##### **Recent events of importance**

- **Why in News:** Thick mist which hampers flight operations, necessitating the reliance on instruments like the “Instrument Landing System” (ILS) to navigate through the obscured surroundings.
- **About Instrument Landing System:**
  - It is a **ground-based radio navigation system** that provides pilots with accurate information about their aircraft's position and alignment with the runway.
  - It comprises two main components, **the localiser, and the glide slope**.
    - The localizer ensures **lateral alignment**, guiding the aircraft along the correct azimuth toward the runway centerline.

- Simultaneously, the **glide slope provides vertical guidance**, aiding pilots in maintaining the proper descent angle for a safe landing.
- It guides pilots along both horizontal and vertical axes, aiding them in maintaining the correct approach path during low-visibility conditions.
- With the help of ILS systems, pilots are able to **understand how their aircraft is positioned** with respect to an airport runway without needing to physically see it.
- This system warns pilots in case their jets are not flying to meet the runway's centreline.
- It will also warn pilots in case their jets are too low or too high and thus, at the risk of undershooting or overshooting the runway.
- Both of these tasks performed by the Instrument Landing System are crucial in ensuring landing in cases where the pilots aren't able to see the runway clearly.
- In addition to ILS, modern aircraft are equipped with **advanced avionics and autopilot systems** that enhance precision during foggy landings.
- These systems, often coupled with radar altimeters, help maintain a stable descent and ensure the aircraft follows the designated glide path with minimal reliance on external visibility.
- It is a standard **International Civil Aviation Organisation (ICAO)** precision landing aid that is used to provide accurate azimuth (angular measurement in a spherical coordinate system) and descent guidance signals for guidance to flight for landing on the runway under adverse weather conditions.

## 6. 'One Vehicle, One FASTag' initiative

### GS 2 (Governance)

- **Why in News:** Recently, the National Highways Authority of India (NHAI) has launched the 'One Vehicle, One FASTag' initiative.
- **About the 'One Vehicle, One FASTag' initiative:**
  - The National Highways Authority of India suggested tagging users to complete **the Know Your Customer (KYC) process** by the end of January 31 to avoid deactivation.
  - The move aims to enhance the efficiency of the Electronic Toll Collection system and provide seamless movement at the Toll Plazas.
  - The new arrangement Of 'One Vehicle, One FASTag' has also been introduced to discourage **user behaviour of using single FASTag for multiple vehicles** or linking multiple FASTags to a particular vehicle.
  - The initiative had been taken after the recent reports of multiple FASTags being issued for a particular vehicle and FASTags being issued without KYC **in violation of RBI's mandate**.
- **Key points about FASTag**
  - It is a device that employs **Radio Frequency Identification (RFID)** technology for making **toll payments directly** while the vehicle is in motion.
  - It is a RFID passive tag used for making toll payments directly from the customers linked prepaid or savings/current account.
  - It is affixed on the windscreen of the vehicle and enables the customer to drive through toll plazas, without stopping for any toll payments.
  - The toll fare is directly deducted from the linked account of the customer.
  - It is also vehicle specific and once it is affixed to a vehicle, it cannot be transferred to another vehicle.
  - FASTag can be purchased from any of the **National Electronic Toll Collection (NETC)** Member Banks.
  - If a FASTag is linked to the prepaid account, then it needs to be recharged/ topped-up as per the usage of the customer.

## 7. Farsi Language

### GS 2 (Governance)

- **Why in News:** The External Affairs Minister recently announced that the Government of India has decided to include Farsi (Persian) as one of the classical languages in India under the New Education Policy.

- **About the Farsi Language:**

- Farsi, also known as **Persian Language**, is the most widely spoken member of the **Iranian branch of the Indo-Iranian languages**, a subfamily of the **Indo-European languages**.
- It is the **official language of Iran**, and **two varieties of Persian known as Dari and Tajik are official languages in Afghanistan and Tajikistan**, respectively.
- Significant populations of **Farsi speakers** can be **found in other Persian Gulf countries** (Bahrain, Iraq, Oman, Yemen, and the United Arab Emirates), **as well as large communities in the US**.
- It has about **62 million native speakers**, ranking it **among the world's 20 most widely spoken first languages**.
- Farsi in Iran is **written in a variety of the Arabic script** called Perso-Arabic, which has some innovations to account for Persian phonological differences. **This script came into use in Persia after the Islamic conquest in the seventh century**.
- Its **relatives are the languages of northern India and, more distantly, the major European languages including English**.

- **Key Facts about Classical Languages in India:**

- **Criteria** evolved by Government of India to determine declaration of a language as a Classical language is as under:
  -
- High antiquity of its early **texts/recorded history** over a period of **1500-2000 years**;
- A body of ancient literature/texts, which is considered a **valuable heritage by generations of speakers**;
- The **literary tradition be original** and not borrowed from another speech community;
- The **classical language and literature being distinct from modern**, there may also be a discontinuity between the classical language and its later forms or its offshoots.
- **Currently, six languages** enjoy the 'Classical' status: **Tamil** (declared in 2004), **Sanskrit** (2005), **Kannada** (2008), **Telugu** (2008), **Malayalam** (2013), and **Odia** (2014).
- **The benefits** it provides once a language is notified as a Classical language:
  - Two major **annual international awards** for scholars of eminence in classical Indian languages.
  - **A Centre of Excellence** for studies in Classical Languages is set up.
  - The University Grants Commission is requested to create, to start with **at least in the Central Universities**, a certain **number of Professional Chairs for the Classical Languages** so declared."

17<sup>th</sup> Jan, 2024

## 1. Understanding the Tenth Schedule GS 2 (Constitution)

### • Why in News:

- Speaker of the Maharashtra Legislative Assembly has refused to disqualify 40 MLAs of the Eknath Shinde faction after recognising it as the real Shiv Sena.
- He also did not disqualify 14 MLAs of the Uddhav Balasaheb Thackeray (UBT) group due to technical reasons under the Tenth Schedule.

### • What is Defection?

- In Legislature, a defector is a person who gives up allegiance to one party in exchange for allegiance to another, changing sides in a way which is considered illegitimate by the first party.
- In India, the defections of legislators during the 1960s and 70s from their parent parties created political instability in many States, bringing down elected governments.
- Therefore, to ensure the stability of elected governments, the **52nd constitutional amendment** introduced the 'anti-defection' law through the Tenth Schedule in 1985.

### • About Anti-Defection Law:

- The **52<sup>nd</sup> Amendment Act, 1985** provided for the **disqualification of the members of Parliament and state legislatures on the ground of defection from one political party to another.**
  - Through this amendment, a new Schedule i.e. **Schedule 10** was added to the Constitution.
- This act is often referred to as the 'anti-defection law'.
- Later, the **91<sup>st</sup> Amendment Act, 2003** made one change in the provisions of the Tenth Schedule.
  - It omitted an exception provision i.e., **disqualification on ground of defection not to apply in case of split.**

### • Salient Features of the Act:

- The Tenth Schedule contains the following provisions with respect to the disqualification of members of Parliament and the state legislatures on the ground of defection.
- **Disqualification:**
  - **Members of Political Parties:**
    - If he voluntarily gives up his membership of such political party; or
    - If he votes or abstains from voting in such House contrary to any direction issued by his political party without obtaining prior permission of such party.
  - **Independent Members:**
    - An independent member of a House (elected without being set up as a candidate by any political party) becomes disqualified to remain a member of the House if he joins any political party after such election.
  - **Nominated Members:**
    - A nominated member of a House becomes disqualified for being a member of the House if he joins any political party after the expiry of six months from the date on which he takes his seat in the House.
- **Exceptions:**
  - **If a member goes out of his party as a result of a merger of the party with another party.**
    - A merger takes place when **two-thirds of the members of the party have agreed to such merger.**
  - If a member, after being elected as the presiding officer of the House, voluntarily gives up the membership of his party or re-joins it after he ceases to hold that office.
- **Deciding Authority:**
  - Any question regarding disqualification arising out of defection is to be decided by the **presiding officer of the House.**
    - In **Kihoto Hollohan case (1993)**, the Supreme Court held that the presiding officer, while deciding a question under the Tenth Schedule, function as a tribunal.

## Understanding the Tenth Schedule

On what basis has the Speaker of the Maharashtra Assembly refused to disqualify the MLAs? What is the history behind the anti-defection law? How can anti-defection laws be made stronger and impactful?

**EXPLAINER**

**The story so far:**  
The Speaker of the Maharashtra Assembly has refused to disqualify 40 MLAs of the Eknath Shinde faction after recognising it as the real Shiv Sena. He also did not disqualify 14 MLAs of the Uddhav Balasaheb Thackeray (UBT) group due to technical reasons under the Tenth Schedule.

**Why was the Tenth Schedule made?**  
The defections of legislators during the 1960s and 70s from their parent parties created political instability in many States, bringing down elected governments. Therefore, to ensure the stability of elected governments, the 52nd constitutional amendment introduced the 'anti-defection' law through the Tenth Schedule in 1985. This Schedule provides that a member of a House of Parliament or State Legislature who voluntarily gives up the membership of their political party or votes against the instructions of their party in a House are liable for disqualification from said House. This disqualification is known as 'disqualification on the ground of defection'.

**What are the issues involved?**  
With the enactment of the Tenth Schedule, the political parties have been unable to recruit members of their political parties 'practically' defecting but claiming to be in the original political party in order to escape disqualification. There have also been instances where more than two-third members of a State Legislature party of a national political party merged themselves with another political party to escape disqualification. This happened in September 2003, in Rajasthan, when all 49 MLAs of the Janata Party merged themselves with the Congress Party and in September 2022, in Goa, when eight out of 14 Congress MLAs merged themselves with the BJP.

**What are the reforms needed?**  
The Supreme Court in July 2023, laid down the three-see formula for determining which faction is to be recognised as the original political party by the Election Commission. These are: (i) the number of members of the party; (ii) the assets and objects of the party; and (iii) the party's constitution that reflect its party democracy and integrity in the legislative and organisational wings. The first test is subject to compelling claims by rival groups. But a lack of inner party democracy that results in mere defections, in fact, the Election Commission in February 2023, recognised the Eknath Shinde faction as the real Shiv Sena, solely based on votes polled by legislators supporting Eknath Shinde in the Maharashtra Assembly elections of 2019. An authorisation to the Supreme Court in these matters and setting up of an independent tribunal to decide on disqualification of members will reduce the ambiguities surrounding the Tenth Schedule. The real reform required is strengthening internal democracy through the inner party elections in our political parties with an independent tribunal headed by judges.

**What happened in Maharashtra?**  
In June 2022, a faction of the Shiv Sena headed by Eknath Shinde moved with 17 of the 56 MLAs and claimed to be the real Shiv Sena. It appointed Bhairav Chaudhari as its Speaker. The original Shiv Sena, headed by Uddhav Thackeray, claimed that they were the original political party and that Eknath Shinde's faction was a splinter group. The Speaker has now recognised the Eknath Shinde faction as the real Shiv Sena and has held the appointment of whip by this group as valid. This was based on the strength of members of the Shiv Sena faction and the party's 1000 constituencies. The Speaker based on this ruling refused to disqualify 40 MLAs of the Shiv Sena faction. He also refused to disqualify 14 MLAs of the UBT group as the whip instructions from Bhairav Chaudhari could not be physically served on them.

**THE GIST**

- Defections of legislators during the 1960s and 70s from their parent parties created political instability in many States, bringing down elected governments. Therefore, to ensure the stability of elected governments, the 52nd constitutional amendment introduced the 'anti-defection' law through the Tenth Schedule in 1985.
- The authority to decide on the disqualification of members is vested in the Speaker of the House.
- The Supreme Court in July 2023, laid down the three-see formula for determining which faction is to be recognised as the original political party by the Election Commission. These are: (i) the number of members of the party; (ii) the assets and objects of the party; and (iii) the party's constitution that reflect its party democracy and integrity in the legislative and organisational wings.
- The first test is subject to compelling claims by rival groups. But a lack of inner party democracy that results in mere defections, in fact, the Election Commission in February 2023, recognised the Eknath Shinde faction as the real Shiv Sena, solely based on votes polled by legislators supporting Eknath Shinde in the Maharashtra Assembly elections of 2019. An authorisation to the Supreme Court in these matters and setting up of an independent tribunal to decide on disqualification of members will reduce the ambiguities surrounding the Tenth Schedule. The real reform required is strengthening internal democracy through the inner party elections in our political parties with an independent tribunal headed by judges.

- Hence, his decision like that of any other tribunal, is subject to judicial review on the grounds of mala fides, perversity, etc.
- **Benefits of Anti-Defection Law:**
  - It provides for greater stability in the body politic by checking the propensity of legislators to change parties.
  - It facilitates democratic realignment of parties in the legislature by way of merger of parties.
  - It reduces corruption at the political level as well as non- developmental expenditure incurred on irregular elections.
  - It gives, for the first time, a clear-cut constitutional recognition to the existence of political parties.
- **Criticism of the Anti-Defection Law:**
  - The law does not make a **differentiation between dissent and defection**. It curbs the legislator's right to dissent and freedom of conscience.
  - It does not provide for the expulsion of a legislator from his party for his activities outside the legislature.
  - Its discrimination between an independent member and a nominated member is contradictory. If the former joins a party, he is disqualified while the latter is allowed to do the same.
- **Views of Various Committees on the Anti-Defection Law:**
  - **Dinesh Goswami Committee on Electoral Reforms (1990):**
    - Disqualification shall have limitation like:
      - For the members who voluntarily give up the membership.
      - For the members who acts/votes contrary to the confidence of his party.
    - The power of the decision of disqualification shall be to the President/Governor on the advice of the Election Commission.
  - **Law Commission (170th Report, 1999):**
    - The provision of split and mergers shall be deleted as an exception from the provision of disqualification.
    - Pre-poll electoral fronts should be treated as political parties under the anti-defection law.
  - **Constitution Review Commission (2002):**
    - The defaulters who are not loyal towards their party shall be barred from holding the public office and also they shall be eligible for getting any political post or any remuneration of the party.
    - **The voting cast by the defaulters shall be treated as invalid.**
- **Important Judgements w.r.t. Anti-Defection Law:**
  - In **Kihoto Hollohan case**, the Supreme Court held that the law is valid in all respects, except on the matter about judicial review, which was held to be unconstitutional.
  - In **Shri Rajesh Verma v. Shri Mohammad Shahid Akhlaque case**, the court held that if the member of the party publicly opposes his original party and supports the other the party then this act deems to be a resignation from the party.
  - In **Mannadi Satyanarayan Reddy v Andhra Pradesh Legislative Assembly case**, the question was raised regarding the jurisdiction of Speaker or Presiding Officers.
    - The court held that **there is no provision in the Tenth Schedule which fetters exercise of jurisdiction by the Speaker to decide this question.**
- **News Summary:**
  - In June 2022, a faction of the Shiv Sena headed by the sitting Chief Minister Eknath Shinde moved with 37 of the 55 MLAs and claimed to be the real Shiv Sena. It appointed Bharat Gogawale as its whip.
  - However, the UBT faction claimed that they were the original political party and that Sunil Prabhu of its faction will continue to be the whip.
  - The Speaker has now recognised the Eknath Shinde faction as the real Shiv Sena and held the appointment of whip by this group as valid.
  - This was based on the **strength of members of the Shinde faction and the party's 1999 constitution**.
  - The Speaker based on this ruling refused to disqualify 40 MLAs of the Shinde faction.
  - He also refused to disqualify 14 MLAs of the UBT group as the **whip instructions from Bharat Gogawale could not be physically served on them.**
- **About Three-test Formula:**
  - The Supreme Court in **Sadiq Ali versus Election Commission of India (1971)**, laid down the **three-test formula for determining which faction is to be recognised as the original political party** by the Election Commission.
  - These are:

- Aim and objective of the party;
- Its affairs as per the party's constitution that reflect inner party democracy; and
- Majority in the legislative and organisation wings.

## 2. The Evolution and Advantages of Light-Emitting Diodes (LEDs)

### GS 3 (Science and Tech)

- **Why in News:** The emergence of light-emitting diodes (LEDs) as the lighting choice of the 21st century, recognized by the Nobel Prize in Physics in 2014, marks a significant shift from traditional incandescent bulbs and fluorescent lamps

#### • Diodes: Foundations of LED Technology

##### ○ What are diodes?

- A diode, a fundamental electronic component, allows the **flow of current in only one direction through a p-n junction**.
- This junction comprises a **p-type material with positive charge-carriers (holes)** and an **n-type material with negative charge-carriers (electrons)**.

##### ○ How does a diode work?

- An electric field applied across the diode encourages electrons to flow from the **n-side to the p-side**, creating an electric current.
- This one-way flow is crucial in electronic circuits.

#### • LEDs: Harnessing Light Emission

##### ○ What is an LED?

- An LED is a diode that emits light through
- In the p-n junction, electrons, having more energy than holes, **emit light when occupying a hole**.
- The band gap, the energy difference between **electron energy levels**, determines the emitted light's frequency.

##### ○ What is the band gap?

- The band gap, crucial in LED functioning, **represents the energy required for electrons to jump from lower to higher energy levels**.
- In LEDs, the energy released during **electron-hole recombination** corresponds to the band gap, determining the emitted light's color.

##### ○ What colors can an LED produce?

- By carefully selecting **materials for the p-layer and the n-layer**, researchers engineer LEDs to emit visible light.
- LEDs can produce **red, green, and blue**, allowing the creation of a spectrum of colors on display boards and various applications.

#### • Need for LEDs:

##### ○ Efficiency and Advantages

- **Why are LEDs prized?**
  - Even before **Haitz's law**, LEDs were valued for surpassing incandescent bulbs and fluorescent lamps in efficiency.
  - Haitz's law predicts a 10x drop in cost and a 20x increase in light output every decade.**
  - LEDs provide up to 300 lumens per watt, **compared to incandescent bulbs' 16 lumens** and fluorescent lamps' 70 lumens per watt.

## What are light-emitting diodes and why are they prized as light sources?

LEDs have several applications in industry, consumer electronics, and household appliances – from smartphones to TV screens, signboards to feeding plants light in greenhouses, and barcode scanners to monitoring air quality

**Yannick Makin**

On October 2014, the Royal Swedish Academy of Sciences issued a statement in which it said, "Incandescent light bulbs... In the 21st century, the 21st century will be lit by LED lamps." The occasion was the awarding of the Nobel Prize for physics for that year, for an achievement that paved the way for light-emitting diodes (LEDs), to succeed incandescent bulbs and fluorescent lamps, as the world's light source of choice.

**What are diodes?**  
A diode is an electronic component about 5 mm wide. It has two points of contact, or terminals, called its anode and cathode. A diode's primary purpose is to allow current to flow in only one direction. It achieves this using a p-n junction.

A p-n junction is made of two materials that meet at each other. One material is a p-type material; its primary charge-carriers are holes. The other is an n-type material; its primary charge-carriers are electrons. You're familiar with electrons; they are 'placed' inside atoms that carry negative charge. A hole denotes a 'place' in an atom or a group of atoms where there could be an electron but isn't. Then, a hole is an electron placeholder but without the electron, so it has a positive charge.

A p-n junction is an interface where the surface of a p-type material and the surface of an n-type material meet. At this interface, electrons can pass easily from the n-type material to the p-type material but can't go the other way. This asymmetry creates the diode's ability to allow current to pass in only one direction. A wire attached to the p-type material is called the diode's anode; that attached to the n-type material is the cathode. These are the diode's two terminals.

When the two materials are first placed next to each other, some electrons move from the n-side to the p-side until there is a level, between the two sides, where there are neither direct electrons nor holes present. When a suitable voltage is applied across the diode, more electrons flow from the n-side to the p-side, pushing an electric current flowing from the p-side to the n-side, that is from the anode terminal to the cathode terminal. But if the voltage is reversed, current must flow in the opposite direction. In volts, a diode is born.

**What is an LED?**  
An LED is a diode that emits light. Inside the diode's p-n junction, the electrons have more energy than the holes. When an electron meets and occupies a hole, it releases energy into its surroundings. If the frequency of this energy is in the visible part of the electromagnetic spectrum, the diode will be seen to emit light. The overall phenomenon is called electroluminescence. The energy of a wave is proportional to its frequency, so making sure the light emitted by an LED is visible light is a matter of making sure the electron-hole recombination releases a certain amount of energy, not more and not less. This is possible to achieve thanks to the band gap.

**What is the band gap?**  
Particles like electrons can only have specific energy values. They can occupy only particular energy levels. When a group of electrons comes together in a crystal – say, in a collection of atoms like a small piece of metal – they're required to follow some rules. One of them is that no two electrons can occupy the same energy level at the same time.

These electrons generally prefer to have lower energy, and thus prefer to occupy the lowest available energy level. If that level is taken, they occupy the next available level. Sometimes they can acquire more energy, but flow from their atoms, and flow across the material. In these circumstances, we say the material is an electrical conductor. When the

electrons don't have enough energy to flow around, the material is an insulator. Electrons can acquire such extra energy when an electric field is applied to the material. The field will accelerate the electrons and transport them, and the electrons will 'scatter' from lower to higher energy levels. In some materials, there is an energy gap between these lower and higher levels – that is between where the electrons can't and can flow around the material. An electron can't have an amount of energy that would place it in one of these levels. It's the reason why electrons in these materials can't conduct an electric current unless they receive a minimum amount of energy – the energy required to jump across this gap. This gap is called the band gap.

In LEDs, the energy emitted when an electron and a hole recombine is the energy of the band gap. By carefully choosing the materials that make up the p-type and the n-type, researchers can engineer the composite p-n junction to have a band gap that corresponds to visible light. Electron-hole recombination can be triggered by passing an electric current through the diode, which creates the electric field that 'kicks' the electrons.

**What colors can an LED produce?**  
Since LEDs can produce all three primary colors – red, green, and blue – different LEDs can be combined on a display board to produce a large variety of colors. (There are other ways as well.) This said, scientists were able to create red and green LEDs more than 40 years before they created blue LEDs. The reason scientists had identified a compound, gallium nitride, that was electroluminescent and whose band gap could yield blue light, but they didn't know how to create crystals of this compound, and the precise physical, electronic, and optical properties. Gallium nitride was also fragile, quickly becoming a powder in the process used to

create crystals. Inventing the blue LED eventually required a series of breakthroughs in epitaxy, the process by which p-type and n-type materials are built layer by layer. In the late 1980s, three Japanese researchers, Isamu Akasaki, Hiroshi Amano, and Shuji Nakamura, led teams that produced a bright blue LED with gallium nitride. For this they received the physics Nobel Prize in 2014.

**What are the advantages of LEDs?**  
According to Moore's law, specified by American engineer Gordon Moore in the 1950s, the number of transistors on a chip would double every two years. Similarly, improvements to LEDs since 1970 have followed Haitz's law. Named for scientist Roland Haitz, it states that for a given frequency of light, the cost per unit of light of an LED will drop 10x and the amount of light it produces will increase 20x every decade.

But even before Haitz's law, researchers pursued LEDs because they were more efficient than incandescent bulbs and fluorescent lamps. For want of power consumed, LEDs can produce up to 300 lumens (amount of visible light emitted per second) versus incandescent bulbs' 16 lumens and fluorescent lamps' 70 lumens. Together with their greater durability and light control, LEDs' advantages translated to higher cost savings and less material waste.

LEDs have several applications in industry, consumer electronics, and household appliances: from smartphones to TV screens, signboards to 'feeding' plants light in greenhouses, barcode scanners to monitoring air quality.

Today, LEDs can also produce a variety of colors or emit energy at higher and lower frequencies. LEDs can be 'embedded' in skin and organic (biocompatible) materials. Researchers are also exploring more efficient LEDs made of materials called perovskites.

With inputs from Aditya Agrawala, assistant professor at IIT Kanpur.

### ▪ Applications and Benefits

- i. LEDs, with their durability and energy efficiency, find applications in diverse fields – **from consumer electronics to industrial settings.**
- ii. Their advantages include higher **cost savings, less material waste, and enhanced performance** in various devices, including smartphones, TV screens, and even air quality monitoring.

## 3. One more cheetah dies at Kuno National Park

### GS 3 (Environment)

#### • Why in News:

- Shaurya, a cheetah that was translocated from Namibia, passed away at the Kuno National Park.
  - The cheetah was part of a male coalition and died inside its enclosure.
  - Kuno National Park is located in Madhya Pradesh's Sheopur district.
- Shaurya is the **seventh one to die** among the 20 Namibian cheetahs since a coalition of cheetahs were first released into the park in September 2022.

#### • Cheetah in India

- In India, the cheetah population used to be fairly widespread. The animal was found from **Jaipur and Lucknow in the north to Mysore in the south and from Kathiawar in the west to Deogarh in the east**
- The cheetah was officially **declared extinct by the Indian government in 1952.**

#### • How did cheetahs go extinct in India?

- Over-hunting was a major contributing factor for the cheetah's extinction.
- The decimation of its relatively narrow prey base species and the loss of its grassland-forest habitat also played a role.
- India's emphasis on agriculture – which included acquiring and parcelling off grassland, led to a decline in the cheetah's habitat.

#### • Cheetah Reintroduction Plan/Project Cheetah

- **Background**
  - Discussions to bring the Cheetah back to India were initiated in 2009 by the Wildlife Trust of India.
  - Under the '**Action Plan for Reintroduction of Cheetah in India**', 50 cheetahs will be brought from African countries to various national parks over 5 years.
- **About**
  - The aim of the project has been to reintroduce the feline species to its former habitat in India after they were declared extinct in 1952.
  - **Kuno National Park in Madhya Pradesh** has been selected as the most suitable site for Cheetah reintroduction.
- **Reintroduction of Cheetah**
  - In September 2022, PM Modi released a coalition of cheetahs into the Kuno National Park.
- **Significance of Cheetah reintroduction**
  - a) **Eight cheetahs**, five of which are female, were flown from Namibia to Gwalior.
  - b) It was the first intercontinental transfer of wild cats into India since independence.
  - Later, in February 2023, **12 South African cheetahs** were released into enclosures inside Kuno National Park.
- **Significance of Cheetah reintroduction**
  - Besides conserving the big cat, the initiative in itself is a boon to the ecosystem.
  - In saving Cheetahs, it is necessary to save not just its prey base (including certain threatened species), but also other endangered species of grasslands.

#### • Death of Cheetah

- So far, seven of the cheetahs which came from Africa have died. Five died while still in captivity and two in the wild.



### One more cheetah dies in Kuno, 13 of original 20 remain

One more cheetah, part of the set of 20 imported from Africa, died, government officials confirmed on Tuesday. A post-mortem is under way and so the cause of death is so far unknown. The cheetah, Shaurya, was of Namibian lineage and was "perfectly fine and healthy" until January 15, S.P. Yadav, a senior official with the National Tiger Conservation Authority and closely involved with Project Cheetah, told *The Hindu*. This is the seventh death among the batch of 20 imported animals. Last year, after a spate of deaths, all of the cheetahs were brought back to an enclosure. "In the coming months, all of these animals are expected to be released in the wild," he added.

- Additionally, three of the four cubs have died and the only remaining cub is being hand reared as its mother has rejected it.
- **Why did the cheetahs die?**
  - There have been a variety of reasons and causes attributed to the deaths of the seven adults and three cubs.
  - **Role of Radio collars**
    - Radio collars are not the underlying reason for the deaths of any of these cats, at least that is the officially stated position.
    - One needs to determine if the African cheetahs are susceptible to certain insects and parasites in India, and if the collars provide a micro-environment conducive for these to thrive.
  - **Other factors**
    - The first cheetah which died is said to have perished due to a **renal condition**.
    - One of the females died when authorities attempted to get the cheetah to mate inside the enclosure.
    - Three of the four cubs born in India are reported to have died **due to heatwave conditions**.
    - One of the males is reported to have died due to cardio-pulmonary failure but what caused it (the ultimate cause), has still not been determined.
    - **The last three deaths occurred during the monsoon.**
  - **Final verdict**
    - While there have been several conflicting reports regarding the cause of their deaths, **no definitive cause has been shared in the public domain.**
- **Were these unfortunate cheetah deaths unexpected?**
  - **Cheetah Project anticipated high mortality**
    - The Cheetah Project did anticipate high mortality.
    - The criteria for the project's **short-term success was only 50% survival of the introduced cheetah for the first year.** That would be 10 out of 20.
  - **Project overestimated Kuno's carrying capacity for cheetahs**
    - A number of experts pointed out that this project had overestimated Kuno's carrying capacity for cheetahs.
  - Hence, the MP government set a six-month deadline for readying Gandhi-sagar, in the Chambal river valley in Mandsaur and Nimach districts, for the cheetahs.
  - There is also talk about moving a few animals from Kuno to the safety of an 80-sq-km fenced area in Rajasthan's Mukundra Hills Tiger Reserve.

#### **4. Defence Technology Council: To Determine the Country's Defence Technology Roadmap GS 2 (Governance)**

- **Why in News:**
  - According to an expert committee, a top body - the Defence Technology Council, should determine the country's defence technology roadmap and decide on major projects and their execution.
  - The 9-member expert committee is headed by the former principal scientific advisor **Prof K Vijay Raghavan**.
- **Background in which the Vijay Raghavan Committee was Constituted:**
  - It was set up by the government last year **to review the functioning of the Defence Research and Development Organisation (DRDO)** and is learnt to have submitted its report this month.
  - The government's decision to review the functioning of DRDO comes against the backdrop of **several of its projects suffering from huge delays**.
  - i. Recently, the Parliamentary Standing Committee on Defence had expressed concerns that **23 of its 55 mission mode projects** could not be completed in time.
  - ii. In 2022, the **Comptroller and Auditor General (CAG)** had flagged that 119 (or 67%) of the 178 projects scrutinised by it had failed to adhere to their initially proposed timelines.

#### **PANEL ON DRDO REFORMS** **Defence upgrade roadmap: Apex body led by PM, MoD sci-tech unit**

Will have Defence Minister, NSA, service chiefs, members from academia, industry

**RITIKA CHOPRA**  
NEW DELHI, JANUARY 16

A TOP body chaired by the Prime Minister, with the Defence Minister and the National Security Advisor as its Vice Presidents, should determine the country's defence technology roadmap and decide on major projects and their execution, an expert committee spearheaded by the former principal scientific advisor, Prof K. Vijay Raghavan, is learned to have told the government.

This top body, called the Defence Technology Council by the Vijay Raghavan committee, is proposed to have an executive

**E** More R&D in DRDO  
ONE KEY point flagged by the panel is that DRDO should focus on its initial mandate, research and development, rather than spread itself thin, as it does now, by getting involved in production, product management.

committee chaired by the Chief of Defence Staff. The Principal Scientific Advisor, along with the three service chiefs and their vice chiefs, will also be its members.

CONTINUED ON PAGE 4

- iii. According to the CAG, **multiple extensions were primarily sought** due to factors like persistent alterations in design specifications, delays in completing user trials, and in placing supply orders.
- iv. The practice of seeking multiple extensions **defeats the very purpose of projects taken under Mission Mode category.**
- **Recommendations of the Vijay Raghavan Committee:**
  - At present, DRDO remains engaged in all aspects, from research to development to production, in its projects.
  - The Vijay Raghavan committee has observed that the **DRDO should focus on its original goal** of research and development for defence.
  - **It should refrain** from involving itself in productization, production cycles, and product management, tasks that are more suitable for the private sector.
  - Furthermore, **there are numerous technologies that DRDO doesn't necessarily need to get into.** For example, why should DRDO engage in drone development?
  - **There is a necessity to identify expertise** within India and internationally for various technologies. Every defence solution to a problem doesn't have to only come from DRDO.
  - This is precisely where the committee believes the **Defence Technology Council** would play a pivotal role in identifying the right players for specific defence technologies.
- **About the Defence Technology Council:**
  - **This top body**, called the Defence Technology Council by the Vijay Raghavan committee, is chaired by the Prime Minister, with the Defence Minister and the National Security Advisor as its Vice Presidents.
  - **It is proposed to have an executive committee** chaired by the Chief of Defence Staff.
    - The Principal Scientific Advisor, along with the three service chiefs and their vice chiefs, will also be its members.
  - Furthermore, it will include **representation from academia and industry**, with two members from each sector.
- **Secretariat of the Defence Technology Council:**
  - The panel has also suggested the creation of a separate department under the Defence Ministry - **the Department of Defence Science, Technology, and Innovation.**
  - This department, **proposed to be headed by a technocrat**, will
    - Promote defence research and development in the academic and start-up ecosystem.
    - **Serve as the secretariat for the Defence Tech Council.**
    - Operate labs for testing and certification, a function also performed by DRDO.
  - As the DTC secretariat, this department **will draw scientists from DRDO and academia**, building a repository of knowledge on production expertise and conducting background research for the DTC.
  - Hence, the department will aid DTC's decisions on technology production.

## 5. Unruly passenger behaviour and DGCA guidelines for airlines

### Recent events of importance

- **Why in News:** The recent incident of passenger hitting the pilot due to delays in taking off of flight has brought back the focus on rise in incidents of unruly behaviour and the response of **airline with regard to such behaviour.**
- **How are airlines expected to respond?**
  - Actions and Response shall be guided by the Civil Aviation Requirements (CAR) on "Handling of unruly passengers" issued by the aviation watchdog Directorate General of Civil Aviation (DGCA).
  - The airline should first inform the passengers concerned that in case their behaviour is deemed unruly as per the guidelines.
- **What is Unruly Behaviour?**
  - Unruly behaviour includes (but is not limited to): consuming liquor or drugs resulting in unruly behaviour; smoking; not obeying the pilot's instructions; using threatening or abusive language against crew or other passengers.

### Dealing with unruly passengers on flights: what the rules say

**Unruly behavior:** smoking, not obeying the pilot's instructions, using threatening or abusive language against crew or other passengers, physically threatening and abusive behavior, consuming liquor or drugs, and changing of identity or name, and changing the identity of the aircraft and its crew.

**Immediate response:** The airline should first inform the passengers concerned that in case their behaviour is deemed unruly as per the guidelines. Unruly behaviour includes but is not limited to: consuming liquor or drugs resulting in unruly behaviour; smoking; not obeying the pilot's instructions; using threatening or abusive language against crew or other passengers.

**After incident is over:** The airline should first inform the passengers concerned that in case their behaviour is deemed unruly as per the guidelines. Unruly behaviour includes but is not limited to: consuming liquor or drugs resulting in unruly behaviour; smoking; not obeying the pilot's instructions; using threatening or abusive language against crew or other passengers.

**Level of offence:** The degree of offence by the passenger can be categorized into the following levels of offence.

**LEVEL 1:** Unruly behaviour, including physical gestures, verbal harassment, and abusive language.

**LEVEL 2:** Physically abusive behaviour, including pushing, hitting, kicking, and grabbing or inappropriate touching or sexual harassment.

**LEVEL 3:** Life-threatening behaviour, including damage to aircraft, threatening systems, physical violence such as holding, groping, maintenance assault, and attempted or actual homicide or flight crew impairment.

**Possible penalty:** The airline can take the unruly passenger for up to 30 days immediately after the incident, pending the decision of the internal committee. The airline should also decide to take a decision to 30 days, the passenger will be taken to the airport.

**DGCA to airlines:** In light of the DGCA and that the historical record of unruly passengers, consumption of liquor resulting in unruly passenger behaviour, altercation between passengers, and incidents of inappropriate touching or sexual harassment by passengers, "airline pilots, cabin crew and other staff members have to be vigilant and take appropriate action".

The regulation stated that it needs to be followed, and advised all airlines to ensure compliance, cabin crew, and other staff members to be vigilant and take appropriate action.

- Physically threatening and abusive behaviour; intentionally interfering with discharge of duties by the crew; and endangering the safety of the aircraft and those on board.
- If the aircraft was still on ground, the passenger shall be handed over to airport security immediately.
- In cases of unruly behaviour in the air, the pilot is required to quickly assess if the cabin crew can control the unruly passenger, and accordingly inform the airline's central control on the ground.
- If the pilots and the airline's central control believe that the unruly passenger cannot be brought under control by the cabin crew, they must land as soon as possible at the nearest available airport and handed over to security after registration of FIR.
- **Procedure post incident**
  - The airline must refer the complaint to an internal committee, which must include (i) a retired district and session's judge as chairman, (ii) a representative of a different airline and, (iii) a representative of a passengers' association, or consumer association, or a retired officer of a consumer disputes redressal forum.
  - The internal committee is required to decide the matter within 30 days, along with the categorisation of the incident in one of three defined category levels.
  - The committee shall also decide the duration for which the unruly passenger will be banned from flying. The committee's decision shall be binding on the airline.
- **And what are the category levels of disruptive passenger behaviour?**
  - The levels define behaviour ranging from verbal harassment to murderous assault.
  - **Level 1:** Unruly behaviour, including physical gestures, verbal harassment, and unruly inebriation.
  - **Level 2:** Physically abusive behaviour, including pushing, kicking, hitting, and grabbing or inappropriate touching or sexual harassment.
  - **Level 3:** Life-threatening behaviour, including damage to aircraft operating systems, physical violence such as choking, eye gouging, murderous assault, and attempted or actual breach of flight crew compartment.
- **Penalties**
  - Ban on passenger for 30 days and Airlines are required to maintain a database of unruly passengers and share it with the DGCA and other airlines. The DGCA maintains a No-Fly List based on the data shared by carriers.
  - For Level 1 and 2 offences, the ban on flying can extend to three months and six months respectively. For a Level 3 offence, the minimum ban should be for 2 years, with no upper limit.
- **Recourse for Banned passenger**
  - An individual who is banned from flying can appeal within 60 days to an Appellate Committee constituted by the Ministry of Civil Aviation, and headed by a retired judge of a High Court.
  - An appeal against the appellate panel's decision shall be made to a High Court.
- **DGCA**
  - It is the regulatory body in the field of Civil Aviation and primarily deals with safety issues.
  - It is responsible for regulating air transport services to/from/within India.
  - Further its responsibility pertains to enforcement of civil air regulations, air safety and airworthiness standards.
  - It is an attached office of the Ministry of Civil Aviation, Government of India.

## 6. Why Kashmir and Ladakh are without snow this winter, its implications

### GS 3 (Environment)

#### • Why in News:

- One of Kashmir's main winter tourism attractions, Gulmarg, has been bereft of snow this season.
- This has led to a plunge in the flow of tourists and severely hitting the business of ski resorts.

#### • The Normal Climatic Conditions

- Weather depends a lot on ocean temperatures** and where the ocean is warm, more clouds form and more rainfall in that part of the world.
- In the Pacific Ocean**, near the equator, the Sun makes the water especially warm on the surface.
- Normally**, a surface low pressure system forms in northern Australia and Indonesia and a high-pressure system develops off the coast of Peru.
- As a result, the **trade winds blow strongly from east to west** over the Pacific Ocean, transporting warm surface waters westward.
- This leads to convective storms (**thunderstorms**) to Indonesia and coastal Australia.

#### • What is El Nino and La Nina?

- El Nino and La Nina** are two opposing climate trends that deviate from the normal conditions and normally run nine to twelve months, but can often extend.
- These events occur every two to seven years on average (El Nino is more frequent than La Nina), but not on a regular basis and together are referred to as the **El Nino-Southern Oscillation (ENSO)** cycle by scientists.
- El Nino is typically known as the **warm phase** (a band of warmer water spreading from west to east in the equatorial Pacific Ocean) and La Nina is identified as the **cold phase** (a band of cooler water spreads east-west) of ENSO.
- Both El Nino and La Nina can have global effects on **weather, wildfires, ecosystems and economics**.

#### • Dry Winter in Jammu & Kashmir

##### • Existing pattern

- Winter precipitation in Jammu and Kashmir, as also Ladakh, is mainly in the form of snowfall.
- Normally, the region gets its first **snowfall in the first half of December, and then through most of January**.

##### • Rainfall this winter

- The whole of Jammu and Kashmir and Ladakh have remained largely without rains or snow this winter.
- Jammu and Kashmir saw 80% rainfall deficit in December and 100% (absolutely no rain) deficit in January so far.
- Ladakh has had no precipitation at all in December or January.
- While snowfall in the region has been showing a declining trend in recent years, this season is remarkable.

#### • Reasons behind the dry winter in J&K

- The overall decreasing trend of snowfall has been attributed to a decline in western disturbance events and gradual rise in temperatures, which involves the role of climate change.
- The prevailing El Nino event in the eastern Pacific Ocean might be the additional factor to account for this year.
- Western Disturbances**
  - Winter precipitation in the Himalayan region is caused mainly by Western Disturbances.

## Why Kashmir is without snow

While snowfall in Ladakh and Jammu & Kashmir has been declining in recent years, this winter has been remarkably dry so far. Fewer Western Disturbances, rising temperatures, El Niño could be responsible

ALIND CHAUHAN  
AND MITABH SINHA  
NEW DELHI, JANUARY 16

ONE of Kashmir's main winter tourism attractions, Gulmarg, has been bereft of snow so far this season, leading to a sharp decline in the flow of tourists, which has severely hit the business of ski resorts.

While snowfall in the region has been showing a declining trend in recent years, the situation this season is remarkable. The overall decreasing trend of snowfall has been attributed to a decline in Western Disturbance events and gradual rise in temperatures, which involves the role of climate change. The prevailing El Niño event in the eastern Pacific Ocean might be the additional factor to account for this year, scientists say.

**Role of Western Disturbances**

Winter precipitation in the Himalayan region is caused mainly by Western Disturbances. These are large eastward-moving rain-bearing wind systems that originate beyond Afghanistan and Iran, picking up moisture from as far as the Mediterranean Sea and even the Atlantic Ocean.

Western Disturbances are the primary source of rainfall over north and northwest India during the post-monsoon and winter months. Along with the south-west monsoon season that runs from June to September, and the north-east monsoon that brings rain to Tamil Nadu and some other regions, Western Disturbances are the third major contributor to India's annual rainfall.

During winter, about four to five Western Disturbance events happen every month on average. This season, there was only one feeble Western Disturbance event in December that did not bring any rain, and another similar one in January.

"Western Disturbances have been showing a declining trend in recent times, in some

all in December or January. While snowfall in the region has been showing a declining trend in recent years, the situation this season is remarkable.

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years we have seen just two or three events a month, when normally five or six are expected. Because of this, the overall precipitation during the winter months in the northern regions has been declining." A.P. Dimet, an atmospheric scientist who is currently the director of Mumbai-based Indian Institute of Geomagnetism, said.

Several recent studies, including those by Dimet, have captured this declining trend. One of them noted that the mean frequency of strong and extreme Western Disturbances, one that definitely result in rainfall or snowfall, had declined by as much as 43 per cent in recent years.

The other, connected thing is that temperatures in these regions are rising. The rate of increase of temperature is seen to be higher in the upper elevation areas than in the plains. In fact, look at the temperatures in Kashmir this winter. On many days, Siachen temperatures have been comparable to those of Delhi, and sometimes even higher," Dimet said. "This is also contributing to the decline in snowfall," he added.

**Impact of El Niño**

Indeed, there have been several years in the past one decade — 2002, 2008, 2015 — when winter has been relatively dry in Jammu and Kashmir, and snowfall has been very less. Mukhtar Ahmad, head of the Siachen centre of IMD, said the situation this winter might be compounded by El Niño.

For the past few months, El Niño has persisted and will continue to do so in the coming months. This has affected the global atmospheric circulation, and might be contributing to the deficit in precipitation in the region," Ahmad said.

However, El Niño alone was not the reason, he said. Ahmad pointed out that even in the absence of El Niño, some years had seen very little snowfall.

"In recent years, 2022 (December), 2018 (December-January), 2015 (January), 2014 (December), 1998 (December-January) and 1992 (December) were dry," Ahmad said.

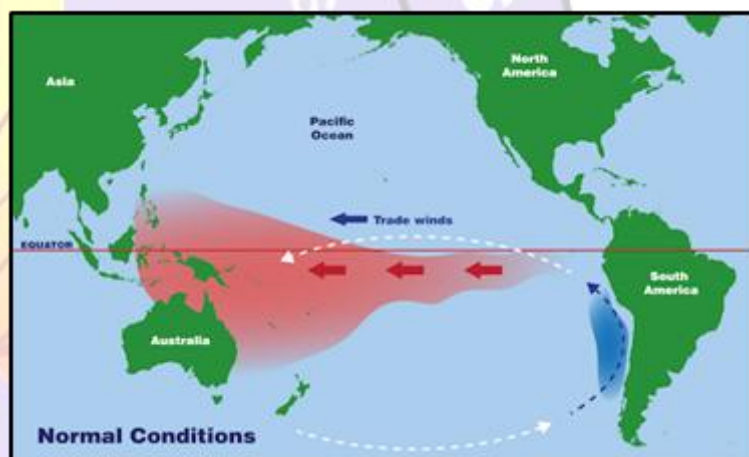
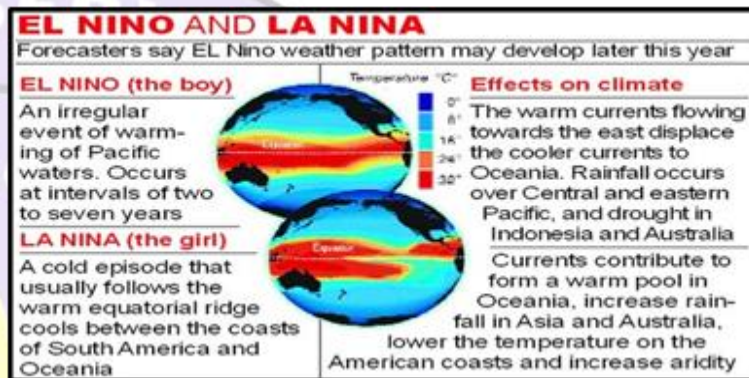
Dimet agreed that the declining snowfall in Kashmir could be a direct fallout of climate change. "Indeed, I do think that climate change has a role to play here. Many of our studies point in that direction," he said.

**Far-reaching repercussions**

Less snowfall in the region is expected to have both short-term and long-term consequences. Long-term implications include the generation of less hydroelectricity, an increase in the rate of glacier-melting, and an adverse impact on drinking water supply, since a scanty snowfall means very little recharge of groundwater.

In the short term, a dry spell can result in an increase in forest fires, agricultural drought, and a drop in crop production. "It can lead to severely spring aridification, which can cause a reduction in yield," Ahmad said.

The winter snow is a source of steady moisture to the soil that is vital for winter crops, particularly horticulture. Yields of apples or saffron, important ingredients of the local economy, are badly affected in the absence of snowfall.



- i. These are large eastward-moving rain-bearing wind systems that originate beyond Afghanistan and Iran.
  - ii. They pick up moisture from as far as the Mediterranean Sea and even the Atlantic Ocean.
- Western Disturbances are the **primary source of rainfall over north and northwest India during the post-monsoon and winter months.**
- During winters, about **four to six western disturbance events happen every month on an average.**
- This season there was **one feeble western disturbance event in December** that did not bring any rains, and another similar one in January.
- i. Western disturbances have been showing a declining trend in recent times
  - ii. Because of this, the overall precipitation during the winter months in the northern regions has also been declining.
- **Rising temperatures**
  - Also, temperatures in these regions are rising. The rate of increase of temperature is seen to be higher in the upper elevation areas than in the plains.
  - On many days, Srinagar temperatures are comparable to those of Delhi, sometimes they appear to be even higher.
  - This is also contributing to the decline in snowfall.
- **El Nino impact**
  - For the past few months, **El Nino has persisted** and will continue to do so in the coming months.
  - This has affected the global atmospheric circulation, and might be contributing to the deficit precipitation in the region as well.
- **Impact of dry winter**
  - **Long-term implications**
    - the generation of less hydroelectricity,
    - an increase in the rate of glacier melting, and
    - an adverse impact on the drinking water supply, since scanty snowfall means very little recharge of groundwater.
  - **Short-term implications**
    - A dry spell can result in an increase in forest fires, agricultural drought, and a drop in crop production.
    - It can lead to an early spring, which means early flowering, which can cause a reduction in yield.
    - The winter snow is a source of steady moisture to the soil that is vital for winter crops, particularly horticulture.
    - Yields of apples or saffron, important ingredients of local economy, are badly affected in the absence of snowfall.

18<sup>th</sup> Jan, 2024

## 1. The Annual Status of Education Report (ASER) GS 2 (Education)

- **Why in News:** Recently the annual ASER report was released. The report sheds light on the status of education and various gaps that exist in the education ecosystem.
- **About the Report**
  - It is conducted by an NGO/ Civil society Pratham
  - **Assessed group**-Rural students aged 14 to 18 years.
  - The survey was conducted in 28 districts across 26 states and it assessed the foundational reading and arithmetic abilities of 34,745 students.
  - Assessment was done in the activities students are engaged in, their basic and applied reading and math abilities and digital awareness and skills.
- **Findings from the report**
  - **Enrolment:** 8% of 14-18-year-olds are enrolled in an educational institution. The percentage of youth not enrolled is 3.9% for 14-year-old youth and is 32.6% for 18-year-olds. This denotes the Small gender gaps in enrolment, but notable differences by age.
  - **Stream preferences and Gender Gap:** Most of the people in this age group were enrolled in the Arts/Humanities streams. In Class XI or higher, more than half are enrolled in the Arts/Humanities stream (55.7%) and females are less likely to be enrolled in the Science, Technology, Engineering, and Mathematics stream (28.1%) than males (36.3%).
  - **Basic abilities:** Only 5.6% of surveyed youth report taking vocational training or other related courses currently. Youth at the college level are the most likely to be taking vocational training (16.2%).
  - **Preferences for Short duration courses:** The survey found adding that most youth are taking short duration courses of six months or less.
  - **Glaring picture on Basic learning:** about 25% still cannot read a Class II level text fluently in their regional language. More than half struggle with division (3-digit by 1-digit) problems. Only 43.3% of 14-18-year-olds are able to do such problems correctly. This skill is usually expected in Standard III/IV.
    - **A little over half can read sentences in English (57.3%).**
    - Of those who can read sentences in English, almost **three quarters can tell their meanings (73.5%).**
    - While **females (76%) do better than males (70.9%) in reading a Standard II level text** in their regional language, males do better than females in arithmetic and English reading.
    - Of the youth who can do subtraction or more, **over 60% are able to do the budget management task, about 37% can apply a discount**, but only about 10% can calculate repayment.
  - **Digital skills:** Close to 90% of all youth have a smartphone in the **household and know how to use it. Of those who can use a smartphone, males (43.7%) are more than twice as likely to have their own smartphone as females (19.8%).**
    - Females are less likely to know how to **use a smartphone** or computer as compared to males.
    - Across all tasks using mobile phones, males **outperformed females**.
    - Performance on digital tasks improves with education level. The ability to do digital tasks increases with basic reading proficiency.

### Over half of youth struggling with basic maths: ASER study

**The Hindu Bureau**  
NEW DELHI

The Annual Status of Education Report (ASER), titled "Beyond Basics", was released here on Wednesday. It involved a survey by the civil society organisation Pratham among rural students aged 14 to 18.

The household survey, conducted in 28 districts across 26 States, assessed the foundational reading and arithmetic abilities of 34,745 students. It discussed the activities students are engaged in, their basic and applied reading and maths abilities and digital awareness and skills.

"Overall, 86.8% of 14- to 18-year-olds are enrolled in an educational institution. There are small gender gaps in enrolment, but notable differences are visible by age. The percentage of youth not enrolled is 3.9% for 14-year-old youth and is 32.6% for 18-year-olds," the report said.

Most of the people in this age group were enrolled in the Arts/Humanities stream. In Class II or higher, more than half are enrolled in the Arts/Humanities stream (55.7%)

and girls are less likely to be enrolled in the Science, Technology, Engineering, and Mathematics stream (28.1%) than boys (36.3%), it said.

**Basic abilities**  
On abilities such as basic reading, maths and English abilities; application of basic skills to everyday calculations; reading and understanding written instructions; and financial calculations that need to be done in real life, about 25% still cannot read a Class 2 level text fluently in their regional language.

"More than half struggle with division 3-digit by 1-digit problems. Only 43.3% of 14-18-year-olds are able to do such problems correctly. This skill is usually expected in Standard III/IV," the report said.

A little over half can read sentences in English (57.3%). "Of those who can read sentences in English, almost three quarters can tell their meanings (73.5%," the report added.

Close to 90% of all youth have a smartphone in the household and know how to use it.

## • About ASER Report

- It is a large-scale citizen-led **household survey Facilitated by Pratham Education Foundation since 2005.**
- It aims to understand whether children in rural India are enrolled in school and whether they are learning.
- The basic, nationwide ASER survey is conducted every alternate year. It collects data on the enrolment status of children in the **age group of 3-16 years, and basic reading and arithmetic levels of children in the age group of 5-16 years.**

## • Why focus on the 14-18 age group?

- India has the largest youth population in the world. It is important to ensure that these young people have the skills and the opportunities needed to help them build a better future for themselves, their families, and for the country.
- The **National Youth Policy 2021** articulates a ten-year vision for youth development aiming to 'unlock the potential of the youth to advance India', and catalyse development across education, employment and entrepreneurship, youth leadership and development, health and fitness, and social justice.
- The **Right to Education Act (RTE)** guarantees free and compulsory education up to the age of 14, by when most children complete Std VIII.
- It is important to understand children's pathways after leaving elementary school, before they become adults at the age of 18.
- Their preparedness to take on adult responsibilities is crucial to their personal, social and professional success in the future.

## 2. Iran strikes militant group Jaish al-Adl bases in Pakistan GS 2 (International Relations)

### • Why in News:

- Recently, Iran bombed two bases of militant group Jaish al-Adl in Pakistan's Balochistan province with missiles and drones.
  - Iran has not yet specified the reason behind the attack.
- This attack killed two children and injured three others. As a result, Pakistan has recalled its ambassador and expelled the Iranian envoy.

### • Sistan-Baluchestan

#### ○ About

- Iran's Baluch minority numbers between one and four million people, based mainly in the southeastern region of Sistan-Baluchestan.
- The region is poor and underdeveloped.
- Made up of rugged, mountainous terrain, it has become a haven for heroin and opium-smuggling from across the border with neighbouring Pakistan and Afghanistan.

#### ○ Demography

- The Baluchs who live there are mostly **Sunni Muslims** and identify themselves as part of an ancient tradition separate from that of Iran's Persian ethnicity.
  - The **majority of Iran's population are Shia.**
- They identify themselves closely with the Baluch populations across the border in Pakistan.

### • Jaish al-Adl

#### ○ About

### Why did Iran carry out strikes in Iraq, Syria and Pakistan?

The Islamic Republic seeks to send an assertive message to its conventional and proxy rivals that it would not hesitate to take military action if its security red lines are breached

#### NEWS ANALYSIS

##### Strategic backdrop

In December 2019, a proxy attack in Iran's Balochistan province killed two children and injured three others. As a result, Pakistan has recalled its ambassador and expelled the Iranian envoy.

##### Iran's calculations

The Islamic Republic seeks to send an assertive message to its conventional and proxy rivals that it would not hesitate to take military action if its security red lines are breached



Striking of the... The Islamic Republic seeks to send an assertive message to its conventional and proxy rivals that it would not hesitate to take military action if its security red lines are breached

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- ### **3. Reviewing Production Linked Incentive (PLI) Schemes**
- #### **GS 2 (Governance)**

- PLI Scheme, commonly abbreviated as the **Production Linked Incentive**



**Scheme**, is an initiative started by the Government of India.

- It is a form of performance-linked incentive to give companies incentives on incremental sales from products manufactured in domestic units.
- It is **aimed at boosting the manufacturing sector and to reduce imports**.
- These schemes have the potential of significantly boosting production, employment and economic growth over the next five years or so.
- In 2021, the Government had announced Rs 1.97 lakh crore (US\$ 28 b) worth of PLI schemes for **13 key sectors**. These sectors include:
  - Auto components, Automobile, Aviation, Chemicals, Electronic systems, Food processing, Medical devices, Metals & mining, Pharmaceuticals, Renewable energy, Telecom, Textiles & apparel, White goods
- These schemes are in various stages of implementation by the implementing Ministries/ Departments.
- These PLI schemes are expected to have a cascading effect on the country's Micro Small & Medium Enterprises (MSME) ecosystem.
- **Performance of PLI Schemes:**
  - **Boost in Exports:**
    - After doubling the value of mobile handset exports in FY22 to Rs 45,000 crore over FY21, India is estimated to have exported Rs 90,000 crore worth of mobile handsets in FY23.
    - Similarly, in the pharma industry, **India is now making 35 active pharmaceutical ingredients (APIs)**, which we used to import from countries like China. As a result, India's imports have come down.
    - These schemes have witnessed exports surpassing Rs 3.2 lakh crore, with significant contributions from sectors such as electronics, pharma, food processing, and telecom.
  - **Slow Implementation:**

<b>A WORK IN PROGRESS</b> BUDGET ALLOCATION UNDER THE PLI SCHEME REFLECTS SLOW PROGRESS IN MANY SECTORS					
Nodal body	Segments covered	FY22 Actual	FY23 BE	FY23 RE	FY24 BE
Ministry of Electronics & Information Technology (MeitY)	Mobile handsets, IT hardware, electronics	0	5,300	2,203	4,645
Dept of Commerce & Industry	White goods & LED	1	4	4	65
Dept of Communication	Telecom & Networking manufacturing	0	528	90	800
Dept of Heavy Industry	Auto, auto components & advanced chemical cell batteries	0	6	12	605
Dept of Civil Aviation	Drones & drone components	0	0	40	33
Ministry of Chemical & Fertilisers	Bulk drug, APIs, medical devices, pharma	0	1,629	1,663	1,200
Dept of Textile	Textile	0	15	8	5
Dept of Food Processing Industry	Food processing	9	1,022	801	1,530
<b>Total</b>		<b>10</b>	<b>8,504</b>	<b>4,821</b>	<b>8,883</b>

Figures in ₹ crore; **BE:** Budget Estimate; **RE:** Revised Estimate;  
**Source** Budget documents FY24

- **Implementation of the PLI schemes has been slow so far.**
- In 2021-22, the government spent just Rs 10 crore in incentive payouts (for mobile handsets, white goods—ACs and LEDs—and food processing industries put together), reflecting marginal increase in production.
- In 2022-23, as per DPIIT, this number rose to Rs 2,874 crore.
- Effectively, the **first two years of the seven-year exercise saw a mere 1.46 per cent of the total Rs 1.97 lakh crore incentive outlay being paid out.**
- Large-ticket industries are either yet to adopt the scheme or begin major activities under it.
- **Lower Number of Jobs Created:**

- The slow start has also meant lower number of jobs created.
- Against the projected 6 million new jobs over seven years, only some 300,000 jobs (or 5 per cent of the total) have been created between 2020 and early-2023 through the various PLIs.
- **News Summary:**
  - The **central government has disbursed incentive amount of Rs 4,415 crore under its flagship Production-Linked Incentive (PLI) schemes** for as many as eight sector still October this fiscal year.
  - About Rs 1,515 crore was disbursed in FY24 till October, while it was Rs 2,900 crore in 2022-23, when payments under the scheme commenced.
  - By end of this fiscal, the disbursal target is Rs 11,000 crore.
  - The government said that employment generation, both direct and indirect, is over 6.78 lakh.
  - As on date, **746 applications have been approved in 14 sectors with expected investment of over Rs 3 lakh crore.**
  - About 176 MSMEs are among the PLI beneficiaries in sectors such as pharma, and telecom.

#### 4. Draft Bills for Repealing Indian Stamp Act GS 2 (Governance)

- **Why in News:** The government has proposed repealing the Indian Stamp Act, 1899 and bringing in a new legislation for the stamp duty regime in the country.
- **More on the News**
  - Department of Revenue under the Ministry of Finance has invited suggestions on the draft 'Indian Stamp Bill, 2023' from the public.
  - The Intent is to align it with the modern stamp duty regime. Once enacted, the Bill shall replace the Indian Stamp Act, 1899.
- **What is a Stamp Duty?**
  - It is a tax, similar to income tax, collected by the government. Stamp duty is payable under Section 3 of the Indian Stamp Act, 1899.
  - Stamp Duty must be paid in full and on time. If there is a delay in payment of stamp duty, it attracts penalty.
  - A stamp duty paid instrument / document is considered a proper and legal instrument / document and has evidentiary value and is admitted as evidence in courts. Document not properly stamped, is not admitted as evidence by the court.
- **The Indian Stamp Act**
  - The Indian Stamp Act 1899 lays down the legal provisions for tax levied in the form of stamps on instruments recording transactions.
  - Stamp duties are levied by the central government, but within the states are collected and appropriated by the concerned states in terms of provisions of Article 268 of the Constitution.
  - The stamp duties on documents specified in entry 91 of the union list of the Seventh Schedule. The seventh schedule deals with division of subjects among Union and States.
  - Stamp duty is levied on instrument recording transaction including bills of exchange, cheques, promissory notes, bills of lading, letters of credit, policies of insurance, transfer of shares, debentures, proxies and receipts are levied by the Union.
- **Why it is being repealed?**
  - It is a pre-Constitution Act and has been amended from time to time to enable a more modern stamp duty regime.

#### Govt proposes repealing Indian Stamp Act, seeks public input on draft Bill

THE ECONOMIC BUREAU  
NEW DELHI, JANUARY 17

THE GOVERNMENT has proposed repealing the Indian Stamp Act, 1899 and bringing in a new legislation for the stamp duty regime in the country, inviting suggestions on the draft 'Indian Stamp Bill, 2023' from the public within a period of 30 days.

"The Department of Revenue, Ministry of Finance, Government of India, has prepared a draft 'Indian Stamp Bill, 2023' to align it with the modern stamp duty regime. Once enacted, the Bill shall replace the Indian Stamp Act, 1899," the Ministry of Finance said in a statement on Wednesday.

The Indian Stamp Act, 1899 lays down the legal provisions for tax levied in the form of stamps on instruments recording transactions.

Stamp duties are levied by the central government, but within the states are collected and ap-

propriated by the concerned states in terms of provisions of Article 268 of the Constitution.

The stamp duties on documents specified in entry 91 of the union list of the Seventh Schedule including bills of exchange, cheques, promissory notes, bills of lading, letters of credit, policies of insurance, transfer of shares, debentures, proxies and receipts) are levied by the Union. Other stamp duties on documents are levied and collected by the states.

The Indian Stamp Act, 1899, a pre-Constitution Act, has been amended from time to time to enable a more modern stamp duty regime, the ministry said.

"However, a number of provisions contained in the Indian Stamp Act, 1899 have become redundant/inoperative and hence, there is a need to re-orient the Indian Stamp Act, 1899. Accordingly, it has been proposed that the Indian Stamp Act, 1899 is repealed and a new legislation is enacted to reflect the present realities and objectives," it said.

- However, a number of provisions contained in the Indian Stamp Act, 1899 have become redundant/ inoperative and hence, it need to reflect the present realities and objectives there is a need to re-orient the Indian Stamp Act, 1899.

## 5. Indian vulture

### GS 3 (Environment)

- **Why in News:** First in many years, a vulture was spotted in the skyline of Thane which has not been spotted over two decades in the city.
- **About Indian vulture:**
  - The Indian vulture (*Gyps indicus*) is an Old-World vulture **native to Asia**.
  - They are also known as Indian long-billed vultures due to their comparatively longer beak.
  - It is a medium-sized and bulky scavenger feeding mostly on the carcasses of dead animals.
  - Females of this species are smaller than males.
  - **Distribution:** These are native to India, Pakistan, and Nepal.
  - **Habitat:** They are usually found in savannas and other open habitats around villages, cities, and near cultivated areas.
  - **Threats:** The Indian vulture has suffered a 97-99% population decrease due to poisoning caused by the veterinary drug This drug is toxic for vultures; it was given to working animals as it reduced joint pain and so kept them working for longer.
  - **Conservation status**
    - ❖ **IUCN Red List: Critically Endangered**

## 6. Thiruvalluvar Day

### GS 1 (Art and Culture)

- **Why in News:** Recently, the Prime Minister of India paid tributes to Saint Thiruvalluvar on Thiruvalluvar Day.
- **About Thiruvalluvar Day:**
  - It is usually observed either on **January 15 or 16 in Tamil Nadu** and is a part of Pongal celebrations.
- **About Thiruvalluvar:**
  - He was a poet and philosopher, is regarded as a cultural icon by Tamils.
  - He is fondly referred to as **Valluvar** by Tamils.
  - His most **popular work is Thirukkural**, a collection of couplets on ethics, politics, economy and love.
  - Thiruvalluvar's primary work Thirukkural **contains 1330 couplets** (kural) that are divided into 133 sections of 10 couplets each.
  - The text is divided into three parts with teachings on **dharma, artha, and kama** (virtue, wealth and love).
  - Each section covers a wide range of topics and imparts **moral, ethical, and practical guidance** to the readers.
  - The couplets are composed in a **concise and poetic form**, making them easily memorable and quotable.

## 7. Senna spectabilis

### GS 3 (Environment)

- **Why in News:** The Forest Department of Tamil Nadu has cleared 356.50 hectares of invasive growth of Senna spectabilis that posed a threat to biodiversity conservation in Sathyamangalam Tiger Reserve (STR).
- **About Senna spectabilis:**
  - It is a species of the **legume family**.
  - It is native to **South and Central America** and is grown as an ornamental plant as it has bright yellow flowers.
  - It was introduced as shade trees for coffee and firewood in the country; it soon became a threat to native tree species as its dense foliage prevented the growth of other indigenous trees and grass species.
  - It is considered as **Least Concern** under the IUCN Red List.
- **Key facts about Sathyamangalam Tiger Reserve:**

- It is located at the **junction of the Eastern and the Western Ghats** in the Nilgiri Biosphere Reserve, in the Erode District of **Tamil Nadu**.
- It is contiguous with the Mudumalai Tiger Reserve, Bandipur Tiger Reserve (Karnataka) and BR Tiger Reserve and Wildlife Sanctuary (Karnataka).
- **Vegetation:** It consists of southern tropical dry thorn forests, mixed deciduous forests, semi-evergreen forests, and Riparian forests.
- **Rivers:** Some of the prominent rivers in the region include **the Bhavani, Moyar, and Noyyal rivers**.
- **Tribal Communities:** It is home to several indigenous tribal communities, including the **Irula and Kurumba tribes**.
- **Flora:** Common Species of trees and shrubs found are Albizia amara Chloroxylon swietenia, Gyrocarpus jacquini, Neem, Tamarind, Sandalwood, Randi dumetorum, Zizyphus and associates.
- **Fauna:** The major species are Elephant, Tiger, Panther, Sloth bear, Gaur, Black Buck, Spotted deer and Bonnet macaque.



19<sup>th</sup> Jan, 2024

## 1. Distress Alert Transmitter

### GS 3 (Disaster Management)

- **Why in News:** Indian Space Research Organisation (ISRO) has developed an improvised Distress Alert Transmitter (DAT) with advanced capabilities and features for the fishermen at sea to send emergency messages from fishing boats.
- **About Distress Alert Transmitter:**
  - The first version of DAT has been operational since 2010.
  - The fishermen at sea send **emergency messages** from fishing boats.
  - The messages are sent through a communication satellite and received at a **central control station** (INMCC: Indian Mission Control Centre) where the alert signals are decoded for the identity and location of the fishing boat.
  - The extracted information is forwarded to **Maritime Rescue Coordination Centres** (MRCCs) under Indian Coast Guard (ICG).
  - Using this information, the MRCC coordinates to undertake Search and **Rescue operations** to save the fishermen in distress.
- **What is Second Generation DAT?**
  - Taking advantage of technological developments in satellite communication and satellite navigation ISRO has improvised DAT with advanced capabilities and features evolving to Second Generation DAT (DAT-SG).
  - The DAT-SG has the facility to **send back acknowledgement to the fishermen** who activate the distress alert from sea. This gives an assurance to him of rescue coming to him.
  - Apart from transmitting distress signals from the Sea, DAT-SG has the capability to receive messages from control centres.
  - Using this, advance alert messages can be sent to the fishermen at sea whenever there are **events of bad weather, cyclone tsunami or any other emergencies**.
  - Further, the information about **Potential Fishing Zones** (PFZs) are also transmitted to fishermen using DAT-SG on regular intervals.
  - DAT-SG can be connected to **mobile phones using Bluetooth** interface and the messages can be read in native language using an App in the mobile.
  - The central control centre has a web-based network management system called "**SAGARMITRA**" which **maintains a database** of registered DAT-SGs and helps MRCCs to access the information about boat, coordinate the boat in distress in real time.
  - This helps the Indian Coast Guard to undertake Search & Rescue operations at the time of distress, without any time delay.

## ISRO upgrades its distress alert device for fishermen

**The Hindu Bureau**  
BENGALURU

The Indian Space Research Organisation (ISRO) has developed an improvised distress alert transmitter (DAT) with advanced capabilities for fishermen at sea to send emergency messages from boats.

The first version of DAT is operational since 2010, using which messages were sent through a communication satellite and received at a central control station (Indian Mission Control Centre), where the alert signals are decoded for the identity and location of the fishing boat.

The information is then

forwarded to maritime rescue coordination centres (MRCCs) under the Indian Coast Guard. The MRCC coordinates to undertake search and rescue operations to save the fishermen in distress.

More than 20,000 DATs are presently being used. "Taking advantage of technological developments in satellite communication and satellite navigation, ISRO has improvised DAT with advanced capabilities and features evolving to second generation DAT (DAT-SG)," ISRO said.

The DAT-SG has the facility to send back acknowledgement to the fisher-

men who activate the distress alert from sea. "This gives an assurance to him (the fisherman) of rescue coming to him. Apart from transmitting distress signals from the sea, DAT-SG has the capability to receive messages from control centres. Using this, advance alert messages can be sent to fishermen at sea whenever there are events of bad weather, cyclone tsunami or other emergencies. Thus, they will be able to sail back home or go to safe places," ISRO said.

Further, the information about potential fishing zones are also transmitted to fishermen using DAT-SG on regular intervals.

## 2. Union Government Forms Committee to Explore SC Sub-Categorisation

### GS 2 (Governance)

- **Why in News:** In response to the demand for sub-categorisation of Scheduled Castes (SCs) by the Madiga community, the Union government has established a five-member committee of Secretaries, chaired by the Cabinet Secretary, to examine and devise a method for the fair allocation of benefits, schemes, and initiatives among the diverse SC communities nationwide.
- **Background**
  - The move follows the longstanding struggle of the **Madiga community**, dating back to 1994, advocating for the **sub-categorisation of SCs**.
  - This demand led to the creation of the **Justice P. Ramachandra Raju Commission in 1996** and a **subsequent National Commission in 2007**,

## Sub-categorisation of SCs: panel to look into even distribution of benefits

**Abhinav Lakshman**  
NEW DELHI

The Union government has formed a five-member committee of Secretaries, chaired by the Cabinet Secretary, to evaluate and work out a method for the equitable distribution of benefits, schemes and initiatives to the most backward communities among the over 1,200 Scheduled Castes (SCs) across the country, that have been crowded out by relatively forward and dominant ones. This comes in the backdrop of PM Narendra Modi's promise to look into the demand for sub-categorisation of SCs as raised by the Madiga community in the run-up to the Telangana Assembly election.

Further, this move

**The Madiga community has been struggling since 1994 for sub-categorisation of SCs**

comes just as a seven-judge Constitution Bench of the Supreme Court is set to start hearing the question of whether sub-categorisation among SCs and Scheduled Tribes (STs) is at all permissible. While the court hearing will be on the constitutionality of sub-categorisation among SCs for the purpose of breaking up the reservation in jobs and education set aside for them, the government panel will be looking into "other ways to take care of their grievances", *The Hindu* has learnt. The committee will look

at strategies like special initiatives, focusing existing schemes towards them, etc.

The committee was formed earlier this month and comprises the Secretaries of the Home Ministry, Law Ministry, Tribal Affairs Ministry, and Social Justice Ministry.

The Madiga community has been struggling since 1994 for the sub-categorisation of SCs and it was this demand that first led to the formation of the Justice P. Ramachandra Raju Commission in 1996 and later a National Commission in 2007 – both of which had concluded that there could be ways to do this. In the last two decades, multiple States like Punjab, Bihar, and Tamil Nadu have tried to bring in reservation laws at the State level in a bid to sub-categorise SCs and decide on a separate quantum of reservation for these subcategories within the umbrella of SCs. However, all plans are held up in court. According to legal experts, nothing in the Constitution prohibits the Parliament from sub-categorising SCs or STs but what the government would need to justify this move would be a 100% count of all castes – a caste census of each community and sub-community and their respective socio-economic data. This can be the only empirical basis on which the government can justify sub-categorisation of benefits and how much extra share of benefits each community needs. Supreme Court advocate Mohan Gopal has argued.

both affirming the possibility of sub-categorisation.

- **Need for Equitable Distribution:**

- With over 1,200 SCs in the country, certain **forward and dominant communities have overshadowed the more backward ones** in terms of benefit distribution.
- The Madiga community, constituting at least **50% of the SCs in Telangana**, has raised concerns about the unequal allocation of benefits, particularly reservations, where the **Mala community is perceived to have garnered the majority**.

- **Supreme Court's Role:**

- Simultaneously, a **seven-judge Constitution Bench of the Supreme Court** is set to scrutinize the permissibility of sub-categorisation among SCs and Scheduled Tribes.
- While the court focuses on the **constitutionality of sub-categorisation** in reservations for jobs and education, the government's committee is mandated to explore alternative strategies for addressing grievances.

- **Committee's Focus:**

- The committee, formed earlier this month, includes representatives from the **Home Ministry, Law Ministry, Tribal Affairs Ministry, and Social Justice Ministry**.
- Explicitly instructed not to delve into **reservation-related questions deemed sub-judice**, the committee aims to explore avenues such as special initiatives and targeted focus on existing schemes.

- **Legal Perspective:**

- In 2005, the Union government had **contemplated legal options for SC sub-categorisation**.
- The possibility was acknowledged by the then Attorney General of India, contingent on "**unimpeachable evidence**" indicating a necessity.
- Both the **National Commissions for Scheduled Castes and Scheduled Tribes**, however, argued **against** constitutional amendments, emphasizing the urgency of ensuring the prioritized delivery of existing schemes and benefits

- **Awaiting Census Data:**

- Legal experts suggest that for the government to justify **sub-categorisation, a comprehensive caste census with socio-economic data is imperative**.
- Experts emphasize the need for a **100% count of all castes to determine the empirical basis** for allocating benefits among various SC communities.

- **About Madiga Community**

- The Madiga community is a significant community in the Indian state of Telangana, and they are primarily engaged in traditional **occupations like leatherwork and related activities**.
- **Occupation:** Leatherwork, including tanning and crafting of leather goods. They often work with **animal hides** to produce items like footwear, bags, and other leather products.
- **Social Status:** The Madiga community has **faced social discrimination and historically occupied a lower social status**.
- **Cultural Practices:** The Madiga community has its **own cultural practices, including festivals, rituals, and traditional art forms**.

### 3. SC reserves judgement on environmental release of GM mustard

#### GS 3 (Agriculture)

- **Why in News:** The apex court stated it will determine what is best for the nation in a "highly technical" and scientific matter.
- **Background**
  - **Background:**
    - The Supreme Court concluded proceedings on the environmental release of genetically modified (GM) mustard.
    - The decision was deferred by the newly-formed bench, comprising justices BV Nagarathna and Sanjay Karol.
  - **Issue:** The deferral of the decision suggests the complexity and sensitivity of the GM crop issue, requiring a thorough examination of scientific and technical aspects before reaching a conclusion.
- **Court's Inquiry into GEAC and TEC Reports**
  - **Data and Facts:**
    - The court inquired on why the **Genetic Engineering Appraisal Committee (GEAC)** had not referenced the reports of the **Technical Expert Committee (TEC)** on biosafety of GM crops.
    - **Court's scrutiny:** The court's scrutiny of the reports highlights the importance of scientific assessments in making informed decisions on environmental releases of GM crops.
- **Concerns Raised**
  - **Data and Facts:**
    - **Potential contamination:** Concerns were raised about the **potential contamination** of other mustard varieties if open plantations of GM Mustard are allowed.
    - **Food Export Risk:** He emphasized the risk to India's potential for exporting organic food.
- **Arguments on Open-Field Trials and Food Security**
  - **Open-field trials:** Solicitor General argued that open-field trials are essential and scheduled at eight locations under supervision.
  - **Indigenous production and Food Security:** He highlighted the importance of indigenous production for food security and reduced dependency on foreign market imports.
- **Way Forward:**
  - The Supreme Court's decision to **defer the judgment** on the **environmental release of GM Mustard** reflects the intricacies involved in balancing environmental, scientific, and economic considerations.
  - The court's thorough review, legal representation, and acknowledgment of the technical nature of the issue underscore the commitment to making an informed decision that aligns with India's broader interests.

### 4. Resistance to Medicines on Rise

#### GS 2 (Health)

- **Why in News:** With antimicrobial resistance on the rise, the Union Health Ministry has urged doctors to write down the exact reason when prescribing antibiotics.
- **About Antimicrobial Resistance (AMR):**
  - Antimicrobials – including antibiotics, antivirals, antifungals and antiparasitic – are medicines used to prevent and treat infections in humans, animals and plants.
  - Antimicrobial Resistance (AMR) occurs **when bacteria, viruses,**

### GM crops will make edible oil cheaper: govt.

In submission before Supreme Court, Centre says GM oil has been used in India for decades now and growing oil seeds indigenously will help reduce prices petitioners submit that regulatory system under Genetic Engineering Appraisal Committee is riddled with conflict of interest

**Background**

The Supreme Court on Thursday said it only wanted what was good for India even as the government argued that growing genetically modified (GM) crops such as mustard would make quality edible oil cheaper for the common man and benefit the national interest by reducing foreign dependence.

"Mustard is the most used edible oil. GM oil has been used in India for decades now. What we are trying to do is make edible oil cheaper for the common man by growing oil seeds indigenously. 50% to 60% of edible oil is imported, interest which we are giving food security and reducing foreign dependence are behind these PILs," said Solicitor General Tushar Mehta, for the Centre, submitted in the Supreme Court.



Testing oil released: Women carry bottles for their cattle through a mustard field in the outskirts of Gurgaon, Haryana.

"So, we are eating more refined items, right," Justice Nagarathna asked on a higher note.

Mr. Mehta and Additional Solicitor General Anshu Kumar had said while the PIL petitioners had highlighted environmental damage allegedly caused

by the open field testing of GM crops, the court had to consider the government's duty to take care of the people's right to food.

"Edible oil is a daily food commodity used in the country. The PIL petitioners are depending on some half-baked study done 14

years ago to raise concern about environmental damage. The court should look at the fundamental right of people to access basic food consumed every day at a cheaper price," Mr. Mehta argued.

He said the open field testing of GM crops were allowed on eight sites of 600 sq. m each.

"Oil seeds were sown in six of the sites. It is not that acres of open fields are used for testing. The testing is done in controlled circumstances and strictly according to statutory regime under expert guidance."

The petitioners, Gene Campaign and activist Anshu Kumar, have challenged the government move to commercially release Dhara Mustard Hybrid II (DMH II), a genetically engineered variety of mustard.

"But DMH II has shown increased yield per hectare of 25% to 30%, in India, annual economic losses of crops due to weeds is \$1 billion USD, at \$1 lakh crore. Annual value of herbicide currently used in India is \$4500 crore," Mr. Mehta reasoned.

**Conflict of interest**

Advocate Prashant Bhushan, appearing for Mr. Nagarathna, had submitted that the regulatory system under the Genetic Engineering Appraisal Committee (GEAC), which cleared the environmental release of DMH II, was "biased" and riddled with conflict of interest. He had said that India hosted 1,477 varieties of mustard, which would be at risk by the GM variety.

Mr. Mehta said India imported about 35,000 tonnes of Canada oil largely from GM canola seeds. Similarly, nearly 2.8 lakh tonnes of soybean oil is imported annually. Most export countries such as Argentina, the U.S., Brazil, and Canada cultivate GM soybeans. Globally around 80% of soybean growing is GM soybean.

### Resistance to medicines on rise, Govt asks doctors to mention reason when prescribing antibiotics

**ANONNA DUTT**  
NEW DELHI, JANUARY 18

WITH ANTIMICROBIAL resistance on the rise, the Union Health Ministry has asked doctors to write down the exact reason when prescribing antibiotics. At the same time, the pharmacists have been urged not to dispense these medicines without a valid prescription as specified by the law.

A letter sent earlier this month to the association of doctors, Union Director General of Health Services Dr Anil Goel states: "It is important that doctors mention

the exact indication on their prescriptions while prescribing antimicrobials. It is an urgent appeal to all doctors in medical colleges to mandatorily mention the exact indication, reason, or justification while prescribing antimicrobials." The letter urged medical colleges to set an example of judicious use of antibiotics for the next generation of doctors. The letter also went to the association of pharmacists, reiterated the provisions of the Drugs and Cosmetics Act, which specify that antimicrobials should be sold only on prescription from a registered medical practitioner. Antimicrobials are listed un-

**Pharmacists told not to sell antibiotics without prescription**

der Schedule H and H1 of the Drugs and Cosmetics Act, both of which are categories of medicines that cannot be sold without a prescription. The records of sale of Schedule H1 drugs – which include third and fourth generation antimicrobials – have to be maintained for a period of three years. "Misuse and overuse of antimicrobials is one of the main drivers in development of drug resistant pathogens. With few

new antibiotics in the research and development pipeline, prudent antibiotic use is the only option to delay the development of resistance. Looking forward to your support to promote judicious use of antimicrobials to reduce emergence of resistance," both the letters read. This comes on the heels of a recent survey by the National Centre for Disease Control (NCDC) which showed that 71% of the patients coming to tertiary care hospitals were prescribed antibiotics. And, more than half of these prescriptions were not to treat an infection but administered as prophylaxis (preventive)

before procedures and surgeries. "Such a high level of prophylactic use of antibiotics is concerning. While it is not recommended, many physicians prescribe antibiotics to people with viral infection to prevent a super-added bacterial infection. And, when it comes to surgeons, almost everyone prescribes antibiotics for as long as 15 days. This is because they are so scared that their patients will get an infection, but this needs to be avoided," Dr Parva Mathur, professor of microbiology and part of the hospital infection control team at the trauma centre of All India Institute of Medical Sciences, told The Indian Express previously.

**fungi and parasites change over time and no longer respond to medicines** making infections harder to treat and increasing the risk of disease spread, severe illness and death.

- As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective and infections become increasingly difficult or impossible to treat.
- It is estimated that **bacterial AMR was directly responsible for 1.27 million global deaths in 2019** and 4,95 million deaths were associated with drug resistant infections.
- **Causes of AMR:**
  - **Selective pressure:**
    - In the presence of an antimicrobial, microbes are either killed or, if they carry resistance genes, survive.
    - These survivors will replicate, and their progeny will quickly become the dominant type throughout the microbial population.
  - **Mutation:**
    - Most microbes reproduce by dividing every few hours, allowing them to evolve rapidly and adapt quickly to new environmental conditions.
    - During replication, mutations arise and some of these mutations may help an individual microbe survive exposure to an antimicrobial.
  - **Inappropriate use:**
    - Unnecessary and injudicious use of antibiotic fixed dose combinations could lead to emergence of bacterial strains resistant to multiple antibiotics.
  - **Hospital use:**
    - Critically ill patients are more susceptible to infections and, thus, often require the aid of antimicrobials.
    - However, extensive use of antimicrobials and close contact among sick patients creates a fertile environment for the spread of antimicrobial-resistant germs.
  - **Agricultural use:**
    - Scientists also believe that the practice of adding antibiotics to agricultural feed promotes drug resistance.
- **Intervention Strategies:**
  - The principles of **infection prevention and control** remain a foundation for preventing infections broadly and a cornerstone in combating the spread of AMR.
  - Preventing infections through vaccinations is paramount for reducing the need for antibiotics.
  - Reducing exposure to antibiotics unrelated to treating human disease is an important potential way to reduce risk.
    - Increased use of antibiotics in farming has been identified as a potential contributor to AMR in humans.
  - Minimising the use of antibiotics when they are not necessary to improve human health—such as treating viral infections—should be prioritised.
    - To this end, building infrastructure that allows clinicians to diagnose infection accurately and rapidly is crucial so that antimicrobial use can be narrowed or stopped when appropriate.
  - Maintaining investment in the development pipeline for new antibiotics—and access to second-line antibiotics in locations without widespread access—is essential.
- **Measures Taken by Govt. of India to Tackle AMR:**
  - Government is aware about the challenges posed by AMR in India and has taken following measures to address the issue:
    - AMR surveillance network has been strengthened by establishing labs in State Medical College. 36 sites in 26 States/UTs have been included in this network so far.
    - **National action plan on containment of Antimicrobial Resistance (NAP-AMR)** focusing on One Health approach was launched in 2017 with the aim of involving various stakeholder ministries/departments.
    - **AMR Surveillance Network:** ICMR has established AMR surveillance and research network (AMRSN) comprising 30 tertiary care hospitals both private and government to generate evidence and capture trends and patterns of drug resistant infections in the country.



- ## 5. Iran-Pakistan Strikes: New Security Trends or Challenges Emerging in the Region
- ### GS 2 (International Relations)

- [illegible]

- **The Taliban** (Afghanistan) foreign ministry added that both sides should resolve disputes through diplomacy and dialogue.
- **Trends in Security Interdependence Emerging in the Region after the Iran-Pakistan Strikes:**
  - **Fragility of Pakistan's western borderlands:** The ungoverned and under-governed spaces in the Baloch lands **provide fertile ground for smuggling**, narcotics trafficking, and cross-border political militancy backed by third parties.
  - **Regional power politics between Arabs, Israelis and Iranians:** The deepening conflict between Iran and its Arab neighbours on the one hand and Israel on the other breeds trans-border interventions.
  - **Balochistan's geopolitical location:** It is located at the mouth of the oil-rich Gulf and also makes it part of the **new great game**.
  - **Pakistan's dilemma:**
    - Pakistan's difficulties in dealing with Balochistan's long-standing unrest have been exacerbated by **Beijing's strategic presence in Gwadar**.
    - Gwadar is one of the critical nodes of the much-touted **China-Pakistan Economic Corridor** and a key Indian Ocean port for Chinese naval presence in the Arabian Sea.
    - Pakistan has often accused **India** of meddling in Baloch affairs.
  - **Relations between Afghanistan and Iran:**
    - Afghanistan and Iran have long had their share of problems with each other. Some of them have sharpened under the **Taliban regimes**.
    - These include differences over religious ideology, minority rights, border management, and sharing transboundary rivers, etc.
  - **The role of the Taliban government:**
    - The Taliban government in Kabul has been quite forceful in dealing with Pakistan.
    - It would be surprising if they did not take advantage of the opportunity to enter the Gulf in order to gain new allies and expand their influence.
  - **Concerns for the Region:**
    - The tit-for-tat attacks within two days **have raised tensions in the volatile region**, already engulfed by Israel's war on Hamas in the Gaza Strip and the targeting of the merchant ships in the Red Sea by Yemen's Houthis.
    - Whether they want it or not, **India, Pakistan, and Afghanistan** will now be drawn deeper into the unstable Middle East.
- **Deep Concerns for India:**
  - The fragility of the Baloch frontier connecting South Asia and the Gulf, **China's strategic presence in Balochistan, and Beijing's growing role in the Gulf** are of deep concern to India.
  - **Delhi has traditionally stayed neutral** in the conflicts within the Middle East. But Delhi **might find it increasingly hard** to do as India's economic and security stakes rise in the volatile Middle East.
  - The attacks on its shipping in the Arabian Sea **threaten its commercial lifelines**, and unsurprisingly, India has deployed ten warships to protect its interests.
  - India's clear stand against terrorism, its close ties with Israel, and its deeper engagement with Saudi Arabia and the United Arab Emirates are all **new elements of New Delhi's Middle East policy**.
  - The cross-border attacks between Iran and Pakistan point to a changing region that **will demand India to rethink many of its past assumptions** about security in the Middle East

20<sup>th</sup> Jan, 2024

## 1. The Problem with India's Science Management

### GS 3 - Science & Tech

#### • Why in News:

- **Sustained economic progress** on a national scale is intricately linked to scientific advances translated into deployable technologies.
- **The Indian government is currently revamping its science establishment**, exemplified by initiatives like the National Research Foundation (NRF) and the restructuring of the Defence Research and Development Organisation (DRDO).
- However, **a critical analysis of the current administrative capacity is necessary to optimise the efficiency and resilience of Indian science.**

#### • An Analysis of Obstacles to India's Scientific Progress

- **Low Research and Development Expenditure**
  - India's commitment to research and development (R&D) is reflected in its modest investment constituting approximately 0.7% of the GDP.
  - This expenditure is significantly low in comparison to global leaders like the United States (3.5%) and China (2.4%).
- **Budgetary Constraints**
  - The limited financial commitment to R&D arises from broader budgetary constraints, competing priorities, and a historical focus on immediate socio-economic needs.
  - As a result, India is facing the challenge of nurturing a robust scientific ecosystem on a constrained budget.
- **Inability of Current Scientific Administration in Budget Allocation**
  - The current scientific administration has struggled to identify and invest in high-impact projects.
  - In 2022, the Indian Space Research Organisation ranked eighth in the number of space launches, while foreign startups excelled in important technologies like reusable rockets.
  - Similarly, India fell behind in nuclear energy, especially in adopting small modular reactors, and its plans for using thorium have not materialised.
  - In crucial areas like genomics, robotics, and artificial intelligence, India faces alarming challenges in science and technology.
  - The management and focus of scientific efforts are inconsistent and not well-suited for the essential role that science needs to play in the future.
- **Lack of Strategic Planning and Execution**
  - The challenge goes beyond the quantum of expenditure; it extends to the strategic planning and execution of scientific projects.
  - The failure to adapt swiftly to emerging technologies and allocate resources judiciously has resulted in India lagging in crucial fields.
- **Lack of Consistent Long-Term Funding**
  - A significant problem is the lack of consistent long-term funding for vital projects, especially when faced with occasional setbacks.
  - This ability to provide steady funding despite occasional failures is crucial for a strong and effective scientific management system.
- **A Critical Examination of the Role of Senior Scientists in India's Science Administration**
  - **Dispersion of Focus Due to Diverse Responsibilities**
    - Senior scientists in India often are engaged in various responsibilities, ranging from academic pursuits to administrative duties.
    - This diversity includes attempts to maintain international academic standing, micromanaging institutional finances, participation in various committees across different institutions, and seeking administrative positions such as directors, vice-chancellors, and government secretaries.

#### The problem with India's science management

Sustained economic progress which can justify national ambition is intricately linked to scientific advances translated into deployable technologies. This has been the inevitable global experience since the onset of the Industrial Revolution. After the 19th century, the government of a country had to establish a science establishment, which includes setting up the new National Research Foundation (NRF) and restructuring the Defence Research and Development Organisation (DRDO). In this process, a kind of administrative capacity to simultaneously optimise India's science's efficiency and resilience is necessary.

India's low overall expenditure on research and development (0.7% of GDP, compared to 3.5% for the United States and 2.4% for China) is but one aspect contributing to its lag in high-impact projects. Unfortunately, the scientific administration has failed to do justice to the task at hand. From the current space programme to witnessing nanotechnology, in 2022, the Indian Space Research Organisation stood a dismal eighth among launchers, with foreign startups racing ahead on key technologies such as reusable rockets. Likewise, the lead in nuclear energy has been limited even, being limited to small modular reactors. Nuclear ambitions remain unachieved. On critical science and technology themes such as genomics, robotics, and artificial intelligence, the situation is even more alarming. The direction and management of science is, in essence, more going wrong than right.

India's science is threatened by the public sector. Generic irritants associated with governmental bureaucracy, such as mindless adherence to a rigid time-dependent funding or available funds, hinder progress. In such a situation, what is absent is the ability to commit to long-term steady funding of critical projects when faced with the inevitable occasional failures. This issue is not unique to any science sector.

**An unaltered role for scientists**

The defining feature of India's science administration is the centrality of its senior scientists. They are the ones who manage the range. Senior scientists are top international level scientists. Others follow in their footsteps. Their institutions' accounts, while still others' personal accounts, to India's science changes and the government's science policy. So, the country is not in a variety of institutional committees (Indian Institutes of Technology, Indian Institutes of Science Education and Research, Council of Scientific & Industrial Research, Defence Research and Development Organisation, Universities), which would fare better without external members. Many of the senior scientists, vice-chancellors and secretaries to the Government of India, but

are chronic regulators of the same said system. The needs of this system are planned once after independence. Poverty forced the country to concentrate higher and higher in a handful of institutions, primarily the Indian Institutes of Technology (IITs). Since only these institutions had a good science management, a system of gatekeepers emerged. These gatekeepers slowly began to capture positions, government patronage and institutional power on the back of their monopoly over a critical expertise. Thus, the gatekeepers had to pay their salaries at the altar, in other words, their tributes in the royal courts, to these gatekeepers, making them indebted forever to these benevolent masters. This system has remained intact ever since. It is not a system that appreciates, rewards, foreign academics and supports from the system overall, depended on continuing to aggrandize the identities of these gatekeepers. Many highly scientific careers and lives have been destroyed due to their conflicts with this regressive network of gatekeepers. Genuine scientific careers become the obvious collateral casualties.

**The system in the U.S.**

The separation of administration and scientists is something which most robust science establishments generally embrace. Even the U.S., which has been unblemished in the scientific ecosystem and has its scientists, who are scientists for an administrative role quite early on in their careers. Such selected senior administrators, by and large, only carry out administrative tasks and have no direct involvement in science. Such a separation has obvious benefits for all stakeholders. For example, the senior scientists, who are not directly involved in science, can focus on their own research, while the administrators can focus on the management of the system. In the U.S., the separation of administration and scientists is something which most robust science establishments generally embrace. Even the U.S., which has been unblemished in the scientific ecosystem and has its scientists, who are scientists for an administrative role quite early on in their careers. Such selected senior administrators, by and large, only carry out administrative tasks and have no direct involvement in science. Such a separation has obvious benefits for all stakeholders. For example, the senior scientists, who are not directly involved in science, can focus on their own research, while the administrators can focus on the management of the system.

**As India revamp its science**

As India revamp its science, the utility of scientists being given administrative tasks needs to be questioned. There are obvious disadvantages in allowing system leaders to

- **This dispersion of focus can lead to inefficiencies and a lack of dedicated attention to critical administrative tasks.**
- **Scientists May Not Have Skills to Be an Effective Administrator**
  - **The common belief that successful scientists can effortlessly become competent administrators ignores the crucial difference between the skills needed for scientific work and those necessary for effective administration.**
  - **Managing complex institutions, distributing resources, and making organisational decisions involve a specific set of skills that may not match the qualities typically linked to accomplished scientists.**
- **The Lack of Comprehensive Training**
  - **The lack of thorough training makes it harder for scientists to take on administrative roles.**
  - **Tasks like choosing the right metrics, handling conflicts of interest, and setting priorities often demand skills that are not naturally cultivated through scientific training.**
  - **Administration is the art of translating policy into outcomes — scientists are simply not trained to prioritise between time, cost, or precision, and certainly not in what proportions.**
- **The Issue of Conflicts of Interest and Quality Control**
  - **The intertwined roles of scientists as academics and administrators can foster conflicts of interest within institutions.**
  - **Academic rivalries, bureaucratic red tape, and compromised quality control can emerge, resulting in detrimental consequences** such as high plagiarism rates, unethical publication practices, and compromised scientific outcomes.
- **The Absence of Nation-Wide Transfer System**
  - **In a more harmful manner, the progress of scientific careers and important projects has been severely damaged by factors such as competition and egotism.**
  - **The absence of a nationwide transfer system for both scientists and science administrators only amplifies the control** certain institutions have and contributes to internal divisions.
  - **Allowing those within the system to also regulate it can lead to clear drawbacks.**
- **Historical Roots of Challenges in India's Science Administration**
  - **Concentration of High-End Equipment**
    - **The economic constraints faced by India in the aftermath of Independence led to a pragmatic decision to concentrate high-end scientific equipment** in a handful of institutions, notably the IITs.
    - **This concentration created a system of gatekeepers who controlled access to critical resources**, giving rise to a hierarchical structure where a select few institutions held disproportionate influence and power.
  - **The Concept of Gatekeepers and Institutional Captures**
    - **Over time, these gatekeepers solidified their positions, accumulating power, government patronage, and institutional control.**
    - **This gatekeeping system created an environment where young scientists had to navigate a complex web of influence, paying nazranas or tributes to those who controlled access to essential resources.**
  - **Impact on Scientific Career**
    - **The gatekeeping system not only influenced access to resources but also dictated career trajectories.**
    - **The nexus between institutional power and individual careers became a defining feature**, with appointments, awards, and foreign accolades often contingent on maintaining favourable relations with the gatekeepers.
    - **Scientists who found themselves in conflict with this system faced significant hurdles**, leading to the destruction of promising careers and stifling genuine scientific outcomes.
  - **Normalisation of Unethical Practices**
    - **The gatekeeping system has normalised unethical practices within Indian science.**
    - **Instances of high plagiarism rates, paid publications in disreputable journals, and under-the-table dealings to secure government funding have become ingrained in the culture.**
    - **This erosion of ethical standards has not only compromised the quality of scientific research but has also perpetuated a system where personal connections hold more sway than merit.**
- **A Comparison of Indian Science Administration with the U.S. Model**
  - **In the US, Scientists selected for administrative roles are identified early in their careers** and undergo specific training for managerial tasks.

- The emphasis is on maintaining a clear division between scientific pursuits and administrative responsibilities.
- **In contrast, India's science administration has traditionally involved senior scientists assuming administrative roles without a clear separation between the two functions.**
- This integration has led to challenges, as the skill sets required for effective scientific research often differ from those essential for efficient administration.
- **Conclusion**
  - As India strives for economic and strategic advancement, **reforming its science administration emerges as a critical imperative.**
  - **Addressing challenges** such as low research expenditure, the outsized role of senior scientists, historical gatekeeping practices, etc., **can pave the way for a more efficient and resilient science establishment.**
  - **The separation of scientists and administrators, coupled with comprehensive training and a strategic overhaul, is crucial to realising India's scientific potential** and achieving its ambitious goals.

## 2. Central Consumer Protection Authority

- **Why in News:** The Central Consumer Protection Authority issues notice to Amazon for sale of sweets under misleading name of Shri Ram Mandir Ayodhya Prasad.
- **Why in the News?**
  - The action has been initiated based on a representation made by the Confederation of All India Traders (CAIT) alleging that **Amazon is engaging in deceptive trade practices involving the sale of sweets under the guise of 'Shri Ram Mandir Ayodhya Prasad'.**
  - It may be mentioned that under **the Consumer Protection (e-commerce) Rules, 2020** no e-commerce entity shall adopt any unfair trade practice, whether in the course of business on its platform or otherwise Further, **'Misleading advertisement'** as defined under the Consumer Protection Act, 2019.
- **About Central Consumer Protection Authority:**
  - As provided in the **Consumer Protection Act, 2019**, the Central Consumer Protection Authority (CCPA) has been **established w.e.f. 24th July, 2020.**
  - **Objective:** To promote, protect and enforce the rights of consumers as a class.
  - **Composition:**
    - It will have a **Chief Commissioner as head**, and **only two other commissioners** as members — one of whom will deal with **matters relating to goods** while the other will look into **cases relating to services.**
  - **It will be empowered:**
    - To conduct investigations into violation of consumer rights and institute complaints / prosecution,
    - Order recall of unsafe goods and services,
    - Order discontinuation of unfair trade practices and misleading advertisements,
    - Impose penalties on manufacturers/endorsers/publishers of misleading advertisements.
  - **Nodal Ministry:** Ministry of Consumer Affairs, Food & Public Distribution.

### Amazon gets notice over 'Ram Temple prasad'

The Hindu Bureau  
NEW DELHI

The Central Consumer Protection Authority (CCPA), an arm of the Union Consumer Affairs Ministry, has sent notices to Amazon India allegedly for selling sweets on its website under the name "Shri Ram Mandir Ayodhya Prasad". The action is based on a complaint by the Confederation of All India Traders (CAIT). Chief Commissioner of the CCPA and Union Consumer Affairs Secretary Rohit Kumar Singh examined the complaint and observed that various sweets or food products are available for sale on Amazon claiming to be prasad of the Ayodhya Ram Temple. "Enabling the sale of food products online that make false representations misleads consumers regarding the genuine characteristics of the product," the Ministry said.

## 3. Great Indian Bustard

### GS 3 - Environment

- **Why in News:** The Supreme Court directed the Centre to come clean on its plans to save the critically-endangered Great Indian Bustard by February 2024.
- **Great Indian Bustard (GIB)**
  - GIBs are the largest among the four-bustard species found in India.
    - The other three being **MacQueen's bustard**, **lesser florican** and the **Bengal florican**.
  - Being terrestrial birds, they spend most of their time on the ground with occasional flights to go from one part of their habitat to the other.

- They feed on insects, lizards, grass seeds etc. GIBs are considered the flagship bird species of grassland and hence barometers of the health of grassland ecosystems.

- **Habitat and Status**

- This bird, **found mainly in Rajasthan and Gujarat**, has been categorized as **critically endangered** by the International Union for Conservation of Nature (IUCN).
  - As per the 2021 report of the IUCN, they are on the verge of extinction with hardly 50 to 249 of them alive.
- GIBs' historic range included much of the Indian sub-continent but it has now shrunk to just 10% of it.
- Among the heaviest birds with flight, GIBs prefer grasslands as their habitats.

- **Threats**

- Scientists of Wildlife Institute of India (WII) have been pointing out overhead power transmission lines as the biggest threat to the GIBs.
  - WII research has concluded that in Rajasthan, 18 GIBs die every year after colliding with overhead power-lines.
  - These birds, due to their poor frontal vision, can't detect power-lines in time and their weight make in-flight quick manoeuvres difficult.
- Kutch and Thar desert are the places which have witnessed creation of huge renewable energy infrastructure over the past two decades.
- This led to installation of windmills and construction of power lines even in core GIB areas.

- **Conservation measures**

- In 2015, the Central government launched the **GIB species recovery programme**.
- Under the programme, the WII and Rajasthan Forest department have jointly set up **conservation breeding centres** where GIB eggs harvested from the wild are incubated artificially and hatchlings raised in controlled environment.
- The plan is to create a population which can act as insurance against the threat of extinction and release the third generation of these captive-bred birds into the wild.
- **Bird diverters** have also been installed on power lines to protect the Great Indian Bustard (GIB) from collisions.
  - The diverters act as reflectors that birds can see from about 50 meters away.
  - When birds spot the diverters, they change their flight path to avoid colliding with the power lines.
- **Supreme Court's intervention**
  - The SC in April 2021 ordered that all overhead power transmission lines in core and potential GIB habitats in Rajasthan and Gujarat be made underground.
  - The SC also formed a three-member committee, including Devesh Gadhvi, the member of the bustard specialist group of IUCN, to help power companies comply with the order.
  - Again, in November 2022, the court sought reports from chief secretaries of the two states in six weeks on installation of bird diverters in priority areas.
  - It also asked them to assess the length of transmission lines required to go underground.

- **News Summary:**

- Recently, a bench of three judges, led by CJI Chandrachud, emphasized that the government needs to create a strategy to protect Great Indian Bustard from the risk of extinction.
- Bird diverters have been installed to avoid collisions. However, these diverters were either sub-standard or the collisions continued on the power lines or the diverters had just fallen off.
- The court stated that the government's strategy should strike a balance between:
  - safeguarding bird species and
  - fulfilling India's international pledges to reduce carbon footprints by adopting alternative energy sources like solar power.
- This order is significant as the areas which were natural habitats of the birds also happen to be India's most prolific solar power producer areas.

## How do you plan to save the Great Indian Bustard, SC asks govt.

The Hindu Bureau  
NEW DELHI

The Supreme Court on Friday directed the Centre to come clean by February on its plans to save the critically endangered Great Indian Bustard.

A three-judge Bench headed by Chief Justice of India D.V. Chandrachud said the government has to come out with a plan which would save the bird species from extinction largely due to collision with high-transmission power lines situated in areas in Gujarat and Rajasthan which also happen to be the natural habitat of the bustards. The court said the government's plan ought to maintain a balance between the preservation of the bird species and India's global commitments to shed its carbon footprints.

ments to shed its carbon footprints.

**'Finding balance'**  
"We are conscious of the fact that we are dealing with an area of development. India has to meet its international obligations with regard to alternate forms of energy. Obviously you (Centre) cannot do anything which will put paid to all those projects. At the same time we have to balance between the preservation of the Great Indian Bustard and make sure that solar power is available keeping in mind international commitments to shed carbon footprints," Chief Justice Chandrachud addressed Attorney-General R. Venkataramani, who was appearing for the Union government.

#### 4. Khelo India Youth Games- 2023

- **Why in News:**

- Prime Minister Modi declared the “Khelo India Youth Games 2023” open at the Nehru Indoor Stadium in Chennai.
- The event, which is being held for the first time in a south Indian state, will feature over 5,600 athletes.

- **Recent performances of India in international sports**

- **Tokyo Olympics 2020**
  - India had its best-ever Olympics in Tokyo 2020 - with 7 medals, including an Olympic Gold in athletics, which is a first in the history of India.
  - India also had its best ever Paralympics with 19 medals
- **Asian Games 2022**
  - India bagged its **highest-ever medals (107) in 60 years** with 75 per cent more gold medals than in Asian Games 2018.
    - It bagged medals in 16 new sporting categories.
  - The remarkable **achievement of Indian women athletes** in this tournament is highlighted by the fact that they clinched around 50% of the total medals of Indian contingent.
  - **Indian para-athletes** too have created history with India's highest-ever medal tally in the Para Asian Games with 111 medals, including 29 Gold medals.
  - This is India's best-ever performance since the inception of the Games where India was ranked 5th in the overall medal tally.
- **Other sports**
  - This was followed by the Thomas Cup win for the first time in 72 years.
  - Also, the current World Boxing Champion, Nikhat Zareen, is from India.
- **Steps taken by the govt to promote sports**
  - **Increased budget of the Ministry of Youth Affairs and Sports**
    - The Ministry of Youth Affairs and Sports received a budget allocation of Rs 3397.32 crore for 2023-2024, which is an 11% increase from the previous year.
  - **Institution involved**
    - Various Sports Promotional Schemes across the country are implemented through:
      - Sports Authority of India (SAI),
      - National Centres of Excellence (NCOE),
      - SAI Training Centre (STC),
      - Extension Centre of STC,
      - National Sports Talent Contest (NSTC).
  - **Schemes**
    - The **Khelo India Scheme** is being implemented by the Ministry of Youth Affairs and Sports through its five verticals which promote sports in the entire country including the rural areas.
      - Khelo India is the basic platform to showcase sporting skills at the national level.
    - Under the **'Talent Search and Development'** vertical of this scheme, Khelo India Athletes are identified, selected, and provided annual financial assistance of Rs 6.28 lakh per annum per athlete.
    - The Ministry organizes national-level multisport competitions, namely, Khelo India Youth Games, Khelo India University Games and Khelo India Winter Games.
    - **TOPS (Target Olympic Podium Scheme)** is another flagship program of the Ministry of Youth Affairs and Sports which is an attempt to provide assistance to India's top athletes.
    - **'Meet the Champions'** initiative is aimed at making children aware about sports and nutrition with the help of the country's best sportspersons.
      - It is a unique school visit campaign that was kicked off by Olympic Gold medallist Neeraj Chopra in December 2021.



PM Narendra Modi, Tamil Nadu CM M.K. Stalin, Union Minister Anurag Thakur, Union MoS Nisith Pramanik in Chennai. ANI

#### **‘Great start to 2024’: PM declares Khelo India Youth Games open in Chennai**

EXPRESS NEWS SERVICE  
CHENNAI, JANUARY 19

PRIME MINISTER Narendra Modi on Friday declared the Khelo India Youth Games 2023 open at the Nehru Indoor Stadium in Chennai. The opening ceremony of the national sports event took place in a grand fashion with several cultural programmes exhibiting the traditional and cultural practices of Tamil Nadu. The event, which is being held for the first time in a south Indian state, will feature over 5,600 athletes. The games will be played across four cities of Tamil Nadu, including Chennai, Madurai, Trichy, and Coimbatore, from January 19 to January 31. The games will feature 26 sporting disciplines with a mix of conventional sports and traditional ones. Chief Minister M.K. Stalin, Union Minister for Youth Affairs and Sports Anurag Thakur, Union Ministers of State L. Murugan, Tamil Nadu Youth Welfare and Sports Development Minister Udhayanidhi Stalin were among the dignitaries present alongside the Prime Minister at the event. Modi placed the Game's torch handed by Olympians

Sharath Kamal and V Subba on the cauldron, marking the inauguration of the Games. He also launched the foundation stone of projects related to the broadcasting sector worth about Rs 250 crore. Addressing the gathering, Modi extended his wishes to all the athletes arriving from various parts of the country to the capital city of Tamil Nadu and said, “For Indian sports, the youth games are a great start to 2024.” “Together you are showcasing the true spirit of Ek Bharat Shreshtha Bharat,” he said, adding, “The people of Tamil Nadu, the beautiful language, its culture and cuisine will make the athletes feel at home.” He said the hospitality of Tamil Nadu will win all hearts and that the Khelo India Youth Games will provide the opportunity for them to showcase their skills as well as help them make new friendships that will last a lifetime. According to a statement released by the Prime Minister's office, talking about the expected growth of India's sports industry to Rs 1 lakh crore, Modi said there is a new awareness about sports and the resulting growth in broadcasting, sports goods, sports tourism, and sports apparel business.

- **Sports Infrastructure - Khelo India Centres (KICs)**
  - The launch of **1000 KICs** at the district level with **employment generation for local coaches** has been a significant landmark in the sports ecosystem in India.
  - The Central Government's partnership with various states has resulted in 31 **Khelo India Centres of Excellence**.
    - These Centres are primed to be state-of-the-art training centres for senior and elite athletes with a focus on specific sporting disciplines.
  - Besides, 257 Khelo India accredited academies, 500 private academies, and 27 adopted schools where Khelo India athletes train added to the strength of the sporting infrastructure.
  - Close to 17,500 playfields have been geo- tagged so that parents can easily find a place for their children to play around their residential area.
- **Towards promoting inclusivity in sports**
  - Special provisions are made for women athletes, such as organising the **Khelo India Women's Leagues** to promote their participation in sports.
  - Constant efforts are on to include youngsters from all parts of the country, with special emphasis on Jammu and Kashmir and the LWE-affected areas.
  - There is also a special space of inclusion being created for **divyang athletes**.
    - In June 2023, a contingent of 198 divyang Indian athletes participated in the Special Olympics Summer Games 2023 in Berlin.
    - The Government extended financial support of Rs 7.7 crore towards the participation of the Indian contingent.
    - It also held a preparatory coaching camp at the Sports Authority of India's JLN Stadium, New Delhi to prepare for the world event.
- **News Summary**
  - PM Modi inaugurated the opening ceremony of the 6<sup>th</sup> Khelo India Youth Games 2023 in Chennai, Tamil Nadu (Jawaharlal Nehru Stadium)
    - The games will be played across four cities of Tamil Nadu from January 19 to January 31 featuring 26 sporting disciplines with a mix of conventional sports and traditional ones.
  - The **mascot** for the games is **Veera Mangai**.
    - Rani Velu Nachiyar, fondly called Veera Mangai, was an Indian queen who waged a war against British colonial rule.
    - The mascot symbolizes the valour and spirit of Indian women, embodying the strength of women power.
  - The **logo for the games** incorporates the figure of poet Thiruvalluvar.

## 5. Japan's Moon Mission – SLIM

### GS 3 - Science & Tech

- **Why in News:** Japan recently landed a spacecraft called SLIM (Smart Lander for Investigating Moon) on the lunar surface, becoming the 5th country after the Soviet Union, the US, China and India to achieve a soft landing on the moon.
- **About SLIM:**
  - SLIM was launched by the **Japan Aerospace Exploration Agency (JAXA)** in September 2023 aboard the H-IIA rocket from the Tanegashima spaceport.
  - It aims to demonstrate precision landing within 100 metres through new technologies.
  - It also carried **two mini robotic rovers** developed by **Sony** and **Tomy** for reconnaissance.
  - The mission aims to revitalise Japan's space program which suffered setbacks like the failure of the flagship H3 rocket in March 2023.
- **Objectives:**
  - The mission aims to observe X-rays coming from deep space and to identify their wavelengths with unprecedented precision.

SOLAR PANELS NOT ABLE TO GENERATE POWER, COULD BE ANGLED WRONG, SAYS SPACE AGENCY

## Japan becomes 5th country to land on Moon

REUTERS  
TOKYO, JANUARY 19

JAPAN ON Saturday became the fifth country to put a spacecraft on the moon but the probe was not generating solar power, its space agency said, during a mission to prove a "precision" landing technology and revitalise a space programme that has suffered setbacks.

The Japan Aerospace Exploration Agency (JAXA) said its Smart Lander for Investigating Moon (SLIM) landed on the moon's surface at 12:20 a.m. (15:20 GMT Friday) and re-established communication with earth, but its solar panels were not able to generate electricity, possibly because they are angled wrong.

SLIM is now operating on a battery, and we are prioritising the transfer of test data to earth,"



Celebrations at a public viewing of the SLIM landing at Sagamihara, south of Tokyo early on Saturday. Reuters

Despite "life-sustaining treatments" such as turning off its

EXPLAINED  
Japan's precision landing bid

DURIED THE "moon super", SLIM attempted to land within 100 metres (328 feet) of its target, versus the conventional accuracy of several kilometres, a technology JAXA says will become a powerful tool in future exploration of hilly moon poles seen as a potential source of oxygen, fuel and water.

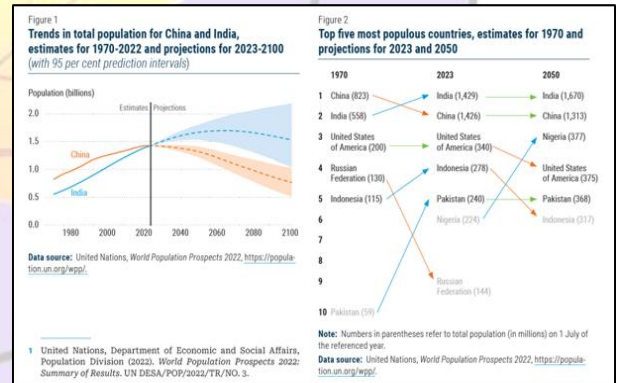
home. SLIM's battery last only for "a few hours", so JAXA will maintain the status quo rather than

take risky actions. JAXA hopes a shift in the sun-light's angle will hit the panels in a way that can restore its functions, Kunitaka said. "It takes 30 days for the solar angle to change on the moon," Kunitaka said. "When the solar direction changes, and the light shines from a different direction, the light could end up hitting the solar cell." "Looking at the trace data, SLIM most certainly achieved a landing with 100-metre accuracy," Kunitaka said, although adding it will take about a month to verify it. Japan is increasingly looking to play a bigger role in space, partnering with ally the United States to counter China. JAXA aims to send an astronaut to moon as part of NASA's Artemis programme.

- It will use state-of-the-art spectroscopy to measure changes in the brightness of celestial objects at different wavelengths.
- It detects X-rays with energies ranging from **400 to 12,000 electron volts**. (For comparison, the energy of visible light is **2 to 3 electron volts**.)
- This range will provide astrophysicists with new information about some of the universe's hottest regions, largest structures, and objects with the strongest gravity.
- **Future Moon Missions:**
  - **ISRO (India):** LUPEX with JAXA, Chandrayaan-4
  - **NASA (USA):** Lunar Trailblazer Mission, Viper Rover, Artemis 2-6 (Manned mission).
  - **ROSCOSMOS (Russia):** LUNA 26-28, ORYOL
  - **CNSA (China):** Chang'e 6-8
  - **JAXA (Japan):** Destiny+

## 6. Decline in China's Population and its Impacts

- **Why in News:**
  - The year 2023 saw 11.1 million deaths and 9 million births in China, marking the second year in which the country's total population has reduced to a recently released total figure of 1.4 billion.
  - In the same year, **India overtook China** as the most populous country in the world.
- **Recent Population Trends in China:**
  - **Since 2016**, the Total Fertility Rate or TFR (the number of children a woman, on average, is expected to bear in her lifetime) has been falling in China.
    - According to the 2020 Census, **China's TFR was 1.3 births per woman** - marginally up from the 1.2 in the 2010 and 2000 censuses, **but way below the replacement rate of 2.1**.
  - **The replacement rate** is the number of children a woman is to have to replace the present generation in the future.
    - A couple having two children would mean maintaining the same level of population in the future as well.
- **Factors Responsible for the China's Falling Population:**
  - **China's one-child policy:**
    - **Introduced in 1980**, the One-child policy restricted couples to have only one child or face harsh penalties.
    - The Communist Party of China, in power since 1949, did so in a **bid to accelerate economic growth**.
    - **In 2016**, the One-child policy officially **ended** and couples were allowed to have up to 2 children, which was increased to 3 children in 2021. **However, this has not helped achieve the goals of population growth.**
  - **Other factors:**
    - **Women's education and employment** allow them the agency to make choices about their reproductive health.
    - **High pressures of modern society**, with increasing competition for jobs, is also a factor. People are marrying later and sometimes choosing not to have children or to have only one child.
    - **It is a vicious cycle** - an economic slowdown should mean young couples delay having children and the resulting decline in fertility rates eventually pushes the economy's productivity rates lower.
- **How Could a Falling Population Impact China?**
  - **The working-age population between 15 to 59 years**, which is seen as being productive in an economy, has now fallen to 61% of the total population.



- **The proportion of those aged 60 and older has increased.** Life expectancy has also increased for both men and women over time as a result of advanced healthcare systems.
- **In the short run**, the trend will result in the need for greater investments in elderly care, including palliative care, and hiring more medical professionals and nursing staff.
- **In the longer run**, it could lead to greater pressure on the young population to support the 'dependants' (those under the age of 15 and over the age of 59).
- It also comes at a time when **China's overall economic growth is lower** than expected and yet to go back to the highs it reached in the 2000s.
- **Way Ahead for China:**
  - It is necessary to strengthen **guidance for young people's views on marriage**, parenthood and the family.
  - **To promote policies** that support parenthood and actively cope with the ageing of the population.
  - **Telling good stories about family customs**, guide women to play a unique role in promoting the traditional virtues of the Chinese nation and establishing good family customs, and create a new culture of family civilization.

## 7. Nagara Style of Temple Architecture

### GS 1 - Art & Architecture

- **Why in News:** The upcoming inauguration of the **Ram temple in Ayodhya**, designed by Chandrakant Sompura and his son Ashish, has drawn attention to the **Nagara style** of temple architecture.
- **Background**
  - The Nagara style, **one of the two great classical languages of Indian temple architecture**, originated in northern India around the fifth century CE.
  - Its **development coincided with the emergence of the Dravida style** in the southern regions during the same period.
- **Nagara Style of Architecture:**
  - **Distinguished by a Towering Shikhara:**
    - Nagara temples are **elevated on a plinth**, with the garbha griha (sanctum sanctorum) as the sacred core.
    - The **towering shikhara**, resembling a 'mountain peak,' is the defining characteristic of Nagara style temples.
    - Shikharas symbolize the **natural and cosmological order in Hindu tradition**, with references to Meru, Mandara, and Kailasa.
  - **Architectural Elements:**
    - A **circumambulatory passage surrounds the garbha griha**, and mandapas (halls) are often present on the same axis.
    - **Elaborate murals and reliefs** depicting deities and mythological scenes adorn the temple walls.
- **Five Modes of Nagara Architecture:**
  - **Valabhi:** Masonry rendering of the barrel-roofed structure.
  - **Phamsana:** Multi-eave towers with slabs.
  - **Latina:** Single, slightly curved tower, a dominant mode for three centuries.
  - **Shekhari:** Shikhara with attached sub-spires or spirelets.
  - **Bhumija:** Miniature spires in horizontal and vertical rows, creating a grid-like effect.
- **Evolution of Latinas:** Composite Latinas emerged in the 10th century, leading to Shekhari and Bhumija styles.
- **Comparison with Dravida Style Architecture:**
  - **Vimana vs. Shikhara:**
    - In Dravida style, the counterpart to the shikhara is the vimana.
    - Vimanas are typically smaller than the gopurams (gatehouses), a distinctive feature in southern temples.
  - **Presence of Boundary Walls:**
    - Dravida style features boundary walls, while Nagara style complexes often lack them.
    - Ayodhya's Ram temple incorporates a 732m-long wall, showcasing a hybrid architectural approach.

### Nagara style of temple architecture, in which Ram temple is being built



## GS 2 (Governance)

- The newly enacted Act does not make any provision for procedural safeguards to dispel fears of misuse of the substantive provision on interception.

- The concerns surrounding the Post Office Act's interception powers underscore the imperative need for procedural safeguards. Balancing security needs with individual privacy is crucial to prevent arbitrary use and safeguard citizens' fundamental rights. The central government's proactive measures in prescribing rules and ensuring accountability can mitigate fears of misuse and uphold the constitutional principles governing privacy.

## 2. NISAR Mission

### GS 3 (Science and Tech)

- **Why in News:** NISAR Mission on track for early 2024 launch.
- **Key Highlights**
  - **Launch Date and Status:**
    - The **NASA-ISRO Synthetic Aperture Radar (NISAR)** mission is set for an "early 2024" launch.
    - The mission is **on track**, with final tests scheduled for the current week.
  - **Testing Update:**
    - All tests, except the acoustic tests, have been completed.
    - Vibration test was successfully conducted, marking progress in the mission's preparation.
  - **Enormous Data Volume:**
    - NISAR is designed as a **low earth orbit (LEO) observatory** with a unique feature of generating an enormous volume of reliable, high-resolution data over a three-year mission life.
    - The data will be valuable for **scientific research, monitoring applications, forest management, agriculture monitoring, and disaster monitoring.**
  - **Open Science and Data Policy:**
    - NISAR adopts an **open science and open data policy**, making it distinct in its scope.
    - **Processed and validated data** will be made open to the **public on data servers** in both India and the U.S., enhancing accessibility.
  - **Observation Capabilities:**
    - NISAR employs **synthetic aperture radar** to scan Earth's land and ice-covered regions twice every 12 days in ascending and descending passes.
    - **Capable of penetrating cloud cover** and operating day and night, NISAR is expected to revolutionize earth-observing capabilities.
  - **Mission Objectives:**
    - NISAR aims to **provide spatially and temporally consistent data** for understanding changes in **Earth's ecosystems, ice mass, vegetation biomass, sea level rise, groundwater, and natural hazards.**
    - It will serve as a reliable data source for disaster monitoring and mitigation.
- **Background:**
  - NISAR has been built by space agencies of the US and India under a partnership agreement signed in 2014.
  - NISAR is expected to be launched in January 2024 from Satish Dhawan Space Centre into a near-polar orbit.
  - The satellite will operate for a minimum of three years.
- **About NISAR:**
  - NISAR stands for NASA-ISRO Synthetic Aperture Radar.

### NISAR Mission on track for a launch soon: NASA official

The NASA-ISRO Synthetic Aperture Radar Mission is designed to observe natural processes and changes in earth's complex ecosystems; the final tests of the mission are scheduled for this week

**Utki Rajani**  
THIRUVANANTHAPURAM

The NASA-ISRO Synthetic Aperture Radar (NISAR) mission, designed to observe natural processes and changes in earth's complex ecosystems, is on track for an "early 2024" launch, a senior official at NASA's Jet Propulsion Laboratory (JPL) said on Sunday.

The final tests on the earth-observing mission are scheduled for this week, Paul A. Rosen, Project Scientist for NISAR at JPL, told *The Hindu*. "As we speak, everything except the acoustic tests has been completed. The vibration test was completed yesterday (January 20). Final tests are planned this week. We are on track," Dr. Rosen said.

Dr. Rosen and several of his NASA-JPL colleagues associated with NISAR are scheduled to speak at the Global Science Festival Kerala under way here on Monday.

**"Enormous data"**  
Designed as a low-earth orbit observatory, the NISAR Mission is unique in several



NASA and ISRO are extremely eager to find ways to collaborate on earth science, planetary science and human space (programmes). There is a very, very strong interest

PAUL A. ROSEN  
Project Scientist for NISAR at JPL

processed to a validated data product. For many SAR synthetic aperture radar missions, this is simply not the case," he said. "The volume of data will be enormous, and it helps us to have a reliable set of measurements over any spot on the earth where we want to do science or monitoring applications, forest management, agriculture monitoring or even just looking at an approaching hurricane," Dr. Rosen said.

The open science and open data policy makes the mission unique in its scope, he said.

"The data will be placed on our respective data servers in India and the U.S. and they will be made open to the public essentially as soon as they are

processed to a validated data product. For many SAR synthetic aperture radar missions, this is simply not the case," he said.

The mission will use a synthetic aperture radar to scan earth's land and ice-covered regions twice every 12 days in ascending and descending passes. Capable of penetrating cloud cover and operating day and night, NISAR is expected to revolutionize earth-observing capability.

It is also expected to be a reliable data source for disaster monitoring and mitigation.

**"Eager to collaborate"**  
This single observatory solution is equipped with a long wavelength band (L-Band) SAR payload system

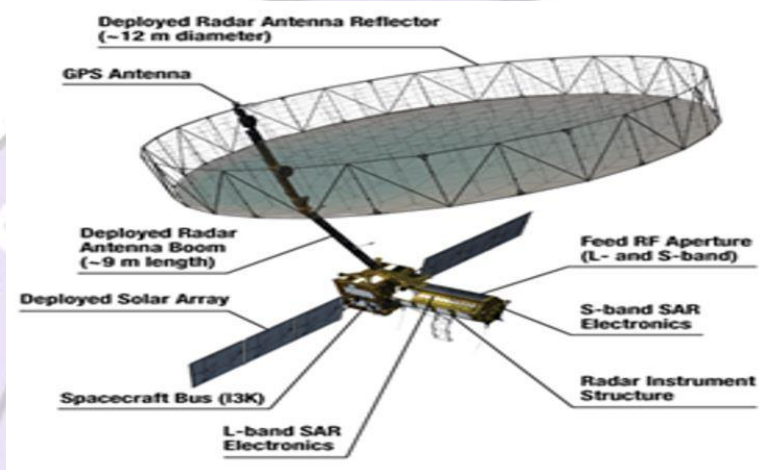
provided by NASA and a short wavelength band (S-Band) ISRO payload. Operating together, they will supply the ISRO says, "spatially and temporally consistent data for understanding changes in earth's ecosystems, ice mass, vegetation biomass, sea level rise, groundwater and natural hazards, including earthquakes, tsunamis, volcanoes and landslides."

For these disasters that evolve over slightly longer periods of time or where you can actually plan an observation, like a hurricane approaching, for these things, you have a reliable data source," Dr. Rosen said.

He feels that NASA and the ISRO are interested in taking their collaboration in space forward. "Both sides I think are extremely eager to find ways to collaborate on earth science, planetary science and human space (programmes). There is a very, very strong interest," he said.

"NISAR – an international radar system of systems for groundbreaking earth science" at the festival on Monday.

- It is an Earth observation satellite.
- The 2,800 kilograms satellite consists of both L-band and S-band synthetic aperture radar (SAR) instruments, which makes it a dual-frequency imaging radar satellite.
- NASA has provided the L-band radar, GPS, a high-capacity solid-state recorder to store data, and a payload data subsystem.
- And the ISRO has provided the S-band radar, the GSLV launch system and spacecraft.
- Another important component of the satellite is its large 39-foot stationary antenna reflector
- It is made of a gold-plated wire mesh, the reflector will be used to focus the radar signals emitted and received by the upward-facing feed on the instrument structure.



### 3. India to send Delegation for Copper Mining Opportunities in Zambia

## GS 2 (International Relations)

- **Why in News:** The Ministry of Mines has proposed sending an Indian industry delegation to copper-rich Zambia to discuss potential copper exploration and mining projects in the African country.
  - **About Copper Mining:**
    - Copper is a chemical element with a distinctive reddish-brown colour. It is an **excellent conductor of electricity and heat**.
    - Copper is **found in various ores in the Earth's crust**. Common copper minerals include **chalcopyrite, bornite, chalcocite, and malachite**.
    - Copper mining involves several stages, from the discovery of copper deposits to the extraction and processing of the metal.
    - There are various mining methods used for extracting copper, and the choice depends on factors such as the depth of the deposit, the type of ore, and economic considerations.
      - **Open-Pit Mining:** Used for shallow deposits. Large pits are excavated, and ore is extracted from the surface.
        - ❖ It accounts for 80% of all copper mining operations in the world.
      - **Underground Mining:** Used for deeper deposits. Shafts or tunnels are dug to reach the ore underground.
    - Chile is the top copper producer in the world, with **27% of global copper production**.
    - Chile is followed by another South American country, **Peru**, responsible for 10% of global production.
  - **Applications of Copper:**
    - **Electrical Conductors:** Copper is widely used in electrical wiring and components due to its excellent conductivity.
    - **Piping and Tubing:** It is commonly used in plumbing for pipes and tubing.
- 



- **Alloys:** Copper is alloyed with other metals to create alloys such as brass (copper and zinc) and bronze (copper and tin), both of which have various industrial and artistic applications.
- **Electronics:** Copper is used in electronic devices, printed circuit boards, and other electronic components.
- **Roofing and Architecture:** Copper is used in roofing materials and architectural applications due to its corrosion resistance and aesthetic appeal.
- **Copper Mining in India:**
  - There are approximately 700 copper mines in operation globally, of which 127 are in India.
    - However, India is poor in terms of copper reserves & production.
    - India has low-grade copper ore (less than 1% metal content) compared to the international average of 2.5%.
  - **Madhya Pradesh is the leading producer of copper in India.** It accounts for producing 53% of copper in this country.
  - Rajasthan accounts for 43%, and Jharkhand accounts for 4% of copper production in India.
- **News Summary:**
  - The Ministry of Mines has proposed sending an Indian industry delegation to copper-rich Zambia to discuss potential copper exploration and mining projects in the African country.
  - **Zambia has about 6% of the world's copper reserves and was the eight-largest producer of copper in 2022.**
  - As per International Copper Association India, domestic copper demand grew by 16 per cent in FY2022-24, while demand for copper in clean energy technologies grew by 32 per cent.
  - At the same time, net imports of copper cathode, which is the basic product of copper production, grew by 180 per cent in the same financial year as India is not self-sufficient in copper due to low domestic reserves.
  - Currently, **India has a limited presence in Zambia's copper mining sector.** Also, India is not alone in investing in Zambia for its copper reserves.
  - Canada's First Quantum Minerals and China's CNMC are among the largest producers of copper in Zambia.
  - Among the interested companies to explore mining opportunities in Zambia is Vedanta-owned Hindustan Zinc, in which the Indian government also owns a 35 per cent stake.

Mine	State
1. Malanjkhand Mine	Madhya Pradesh
2. Khetri Mine	Rajasthan
3. Kolihan Mine	Rajasthan
4. Surda Mine	Jharkhand
5. Banwas Mine	Rajasthan

#### 4. WTO Dispute Settlement Body: Revival Faces Delays over Country Differences

##### GS 2 (International Relations)

- **Why in News:**
  - According to an economic think tank GTRI report, restoring a fully functional WTO dispute settlement body may take longer due to significant differences between developed and developing countries on the issue.
  - This comes as the 164-member WTO is set to gather next month in Abu Dhabi for the 13th ministerial conference (MC).
- **About the World Trade Organisation (WTO):**
  - It is an **intergovernmental organisation** (that describes itself as a "member-driven", "consensus-based" organisation) that regulates and facilitates international trade between nations.
  - It is the world's largest international economic organisation (headquartered in Geneva, Switzerland), with 164 member states representing over 98% of global trade and global GDP.
  - It officially began operations on **January 1, 1995**, in accordance with the 1994 **Marrakesh Agreement** (marks the culmination of the Uruguay Round), thus replacing the 1948 General Agreement on Tariffs and Trade (GATT).
  - The highest authority of the WTO is the **Ministerial Conference**, which is composed of all member states and usually convenes **biennially** (every two years) and **consensus** is emphasised in all its decisions.
  - The daily work is handled by three bodies whose membership is the same. The only difference is the terms of reference under which each body is constituted.
    - The General Council

#### WTO dispute settlement body revival faces delays over country differences: GTRI

THE ECONOMIC BUREAU  
NEW DELHI, JANUARY 21

REINSTATING A fully functional WTO dispute settlement body to resolve trade disputes between countries could take longer than expected as there continues to be wide differences between developed and developing countries over the issue, a GTRI report said on Sunday.

This comes as the 164-member World Trade Organization (WTO) is set to gather next month in Abu Dhabi for the 13th ministerial conference (MC) to resolve different issues such as reforms in dispute settlement mechanisms, agriculture-related matters among other key issues.

Protectionism has been on the rise due to the lack of a functional dispute settlement body as the US, since 2017, has been blocking the appointment of new judges to the WTO's seven-member appellate court as it believes that

that the body is hurting its interest.

GTRI said that balancing India's demands for an appellate body, S&DT (special and differential treatment) provisions, and fairness while addressing other members' concerns, including transparency and legal certainty, will require significant compromise and negotiation.

Reaching a consensus on reform of the dispute settlement system is complex, with developed and developing countries holding different priorities and concerns," economic think tank Global Trade Research Initiative (GTRI) said.

GTRI Co-Founder Ajay

Srivastava said that for India, reforming the dispute settlement system remains a crucial priority at the upcoming MC13. MC is the highest decision-making body of the global trade watchdog.

Reforming the dispute settlement mechanism is essential, as without a reliable way to resolve com-

licts between countries, WTO rules are ineffective.

"The proper functioning of the WTO Appellate Body has a disproportionate impact on the United States because more than one-quarter of all disputes at the WTO have been challenges to US laws or other measures. Specifically, 155 disputes have been filed against the United States and no other member has faced even a handful of disputes," the US had said in a report in 2020.

The United States Trade Representative (USSTR) in its report had pointed out that up to approximately 90 percent of the disputes pursued against the US have led to a report finding that the US law or other measure was inconsistent with WTO agreements. "This means that, on average, over the past 25 years, the WTO has found a US law or measure WTO-inconsistent between five and six times per year, every year," USSTR added.

- **The Dispute Settlement Body**
- The Trade Policy Review Body
- **What is the Dispute Settlement Body (DSB)?**
  - The General Council convenes as the DSB **to deal with disputes between WTO members.**
  - Such disputes **may arise with respect to any agreement** contained in the Final Act of the Uruguay Round.
  - **The DSB has authority to –**
    - Establish dispute settlement panels,
    - Refer matters to arbitration,
    - Adopt panel, Appellate Body and arbitration reports,
    - Maintain surveillance over the implementation of recommendations and rulings contained in such reports, and
    - Authorise suspension of concessions in the event of non-compliance with those recommendations and rulings.
  - **Only the DSB has the authority to make these decisions,** panels and the Appellate Body can only make recommendations.
- **Why does the WTO DSB Remain Defunct?**
  - WTO dispute settlement is in the midst of a serious crisis because **its appeals mechanism is not functioning.**
  - This is because the **US** (over the issue of judicial overreach) **blocked appointments** of new judges **to the Appellate Body.**
  - This has led to most panel reports being appealed “into the void” and leaving the dispute unresolved.
  - As a result, it is **extremely difficult right now for WTO members to enforce WTO obligations** through complaints against measures they believe are in violation.
- **Highlights of the GTRI Report:**
  - **Protectionism has been on the rise** due to the lack of a functional dispute settlement body.
  - Balancing India’s demands for an appellate body, S&DT provisions, and fairness while addressing other members’ concerns, including transparency and legal certainty, **will require significant compromise and negotiation.**
  - **Reaching a consensus on reform of the dispute settlement system is complex,** with developed and developing countries holding different priorities and concerns.
  - The proper functioning of the WTO Appellate Body has a disproportionate impact on the US because more than one-quarter of all disputes at the WTO have been **challenges to US laws or other measures.**

## **5. Three-year deadline to free Chhattisgarh from Maoist menace**

### **GS 2 (Governance)**

- **Why in News:**
  - At a review meeting of Chhattisgarh’s Left-Wing Extremism (LWE) situation held in Raipur, Union Home Minister emphasised the need to free the affected pockets of the State within the next three years.
  - The minister highlighted that the problem was confined only to certain pockets of Chhattisgarh.
    - In the past couple of months, the number of anti-Naxal operations have been on the rise in Bastar and other LWE-affected areas of the State.
- **Left Wing Extremism (LWE)**
  - Left-wing extremism is the single internal security threat that affects the largest number of States in India.
  - LWE aims to **overthrow the existing democratic state structure with violence** as their primary weapon, and mass mobilization and strategic united fronts as complementary components.
    - They plan to usher in So-called ‘**New Democratic Revolution**’ in India.
  - Left-wing extremists are popularly known as Maoists worldwide and as Naxalites in India.
- **Reasons for the spread of LWE**
  - **Land Related Factors:**
    - Encroachment and occupation of Government and Community lands (even the water-bodies) by powerful sections of society.
    - Lack of title to public land cultivated by the landless poor.
    - Poor implementation of laws prohibiting the transfer of tribal land to non-tribals in the Fifth Schedule areas.
    - Non-regularisation of traditional land rights.

- **Displacement and Forced Evictions:**
  - Eviction from lands traditionally used by tribals.
  - Displacements caused by irrigation and power projects without adequate arrangements for rehabilitation.
  - Large scale land acquisition for 'public purposes' without appropriate compensation or rehabilitation
- **Livelihood Related Causes:**
  - Lack of food security – corruption in the Public Distribution System
  - Disruption of traditional occupations and lack of alternative work opportunities.
  - Deprivation of traditional rights in common property resources.
- **Social Exclusion:**
  - Denial of dignity.
  - Continued practice, in some areas, of untouchability in various forms.
  - Poor implementation of special laws on prevention of atrocities, protection of civil rights and the abolition of bonded labour etc.
- **Governance Related Factors:**
  - Corruption and inadequate provision/non-provision of essential public services including primary health care and education.
  - Misuse of powers by the police and violations of the norms of law.
  - Perversion of electoral politics and unsatisfactory working of local government institutions.
- **Current LWE situation in India**
  - **Maoist violence came down**
    - According to the Ministry of Home Affairs:
      - Maoist violence in the country has gone down by 77% since 2010;
      - The number of resultant deaths (security forces + civilians) has come down by 90 % from the all-time high of 1,005 in 2010 to 98 in 2022.
  - **Number of districts declared to be Naxal-affected**
    - The government has cut the number of districts declared to be Naxal-affected from over 200 in the early 2000s to just 90 now.
    - It claims that the geographical spread of violence is actually restricted to just 45 districts.
      - According to the MHA, the arc of violence has been considerably restricted with just 25 districts accounting for 90% of the LWE violence.
    - The presence of Naxals is said to be minimal to zero in Andhra Pradesh, Telangana, Odisha, Jharkhand, and Bihar, which were at one time their strongholds.
- **Why does Chhattisgarh continue to remain troubled?**
  - **Late involvement of State Police in counter-Maoist operations**
    - It is a widely accepted principle in counter-Maoist strategy that the war against Left Wing Extremism can only be won by the state police and not central forces.
      - This is because the state police have local knowledge and have local networks that are essential for the generation of intelligence.
    - It was through the active involvement of local police in the leading role that states such as Andhra Pradesh, West Bengal, Odisha and Jharkhand were able to end their Maoist problem.
    - **This process, security establishment sources say, started late in Chhattisgarh.**
    - By this time, police of neighbouring states had pushed Maoists from their states to Chhattisgarh, making it a concentrated zone of Maoist influence.
  - **Absence of roads in the interiors of Bastar**
    - The absence of roads in the interiors of Bastar has stymied the operations of security forces.
    - Minimal presence of the administration in the interiors of South Bastar has ensured that Maoists continue to have influence in the region.
- **Response by Centre**
  - **Different schemes to support LWE states**
    - **Security Related Expenditure (SRE)** - focuses on equipping security forces to fight Maoists;
    - **The Special Infrastructure Scheme (SIS)** - aims to strengthen local police and intelligence set ups;
    - **Special Central Assistance** for building infrastructure such as roads in LWE districts.

- **Massive presence of the CRPF**
  - The Centre has maintained a massive presence of the CRPF in the affected states for almost two decades.
- **Erection of mobile towers**
  - Centre is pushing for the erection of mobile towers in the interiors, which would help the local people connect with the mainstream, and also generate technical intelligence.
- **Maoists sympathisers on the radar of Centre**
  - The Centre has also unleashed the counter-terrorism National Investigation Agency (NIA) and the Enforcement Directorate on CPI(Maoist) cadres, leaders, and sympathisers with the aim to choke their funding.

## 6. Havisure vaccine

### GS 2 (Health)

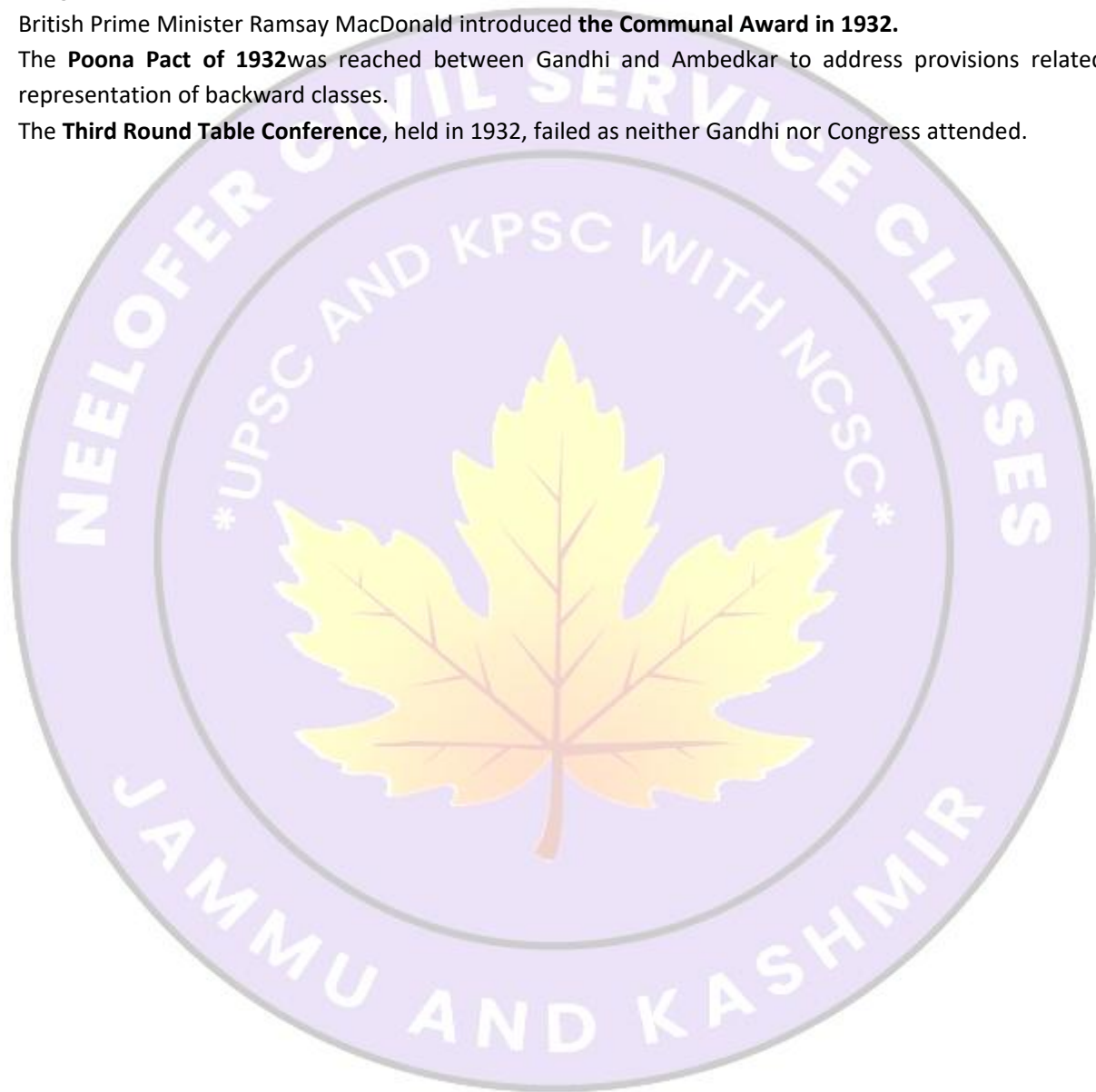
- **Why in News:** Recently, the Indian Immunologicals Ltd (IIL) a wholly owned subsidiary of National Dairy Development Board (NDDB) launched India's first indigenously developed Hepatitis A vaccine 'Havisure' in Hyderabad.
- **About Havisure vaccine:**
  - It is a two-dose vaccine — **first dose** administered at **above 12 months** of age and the second at least six months after the first dose.
  - The vaccine **is recommended** for children as part of **the routine immunisation** as well as for individuals at risk of exposure or travel to the regions with high hepatitis A prevalence.
  - In addition to this people with occupational risk of infection and suffering from chronic liver diseases also require Hepatitis A vaccination.
- **Key facts about Hepatitis A**
  - It is an **inflammation of the liver** caused by the **hepatitis A virus (HAV)**.
  - The virus is primarily spread when an uninfected (and unvaccinated) person ingests food or water that is contaminated with the faeces of an infected person.
  - Hepatitis can be **an acute** (short-term) infection or **a chronic** (long-term) infection.
  - There are **different types of hepatitis**, with different causes:
    - Viral hepatitis is the most common type. It is caused by one of several viruses -- **hepatitis viruses A, B, C, D, and E**.
    - Alcoholic hepatitis is caused by heavy alcohol use.
    - Toxic hepatitis can be caused by certain poisons, chemicals, medicines, or supplements.
    - Autoimmune hepatitis is a chronic type in which your body's immune system attacks your liver. The cause is not known, but genetics and your environment may play a role.
  - Hepatitis B, hepatitis C, and hepatitis D spread through contact with the blood of someone who has the disease.
  - Hepatitis B and D may also spread through contact with other body fluids. This can happen in many ways, such as sharing drug needles or having unprotected sex.
  - **Symptoms:** Some people with hepatitis do not have symptoms and do not know they are infected.
  - **Common symptoms include:** fever, malaise, loss of appetite, diarrhoea, nausea, abdominal discomfort, dark-coloured urine and jaundice.
  - **Treatment:** There is no specific treatment for hepatitis A. Recovery from symptoms following infection may be slow and can take several weeks or months.

## 7. Willingdon Island

### GS 1 (Geography)

- **Why in News:** Recently, the Cochin Port Joint Trade Union Forum has urged the Prime Minister of India to take effective steps to revive the lost glory of Willingdon Island.
- **About Willingdon Island:**
  - It is among the most beautiful locations in the **Kochi area**.
  - This is a man-made island, named after **Lord Willingdon** who was a **British Viceroy of India**.
  - It is among the biggest of its kind in India.

- It is a major **commercial centre** and has some of the best hotels in the city.
- It is also home to the Kochi Naval Base of the Indian Navy, the Central Institute of Fisheries Technology and the Port of Kochi.
- It handles millions of tonnes of freight every year.
- The island is connected to the mainland by **the Venduruthy Bridge**.
- **Who was Lord Willingdon (1931 - 1936)?**
  - He was the 22nd Viceroy and **Governor-General of India**.
  - **Major events** during his tenure
    - Introduction of the Government of India Act, 1935.
    - The **Second Round Table Conference**, held in 1931, saw the participation of Gandhi as a representative of the Congress.
    - British Prime Minister Ramsay MacDonald introduced **the Communal Award in 1932**.
    - The **Poona Pact of 1932** was reached between Gandhi and Ambedkar to address provisions related to fair representation of backward classes.
    - The **Third Round Table Conference**, held in 1932, failed as neither Gandhi nor Congress attended.



23rd Jan, 2024

## 1. Ayodhya Ram Temple: A new-age Architectural Marvel Carved in Stone

### GS 1 (Art and Culture)

- **Why in News:** A new landmark of India - both structural and spiritual - rises on Ayodhya's horizon as a new-age architectural marvel of elegant sandstones, diligently carved by craftspeople with dedication and devotion to Lord Ram.

#### Major Features of the Ram Temple:

##### Main Complex:

- The Ram Mandir is a Hindu temple in Ayodhya, Uttar Pradesh. It is located at the site of Ram Janmabhoomi, the birthplace of Lord Rama.
- **No iron or steel has been used** in the construction of the grand structure. Stones have been sourced from **Rajasthan's Bansi Paharpur area**.
- The temple complex, built in the traditional **Nagara style**, will be 380 feet long from the east to the west 250 feet wide and 161 feet high.
- Each floor of the temple will be 20 feet high and have a total 392 pillars and 44 gates.
- Around the grand temple is a rectangular periphery called **percota**, a feature found in temples in south India, but not generally in north India.
- The percota will be 14 feet wide and the periphery span 732 metres. The temple will be nestled within the percota periphery.
- Images of Lord Hanuman, other deities, peacocks and flower patterns have been carved onto the stones, lending the structure a divine look.
- More than 3,000 kg of flowers of over 20 varieties have been used to decorate the grand structure.

##### Main Entrance:

- Ornate statues of elephants, lions, Lord Hanuman and Garuda were installed at the main entrance leading to the temple earlier this month.
- These statues have also been made using sandstone brought from Bansi Paharpur.

##### Green Complex:

- A major part of the temple compound will be a green area with hundreds of trees.
- About 70 per cent of the complex will be a green area.
- The complex will have two sewage treatment plants — a water treatment plant and a dedicated electricity line from the power house.
- The fire brigade post will be able to source water from an underground reservoir.

## With no iron or steel, Ayodhya temple is a study in sandstone

The edifice will eventually be of three storeys; each floor will be 20 feet high and will have 392 pillars and 44 gates; about 70% of the complex is expected to be maintained as a green area; nearly 600 existing trees are preserved in this belt

Press Trust of India

AYODHYA

The Ayodhya temple, consecrated on Monday, is a sprawling structure built with sandstones by over-coming engineering challenges and showing sensitivity to nature, say authorities connected with its construction.

Champi Rai, general secretary of the Sri Ram Janmabhoomi Trust, said the temple's construction was the result of "collective wisdom" of "some of the best brains in the country".

No iron or steel has been used in the construction of the grand structure. Stones have been sourced from the Bansi Paharpur area in Rajasthan. Images of Lord Hanuman and other deities, peacocks and flower patterns have been carved into them.

"The entire temple superstructure will eventually be of three storeys —

ground plus two floors," Mr. Rai said. Visitors will climb 32 steps from the eastern side to reach the main temple.

**Nagara style**

The temple complex, built in the traditional Nagara style, will be 380 feet long from east to west, 250 feet wide and 161 feet high. Each floor will be 20 feet high and will have 392 pil-

lars and 44 gates.

During excavation, the ground was found unsuitable for laying the foundation stone, a challenge that engineers overcame by creating an "artificial foundation" over which the superstructure sits. Around the grand temple is a rectangular periphery called percota, a feature found in temples in south India, but not generally in the north,

Mr. Rai had earlier said. The percota will be 14 feet wide and the periphery spans 732 metres. The temple will be nestled within the percota periphery.

Ornate figures of elephants and lions and idols of Lord Hanuman and Garuda were installed at the main entrance earlier this month. They have also been made using sand-

stones from Bansi Paharpur.

"An ancient Shiva temple that exists on the Kabir Tila has also been revitalised," Mr. Rai said. After the consecration ceremony, Prime Minister Narendra Modi offered prayers at the Kabir Tila.

A major part of the temple compound will be a green area with hundreds of trees. Mr. Rai underlined important features such as sewage and water treatment plants, a fire brigade post and a dedicated electricity line.

About 70% of the complex will be a green area. The green area includes portions which are very dense and, in some segments, even sunlight hardly filters through," Mr. Rai said. Nearly 600 trees are preserved in this belt.

More than 3,000 kg of flowers of over 20 varieties have been used to decorate the grand structure, says Sanjay Dhawalakar, head of the floral decoration team.

#### Brick by brick

Look at the figures related to the Ram Temple consecrated in Ayodhya on January 22.

2.7 acres Area of the temple

57,400 sq. ft. Built-up area

1,800 crore Estimated construction cost

235 ft. Height of the temple

161 ft. Height of the temple

230.93 crore Project cost for the temple

32 steps to reach the temple

392 pillars and 44 gates

732 metres periphery

14 feet wide percota

70% green area

3,000 kg of flowers

20 varieties of flowers

1.2 lakh expected daily footfall

5 lakh expected footfall on special days

#### Ram temple at Ayodhya

##### Facts & Figures

- Estimated cost of temple: ₹1800 crore
- Total land: 70 acres
- Main temple land: 2.77 acres
- Floors: 3
- Gates: 12
- Doors: 44
- Total built-up area: 57,400 Sq. ft.
- Height of each floor: 30 ft.
- No. of columns in ground floor: 160
- No. of columns in first floor: 132
- No. of columns in second floor: 74
- No. of pedes and pavilions: 5



#### Ram temple at Ayodhya



Source: Sri Ram Janmabhoomi Trust, Bansi Paharpur

## 2. Supreme Court to Examine BSF Jurisdiction Extension in Punjab

### Recent events of importance

- **Why in News:** The extension granted to BSF in terms of area of its jurisdiction has emerged as a recent flashpoint between the state of Punjab and Union Home Ministry, with the state challenging the constitutional validity of the Centre's notification issued in October 2021.
- **Background**
  - Punjab contests the extension of BSF's jurisdiction from 15 km to 50 km from the Indo-Pakistan border, invoking Section 139 of the BSF Act,

## Apex court to decide if Centre encroached on Punjab's domain

Punjab has challenged constitutional validity of a notification issued by the Centre, extending the reach of the BSF to 50 km from the border, which was opposed by both States. CJI led Bench fixed third week of April for hearing.

Reichmohan, Rajmohan

The apex court said it will examine the constitutional validity of the BSF Act, which grants jurisdiction to the BSF to guard the border of India.

The Centre had extended its jurisdiction from 15 km to 50 km from the border of India.

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border area within a State, which is a matter of State, and not a matter of Union, and that the Centre's notification, which extended the jurisdiction of the BSF to 50 km from the border, was a matter of State, and not a matter of Union.

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- The constitutional debate revolves around **whether the Centre's move infringes upon Punjab's legislative domain** and dilutes its authority over the police and maintenance of public order.
- **Supreme Court's Intervention:**
  - A **three-judge Bench**, led by Chief Justice of India D.Y. Chandrachud, has taken up the case.
  - The court aims to **determine if all border states should be treated uniformly in delineating BSF's jurisdiction** and whether the Centre's actions constitute an encroachment into Punjab's legislative territory.
- **Constitutional Challenge:**
  - Punjab questions the **constitutional validity of the Centre's October 2021 notification, utilizing Section 139 of the BSF Act.**
  - This section **empowers the Centre to confer duties and powers on BSF members** concerning Central Acts, aiming to enhance control over trans-border crimes in collaboration with State Police.
- **Key Legal Issues:**
  - The Supreme Court will scrutinize whether the Centre's notification **signifies an arbitrary exercise of power and an unconstitutional interference** into Punjab's authority.
  - The court will specifically consider if the **expansion of BSF's jurisdiction to 50 km surpasses the defined 'local limits of area** adjoining the borders of India' under Section 139.
- **Factors for Consideration:**
  - The **court will delve into the factors that should be considered when demarcating BSF's jurisdiction** in a border area within a state.
  - This involves an exploration of the differences in **topography, population concentration, and other relevant aspects.**
- **Legal Arguments:**
  - Solicitor General, representing the Union government, highlights varying BSF jurisdictions in different states, citing **examples like 80 km in Gujarat and 50 km in Rajasthan.**
  - Punjab's Advocate General contends that factors such as **topography and population concentration should determine BSF jurisdiction**, emphasizing that Punjab's smaller size includes cities and towns within the 50 km ambit.

### 3. Intersectionality: Gender and Caste Dynamics in India's Labour Market

#### GS 3 (Economy)

- **Why in News:** India is a booming market, but often the details of it reveal certain trends in terms of how the societal dynamics play a role. This gets further complex w.r.t the Women and the caste realities and how they relate to the Labour Market.
- **Background**
  - Over the last two decades, a noticeable decline in female **Labour Force Participation (LFP)** has paralleled the overall reduction in workforce engagement.
  - Structural constraints within India's manufacturing and service sectors, **combined with gender bias and caste discrimination**, contribute to women finding themselves at the bottom of the labour pyramid.

#### Intersectionality of gender and caste in women's participation in the labour force

This paper is a comprehensive exploration of gender and caste dynamics in India's labour market that delves deep into the challenges faced by women in the workplace, particularly those from the lower castes.

Reference: [Ramesh, Arun, 2023](#)

**Abstract:** This paper explores the intersectionality of gender and caste in India's labour market, focusing on the challenges faced by women from lower castes. It examines how caste discrimination and gender bias interact to limit their participation in the workforce, particularly in higher-paying jobs. The paper argues that the current labour market structure, which often relies on informal and precarious work, disproportionately affects women from lower castes, leading to lower wages and less social security. It also discusses the role of social norms and patriarchal structures in restricting women's mobility and their ability to engage in higher-paying work. The paper concludes that addressing these issues requires a multi-pronged approach, including policy reforms to improve labour conditions, social interventions to challenge caste and gender stereotypes, and legal measures to enforce anti-discrimination laws.

**Keywords:** Intersectionality, Gender, Caste, Labour Market, Women's Participation, India.

Over the last two decades, a noticeable decline in female Labour Force Participation (LFP) has paralleled the overall reduction in workforce engagement. This paper explores the intersectionality of gender and caste in India's labour market, focusing on the challenges faced by women from lower castes. It examines how caste discrimination and gender bias interact to limit their participation in the workforce, particularly in higher-paying jobs. The paper argues that the current labour market structure, which often relies on informal and precarious work, disproportionately affects women from lower castes, leading to lower wages and less social security. It also discusses the role of social norms and patriarchal structures in restricting women's mobility and their ability to engage in higher-paying work. The paper concludes that addressing these issues requires a multi-pronged approach, including policy reforms to improve labour conditions, social interventions to challenge caste and gender stereotypes, and legal measures to enforce anti-discrimination laws.

**The caste and gender bias in women's participation in the labour force**

The intersectionality of gender and caste in India's labour market is a complex issue that requires a multi-pronged approach to address. This paper explores the challenges faced by women from lower castes in the workforce, particularly in higher-paying jobs. It examines how caste discrimination and gender bias interact to limit their participation in the workforce, leading to lower wages and less social security. The paper argues that the current labour market structure, which often relies on informal and precarious work, disproportionately affects women from lower castes, leading to lower wages and less social security. It also discusses the role of social norms and patriarchal structures in restricting women's mobility and their ability to engage in higher-paying work. The paper concludes that addressing these issues requires a multi-pronged approach, including policy reforms to improve labour conditions, social interventions to challenge caste and gender stereotypes, and legal measures to enforce anti-discrimination laws.

these arguments to both the women's participation in the rural informal sector and their mobility in the urban labour market. Further, the paper explores how women from lower castes have higher participation in informal sectors, which often lack social security and benefits. It also discusses the role of social norms and patriarchal structures in restricting women's mobility and their ability to engage in higher-paying work. The paper concludes that addressing these issues requires a multi-pronged approach, including policy reforms to improve labour conditions, social interventions to challenge caste and gender stereotypes, and legal measures to enforce anti-discrimination laws.

From the time the British colonial rule ended in 1947, India has been a rapidly growing economy. The growth has been driven by the services sector, which has become the dominant sector in the economy. However, the growth has not been inclusive, and a large section of the population, particularly women from lower castes, has been left behind. This paper explores the intersectionality of gender and caste in India's labour market, focusing on the challenges faced by women from lower castes. It examines how caste discrimination and gender bias interact to limit their participation in the workforce, particularly in higher-paying jobs. The paper argues that the current labour market structure, which often relies on informal and precarious work, disproportionately affects women from lower castes, leading to lower wages and less social security. It also discusses the role of social norms and patriarchal structures in restricting women's mobility and their ability to engage in higher-paying work. The paper concludes that addressing these issues requires a multi-pronged approach, including policy reforms to improve labour conditions, social interventions to challenge caste and gender stereotypes, and legal measures to enforce anti-discrimination laws.

resulting in a higher share of their total income. Limited educational opportunities confine them to jobs in the informal sector. Moreover, if a woman from this background manages to pursue higher education, she faces a double burden: from the same social identity and the formal sector, particularly in the private sector. Furthermore, women from lower castes have higher participation in informal sectors, which often lack social security and benefits. It also discusses the role of social norms and patriarchal structures in restricting women's mobility and their ability to engage in higher-paying work. The paper concludes that addressing these issues requires a multi-pronged approach, including policy reforms to improve labour conditions, social interventions to challenge caste and gender stereotypes, and legal measures to enforce anti-discrimination laws.

- This **limits their employment choices**, primarily directing them towards the agricultural or informal sector.
- **Need for Exploration:**
  - While previous discussions have attempted to trace the decline in female LFP through the lens of caste, **conflicting results have emerged**.
  - Education's role in **facilitating employment opportunities for women** from higher castes contrasts with the reservation-driven choices of public sector jobs for women from lower castes.
- **Points of Analysis:**
  - Utilizing data from the Socio-Economic and Caste Census (SECC) 2011, analysis of labour force participation at the tehsil level.
  - The focus is on Bihar, Haryana, Maharashtra, Punjab, Madhya Pradesh, Rajasthan, and Uttar Pradesh.
  - Women's involvement in rural informal sectors changes based on caste positions, emphasizing the influence of economic conditions and female-headed households.
- **Caste and Gender Bias:**
  - Gender-related barriers hinder **women's contribution to economic activities**, with societal expectations often prioritizing housework.
  - Legal and economic constraints, such as **restrictions on night shifts**, further impede women's pursuit of employment.
  - However, in the non-farm, informal sector, women in **female-headed households find opportunities, driven by economic necessities**.
  - Caste-based biases, rooted in historical expectations, explain the **higher female LFP in lower-caste households, particularly in the informal sector**.
- **Education's Role:**
  - The caste pattern in women's employment reveals **lower work participation rates among upper-caste women**.
  - Education plays a pivotal role, as limited **opportunities confine lower-caste women to informal sector jobs**.
  - Education **beyond school allows entry into the formal economy**, particularly through state-driven affirmative action policies.
  - Conversely, educated women from higher castes, challenging societal norms, **find greater prospects in the formal sector**.
- **Socio-Economic Impact:**
  - Despite obstacles rooted in caste and gender bias, **women's participation in the workforce has a positive socio-economic impact**.
  - The ability to **generate revenue enhances decision-making capacities for women** and their families.
  - **Education and employment correlate with delayed marriage and childbirth**, increased child schooling, reduced domestic violence, and enhanced mobility for women.
- The intersectionality of gender and caste in women's participation in the labour force emerges as a critical aspect that demands attention for shaping a progressive socio-economic landscape.

#### 4. Pradhan Mantri Suryodaya Yojana GS 2 (Governance)

- **Why in News:** PM Modi announced the 'Pradhan Mantri Suryodaya Yojana', a government scheme under which one crore households will get rooftop solar power systems.
- **Previous schemes to promote rooftop solar system**
  - **About**
    - In 2014, the government launched the Rooftop Solar Programme.
    - This had aimed to achieve a cumulative installed capacity of 40,000 megawatts (MW) or 40 gigawatts (GW) by 2022.
      - Watt is a unit of power and is calculated as the amount of energy used over time, specifically one Joule per second.
    - The scheme aimed to expand India's rooftop solar installed capacity in the residential sector by providing Central Financial Assistance and incentives to DISCOMs (distribution companies).
  - **Achievement**
    - However, this target could not be achieved. But by the end of 2023, rooftop solar energy generation was just 11 GW.
      - And energy generated from residences was only about a fifth of that.
    - As a result, the government extended the deadline from 2022 to 2026.
  - **Features**
    - A consumer can avail of benefits of the scheme through DISCOM tendered projects or through the National Portal (solarrooftop.gov.in)
    - The DISCOMs role is limited to issuing of technical feasibility approval, installation of net-meter and inspect the system.
      - Net metering is a billing mechanism that credits solar energy system owners for the electricity they add to the grid.
    - Surplus solar power units generated from the rooftop solar plant can be exported to the grid.
    - The consumer can receive monetary benefits for the surplus exported power as per the prevailing regulations.
- **Challenges and incentives**

THE CHALLENGES	THE INCENTIVES
<ul style="list-style-type: none"> <li>▶ Lack of awareness among customers</li> <li>▶ Initial high cost of system, lack of adequate financing options</li> <li>▶ Varying policies across states; discoms reluctant to see high-paying customers switch</li> <li>▶ Delay in getting net metres installed</li> </ul>	<ul style="list-style-type: none"> <li>▶ Govt ups subsidy for residential sector by up to 24%</li> <li>▶ PSU power companies roped in to offset installation costs</li> <li>▶ New national portal streamlines the process</li> <li>▶ Fewer documents to be submitted to discoms</li> </ul>

- **Pradhan Mantri Suryodaya Yojana**
  - This scheme is a new attempt to help reach the target of 40 GW rooftop solar capacity.
  - It will involve installing solar power systems at rooftops for residential consumers.
  - The scheme would help not only reduce electricity bills of the poor and middle class, but also push India's goal of becoming self-reliant in the energy sector.
- **India's current solar capacity**
  - **Installed capacity**

#### PM announces solar rooftop scheme for 1 crore households

The Hindu Bureau  
NEW DELHI

Hours after the consecration of the Ram idol in Ayodhya, Prime Minister Narendra Modi, citing divine inspiration, publicly announced a scheme to electrify one crore households with solar electricity.

"Today, on the auspicious occasion of the consecration in Ayodhya, my resolve has been further strengthened that the people of India should have their own solar rooftop system on the roof of their houses. The first decision I have taken after returning from Ayodhya is that our government will launch 'Pradhanmantri Suryodaya Yojana' with the target of installing rooftop solar on one crore houses. This will not only reduce the electricity bill of the poor and middle class, but will also make India self-reliant in the field of energy," Mr. Modi tweeted from his personal account.

No information on a timeline for such installations was given. Accompanying the tweet were photographs of Mr. Modi convening a meeting with officials, including those from the Ministry of New and Renewable Energy. These included the department's Minister,



Prime Minister Narendra Modi during a meeting on installing solar rooftop systems, with R.K. Singh, and Secretary, Bhupinder Bhatla.

**Muted growth** Currently, there is no Centrally compiled estimate of the number of households in India with rooftop solar installations.

What is known is that despite increases in installed solar capacity, the growth in the number of rooftop solar installations has been muted. The *Hindu* spoke to multiple analysts, and though none had definitive numbers, it is estimated that there are fewer than 10 lakh households with rooftop solar installations.

As of July 31, 2023, only 2.2 GW (1 GW is 1,000 MW) worth of rooftop installations were reportedly installed in Indian homes, according to information presented to the Lok Sabha.

- According to the Ministry of New and Renewable Energy, solar power installed capacity in India has reached around 73.31 GW as of December 2023.
- Meanwhile, rooftop solar installed capacity is around 11.08 GW as of December 2023.
- Overall, solar power has a major share in the country's current renewable energy capacity, which stands at around 180 GW.
- **High performing states**
  - In terms of total solar capacity, **Rajasthan is at the top with 18.7 GW**. Gujarat is at the second position with 10.5 GW.
  - When it comes to **rooftop solar capacity, Gujarat tops the list with 2.8 GW**, followed by Maharashtra by 1.7 GW.
- **Need for an expansion of solar energy in India**
  - According to the latest World Energy Outlook by the International Energy Agency (IEA), India is expected to witness the largest energy demand growth of any country or region in the world over the next 30 years.
  - IEA is an intergovernmental organization that provides data, policy recommendations, and analysis on the global energy sector.
  - IEA's goal is to help countries provide sustainable and secure energy for everyone.
  - To meet this demand, the country would need a reliable source of energy and it can't be just coal plants.
  - Although India has doubled down on its coal production in recent years, it also aims to reach 500 GW of renewable energy capacity by 2030.

## 5. Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme

### GS 3 (Economy)

- **Why in News:**
  - The Centre has no plans of re-working the popular Remission of Duties and Taxes on Exported Products (RoDTEP) scheme for exporters, despite the US government imposing anti-subsidy duties against it.
  - This is because the issue was not with the WTO compatibility of the scheme but with the inability of exporters to provide adequate documents to US investigating teams.
- **What is the Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme?**
  - It is a new scheme applicable from **1 January 2021** and is launched by the **Ministry of Commerce & Industry** to replace the existing MEIS (Merchandise Exports from India Scheme).
  - The scheme ensures that the **exporters receive the refunds** on the embedded taxes and duties previously non-recoverable.
  - It was introduced with the **intention to boost exports** which were relatively poor in volume previously.
- **Need for the RoDTEP Scheme:**
  - **The US had challenged India's key export subsidy schemes** in the WTO (World Trade Organisation), claiming them to harm the American workers.
  - **A dispute panel in the WTO ruled against India**, stating that the export subsidy programmes that were provided by the Government of India violated the provisions of the trade body's norms.
  - The panel further recommended that the export subsidy programmes (like the MEIS, Export Oriented Units Scheme, SEZ Scheme, Duty-Free Imports for Exporters Scheme, etc.) be withdrawn.
  - **This led to the birth of the RoDTEP Scheme**, so as to ensure that India stays WTO-compliant.
- **Features of the RoDTEP Scheme:**
  - **Refund of the previously non-refundable duties and taxes:** Mandi tax, VAT, Coal cess, Central Excise duty on fuel, etc., will now be refunded under this particular scheme.

### No relook at duty remission scheme needed due to US, EU action: Official

RAVI DUTTA MISHRA  
NEW DELHI, JANUARY 22

THE UNION government does not intend to relook at its Remission of Duties and Taxes on Exported Products (RoDTEP) scheme after the United States (US) and the European Union (EU) last year imposed countervailing duties on four Indian products citing breach of World Trade Organization (WTO) norms, a government official said.

The US and EU had imposed countervailing duties (CVDs) on paper file folders, common alloy aluminium sheet and forged steel fluid after an anti-subsidy investigation. CVDs are tariffs on imported goods that are imposed to offset subsidies given by the exporting country's government, aimed at protecting the domestic industry.

"When US investigators come to the manufacturing plants, the exporters should be able to show what they are getting is a remission and not an incentive. They should be able to show that they are paying electricity bills and value-added tax (VAT). But there are problems in maintaining the documents from our exporters side. We are working on a process to familiarize the exporters with the entire documentation process," the official said.

"There is no need to relook at

CVDs are tariffs on imported goods that are imposed to offset subsidies given by the exporting country's government

the scheme. It is WTO compliant. There were few exporters who could not show the documents, some people mentioned it is an incentive because there used to be incentives. So our exporters will have to adapt to the documentation mechanism and the government will be helping in the process," the official added.

The RoDTEP scheme, announced in January 2021, refunds embedded duties and taxes, such as VAT on fuel used in transportation, mandi tax and duty on electricity. It replaced the WTO-incompatible Merchandise Exports from India Scheme (MEIS) scheme, which had faced several challenges from WTO members.

The RoDTEP scheme operates under a budgetary framework and for FY 23-24, Rs. 15,000 crore was allocated to boost exports of items such as pharmaceuticals, organic and inorganic chemicals and articles of iron and steel among other items.

FULL REPORT ON  
[www.indianexpress.com](http://www.indianexpress.com)

### MEIS vs RoDTEP

MEIS	RoDTEP
1. Incentives available on the export of goods	1. Refund of duties and taxes that are currently not being reimbursed by any other schemes.
2. Not compliant with the WTO norms.	2. Compliant with the WTO norms.
3. 2%-5% of the FOB (Free On Board) value of exports.	3. Product based % is yet to be notified
4. Issued in the form of physical transferable scrips.	4. Issued in the form of transferable duty credit or electronic scrips which will be maintained via an electronic ledger.

- **Automated system of credit:** The rebate is issued as a transferable electronic scrip by the Central Board of Indirect Taxes & Customs (CBIC) in an end-to-end IT environment.
- **Quick verification through digitisation.**
- **Multi-sector scheme:** Under RoDTEP, all sectors, including the textiles sector, are covered, so as to ensure uniformity across all areas.
  - **Labor-intensive sectors** that enjoy benefits under the MEIS Scheme will be given a priority.
- **Eligibility to Obtain Benefits of the RoDTEP Scheme:**
  - Manufacturer exporters and merchant exporters (traders) are both eligible for the benefits of this scheme.
    - **The exported products need to have the country of origin as India.**
  - There is no particular turnover threshold to claim the RoDTEP.
  - The Special Economic Zone Units and Export Oriented Units are also eligible to claim the benefits under this scheme.
  - Where goods have been exported via **courier through e-commerce platforms**, the RoDTEP scheme applies to them as well.
  - However, the **re-exported products are not eligible under this scheme.**
- **Issues in the Implementation of the RoDTEP Scheme:**
  - **RoDTEP is based on the globally accepted principle** that taxes and duties should not be exported, and taxes and levies borne on the exported products should be either exempted or remitted to exporters.
  - However, both the US and the EU **imposed countervailing (anti-subsidy) duties** on Indian products, against RoDTEP payments availed.
  - The problem is that while the plants have records of total payments made by them in the form of input taxes, **they may not have the details.**
  - **For instance**, in a hand-written fuel bill given by a petrol pump, it may not give disaggregated Central excise duty and State VAT charges.
  - **All this needs to be streamlined and the exporters need to be properly trained.**

## 6. Davos meeting 2024

### GS 3 (Economy)

- **Why in News:**
  - This year's edition of the World Economic Forum (WEF) annual meeting was held from January 15 to January 19.
  - The overarching theme for WEF 2024 was '**Rebuilding Trust**'.
- **World Economic Forum**
  - It is the international non-governmental organization for Public-Private Cooperation.
    - It was founded in January 1971 by German engineer and economist Klaus Schwab.
  - The Forum engages the foremost political, business, cultural and other leaders of society to shape global, regional and industry agendas.
    - It has no independent decision-making power.
  - **HQ:** Cologny-Geneva, Switzerland.
- **Davos meet**
  - Annually, the WEF organizes a meeting at the end of January in Davos, a mountain resort in Graubünden, in the eastern Alps region of Switzerland.
  - The Annual Meeting, also known as the Davos Agenda, **has the objective of orienting global leaders on the imperatives of the year ahead.**
- **Different reports published by WEF**
  - WEF also produces a series of annual reports such as –
    - Global Competitiveness Report,
    - Global Information Technology Report,



- Global Gender Gap Report,
- Global Risks Report,
- Global Travel and Tourism Report,
- Global Enabling Trade Report.
- **Key takeaways from Davos meeting 2024**
  - **Artificial Intelligence**
    - The one issue that took centre stage at this year's WEF meet was Artificial Intelligence (AI).
    - Its many transformational abilities for human welfare were discussed.
    - It also highlighted the potential threats such as:
      - the need for regulation,
      - fear of job losses,
      - the risks of impersonation and misinformation, and
      - the inequalities it can potentially worsen.
    - Overall, the participants agreed that the positives outweigh the negatives, and **human intelligence did not face a major threat from AI.**
  - **War and uncertainty**
    - The summit highlighted the **risk posed by a fragile geopolitical situation, wars in the Middle East and Europe, the threats to global supply chains, and the uncertainty around food security.**
    - The head of the Palestine Investment Fund estimated at least \$15 billion would be needed to rebuild houses in Gaza alone.
    - However, Arab states said they would not fund reconstruction unless there was lasting peace.
  - **Climate**
    - The need for businesses to adapt to climate change and for countries to unite for action against it despite differences was another topic of discussion.
    - In the financing of climate action in developing countries, assistance has to be provided by developed countries; otherwise, this inequality will only grow, resulting in winners and losers.
  - **China's economy**
    - Facing a slowing economy, China tried to attract more investment from the West, which has witnessed some cooling.
    - At 5.2%, China's GDP growth in 2023 is still below pre-pandemic levels.
    - It is battling American attempts to isolate it, as evidenced in the semiconductor trade standoff.
  - **India specific observation**
    - An assessment of Davos 2024 by consulting firm McKinsey and Company said:
      - India is transforming rapidly as one of the fastest growing large economies in the world.
      - **When it comes to technology, talent, healthcare, and other areas, its future in 2024—and beyond—is worth paying attention to.**
    - The summit announced the launch of a **Global Good Alliance for Gender Equity and Equality** with the support and **endorsement by WEF and Government of India.**
      - The idea of this alliance emerged from the G20 Leaders' Declaration.
      - The objective of this Alliance is to bring together global best practices, knowledge sharing and investments in the identified areas of women's health, education, and enterprise
      - Supported by the Bill and Melinda Gates Foundation, the alliance will be housed and anchored by the CII Centre for Women Leadership.
      - The World Economic Forum has come on board as a 'Network Partner' and Invest India as an 'Institutional Partner'.

## **7. Batadrava Than temple and its significance**

### **GS 1 (Art and Culture)**

- **Why in News:** Congress leader Rahul Gandhi was prevented from visiting Assam's Batadrava Than, where he was going as part of his Bharat Jodo Nyay Yatra.

## • Batadrava Than

### ○ About

- The Batadrava Than, or Bordowa Than, is a temple complex at the birthplace of revered Vaishnavite reformer-saint Srimanta Sankardeva.
- It is located in Nagaon district, Assam.
- Srimanta Sankardev established Than Satra in 1494 A.D. at the age of 19.
- It is one of the most sacred sites for Assamese Vaishnavites.

### ○ Features

- Enclosed by a brick wall, the Than Satra has two entrances.
- The Kirtan Ghar, a capacious prayer house, was initially built by Sankardev using temporary materials.
- Connected to the Kirtan Ghar is the Manikut, a place dedicated to housing sacred texts, scriptures, and manuscripts.

### ○ Administration of the Than

- The administration of the Than includes different officials appointed by the Sattradhikar (head of the Satra) to ensure the seamless execution of rituals and prayers.

### ○ DouL Mohotsava

- An annual highlight for devotees in Bordowa is the grand festival "DouL Mohotsava," celebrated during Holi.

### ○ Ownership disputes

- Bordowa Than has a history marked by ownership disputes, resulting in its split into two Satras, namely Narowa and Salaguri.
- However, in 1958, it underwent a reunification process under the name 'Bordowa Than,' bringing together the two former Satras.

### ○ Significance

- Identity has always been an important strain of Assam politics, and the Thans/Sattras are a component of Assamese identity.
- As one of the most prominent Thans, the Batadrava Than is often visited by politicians.
- The current Assam govt has sought to make land grabbing around Sattras by illegal settlers an electoral issue.

## • Srimanta Sankardev

### ○ About

- The great Vaishnavite saint and reformer Srimanta Sankardev was born in Alipukhuri, Nagaon in 1449.
- He is credited with providing a thread of unity to Assam straddling two major kingdoms (Ahom and Koch kingdoms).
- The religion he started, Mahapuruxiya Dharma, was part of the Bhakti movement then raging in India.
- He inspired bhakti in Assam just as Ramananda, Kabir, Basava and Chaitanya Mahaprabhu inspired it elsewhere.

### ○ Sankardeva's philosophy

- He propagated the **Ek Saran Naam Dharma**.
  - The Ek Saran Naam Dharma focussed on worship in the form of bhakti (devotion) to Lord Krishna.
  - This was done through singing and congregational listening of His name and deeds.
- Sankardeva espoused a society based on equality and fraternity, free from caste differences, orthodox Brahmanical rituals and sacrifices.
- His teaching focused on prayer and chanting (naam) instead of idol worship.
- His dharma was based on the four components of **deva (god), naam (prayers), bhakats (devotees), and guru (teacher)**.

### ○ Creation of monastic institutions known as Thans/Sattras

- The Neo-Vaishnavite reformist movement initiated by Sankardeva led to the creation of monastic institutions known as Thans/Sattras in Assam.
- As the saint traveled across the region, spreading his teachings in the 16th century, these Sattras/Thans were established as centers for religious, social, and cultural reforms.
- Today, these Sattras continue to promote Sankardeva's distinctive worship through art approach, incorporating **music (borgeet), dance (xattriya), and theater (bhauna)**.

### ○ Major literary creations

## Assam shrine Rahul was stopped from visiting

EXPRESS NEWS SERVICE  
NEW DELHI, JANUARY 22

CONGRESS LEADER Rahul Gandhi was Monday prevented from visiting Assam's Batadrava Than, where he was going as part of the Bharat Jodo Yatra. The yatra was stopped for over two hours at Habaguri in Nagaon, and around 10 km, only Congress leader Gaurav Gogoi and Batadrava MLA

Shantanu Bora were allowed past the barrier to visit the Than. On Sunday, the president of the Than management committee had written to Bora, saying Rahul would not be allowed inside the premises before 3 pm on Monday since thousands of people would gather there in the evening to mark the year's anniversary at the Kirtan temple in Apydhyo.

Assam's Chief Minister Himanta Biswa Sarma too had said Rahul should visit the Than or the border this evening had concluded.

**What is the Batadrava Than?**  
Located in Nagaon district, the Batadrava Than, or Bordowa Than, is one of the most

sacred sites for Assamese Vaishnavites. The Than is situated in the birthplace of revered Vaishnavite reformer saint Srimanta Sankardeva (1449-1506).

According to the Nagaon district's website, "Sankardeva founded the first event Kirtan Chai at Bordowa in 1494 AD to practice and preach the new Vaishnavite faith during the 16th century in Assam, and inaugurated the Ek Saran Naam Dharma."

**What was Sankardeva's philosophy?**  
The Ek Saran Naam Dharma focused on worship in the form of bhakti (devotion) to Lord Krishna, through singing and congregational listening of

His name and deeds. Sankardeva espoused a society based on equality and fraternity, free from caste differences, orthodox Brahmanical rituals and sacrifices. His teaching focused on prayer and chanting (naam) instead of idol worship. His dharma was based on the four components of deva (god), naam (prayers), bhakats (devotees), and guru (teacher).

The Neo-Vaishnavite reformist movement that Sankardeva started is behind the



Rahul Gandhi after he was prevented from visiting the temple Monday. PTI

is headed by influential "Sattradhikar".  
**Are these Thans politically significant?**  
Identifying Thans has always been an important strain of Assam politics, and the Thans/Sattras are a component of Assamese identity. As one of the most prominent Thans, the Batadrava Than is often visited by politicians. The BJP has sought to make "land grabbing around Sattras by illegal settlers" an electoral issue.

In September last year, CM Sarma had said the state was planning to bring a law barring "non-indigenous people" from purchasing land in an eight-kilometre radius around the Batadrava Than. During an event to mark Sankardeva's 575th birth anniversary, Sarma had said: "We are making efforts for a law so that people other than indigenous folks cannot buy land around it. In the meantime, I have told the DC also that till the Act is not finalised, they should give permission to people other than indigenous people to buy and sell land around here."

In 2021, Home Minister Arun Sarma had launched a beautification project at the Batadrava Than, earmarking Rs 186 crore for its development.

- His major literacy creations are the 'Kirtan Ghosa', 'Gunamala' etc.
- The holy songs written by him are known as '**Borgeet**'.
- The dramas written by him are known as '**Ankia Naat**' and **Sattriya Dance at that time was a part of it.**
  - In the 'Ankiya Naats' Srimanta Sankardev used the style of storytelling through drama, mostly depicting the life of Lord Krishna and Lord Rama.
  - The first dramatical work by him was 'Chihnajatra'. The various 'Ankia Naats' written by him are 'Kaliya Daman', 'Patni Prasad' etc.
- When he started going to school at the age of twelve, he wrote a poem on the praise of Lord Vishnu - 'Karatala Kamala Kamala Dala Nayana' **without using any vowels as he had learnt only the consonants till that time.**



24<sup>th</sup> Jan, 2024

## 1. Maldives rules out Research by Chinese Vessel in its Waters GS 2 (International Relations)

### • Why in News:

- As per the foreign ministry of the Maldives Government, diplomatic request was made by the Chinese government for the necessary clearances to make a port call, for rotation of personnel and replenishment.
- The ministry said that the Chinese research vessel Xiang Yang Hong 03 will not be carrying out research in Maldivian waters, but will arrive for a port call.
- Reports of Chinese vessel heading to Maldives have drawn considerable attention in India.
  - This was significant especially in the wake of **Sri Lanka announcing a one-year moratorium on foreign research vessels calling at the island's ports.**
    - ❖ This was after India voiced concerns over visits by a Chinese vessel.
  - In October 2023, the Chinese research vessel Shiyan 6 had docked at the port of Colombo for replenishment and to undertake joint military scientific research in Sri Lanka's EEZ.
- The Ministry said the Maldives has always been a welcoming destination for vessels of friendly countries and continues to host both civilian and military vessels making port calls for peaceful purposes.
- **The Chinese Vessel Xiang Yang Hong 03:**
  - The research vessel Xiang Yang Hong 03 is expected to arrive in Malé on 8 February, following a planned exploration of the southern Indian Ocean from January to May 2024.
  - The arrival of Xiang Yang Hong 03, which marine traffic portals describe as a research or survey vessel, is expected early next month.
  - The vessel had earlier called at Sri Lankan ports, but did not obtain clearance for a visit early this year.
- **Deteriorating Ties between India & Maldives:**
  - The visit of the Chinese vessel to the Maldives is the latest source of tension for India, during a challenging phase of its ties with the Maldives.
  - Maldivian President **Mohamed Muizzu**, who was elected to office in September 2023, has demanded that Indian troops be withdrawn from the Maldives.
  - He did not renew a joint hydrographic survey exercise with India.
  - During his recent state visit to China, Mr. Muizzu also pledged to elevate strategic ties with the Chinese.
    - Besides holding bilateral talks with Chinese President **Xi Jinping**, Muizzu's China visit was marked by signing 20 agreements, an **aid of \$130 million to Maldives**.
  - Despite sustained pressure from the Indian government, Mohamed Muizzu granted permission on 3 January for Chinese research vessels to dock in the Maldives.
    - India had previously expressed objections to the Sri Lankan and Maldivian governments regarding the docking of the Xiang Yang Hong 03.
- **Growing Chinese Presence in the Indian Ocean:**
  - In April 2023, a representative from the Indian Navy briefed the Parliamentary Standing Committee on Defence, revealing that China had experienced a significant naval expansion over just a decade.
  - Importantly, they noted that China's naval fleet had grown from 250 to over 350 ships, solidifying its position as the world's largest navy.
  - The representative highlighted further concerns about the nature of the data generated by Chinese research activities in international waters.
  - While regulations permit research in these waters, the representative pointed out that the data collected often has both civilian and military applications.

## Maldives rules out research by Chinese vessel in its waters

Island nation's Foreign Ministry says *Xiang Yang Hong 03* will arrive for rotation of personnel, replenishment following a Chinese govt. request

Meera Srinivasan  
COLOMBO

**C**hinese research vessel *Xiang Yang Hong 03* will not be carrying out research in Maldivian waters, but will arrive for a port call, the Government of Maldives said on Tuesday.

Reports of the Chinese vessel heading to the Maldives have drawn considerable attention in India, especially in the wake of Sri Lanka announcing a one-year moratorium on foreign research vessels calling at the island's ports, after India voiced concern over visits by a Chinese vessel. The Ministry of Foreign Affairs said a diplomatic request was made by



the Government of China to the Government of Maldives for "necessary clearances to make a port call, for rotation of personnel and replenishment". "The vessel would not be conducting any research while in the Maldivian waters," the Ministry said in a statement, which Foreign Minister Moosa Zameer shared on social media platform X.

## 2. Analysing the Rising Gap in Incomes

### GS 3 (Economy)

#### • Why in News:

- The State Bank of India's (SBI) recent report **highlights a substantial decrease in income inequality in India over the past decade.**
- The report indicated a **decline in the Gini coefficient from 0.472 in 2014-15 to 0.402 in 2022-23.**
- Since the SBI report primarily relies on taxpayer data, **it is important to have an assessment of the PLFS which includes a broader spectrum of income-earners.**

#### • An Assessment of SBI's Report on Reduction in Inequality

##### ○ Gini Coefficient Reduction

- The Gini coefficient is a numerical representation of income distribution, ranging from 0 (perfect equality) to 1 (perfect inequality).
- The SBI report indicates that the **Gini coefficient, a widely used measure of income inequality, has experienced a substantial decrease in India.**
- In this case, **the coefficient has fallen from 0.472 in 2014-15 to 0.402 in 2022-23.**

##### ○ Magnitude of Change

- The **numerical drop in the Gini coefficient from 0.472 to 0.402 signifies a reduction of almost 15%,** indicating a noteworthy improvement in income equality over the specified period.
- **The report refers to a decade-long timeframe, suggesting that the observed reduction in income inequality is not a short-term fluctuation but rather a trend sustained over several years.**

##### ○ Positive Implications

- A decrease in the Gini coefficient is **generally interpreted as a positive development, as it suggests a move towards a more equitable distribution of income among the population.**
- The reduction in income inequality **could have significant implications for policymakers,** indicating the potential success of economic policies or social programs aimed at addressing disparities in income distribution.

#### • A Critical Assessment of SBI Report

##### ○ Taxpayer Data Limitations

- The **primary concern is centred around the reliance on taxpayer data** for the analysis of income inequality.
- A significant proportion of income-earners, **nearly 80%, fall below the minimum taxable threshold and their income is not covered in the analysis.**
- SBI report raises concerns about the representativeness of the findings, emphasising that **taxpayer data may not provide a comprehensive reflection of income distribution** among the entire population.
- **This limitation can result in an incomplete understanding of the true extent of income inequality.**

##### ○ Exclusion of Low-Income Earners

- Since the SBI analysis is based on taxpayer data, **individuals with incomes below the minimum taxable amount are excluded from consideration.**
- **This exclusion is significant** because a substantial portion of the population falls into this category, and **their economic conditions may not be adequately represented.**

##### ○ Sensitivity to Economic Disparities

- Critics imply that the reduction in the Gini coefficient, as reported in the SBI analysis, **might be sensitive to the economic disparities present within the taxpayer base.**
- If a considerable portion of low-income individuals is excluded, **it may impact the accuracy of the findings.**

##### ○ Absence of Supplementary Data

- To address the limitations of relying solely on taxpayer data, **the critics have suggested the incorporation of additional sources, such as data from the Periodic Labour Force Survey (PLFS).**
- **This would provide a more holistic understanding of income distribution,** considering a broader spectrum of income-earners.

#### • An Analysis of Reduction in Inequality According to PLFS Data

### Analysing the rising gap in incomes

Using data from the 2011-12 and 2022-23 rounds of the Periodic Labour Force Survey, this article examines the changes in income inequality among all income earners in India, and discusses it according to the nature of employment.



- Unlike other surveys, the PLFS records gross incomes of the self-employed, thus allowing for a greater depth of analysis.
- **The Gini coefficient has fallen from 0.4297 in 2017-18 to 0.4197 in 2022-23** when comparing the different forms of employment.
- The **Gini coefficient falls for regular wage and casual wage workers, but rises for the self-employed**. However, the changes are largely minimal.
- **The Gini for the self-employed workers rises from 0.37 to 0.3765, an increase of 1.5%.**
- For regular and casual wage workers, **the Gini coefficients register falls of 1.7% and 4.8%, respectively.**
- **Inequality has fallen, but inequality among the top income earners seems to have fallen far more than when we consider the population.**
- **Polarisation of Incomes**
  - **Divergence in Income Growth**
    - **The top decile's average income grew at a specific annual rate (e.g., 7.23%),** surpassing the growth rates of the bottom 20% and resembling the third decile.
    - In contrast, **the bottom decile witnessed the slowest income growth, at a lower rate (e.g., 1.67%).**
  - **90/10 Ratio**
    - The 90/10 ratio, which calculates the ratio of incomes of those at the 90th percentile (top 10%) to the 10th percentile (bottom 10%).
    - **There has been an increase in this ratio from 6.7 in 2017-18 to 6.9 in 2022-23.**
    - A significant finding is that the **90/10 ratio has increased significantly for the self-employed, reaching a specific value in 2022-23.**
    - **The income of the top 10% of self-employed individuals was, for example, 8.3 times that of the bottom 10%.**
- **Possible Explanations of Contradictory Findings in Income Polarisation**
  - **Rise in Women's Labor Force Participation**
    - The contradictory changes in income inequality **maybe linked to the documented rise in women's labour force participation.**
    - This rise is **due to forms of low-paid, part-time self-employed work.**
    - The rise in women's labour force participation, **particularly in the self-employed sector, is a potential factor** contributing to income polarisation.
    - **The nature of self-employed work undertaken by women might be low-paid** and part-time, which could influence income dynamics within this group.
  - **Increased Household Earnings**
    - While households may be earning more due to the increased labour force participation, **this increase is accompanied by a surge in low-paid self-employed work.**
    - The juxtaposition of increased earnings at the household level and the specific type of work undertaken by women **leads to an increase in the gap between the top and bottom of self-employed incomes.**
  - **Polarisation Among Income-Earners**
    - The overall increase in low-paid self-employed work **contributes to polarisation among income-earners.**
    - This polarisation is more significant among the self-employed, **potentially explaining the contradictory changes in income inequality trends.**
- **Conclusion**
  - **While the overall reduction in the Gini coefficient suggests a positive trend,** the polarisation of incomes, particularly among the self-employed, complicates the contradictory analysis of SBI report and PLFS data.
  - **A nuanced understanding of income dynamics is crucial for formulating effective policy interventions.**
  - Therefore, **policymakers need to consider the specificities of different employment categories and the potential gender dimensions influencing income disparities.**

### 3. Bharat Ratna

#### Recent events of importance

- **Why in News:** Karpoori Thakur, a prominent Gandhian socialist leader and former Bihar chief minister will be awarded the 'Bharat Ratna' posthumously.
- **About Bharat Ratna:**
  - It is the **highest civilian Award** of the country which was instituted in **the year 1954**.
  - **Eligibility:**
    - Any person without distinction of race, occupation, position or sex is eligible for these awards.
    - Though **usually conferred on India-born citizens**, the Bharat Ratna has been awarded to one naturalised citizen, Mother Teresa, and to two non-Indians, Pakistan national **Khan Abdul Ghaffar Khan** and former South African President **Nelson Mandela**.
    - The original statutes did not provide for posthumous awards but were amended in 1955 to permit them. Former Prime Minister Lal Bahadur Shastri became the first individual to be honoured posthumously.
  - It is awarded in **recognition of exceptional service/performance** of the highest order in any field of **human endeavour**.
  - The **recommendations** for Bharat Ratna are made **by the Prime Minister** himself to the President and no formal recommendations for this are necessary.
  - The number of annual awards is restricted to a **maximum of three in a particular year**.
  - On conferment of the award, the recipient receives a **Sanad (certificate)** signed by the President and a medallion. The award **does not carry any monetary grant**.

### On eve of birth centenary, Karpoori Thakur named for Bharat Ratna honour

The Hindu Bureau  
NEW DELHI

A day before the birth centenary celebrations of former Bihar Chief Minister and socialist leader Karpoori Thakur, President Droupadi Murmu on Tuesday announced that he would be awarded the Bharat Ratna, India's highest civilian award.

"The President has been pleased to award Bharat Ratna to Shri Karpoori Thakur (posthumously)," a Rashtrapati Bhavan communique said. Prime Minister Narendra Modi posted on X that "this prestigious recognition is a testament to his enduring efforts as a champion for the marginalised and a stalwart of equality and justice".

Son of a marginal farmer from the Nai (barber) community, he went on to serve as the Chief Minister of Bihar twice – first between December 1970 and June 1971 as part of the Bhuratiya Kranti Dal and later between December 1977 and April 1979 from the Janata Party. Named



President Murmu announced the award for Karpoori Thakur on Tuesday. THE HINDU ARCHIVES

Jamrask, or People's Leader, Mr. Thakur was a freedom fighter, incarcerated during the Quit India movement in 1942, and has been seen as the architect of much of the social justice plank in politics.

He was part of the anti-Emergency movement along with the other key socialist leader Jayaprakash Narayan.

During Thakur's Chief Ministership in 1977, the Mungeri Lal Commission submitted its report recommending that backward classes be reclassified as extremely backward classes and backward classes. The report was im-

plemented in 1978. This paved the way for 26% reservation for them in government services in Bihar in November 1978.

This reclassification was seen as a precursor to the Mandal Commission report that recommended 27% reservations for Other Backward Classes, implemented in the 1990s changing the face of Indian politics forever. More immediately, Bihar Chief Minister Nitish Kumar used the "Karpoori Thakur formula" to classify backward classes into two categories to establish himself as the leader of the EBCs to counter Friend-turned-foe-turned-ally Rashtriya Janata Dal chief Lalu Prasad.

The Bharat Ratna to Mr. Thakur, therefore, could not just help the BJP counter the effects of the caste survey in Bihar but also the Congress's repeated demands for a nationwide caste census.

Mr. Kumar expressed happiness over the Bharat Ratna to Mr. Thakur saying that it has been a long-time demand of the JDU. (With inputs from Patna)

### 4. Centre's sovereign AI push

#### GS 2 (Governance)

- **Why in News:**
  - As per the Union Minister of State for Electronics and IT, the ambitious artificial intelligence (AI) Mission may soon head for Cabinet approval and could have an outlay of more than Rs 10,000 crore.
  - As part of the programme, the government wants to:
    - develop its own 'sovereign AI',
    - build computational capacity in the country, and
    - offer compute-as-a-service to India's startups.
- **Sovereign AI**
  - **About**
    - Sovereign AI is the strategic **development and deployment** of AI technologies by national governments.
    - It involves efforts to develop **AI technologies to protect national security, economic competitiveness, and societal well-being**.
    - Sovereign AI involves:
      - Independence from individual providers
      - Consideration of the legal regulatory framework
      - Compliance with data protection & transparency obligation
      - Avoidance of potential copyright infringements
      - Self-determined selection of the models used
    - Basically, sovereign AI infrastructure refers to the idea of an autonomous and self-contained AI ecosystem.
    - Such infrastructure is coming up in countries like India, Sweden, Japan, and France that recognise that they should use their data to develop their own AI.
  - **Sovereign AI and India**

EXPLORING INCENTIVE STRUCTURES FOR PVT FIRMS TO SET UP COMPUTING CENTRES

### Centre's sovereign AI push: Compute mission may get over ₹10,000 crore

SOURYARENDRA BARIK  
NEW DELHI, JANUARY 23

THE CENTRE'S ambitious artificial intelligence (AI) Mission may soon head for Cabinet approval and could have an outlay of more than Rs 10,000 crore, Union Minister of State for Electronics and IT Rajeev Chandrasekhar told reporters Tuesday.

As part of the programme, the government wants to develop its own 'sovereign AI', build computational capacity in the country, and offer compute-as-a-service to India's startups.

"We will take the proposal to the AI Mission for Cabinet approval. We are still working out some contours, but the overall outline for the initiative could be more than Rs 10,000 crore," he said.

The Indian Express had earlier reported the capacity building will be done both within the government and through a public-private partnership model, highlighting New Delhi's intention to develop the AI Centre for Development of Advanced Computing (CDAC), Chandrasekhar had earlier told this paper.

For context, according to a report by Microsoft, the company had developed a supercomputer for OpenAI, the firm behind ChatGPT, with a cost of 10,000 GPUs among



Computing capacity is among the most important elements of building a large AI system.

other things. The government is exploring various incentive structures for private companies to set up computing centres in the country, ranging from a capital expenditure subsidy to a tax break.

In total, the country is looking to build a compute capacity of anywhere between 10,000 GPUs (graphic processing units) and 50,000 GPUs under the PPP model and an additional 1,000-2,000 GPUs through the CDAC, Chandrasekhar had said.

Computing capacity is among the most important elements of building a large AI system apart from algorithms, infrastructure and data. It is also one of the most difficult elements to procure for smaller businesses looking to train and build such AI systems.

The government's idea is to create a sovereign AI infrastructure (Sovereign AI) out of the GPU assembly and use it to build a compute centre as a service to the country, which will be a major cost centre for the government.

Information Technology (IT) Ministry released a draft of the National Data Governance Framework, which will be a major cost centre for the government.

The idea is that the non-personal data housed within this programme would be accessible to startups and Indian researchers. The draft proposal said.

The Indian Express had earlier reported that the Centre is also considering issuing directives to big tech companies like Facebook, Google and Amazon to share anonymised personal data with government with the India Data Trust platform.

FR, Instagram may lose legal immunity over fake loan apps

New Delhi: The central government is considering legislative measures to prevent social media platforms like Instagram and Facebook from hosting advertisements of fraudulent loan apps.

The consideration comes after the Indian Express – in a two-part investigation published on November 20-21 last year – had reported how data on loan apps were being shared with the platform.

The government is also considering issuing directives to big tech companies like Facebook, Google and Amazon to share anonymised personal data with government with the India Data Trust platform.

- India has pitched itself as a country that has effectively used technology to develop and deliver governance solutions at a mass scale.
- E.g., the biometric identity programme Aadhaar and payments solution Unified Payments Interface (UPI) etc.
- These solutions form the bedrock of what New Delhi calls Digital Public Infrastructure (DPI).
- In DPI, the underlying technology is sanctioned by the government and is later offered to private entities to develop various use cases.
- Now, India wants to take the same DPI approach with AI.
- Through sovereign AI, government is looking to focus on real-life use cases in healthcare, agriculture, governance, language translation, etc., to maximize economic development.

<p>■ AI sovereignty means the government building its AI foundation models like large language models, for national security, which can then be leveraged by other companies and used as a digital good</p>	
<p>■ India will require to advance the infrastructure, irrespective of the profitability of companies</p>	<p>■ The govt is expected to announce its own generative AI model very soon</p>

#### • India's AI Mission:

- The PM of India at the Global Partnership on Artificial Intelligence (GPAI) Summit 2023 (New Delhi) announced that India will launch an AI mission.
- **The aim of this mission will be to establish sufficient AI compute power in the country.** This will help India's innovators and startups get better facilities.
- Under this mission, AI applications in agriculture, healthcare and education-related sectors will be promoted.

#### • Centre's Plan to Step up Compute Capacity under the AI Mission

- According to the Union Ministry of Electronics and IT (MeitY), the Centre is looking to build computational capacity in the country and offer compute-as-a-service to India's startups.
- The capacity building will be done **both within the government and through a public-private partnership (PPP) model.**
- Under the public model, compute capacity will be set up within the C-DAC as part of the **National Supercomputing Mission.**
  - C-DAC already has the Rudra and Param systems.
- The government is exploring various incentive structures for private companies to set up computing centres in the country. These models range from a capital expenditure subsidy model to offering them a usage fee.
  - **A capital expenditure subsidy model** which has been employed under the semiconductor scheme
  - **Usage" fee model** where companies can be incentivised depending on their operational expenses, to offer them a "usage" fee.
- **In total**, the country is looking –
  - To build a compute capacity of anywhere between 10,000 GPUs (graphic processing units) and 30,000 GPUs under the PPP model and
  - An additional 1,000-2,000 GPUs through the PSU Centre for Development of Advanced Computing (C-DAC).
    - GPU is a chip or electronic circuit that can render graphics for display on an electronic device.
    - GPUs are designed to accelerate computer graphics and image processing. They can perform mathematical calculations at high speed.
    - These calculations are used **for tasks like graphics rendering, machine learning, and video editing.**

#### • Other Plans of Government to Push AI in India:

- Apart from building computing capacities, the government is also working on **building datasets** and making them available to Indian startups.
- Earlier, the MeitY released a draft of the **National Data Governance Framework Policy** under which it proposed the creation of an India Datasets platform.
- **The platform will consist of non-personal and anonymised datasets** from Central government entities that have collected data from Indian citizens or those in India.
- The idea is that the non-personal data housed within this programme would be accessible to startups and Indian researchers.
- Among the stated objectives of the policy is **to modernise the government's data collection**, with an aim to improve governance and to enable AI and data-led research and startup ecosystems in the country.

- **The Centre is also considering issuing a directive** to big tech companies like Facebook, Google and Amazon to share anonymised personal data in their possession with the India Datasets platform.

## 5. Insat-3DS

### GS 3 (Science and Tech)

- **Why in News:** Indian Space Research Organisation has completed all key tests on Insat-3DS satellite before the final review which will be followed by its shipping to the spaceport in Srihari Kota, Andhra Pradesh.
- **About Insat-3DS:**
  - It is a collaborative effort between **ISRO and the India Meteorological Organisation (IMD)**.
  - It is part of a series of **climate observatory satellites** aimed at enhancing climate services. Comprising three dedicated Earth observation satellites, including INSAT-3D and INSAT-3DR already in orbit.
  - It will be launched by using the **Geosynchronous Launch Vehicle (GSLV-F14)**.
- **What is GSLV-F14?**
  - It is a more advanced rocket utilising liquid propellant.
  - The rocket, distinguished by its **higher capacity** and the use of **cryogenic liquid propellants** in all **three stages**, presents a more complex engineering challenge but allows for a substantially higher lift-off weight capacity.
- **Key facts about INSAT-3DR**
  - It is an **advanced meteorological satellite** of India configured with an imaging System and an Atmospheric Sounder.
  - The significant improvements incorporated in INSAT-3DR are:
    - Imaging in Middle Infrared band to **provide night time pictures of low clouds** and fog
    - Imaging in two Thermal Infrared bands for estimation of **Sea Surface Temperature (SST)** with better accuracy
    - Higher Spatial Resolution in the Visible and Thermal Infrared bands
  - **Payloads:** INSAT-3DR carries a multi spectral Imager, 19 channel Sounder, Data Relay Transponder and Search and Rescue Transponder.

## 6. Lake Retba

### GS 3 (Environment)

- **Why in News:** The Lake Retba's waters are virtually devoid of life and are on the verge of disappearing due to pollution and mining.
- **About Lake Retba:**
  - It is also known as **Lac Rose (the Pink Lake)**.
  - **Location:** It is located north of the **Cap Vert peninsula of Senegal**, northeast of Dakar (Senegal).
  - The lake is isolated from the sea by sand dunes.
  - Its fresh water comes from the seasonal water table in the dunes, which are higher than the lake. Thus, the sea provides most of the lake's water and all of its salt.
  - The Pink Lake is one of the main tourist destinations in the Dakar region, primarily because of the pink colour of its waters.
  - **Why is it pink?**
    - The pink coloration is due to the proliferation of **halophilic green algae** (living in a salty environment), **Dunaliella salina**, which contain red pigments.
    - The algae is associated with halophilic bacteria of the genus Halobacterium.
    - This microscopic alga's resistance to salt comes from its high concentration of **carotenoid pigments**, which protect it from light, and its high glycerol content.
    - In fact, Dunaliella salina contains at least four antioxidant pigments (beta-carotene, astaxanthin, lutein and zeaxanthin), which are rich in vitamins and trace elements.
    - When salinity is high, algae with red pigments thrive, and when salinity is low, they give way to other algae rich in green pigments.

25<sup>th</sup> Jan, 2024

## 1. Health Ministry's new Treatment Regimen for Leprosy GS 2 (Health)

- **Why in News:** The Central government has approved a new treatment regimen for leprosy, aiming to stop its transmission at the sub-national level by 2027, three years ahead of the UN's Sustainable Development Goals.
- **About Leprosy:**
  - Hansen's disease (also known as leprosy) is an infection caused by slow-growing bacteria called *Mycobacterium leprae*.
  - It can affect the nerves, skin, eyes, and lining of the nose (nasal mucosa).
  - Leprosy produces skin ulcers, nerve damage, and muscle weakness. If it isn't treated, it can cause severe disfigurement and significant disability.
  - Early treatment may prevent additional tissue damage and stop it from spreading further.
- **Transmission of Leprosy:**
  - The disease is transmitted through droplets from the nose and mouth.
  - Prolonged, close contact over months with someone with untreated leprosy is needed to catch the disease.
  - The disease is not spread through casual contact with a person who has leprosy like shaking hands or hugging, sharing meals or sitting next to each other.
  - Moreover, the patient stops transmitting the disease when they begin treatment.
- **Prevalence of Leprosy:**
  - Leprosy is one of the oldest diseases in recorded history. The first known written reference to Hansen's disease is from around **600 B.C.**
  - It is a **Neglected Tropical Disease (NTD)** which still occurs in more than 120 countries.
    - NTDs are a diverse group of conditions caused by a variety of pathogens (including viruses, bacteria, parasites, fungi and toxins) and associated with devastating health, social and economic consequences.
  - In 2022, 182 countries accounted for a registered prevalence of 1,65,459 cases and 1,74,087 new cases of leprosy.
- **Prevalence of Leprosy in India:**
  - Despite India being declared "Leprosy Eliminated" in 2005, **the country still accounts for over half (52%) of world's new leprosy patients.**
  - Arunachal Pradesh, West Bengal, Bihar, Jharkhand, Odisha, Chhattisgarh, Maharashtra, Uttar Pradesh, Delhi, Madhya Pradesh, Gujarat, Dadra Nagar Haveli and Daman Diu have either one or more districts (total 82 districts) which are yet to achieve leprosy elimination target.
- **National Leprosy Eradication Programme (NLEP):**
  - NLEP is a centrally sponsored scheme under the umbrella of **National Health Mission (NHM).**
  - NLEP is aimed to bring down Prevalence Rate of leprosy:
    - To less than 1/10,000 population at district level;
    - Grade II Disability rate per million population to Zero at district level;
    - Grade II Disability to Zero among new cases and
    - Child leprosy cases to zero level.
  - It also aims at generating awareness about leprosy disease.
  - Major initiatives under NLEP are as follows:

## Centre releases three-drug regimen for treating leprosy

Government aims at stopping transmission of leprosy at the sub-national level by 2027; the new regimen will replace two-drug medication for six months; this was conveyed to States on Jan. 17

Bindu Shajan Perappadan  
NEW DELHI

The Union government has approved a new treatment regimen for leprosy, aiming at stopping its transmission at the sub-national level by 2027. A letter written by the Directorate General of Health Services (DGHS) said the National Leprosy Eradication Programme is taking all the required steps to stop the transmission of the infection.

"Now with the approval of the competent authority, the Ministry of Health and Family Welfare has decided to introduce a three-drug regimen for Pauci-Bacillary (PB) cases in place of a two-drug regimen for six months," the letter written by Sadasarshan Mandal, Deputy Director-General, DGHS, said.

The January 17 letter said that the move follows the "latest, globally accepted scientific research studies and evidence-based practices".

It further added that the World Health Organization (WHO) had agreed to supply the revised drug regimen from April 1, 2025.



Doctors say that there is no need for three-drug regimen and the third medicine has its own side effects. FILE PHOTO

Thus, all States and Union Territories have now been asked to send their requirements for anti-leprosy drugs 12 months beforehand. The revised classification of leprosy and the treatment regimen for PB and multi-bacillary (MB) cases in India will be implemented from the same date.

The WHO says leprosy is a chronic infectious disease caused by *Mycobacterium leprae*. The bacteria are transmitted via droplets from the nose and mouth during close and frequent contact with untreated cases. Leprosy, reported from all the six WHO regions, is curable with multi-drug therapy (MDT). The majority of

new cases detected are from Southeast Asia. The letter also states that PB patients have fewer bacteria visible and show no signs of advanced disease in biopsies, while MB patients have visible bacteria and may show signs of more advanced disease in biopsies. "We believe that this new treatment regimen will mark a significant step forward in our collective efforts to eradicate leprosy in India by 2027," it said.

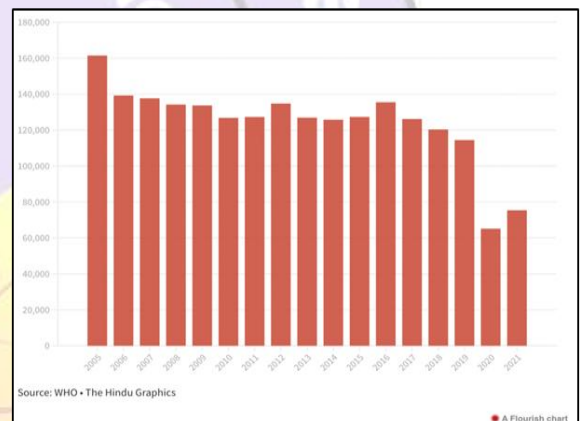
The WHO's recommended treatment regimen consists of three drugs – dapsone, rifampicin and clofazimine. The combination is referred to as MDT. The duration of

treatment is six months for PB and 12 months for MB cases. MDT kills the pathogen and cures the infection.

The WHO has been providing MDT free of cost. Free MDT was initially funded by the Nippon Foundation and since 2000, it has been donated through an agreement with Novartis. This regimen is known as 'Uniform MDT', where a single three-pack kit can be given to all leprosy patients.

This measure facilitates ease of administration. Healthcare experts say it makes it easier for the manufacturers, too.

Asked about the need for the three-drug regimen, Kabir Sardana, Professor, Dermatology, Ram Manohar Lohia Hospital, explained that it was true there was no specific need as such for three drugs since the two-drug regimen had adequate efficacy. Moreover, as relapses are low in PB MDT, three drugs are not strictly needed. The third drug – clofazimine – also causes its own side effects, the most disconcerting of which is the red colour of the skin, Dr. Sardana said.



- Leprosy Case Detections Campaign (LCDC) in high endemic districts.
- Focused Leprosy Campaign (FLC) in low endemic districts for case detection.
- Special plans for Hard-to-Reach areas for early case detection and treatment.
- ASHA Based Surveillance for Leprosy Suspects (ABSULS).
- Sparsh Leprosy Awareness Campaign on 30th January every year.
- Active Case Detection and Surveillance both in rural and urban areas.

#### • News Summary:

- According to a letter written by the Directorate General of Health Services (DGHS), the National Leprosy Eradication Programme is taking all the required steps to stop the transmission of leprosy.
- The Government has approved a new treatment regimen for leprosy, aiming to stop its transmission at the sub-national level by 2027, three years ahead of the UN's Sustainable Development Goals.
- The Ministry of Health and Family Welfare has decided to **introduce a three-drug regimen for Pauci-Bacillary (PB) cases in place of a two-drug regimen for six months.**
- It further added that the World Health Organization (WHO) had agreed to supply the revised drug regimen from April 1, 2025.
- Thus, all States and Union Territories have now been asked to send their requisitions for anti-leprosy drugs 12 months beforehand.

## 2. The Legal Dispute Over AMU's Minority Status: A 57-Year Journey

### Recent events of importance

- **Why in News:** The recent controversy over the minority status of Aligarh Muslim University (AMU), has evoked strong reactions. It has raised debate around historical developments, constitutional provisions, and the current judicial discourse.
- **Founding and Evolution of AMU:**
  - In 1877, Sir Syed Ahmed Khan established **Muhammadan Anglo-Oriental College (MAO College)** in Aligarh to address Muslim educational backwardness and preserve Islamic values.
  - **The Aligarh Muslim University Act, 1920 (AMU Act)** was enacted, incorporating MAO College and the Muslim University Association into AMU.
- **Key Amendments and Changes:**
  - In 1951, amendments **removed compulsory religious education and exclusive Muslim representation mandates.**
  - **Further amendments in 1965 redistributed powers among various bodies,** reducing the exclusive powers of the University Court.
  - The legal dispute began in 1967 when the Supreme Court (SC) reviewed these amendments in the **S. Azeez Basha versus Union of India (UOI) case.**
- **The Legal Dispute:**
  - **Arguments Regarding Minority Status:**
    - **Article 30(1)** of the Constitution grants religious and linguistic minorities the right to establish and administer educational institutions.
    - The **1967 SC bench held that AMU was not established or administered by the Muslim minority,** leading to nationwide protests.
    - **The AMU Act was amended in 1981** to reaffirm the university's minority status, which was contested in subsequent legal battles.
  - **Reservation Controversy:**
    - In 2005, AMU reserved 50% of postgraduate medical seats for Muslim candidates.

### AMU MINORITY STATUS How can Centre not accept 1981 amendment by Parliament: SC

ANANTHAKRISHNAN  
NEW DELHI, JANUARY 24

THE SUPREME COURT on Wednesday questioned the Centre's submission that the 2006 Allahabad High Court ruling striking down the 1981 amendment made by Parliament to the Aligarh Muslim University Act seemed to be the more correct view, and said a government has to stand by Parliamentary amendments unless the same is reversed by Parliament.

A seven-judge bench presided by Chief Justice of India D.V. Chandrachud said that "irrespective of which government represents the cause of the Union of India, Parliament's cause is eternal, indivisible and indestructible".

It begins with Justice Sanjay Khanna, who was part of a seven-judge Constitution bench hearing the question of AMU's minority status, asking Solicitor General Tushar Mehta, for the Centre, whether he accepted the 1981 amendment. The bench, also comprising Justices Surya Kant, JB Puri, Dhananjaya Kumar, Manoj Mishra and Sanjay Chandra Sharma, is hearing a reference made to it in February 2019. "This is an amendment by the Parliament. Is the government accepting?" asked Justice Khanna. "I am not," the Solicitor General responded.

Expressing surprise, the CJI said, "How can you not accept an amendment by Parliament? Mr Solicitor, Parliament is an eternal indestructible body under the Indian union. Irrespective of which government represents the cause of the Union of India, Parliament's cause is eternal, indivisible and indestructible. And I can't hear the Government of India say that an amendment which Parliament made is something I don't stand by. You have to stand by this amendment. You have an option. Go through the amending route and change the amending Act again."

Mehta said, "I am not arguing

a matter of A versus B. I am before a seven-judge Constitution bench answering constitutional questions. The amendment in question was subjected to challenge before the high court and there is a judgment declaring that it is unconstitutional for Article 30 grounds and as a law officer, it is my right as well as my entitlement and duty to say that this view appears to be correct." The reference was to the 2006 Allahabad High Court ruling that held the 1981 amendment unconstitutional.

The CJI enquired, "This would be radical because a law officer would be telling us that I don't abide by what Parliament has done. You have to stand by what Parliament has done... Can we hear any organ of the government say that notwithstanding a Parliamentary amendment, I don't accept this amendment?" Mehta said he was supporting the 2006 judgment. The CJI asked, "How can you say I don't accept the validity of an amendment?" Mehta said, "Would a law officer be expected to say whatever amendments were made in the Constitution during Emergency were true only because they were made by the Parliament? ... Here I have a judgment of the HC..."

At this point, Senior Advocate Kapil Sibal, for the AMU Old Boys Association, said, "I was sitting in the court when the Attorney-General Niranjan De was arguing that what is being done is right. I (Niranjan De) defended the Emergency provision. Why? Because he could not say otherwise."

In 1967, the SC in 'S. Azeez Basha vs Union of India' held that AMU was not entitled to minority status as "it was brought into existence by the central legislature and not by the Muslim minority...". On Tuesday, the Centre argued the AMU had surrendered its denominational character at the time of its establishment by an Act of the British Parliament in 1920 and hence could not claim the minority status now.

FULL REPORT ON [www.indianexpress.com](http://www.indianexpress.com)

- **The Allahabad High Court struck down the reservation policy** in *Dr Naresh Agarwal vs UOI* (2005), considering the 1981 amendment ultra vires.
- **Current Status in the Supreme Court:**
- **Critical Issues Under Consideration:**
  - The SC, led by Chief Justice of India D.Y. Chandrachud, is addressing two crucial issues: the **criteria for determining minority status and whether an institution under statute can enjoy such status.**
  - The petitioners argue for AMU's entitlement to minority status, citing the **T.M.A Pai Foundation verdict.**
  - The UOI endorses the **S. Azeez Basha verdict**, questioning the establishment and administration of AMU by the Muslim minority.
- **Legal Arguments in the SC:**
  - Senior Advocates argue that Statutory regulations or **state aid**, as received by AMU, do not strip an educational institution of its minority character.
  - Solicitor General contends that AMU, **having surrendered rights to the British government and assumed a secular character**, should not retain minority status.
  - Chief Justice emphasizes that **AMU's political inclination does not affect its minority status.**
- **Future Implications:**
  - The SC's judgment **will set a precedent impacting the rights and legal recognition** of all minority institutions.
  - The case has **far-reaching consequences for the interpretation of Article 30(1)** and the determination of minority character in educational institutions

### 3. Indian Firms Allowed Direct Listing on GIFT-IFSC International Markets

#### GS 2 (Governance)

- **Why in News:** The Indian government's recent decision to permit direct listing of securities by public Indian companies on the international exchanges of GIFT International Financial Services Centre (GIFT-IFSC) marks a significant stride in enhancing access to global capital.
- **Expectations: Foster economic growth, foreign investment, and broaden investor opportunities.**
- **Background**
  - **To facilitate direct listings on GIFT-IFSC's international exchanges, the Department of Economic Affairs and the Ministry of Corporate Affairs have introduced amendments to regulatory frameworks.**
  - **The revised Foreign Exchange Management Rules and the newly notified Companies (Listing of Equity Shares in Permissible Jurisdictions) Rules lay the foundation for public Indian companies to issue and list shares on approved international exchanges.**
- **Framework and Regulatory Oversight:**
  - The permitted international stock exchanges at **GIFT-IFSC include India International Exchange and NSE International Exchange.**
  - Both operate under the regulatory supervision of the **International Financial Services Centres Authority (IFSCA).**
  - GIFT-IFSC, as India's premier **international financial services centre**, aims to facilitate global connectivity for the Indian economy, fostering the seamless flow of global capital into the country.
- **Potential Impact on Indian Capital Market:**

#### LISTING OF SECURITIES BY INDIAN COMPANIES

### Govt permits direct listing on GIFT-IFSC's global exchanges

SUKALP SHARMA  
NEW DELHI, JANUARY 24

THE GOVERNMENT on Wednesday allowed direct listing of securities by public Indian companies on the international exchanges of GIFT International Financial Services Centre (GIFT-IFSC), and made the requisite provisions to provide "an overarching regulatory framework" to facilitate it. In July, Finance Minister Nirmala Sitharaman announced that the government had decided to enable direct listing of listed and unlisted companies on the IFSC exchanges. The move is expected to give Indian companies access to cheaper foreign capital, boost foreign investment, and broaden investor.

The Department of Economic Affairs of the Finance Ministry has amended Foreign Exchange Management (Non-debt Instruments) Rules, 2019, and notified the Direct Listing of Equity Shares of Companies

Incorporated in India on International Exchanges Scheme. Additionally, the Ministry of Corporate Affairs (MCA) has issued Companies (Listing of Equity Shares in Permissible Jurisdictions) Rules, 2024. "These, together, provide an overarching regulatory framework to enable public Indian companies to issue and list their shares in permitted international exchanges. As of now, the framework allows unlisted public Indian

The move is expected to give Indian companies access to cheaper foreign capital. *File*

companies to list their shares on an international exchange. SEBI (Securities and Exchange Board of India) is in the process of issuing the operational guidelines for listed public Indian companies," the Finance Ministry said in a statement.

The international stock exchanges at GIFT-IFSC—India International Exchange and NSE International Exchange—are currently prescribed as the permitted stock exchanges. These ex-

changes are under the regulatory supervision of the International Financial Services Centres Authority (IFSCA). GIFT-IFSC is India's first international financial services centre set up with the objective of connecting India with global opportunities while helping the Indian economy connect with the global financial system and facilitating seamless flow of global capital into India.

"This policy initiative... will reshape the Indian capital market landscape and offers Indian companies, especially start-ups and companies in the sunrise and technology sectors, an alternative avenue to access global capital beyond the domestic exchanges. This is expected to lead to better valuation of Indian companies in line with global standards of scale and performance, boost foreign investment flows, unlock growth opportunities and broaden the investor base," the Finance Ministry said.

FULL REPORT ON [www.indianexpress.com](http://www.indianexpress.com)

- This policy initiative is poised to **reshape the Indian capital market landscape**, offering a viable alternative for Indian companies, especially start-ups and those in **sunrise and technology sectors**, to access global capital.
- The Finance Ministry anticipates that this move will **align Indian companies' valuations with global standards**, enhance foreign investment inflows, unlock growth opportunities, and diversify the investor base.
- **Flexibility for Public Indian Companies:**
  - Under this initiative, **public Indian companies gain the flexibility** to raise capital in both domestic and international markets.
  - They **can leverage domestic exchanges** to raise capital in rupees and the IFSC international market to raise capital in foreign currency from global investors.
- **Strategic Benefits and Outlook:**
  - The government envisions that this initiative will **particularly benefit Indian companies with global ambitions**, fostering expansion into other markets.
  - Additionally, it is expected to **boost the capital market ecosystem at GIFT-IFSC** by introducing new investment opportunities, diversifying financial products, and enhancing liquidity.

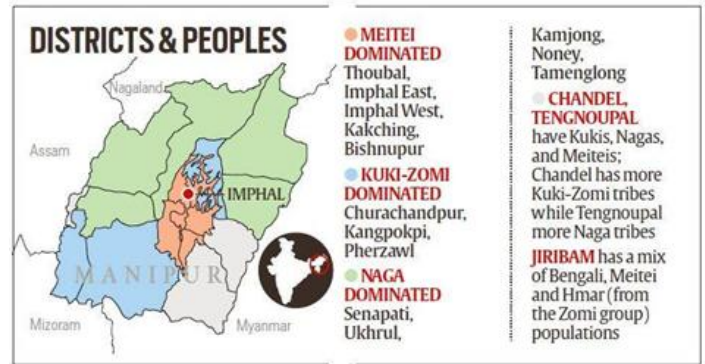
#### 4. Arambai Tenggol

##### Recent events of importance

- **Why in News:**
  - Almost all the Meitei MLAs as well as Lok Sabha and Rajya Sabha MPs representing valley areas of Manipur were at Kangla Fort of Imphal to meet the leaders of radical Meitei group Arambai Tenggol.
  - The development came after Arambai Tenggol issued “summons” to all the ministers and MLAs belonging to the valley districts.
- **Who are the Arambai Tenggol Group?**
  - According to sources, Arambai Tenggol **started in 2020 as a cultural outfit**, but soon transformed into a radical organisation.
  - **It is one of the two hardline Meitei organisations** (the other group is Meitei Leepun) suspected to be involved in a large number of Meitei-Kuki clashes, which broke out in May 2023.
  - Both the organisation had **armed themselves and their membership grew rapidly** during the conflict.
    - **They have been accused** by the Kuki groups and the security establishment of **playing a leading role in the violence**.
  - **Arambai Tenggol** has also been accused of targeting Naga community members.
    - The organisation was also suspected to be involved in a gunfight with a unit of Assam Rifles just before the Union Home Minister visited Manipur in June 2023.
- **Why did the Group ‘Summon’ Manipur’s Political Representatives?**
  - The meeting was organised **to discuss the demands of Arambai Tenggol**.
  - **The demands included –**
    - Delisting of Kukis from the Scheduled Tribes list,
    - Deportation of refugees to camps in Mizoram,
    - Border fencing,
    - Replacement of Assam Rifles with other paramilitary forces and
    - Revoking Suspension of Operations (SoO) agreement between the Centre and Kuki militant groups.
  - Subsequently, Arambai Tenggol leader Korounganba Khuman addressed a large gathering.
    - He claimed that the representatives (including Manipur CM N Biren Singh who was not present) were made to sign a set of demands and told to pressure the Central government to translate them into action.



- While Arambai Tenggol maintained a shadowy presence at the beginning of the conflict, **these developments showcased the strength and legitimacy of the group.**
- Major Communities Residing in Manipur:**
  - The State is like a football stadium with the Imphal Valley representing the playfield at the centre and the surrounding hills the galleries.
  - The valley, which comprises about 10% of Manipur's landmass, is **dominated by the non-tribal Meitei**. This area yields 40 of the State's 60 MLAs.
  - The hills comprising 90% of the geographical area are inhabited by more than **35% recognised tribes**. This area sends only 20 MLAs to the Assembly.
- What's Behind the Violence in Manipur?**
  - The recent protests were triggered by the Manipur HC's direction to the State to pursue a 10-year-old recommendation to **grant Scheduled Tribe (ST) status to the non-tribal Meitei community**.
  - The Court's order has brought the **historical tensions** between the valley-dwelling Meitei community and the state's hill tribes (like the Kukis) to a boil.



## 5. Turkey's parliament approves Sweden's NATO membership

### GS 2 (International Relations)

- Why in News:**
  - Sweden's attempt to join NATO cleared a major hurdle after Turkey's parliament supported its membership.
  - For a new country to join the North Atlantic Treaty Organization (NATO), all the existing members have to approve it.
  - Turkey and Hungary had been opposing Sweden's entry for almost the past two years.
- North Atlantic Treaty Organization (NATO)**
  - About**
    - Formed in 1949 with the signing of the Washington Treaty, NATO is a security alliance of 31 countries from North America and Europe.
      - In April 2023, **Finland joined the alliance as its 31<sup>st</sup> member.**
    - NATO's fundamental goal is to safeguard the Allies' freedom and security by political and military means.
    - It is a **system of collective defence** where independent member states agree for mutual defence in case of any attack by external party.
      - Article 5** of the Washington Treaty states that an attack against one Ally is an attack against all. This article forms the core of the Alliance, a promise of collective defense.
    - Headquarter** - Brussels, Belgium.
  - Functions**
    - Political**
      - NATO promotes democratic values and enables members to consult and cooperate on defence and security-related issues to solve problems, build trust and, in the long run, prevent conflict.
    - Military**
      - NATO is committed to the peaceful resolution of disputes.
      - If diplomatic efforts fail, it has the military power to undertake crisis-management operations.
  - News Summary:**
    - On January 23, Turkey's parliament voted to approve Sweden's membership bid to join NATO.
    - The vote ended a 20-month delay that frustrated Turkey's Western allies.
  - Why does Sweden want to join NATO?**

### WHY TURKEY HAS FINALLY BACKED SWEDEN'S NATO MEMBERSHIP BID

SWEDEN'S ATTEMPT to join NATO cleared a major hurdle Tuesday after Turkey's parliament supported its membership. For a new country to join the North Atlantic Treaty Organization (NATO), all existing members have to approve it. Turkey and Hungary had been opposing Sweden's entry for almost the past two years.

#### Why does Sweden want to join NATO?

Sweden has not fought a war in two centuries, preferring to remain neutral. However, this neutrality had to be abandoned after Russia invaded Ukraine, and both Sweden and Finland applied for NATO membership in 2022.

Once a country is a NATO member, an attack on its territory is considered an attack on the US-led alliance.

While Finland's bid was cleared, Sweden ran into stiff opposition from Turkey's President Recep Tayyip Erdogan and Hungary's Prime Minister Viktor Orban.

#### Why did Turkey change its mind?

Turkey had accused Sweden of going soft on groups it sees as terrorists, such as the Kurdish militant outfit the Kurdistan Workers' Party (PKK). Quran-bur-

ning protests in Sweden, which its government says are protected under freedom of speech laws, further soured its relationship with Turkey.

When Turkish legislators cleared Sweden's bid, Fuat Oktay, a senior member of Erdogan's party, told parliament that Sweden had tightened its anti-terrorism laws, cracked down on the PKK's activities, and lifted restrictions on arms sales to Turkey, AP reported. Sweden has also said it will support Turkey's EU membership bid.

Erdogan had also linked Turkey's support to Sweden with the US agreeing to sell 40 F-16 fighter jets to Ankara. While the US had not said the deal would depend on Turkey's Sweden actions, the sale is expected to go through now.

#### What will Sweden bring to NATO?

Once Sweden becomes a member, almost all of the Baltic Sea coastline, except that in Russia's control, will become NATO territory. This will provide the alliance strategic bases close to Russia, and make it easier to defend assets in the sea. Sweden's military, though numerically small, is modern and experienced in past NATO missions. It has advanced aircraft and submarine capabilities.

YASHEE

- Sweden has not fought a war in two centuries, staying neutral through the two World Wars and the Cold War.
- In recent years, while it joined the European Union and collaborated with NATO, it showed no intention of actually joining the military alliance.
- However, this neutrality had to be abandoned after Russia invaded Ukraine.
  - With public opinion increasingly in favour of joining NATO, both Sweden and Finland applied for membership in 2022.
  - While Finland's bid was cleared, Sweden ran into stiff opposition from Turkey and Hungary.
- **Why was Turkey opposing Sweden's bid?**
  - **Support to Kurdish militant outfit**
    - Turkey had accused Sweden of going soft on groups it sees as terrorists, such as the Kurdish militant outfit.
  - **Quran-burning protests held in Sweden**
    - The government says that it is protected under freedom of speech laws. This further soured its relationship with Turkey.
  - **US agreeing to sell 40 F-16 fighter jets to Ankara**
    - Experts also linked Turkey's support to Sweden with the US agreeing to sell 40 F-16 fighter jets to Ankara (capital of Turkey)
    - While the US had not said the deal would depend on Turkey's Sweden actions, the sale is expected to go through now.
- **What will Sweden bring to NATO?**
  - Once Sweden becomes a member, almost all of the Baltic Sea coastline, except that in Russia's control, will become NATO territory.
  - This will provide the alliance strategic bases close to Russia, make supply lines more streamlined, and make it easier to defend assets in the sea.
  - Sweden's military, though numerically small, is modern and experienced in past NATO missions. Importantly, it has advanced aircraft and submarine capabilities.

## 6. National Voters' Day

### Recent events of importance

- **Why in News:** Election Commission of India is celebrating 14th National Voters' Day (NVD) on 25th January 2024.
- **About National Voters' Day (NVD):**
  - It has been celebrated on **January 25 every year since 2011**, across the country to mark the foundation day of the **Election Commission of India**, i.e. 25th January 1950.
  - **Purpose:** The main purpose of the NVD celebration is to create **electoral awareness** amongst citizens and encourage them to participate in the electoral process.
  - Dedicated to the voters of the country, the National Voters' Day is also used to facilitate enrolment of voters, especially the newly eligible young voters.
  - New voters are felicitated and handed over their **Elector Photo Identity Card (EPIC)** in the NVD functions held across the country.
  - NVD is celebrated at the national, state, district, constituency and polling booth levels, which makes it one of the largest celebrations in the country.
  - NVD 2024 theme - '**Nothing Like Voting, I Vote For sure**'
  - On January 25, 2024, the Election Commission of India celebrates its **75th year of service** to the Nation.
- **Key facts about the Election Commission of India:**
  - It is an autonomous and **permanent constitutional body** responsible for organising free and fair elections in India.
  - The Constitution grants the ECI with the power of **direction, superintendence**, and control of elections to Parliament, state legislatures, the office of president of India, and the office of vice-president of India.
  - **Powers and responsibilities ECI:**
    - Determining the Electoral Constituencies' territorial areas throughout the country.
    - Preparing and periodically revising electoral rolls and registering all eligible voters.
    - **Notifying the schedules** and dates of elections and scrutinising nomination papers.

- **Granting recognition** to the various political parties and allocating them election symbols.
- The Commission also has **advisory jurisdiction** in the matter of post-election disqualification of sitting members of Parliament and State Legislatures.
- It issues the **Model Code of Conduct** in elections for political parties and candidates so that no one indulges in unfair practice or there is no arbitrary abuse of powers by those in power.
- **Composition:** The commission consists of a **Chief Election Commissioner (CEC)** and two Election Commissioners (ECs).

## 7. The issue of expansion of BSF jurisdiction

### GS 2 (Security)

#### • Why in News:

- The Supreme Court is set to hear the dispute over the expansion of the Border Security Force (BSF) jurisdiction in Punjab.
- In October 2021, the Ministry of Home Affairs issued a notification expanding the jurisdiction of the BSF in Punjab, West Bengal and Assam.
- This was challenged by the Punjab government the following December.

#### • Border Security Force (BSF)

##### ○ About

- It is one of the seven Central Armed Police Forces (CAPF) of India and was raised in December 1965.
  - It was raised in the wake of the 1965 War to ensure the security of the borders of India.
- It is the only CAPF which has its own Water Wing, Air Wing and other ancillary units.
- The Force Headquarters is in New Delhi.
- It works under the **administrative control of Ministry of Home Affairs**.
- Its operational responsibility is spread over 6,386.36 km of International Border with Pakistan and Bangladesh.

##### ○ Operations:

##### ▪ Peace Time Role

- Prevent trans-border crimes, unauthorized entry into or exit from the territory of India.
- Prevent smuggling and any other illegal activity.

##### ▪ War Time Role

- Protection of vital installations particularly air-fields
- Limited aggressive action against Para military or irregular forces of the enemy within the overall plan of the Armed forces
- Assistance in control of refugees

##### ▪ Overseas Deployment:

- BSF contributes its personnel every year for UN Missions.
- It is handling the security issues on the famous Kartarpur Corridor.

##### ▪ Other roles

- It is also deployed on Line of Control (LoC) in J&K under the Operational control of the Army.
- At the time of natural disaster/calamities, BSF provides assistance in areas of deployment such as:
  - Kashmir flood in 2014,
  - Kerala flood in 2018 and
  - Kedarnath Tragedy in 2013.

##### ▪ Power to arrest, search and seize

- BSF is empowered to arrest, search and seize under a number of laws, such as the Criminal Procedure Code, the Passports Act 1967, the Passport (Entry into India) Act 1920, and the NDPS Act, to name a few.

#### • Background: Expansion of the jurisdiction of BSF

- Earlier, the BSF could exercise its powers within 15 kilometres of the border in Punjab, West Bengal and Assam.

### BSF jurisdiction extended: why Punjab moved SC

AJOY SINHA KARPURAM  
NEW DELHI, JANUARY 24

THE MINISTRY of Home Affairs, in October 2021, issued a notification expanding the jurisdiction of the Border Security Force (BSF) in Punjab, West Bengal and Assam. This was challenged by the Punjab government in December 2022. Now, the Supreme Court will hear this case next week.

#### Why was BSF's jurisdiction extended?

The Border Security Force Act, which gave birth to the BSF, was enacted in 1968. The Act empowered the BSF to arrest, search, and seize under different laws, to secure India's borders. Section 139(1) of the BSF Act allows the Centre to designate an area "within the local limits of such area adjoining the borders of India" where members of the BSF can exercise their powers.

The 2021 notification increased this area

from 15 to 50 km of the border in Assam, Punjab, and West Bengal. The notification stated that within this 50 km jurisdiction, the BSF can only exercise powers under the Criminal Procedure Code, the Passport (Entry into India) Act, and the Passports Act. For other central legislations, the 15-km limit remains.

Minister of State for Home Affairs Nityanand Rai in 2021 said the expansion was in response to the increased use of Unmanned Aerial Vehicles (UAVs) with long-range capabilities, for surveillance, and smuggling of arms and fake currency. He also highlighted the "menace of cattle smuggling", saying smugglers often seek refuge outside BSF jurisdiction.

Solicitor General Tushar Mehta said the move made the BSF jurisdiction uniform across states, as the 50-km limit was already in place in Rajasthan. The same notification reduced the BSF jurisdiction in Gujarat from 80 km to 50 km.

#### Why did Punjab challenge this move?

Punjab filed an original suit against the Centre in the Supreme Court in December 2021. The apex court has 'original jurisdiction' in disputes between the Centre and states under Article 131 of the Constitution, which means cases of this kind can only be heard for the first time at the Supreme Court "to the exclusion of any other court".

The Punjab government claimed that expanding the jurisdiction of the BSF would compromise the state's exclusive powers to legislate on matters involving the police and public order. These powers are provided in Entries 1 and 2 of the State List under Article 246 of the Constitution. It also said the notification was issued without consulting the states concerned.

Arguing before the top court in December 2023, Shadab Farasat, Additional Advocate General for the state of Punjab, said a large number of cities and towns in Punjab would

fall within this 50-km jurisdiction, unlike states like Gujarat and Rajasthan, where areas along the international border are less populated. While there was pushback in West Bengal against the move, no other state initiated legal proceedings like Punjab.

#### What are the issues that SC will consider?

The court will decide if the notification expanding the jurisdiction of the BSF was arbitrary or backed by legitimate reasons. It will also determine if the notification interferes with the powers of the local police and encroaches upon states' powers.

The court will determine what factors should be considered when deciding which areas are "within the local limits of such area adjoining the borders of India" and whether all states must be treated alike when determining these local limits.

Finally, the court will decide if the notification can be challenged through an original suit under Article 131 of the Constitution.

**EXPLAINED  
LAW**

- Later, through a notification issued in October 2021, the Centre expanded this to within 50 kilometres of the border.
  - The notification states that, within this larger 50-kilometre jurisdiction, **the BSF can only exercise powers under the Criminal Procedure Code, the Passport (Entry into India) Act and the Passports Act.**
- For other central legislations, the 15-km limit remains.
- **From which law the Centre draws its authority to take such step?**
  - **Section 139 of the Border Security Force Act, 1968**, empowers the Centre to notify the area and extent of border force's operational mandate.
    - Every order (notification) made under Section 139 of this act must be subsequently laid before each house of Parliament.
  - Using this act, Centre issues notification revising the 'Schedule' specifying the border stretch where BSF would have powers of search, seizure and arrest.
- **Need for such step**
  - **To improve operational efficiency and crack down on smuggling rackets**
    - Punjab has the problem of drugs and arms smuggling. Similarly, Assam and West Bengal face the issue of cattle and fake currency smuggling.
    - These borders are also prone to illegal migration.
  - **To counter the security challenges**
    - This expansion was in response to the increased use of drones and Unmanned Aerial Vehicles.
    - These technologies have long-range capabilities and enable surveillance and the smuggling of arms and fake currency.
  - **To make jurisdiction of BSF uniform across states**
    - The notification makes the BSF jurisdiction uniform across states, as the 50-kilometre limit was already in place in Rajasthan.
    - The same notification reduced the jurisdiction in Gujarat from 80 km to 50 km.
- **News Summary:**
  - The state of Punjab filed an original suit against the central government in the Supreme Court in December 2021 against the expansion of the jurisdiction of the BSF.
  - The Supreme Court has original jurisdiction in disputes between the central government and states under **Article 131 of the Constitution.**
  - This means cases of this kind can only be heard for the first time at the SC to the exclusion of any other court
  - The Punjab govt claimed that expanding the jurisdiction would compromise the state's exclusive powers to legislate on matters involving the police and public order
    - These powers are provided in Entries 1 and 2 of the State List under Article 246 of the Constitution.
  - They also claimed that the notification was issued without consulting with any of the states concerned.

## 8. Halwa Ceremony

### Recent events of importance

- **Why in News:** The Union Finance Minister participated in the 'Halwa Ceremony' recently, a tradition observed before the annual budget presentation.
- **About Halwa Ceremony:**
  - It is a tradition performed **every year ahead of the budget** and signifies the **official initiation of the printing process** of various documents **related to the budget.**
  - It involves the preparation of the traditional **dessert 'halwa'** in a massive kadhai (wok), which is then **served to all those who are directly associated with the budget-making process.**
    - The **finance minister gives the go-ahead** by stirring the kadhai and serving the sweet to officials.
    - It takes place in the **basement of the Finance Ministry's North Block in Central Delhi**, where a **special printing press is located.**
  - It serves as a **formal 'send-off' for the ministry officials** and staff engaged in preparing the Union government's annual financial statement.

- Subsequently, the **top officials** involved with the budget **enter a designated 'lock-in' period**, isolating **themselves** within the ministry premises and cutting off from their families **to preserve the confidentiality surrounding the final budget document**.
- The **officials are required to stay** in the Finance Ministry **till the finance minister finally presents the budget**.



27<sup>th</sup> Jan, 2024

## 1. India and France deepen ties

### GS 2 (International Relations)

#### • Why in News:

- French President Emmanuel Macron visited India as the Chief Guest for the 75th Republic Day celebrations.
- During this visit, India and France made significant decisions with the primary focus on enhancing collaboration in the defence sector.

#### • Indo-France Bilateral Relations:

- Since the establishment of diplomatic ties in 1948, India and France have enjoyed 75 years of close and friendly relations.
- In 1998, India and France elevated their diplomatic relationship to **Strategic Partnership** which completed 25 years in January, 2023.
- This Strategic Partnership, **first for France outside the EU**, has been instrumental in the comprehensive growth of India-France relationship.

#### • Key Pillars of India-France Cooperation:

- Defence Cooperation:** The Agreement on Defence Cooperation signed in 2006 and renewed for another 10 years in 2016 gives the framework for all defence cooperation activities between India and France.
  - A DRDO office was opened in the Embassy in 2023 for strengthening technology cooperation.
  - The procurement of Rafale jets as part of India's air power is a testament to the deep defence ties.
- Space Cooperation:** ISRO and the French Space Agency, CNES have been carrying on various joint research programmes and collaborating in satellite launches.
  - For example**, on 22 June 2022, **GSAT-24** communication satellite of New Space India Ltd (NSIL) was successfully launched on-board Ariane-5 from Kourou, French Guiana.
- Civil Nuclear Cooperation:** An agreement on civil nuclear cooperation was signed between India and France in 2008.
  - France is involved in the construction of the Jaitapur Nuclear Power Project. However, the progress here has been slow (the first pact was agreed in 2008).
  - The two sides have also agreed to establish a partnership on Small Modular Reactors (SMR) and Advanced Modular Reactors (AMR).
- Economic Cooperation:** They have important bilateral investments and trade and commercial cooperation, particularly in sectors involving **IT corridors, smart-cities, railways, capital and trade exchanges, skill development, etc.**
  - Bilateral trade reached an impressive **\$13.4 Bn in 2022-23**, marking a significant 7.72% increase from the previous year.
  - France has emerged as the **11th largest investor in India**, with FDI inflow of \$10.5 Bn from April 2000 to March 2023.
- Digital Cooperation:** India-France Roadmap on Cyber security and Digital Technologies was one of the outcomes of the visit of the PM of India to France in 2019.
  - In July 2023, Unified Payments Interface (UPI) was launched from the Eiffel Tower, offering secure and convenient transactions for Indian visitors and NRIs.
- Culture and Tourism Cooperation:** There are many Indo-French cultural associations which organise various events across France.
  - For example**, the Government of India organised '**Namaste France**' cultural festival in several cities of France in 2016.
- Marine and Maritime Cooperation:** Indo-French Maritime Cooperation is based on the India-France Roadmap on **Blue Economy and Ocean Governance** adopted in 2022.
- Community in France:** The Indian community, including NRIs in mainland France number around 109,000, largely originating from French enclaves of **Puducherry, Karaikal, Yanam, Mahe and Chandernagore.**

## India-France defence ties take a bigger leap

Defence industrial road map among key agreements signed; it envisages future collaboration in 'co-design, co-development' of military hardware

Suhasini Haider  
Dinakar Peri  
NEW DELHI

India and France have announced a "defence industrial road map" for cooperation on defence production, future collaboration on "co-design and co-development" of military hardware, as well as key agreements on space cooperation, officials said. The road map was part of a number of agreements between the two countries that were sealed during talks between Prime Minister Narendra Modi and French President Emmanuel Macron in Jaipur on Thursday, that will also bring some parity with the India-U.S. defence production plan finalised last year. However, differences over some of the language on the road map held up a



Narendra Modi and Emmanuel Macron during the Republic Day parade in New Delhi. PTI

"joint statement" between them for several hours on Friday before it was released. Mr. Macron was in Delhi as part of a short 30-hour visit to India, and was accompanied by a delegation of 40 officials, including his new Minister for Foreign Affairs, Stéphane Séjourné, and Ministers of Defence and Culture.

The two sides also signed a new agreement for a defence-space partnership that will see them collaborate on "space situational awareness", and an MoU on coordinating on satellite launches, along with other agreements on partnerships in energy, digital health, agriculture, and education.

While the two countries did not announce any progress on negotiations for the big-ticket government-to-government deals on fighter jets, engines and submarines that were announced during Mr. Modi's visit to Paris last July, officials said that at least one joint venture for the local manufacture of civilian helicopters was agreed between Airbus and TATA.

CONTINUED ON  
PAGE 10

- **Key outcomes of the visit**
  - **Roadmap for India-France Defence Industrial Partnership**
    - The main goal of this roadmap is to find areas to work together on making military equipment.
    - This includes designing, developing, and producing things together, as well as creating supply chains for defence goods between the two countries.
    - It aims to foster collaboration in cutting-edge technologies, including robotics, artificial intelligence (AI), autonomous vehicles, platforms, and cyber defence.
    - The defence roadmap will cover both **air and space technologies, maritime technology, including underwater domain awareness.**
  - **Defence-space partnership**
    - The two sides also signed a new agreement for a defence-space partnership that will see them collaborate on space situational awareness.
  - **Airbus-TATA chopper deal**
    - Tata and Airbus Helicopters have entered into an industrial partnership for the production of H125 helicopters, fostering collaboration in the defence sector.
    - Two mega multi-billion-dollar defence deals in the pipeline between the two countries are currently in the cost negotiation phase. These are:
      - i. The 26 Rafale-M fighter jets for the Indian Navy's aircraft carriers, and
      - ii. Three additional Scorpene-class conventional submarines.
  - **Cooperation in satellite launches**
    - An MoU was sealed between New Space India Ltd and France's Arianespace, signifying cooperation in satellite launches and advancing space exploration initiatives.
  - **Introduction of the Young Professional Scheme**
    - The scheme facilitates:
      - i. the exchange of individuals between 18-35 years of age, and
      - ii. extension of visa validity to five years for Schengen visas for Indian students pursuing master's degrees in France.
    - **Other areas of cooperation**
      - Both sides also agreed on cooperation in healthcare, which would include education, training and research, and the use of AI in healthcare.
  - **Key announcements made during the visit**
    - Year 2026 as the India France Year of Innovation.
    - Operationalization of UPI at Eiffel Tower.
    - Setting up of a Solar Academy in Senegal under the STAR-C program of International Solar Alliance (ISA).
      - STAR-C programme aims to boost solar power ecosystems in the poorest countries.
      - The initiative is run by ISA in partnership with the United Nations Industrial Development Organisation (UNIDO).
    - Establishment of India's Consulate in Marseille and French Bureau de France in Hyderabad

## 2. India's First Private Helicopter Assembly Line

### GS 3 (Economy)

- **Why in News:** In a significant development coinciding with French President Emmanuel Macron's visit to India, Airbus Helicopters and the Tata Group have unveiled plans to collaboratively set up India's maiden private-sector helicopter assembly line.
- **Aims:** The venture, marked by the establishment of a **Final Assembly Line (FAL)**, aims to manufacture Airbus' highly sought-after **H125 single-engine civil helicopter**, catering to both the Indian market and neighboring countries.
- **Recent Aircraft production deals by TATA:**
  - This groundbreaking initiative follows the footsteps of the Airbus-Tata collaboration to construct a Final Assembly Line in **Vadodara for the C-295**

## Airbus, Tata to set up India's first private copter assembly line

The Final Assembly Line will produce Airbus' best-selling H125 civil helicopter for India and for export to neighboring countries.

**Final Assembly Line**  
New Delhi

In the backdrop of French President Emmanuel Macron's visit to India, Airbus Helicopters has announced that it is partnering with the Tata Group to establish a Final Assembly Line (FAL) for civil helicopters in the country, making it India's first helicopter assembly facility in the private sector. Under this partnership, the FAL will produce Airbus' best-selling H125 single-engine civil helicopter for India and export to some of the neighbouring countries, the company said.

Under this partnership, Tata Advanced Systems Limited, a subsidiary of Tata Group, will set up the facility along with Airbus Helicopters. Airbus and Tata are already setting up a C-295 military transport aircraft as part of a contract to supply 56 aircraft to the Indian Air Force.

The announcement was made during the two-day visit of French President Emmanuel Macron to India as Chief Guest at the Republic Day celebrations.

The FAL in Vadodra will undertake the integration of the major component assemblies, avionics and mission systems, installation of electrical harness-

es, hydraulic circuits, flight controls, dynamic components, fuel system and the engine," Airbus said in a statement. "It will also deliver, qualification, and delivery of the H125 to customers in India and the region."

The FAL will take 24 months to set up, and deliveries of the first 'made in India' H125s are expected to commence in 2026, it stated. "The location of the FAL will be jointly decided by Airbus and the Tata Group," Airbus added.

The H125 is the world's best-selling single-engine helicopter that caters to other helicopters in its category, according to Airbus.

ECarevill family, which has accumulated more than 38 million flight hours. It can operate in high-and-hot and extreme environments, including aerial work, firefighting, law enforcement, rescue, air ambulance, passenger transport, and heavy lifting, Airbus said. "The H125 is the only helicopter to have landed on Mount Everest, demonstrating its ability in operating in high altitude, extreme environments."

"The H125 is the only helicopter to have landed on Mount Everest, demonstrating its ability in operating in high altitude, extreme environments."

Airbus currently does \$750 million worth of sourcing from India every year to its global supply chain and this is expected to go up to \$1.5 billion per year by 2026, company officials said.



Head in clouds: The H125 is a single-engine helicopter that outclasses other helicopters in its category, according to Airbus.

**military transport aircraft**, part of a substantial contract to supply 56 aircraft to the Indian Air Force.

- **Partnership Dynamics:**

- Under this **strategic partnership**, Tata Advanced Systems Limited (TASL), a Tata Group subsidiary, will be at the forefront of establishing the helicopter assembly facility in collaboration with Airbus Helicopters.
- The venture is poised to fortify the aerospace ties between India and France, providing an **impetus to indigenous helicopter production capabilities**.
- Final Assembly Line in India will oversee the **comprehensive integration of major component assemblies, avionics, and mission systems**.
- Additionally, it will be responsible for intricate tasks such as the installation of **electrical harnesses, hydraulic circuits, flight controls, dynamic components, fuel systems, and the engine**.
- The facility will also conduct rigorous testing, qualification, and ultimately, deliver the '**Made in India**' H125 helicopters to customers in India and the surrounding region.

- **Timeline and Deliveries:**

- The FAL is slated to commence deliveries of the **first H125 helicopters by 2026**.
- Location is yet to be finalized.

- **Significance of the H125 Helicopter:**

- The H125, recognized as the **world's best-selling single-engine helicopter**, belongs to Airbus' Ecureuil family, boasting over 38 million flight hours globally.
- Its versatility is highlighted by its ability to operate in challenging conditions, **including high-and-hot environments**.
- The helicopter's adaptability makes it suitable for **a range of missions, from aerial work and firefighting to law enforcement, rescue operations, air ambulance services**, and passenger transport.

- **Economic Impact:**

- Airbus, currently sourcing \$750 million annually from India for its global supply chain, envisions this **figure to surge to \$1.5 billion per year by 2026.**
- The venture not only signifies a boost to India's aerospace sector but also holds **promising economic implications, fostering growth and collaboration in the dynamic aviation industry.**

### **3. Kashi Vishwanath-Gyanvapi Mosque Matter: ASI Report says Temple Existed at the Site of Gyanvapi Mosque**

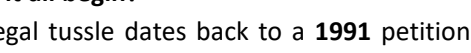
### Recent events of importance

- **Why in News:** The Archaeological Survey of India (ASI) in its scientific survey report on the Gyanvapi mosque complex has concluded that “there existed a Hindu temple prior to the construction of the existing structure” at the site.

- **Background of the Kashi Vishwanath-Gyanvapi Mosque Matter:**

- ### How did it all begin?

  - The legal tussle dates back to a **1991** petition filed in Varanasi district court, seeking the restoration of Gyanvapi land to the Kashi Vishwanath temple.
  - The claim was that the mosque was constructed under the orders of Aurangzeb, who **allegedly tore down a part of the temple in the 16th century**.



**Case revived:**

  - In 2019, a petition was filed (in Varanasi district court) after the SC's **Babri Masjid-Ram Janmabhoomi dispute verdict**.



- The court directed the **ASI to conduct a scientific survey**, sparking a series of legal actions and reactions.
- **For example**, in 2021, the Allahabad HC put a halt to proceedings in the Varanasi court, emphasising **the Places of Worship Act 1991**.
- The Act prevents changes in the religious character of a place of worship as of August 15, 1947.
- **Recent update:**
  - The ASI was tasked by the Varanasi district court in July 2023 to conduct a scientific survey of the mosque and ascertain if it was “constructed over a pre-existing structure of a Hindu temple”.
  - This faced a temporary pause from the SC and the ASI initiated the survey in August 2023.
- **Key Highlights of the ASI Report:**
  - **The pre-existing structure was probably destroyed in the 17th century, during the reign of Aurangzeb.**
    - A loose stone with an inscription engraved on it recorded the construction of the mosque during the reign of Mughal Emperor Aurangzeb between the years **1676 and 1677**.
    - According to **Maasir-i-Alamgiri** (1947) by Sir Jadunath Sarkar, the pre-existing structure was destroyed after Aurangzeb issued orders to the governors of all provinces to demolish the schools and temples of the infidels.
    - According to the Emperor’s command his officers had **demolished the temple of Vishwanath at Kashi on September 2, 1669**.
  - **Inscriptions in Devanagari, Grantha, Telugu and Kannada scripts with names of deities found.**
    - During the survey, a total of 34 inscriptions were recorded.
    - These are inscriptions on the stones of the pre-existing Hindu temples, which have been **re-used during the construction/ repair of the existing structure**.
    - The report added that names of deities like Janardhana (another name of Vishnu), Rudra (another name of Shiva), and “Umesvara” were found in the inscriptions.
    - Terms such as **Maha-muktimandapa** (while mukti means freedom, mandapa means platform) mentioned in three inscriptions are of great significance.
  - **Parts of the pre-existing temple were mutilated for reuse.**
    - **Vyala**(a Hindu mythological creature) figures carved on either side of the lotus medallion were mutilated for reuse, and the area between the corners decorated with floral design after the stone mass was removed.
  - **The central chamber and main entrance of the pre-existing structure are part of the existing structure.**
    - According to the report, the pre-existing temple had one big central chamber and at least one chamber to the north, south, east, and west respectively.
    - **The central chamber now forms the central hall of the existing structure.**
    - Meanwhile, the main entrance to the central chamber which was from the west is now blocked by stone masonry.
    - The entrance used to be decorated with carvings of animals and birds and an ornamental **torana** (a gateway).
  - **Sculptural remains in cellars indicate that there existed a large Hindu temple.**
    - The report noted that pillars from the pre-existing temple were reused to make cellars in the eastern part of the platform to accommodate a large number of people for prayers.
    - Moreover, sculptures of Hindu deities and carved architectural members were found under the dumped soil in one of the cellars.
- **Key Takeaways from the ASI Report:**
  - The Gyanvapi Masjid case continues to **unfold as a complicated legal battle** with deep historical and religious implications.
  - **The recent decision** by the Varanasi court to disclose the ASI report is **a significant step toward transparency in resolving this long-standing dispute**.
  - While the Opposition maintained silence on the matter, the RSS and BJP indicated they were in no hurry to get into the issue and would **wait for courts to take the lead on the matter**.
  - According to an RSS functionary, the Sangh had to take up the **Ayodhya Ram temple** issue in the 1980s as a **mobilisational issue so as to reach out to people and get our concerns into the mainstream debate**.
    - At that time, **society was not alive to these concerns**, like it is today. **Now**, it is society that has taken up all these cultural concerns as collective concerns.

## 4. ICJ orders Israel to prevent genocidal acts in Gaza

### GS 2 (International Relations)

#### • Why in News:

- The International Court of Justice (ICJ) ordered that Israel must take all measures within its power to prevent all acts within the scope of the Genocide Convention.
  - The court was ruling on the nine provisional measures requested by South Africa in its genocide claim against Israel.
- The court did not agree to South Africa's request for an immediate ceasefire in Gaza.
- However, it directed Israel to allow the entry of basic services and humanitarian assistance into the Palestinian enclave.

#### • International Court of Justice (ICJ)?

##### ○ About

- The ICJ is the principal judicial organ of the United Nations (UN).
- It was established in June 1945 by the Charter of the United Nations and began work in April 1946.
- The seat of the Court is at the **Peace Palace in The Hague** (Netherlands).
  - It is the only one of the six principal organs of the UN that is not located in New York City.
- **English and French** are the ICJ's official languages.

##### ○ Role

- The role of ICJ is:
  - to settle, in accordance with international law, legal disputes submitted to it by States and
  - to give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies.

##### ○ Judges

- The ICJ has **15 judges** who are elected to **nine-year terms** by the UN General Assembly and Security Council, which vote simultaneously but separately.
- To be elected, a candidate must receive a majority of the votes in both bodies, a requirement that sometimes necessitates multiple rounds of voting.
  - A third of the court is elected every three years and elections are held at the UNHQ in New York during the annual UNGA meeting.
  - The judges elected at the **triennial election** commence their term of office on February 6 of the following year.
- The president and vice-president of the court are elected for three-year terms by secret ballot. **Judges are eligible for re-election.**

##### ○ Members and Jurisdiction

- All members of the UN are automatically parties to the ICJ statute. However, this does not automatically give the ICJ jurisdiction over disputes involving them.
  - The **ICJ gets jurisdiction only if both parties consent to it.**
- The judgment of the **ICJ is final and technically binding** on the parties to a case.
  - There is no provision of appeal. It can at the most, be subject to interpretation or, upon the discovery of a new fact, revision.
- The ICJ has no way to ensure compliance of its orders, and its authority is derived from the willingness of countries to abide by them.

#### • Genocide Convention

##### ○ About

- The **Convention on the Prevention and Punishment of the Crime of Genocide** is an international human rights treaty that codified the crime of genocide for the first time.
- This was the first human rights treaty adopted by the UN General Assembly on December 9, 1948, and has been in effect since January 12, 1951.

COURT KEEPS SOUTH AFRICA'S CASE ON PALESTINIAN RIGHTS ALIVE

## ICJ says Israel must prevent genocide in Gaza, but doesn't call for ceasefire

Demand to halt military action 'justly rejected', says Netanyahu

REUTERS  
THE HAGUE, JANUARY 26

THE WORLD COURT ordered Israel on Friday to prevent acts of genocide against the Palestinians and to ensure they are not at risk of being killed, although it stopped short of ordering a ceasefire as requested by the plaintiff, South Africa.

While the ruling denied Palestinian requests for a ceasefire to halt the war in Gaza, it also represented a legal setback for Israel, which had hoped to win out a case brought under the genocide convention established in the ashes of the Holocaust.

The court found that there was a case to be heard about whether Palestinian rights were being denied as a war it said was causing genocide humanitarian harm. It also called for Palestinian armed groups to release hostages captured in the October 7 attacks.

The Palestinian Foreign Ministry said the decision was a welcome reminder "to state as above the law". Senior Hamas official Sami Abu Zuhri said the decision would contribute to "ending the occupation and eradicating its crimes in Gaza".

Israel's Prime Minister Benjamin Netanyahu said the court had "justly rejected the outrageous demand" to "suspend all of Israel's right to defend itself".

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Displaced Palestinians' tents in Rafah, south Gaza, near the Egypt border. Reuters

## Israeli military says engaged in heavy fighting in heart of Khan Younis city

REUTERS  
GAZA, JANUARY 26

ISRAELI FORCES continued to pound the main southern Gaza city of Khan Younis, from where thousands of Gazans were fleeing to the south.

The Israeli military said on Friday it was engaged in "intense" battles in the heart of Khan Younis, with forces sinking

dozens of Hamas fighters and its ground. It said forces also fired at Hamas targets in northern Gaza and along the Gaza coastline.

Residents said gun battles continued overnight with Israeli forces blowing up buildings and homes in the western part.

Gaza officials said the death toll from the campaign, now in its fourth month, has risen to 26,083, with 183 killed in the

past 24 hours and many more feared trapped under flattened buildings.

The huge assault this week on the city of Khan Younis is one of the heaviest yet, now hitting territory housing hundreds of thousands of thousands of displaced Palestinians.

Israel has blockaded hospitals making it impossible for rescuers to reach the dead and wounded.

- **Genocide acts as per this convention**
  - The Convention defines genocide as five acts:
    - killing members of a group;
    - causing serious bodily or mental harm;
    - inflicting on the group conditions of life calculated to bring about their physical destruction;
    - imposing measures intended to prevent births within a group; and
    - forcibly transferring children of the group to another group — committed with intent to destroy, in whole or in part, a national, ethnic, racial, or religious group.
- **Claim of genocide**
  - There are two elements: the **physical acts** (mentioned above); and **mental act** (specific intent to destroy, in whole or in part a specific group).
  - Committing these **physical acts**, however widespread, is not enough to make a claim of genocide.
  - The **specific intent to destroy is what distinguishes genocide from war crimes**, ethnic cleansing, and crimes against humanity.
  - Also, the commission of war crimes, ethnic cleansing, and crimes against humanity do not provide an avenue for States to approach the ICJ because the court does not have automatic jurisdiction over those crimes.
- **Background of the current verdict by ICJ**
  - Earlier, South Africa brought a case to the **ICJ accusing Israel of committing genocide** in its military response to the 7 October Hamas attack.
  - The South African case included references to the Israeli use of blanket bombing and the cutting of food, water and medicine supplies to Gaza.
    - The ICJ was also asked to **consider whether Israel is committing genocide against the Palestinians in Gaza**.
  - The present order came in response to this case
- **News Summary:**
  - ICJ said Israel must prevent genocidal acts in Gaza and facilitate urgently needed humanitarian aid into the besieged territory.
  - The court urged Israel to refrain from any possible genocidal acts as it presses its military operation in the Gaza Strip, but stopped short of ordering a ceasefire.
  - At this stage, **the ICJ has not considered whether Israel is actually committing genocide in Gaza** — that process will take several years.
- **Challenges ahead**
  - The question now is whether the court's rulings will be obeyed.
  - Although its rulings are legally binding, it has no mechanism to enforce them and they are sometimes completely ignored.
    - E.g., it has ordered Russia to stop its invasion of Ukraine.
- **Impact of the ruling on Israel**
  - PM Benjamin Netanyahu has already hinted Israel would not abide by any ruling saying no one will stop us, not even a verdict in The Hague.
  - But experts believe that **aside from the significant symbolic impact of the ruling, there could be tangible consequences on the ground**.
    - It makes it much harder for other states to continue to support Israel in the face of a neutral third party finding there is a risk of genocide.

## 5. BrahMos

### GS 3 (Science and Tech)

- **Why in News:** India is all set to begin the export of ground systems for the BrahMos supersonic cruise missiles to the Philippines.
- **About BrahMos:**
  - It is a **supersonic cruise missile** that can be launched from land, sea, and air.
  - It has been **developed by Brahmos Aerospace, a joint venture of India and Russia**.

- It is named after the rivers Brahmaputra (India) and Moskva (Russia).
- **Features:**
  - It is a **two-stage missile** with a **solid propellant** booster engine as its **first stage**, which **brings it to supersonic speed** and then gets separated. The **liquid ramjet, or second stage** then takes the missile closer to 3 Mach speed in the cruise phase.
  - It is one of the fastest cruise missiles currently operationally deployed, with a **speed of Mach 2.8**, which is nearly three times more than the speed of sound.
  - It has a **launch weight of 2,200-3,000 kg**.
  - The extended-range variant of the missile can strike land and sea targets at a **maximum range of 400 to 500 kilometers** with supersonic speed all throughout the flight.
  - It **operates on the "Fire and Forgets" principle**, adopting varieties of flights on its way to the target.
  - Its cruising altitude could be up to 15 km, and its **terminal altitude is as low as 10 meters**.
  - It carries a **conventional warhead** weighing 200 to 300 kg.
  - It is equipped with **stealth technology** designed to make it less visible to radar and other detection methods.
  - It has an **inertial navigation system (INS)** for use against ship targets, and an INS/Global Positioning System for use against land targets.

## 6. Houthis

### Recently in News

- **Why in News:** Yemen's Iran-aligned Houthis have stepped up their attacks on commercial vessels transiting the Red Sea.
- **About Houthis:**
  - The Houthis, officially known as **Ansar Allah (Partisans of God)**, are an **armed religious and political movement in Yemen**.
  - **Houthis are Zaydi Shiites**, or Zaydiyyah. **Shiite Muslims** are the **minority community in the Islamic world**, and Zaydis are a minority of Shiites, significantly different in doctrine and beliefs from the Shiites who dominate in Iran, Iraq, and elsewhere.
  - They are a **minority in Yemen, which is predominantly Sunni Muslim**, but they are a significant one, numbering in the hundreds of thousands and making up as much as a **third of the overall population**.
  - Its members **advocate regional autonomy for Zaidis in northern Yemen**.
  - They have been **fighting Yemen's Sunni-majority government since 2004**.
  - The Houthis **took over the Yemeni capital Sanaa in September 2014** and seized control over much of north Yemen by 2016.
  - The Houthi **movement began as an effort to maintain tribal autonomy in northern Yemen and protest Western influence** in the Middle East.
  - Today, the Houthis **seek a greater role in the Yemeni government** and continue to advocate for Zaidi minority interests.
  - The movement is **known for its virulently anti-American and anti-Semitic rhetoric**.
  - Several of the **group's leaders** have been **designated as terrorists by the United States**.

## 7. Armado

### GS 3 (Science and Tech)

- **Why in News:** The new Mahindra Armado recently made its first appearance at the Republic Day Parade.
- **About Armado:**
  - It is **India's first Armoured Light Specialist Vehicle (ALSV)**.
  - It is a fully indigenous vehicle **designed and built by the Mahindra Defence Systems (MDS)** for the Indian armed forces.
  - It can be used in counter-terrorist and special forces operations. It can also be used by quick reaction teams, as a reconnaissance vehicle and for patrolling the borders.

- **Features:**

- It has a **seating capacity of six passengers**, including the driver, and can be configured to seat up to eight.
- Above the standard **1,000 kg load capacity**, the ASLV can carry another 400 kg.
- It gets ballistic protection up to the B7 level and STANAG level-2. This means that **its armour offers protection against armour-piercing rifles**.
- Also, the ASLV **gets protection on all sides**(front, side and rear) **from ballistics** and explosives.
- Powering the 4-wheeler is a 3.2-litre multi-fuel diesel engine that generates 216 hp of maximum power.
- Armado takes just 12 seconds to accelerate from 0 to 60 kmph, and runs at a speed of more than 120 kmph.
- It also gets a self-cleaning-type exhaust scavenging and air filtration system for extreme dusty climate, like deserts.

## **8. PM Young Achievers Scholarship Award Scheme (PM YASASVI)**

### **GS 2 (Governance)**

- **Why in News:** A total of ₹32.44 Crore has been released for Pre-matric Scholarships and ₹387.27 Crore for Post-Matric Scholarships to States/Union Territories (UTs) under the PM YASASVI scheme in 2023.
- **About PM Young Achievers Scholarship Award Scheme (PM YASASVI):**
  - It is a **scholarship scheme for Other Backward Class (OBCs), Economically Backward Class (EBC), and Denotified Nomadic Tribes (DNT) students**.
  - Under this scheme, students can avail of **Pre-Matric Scholarships from Classes 9 to 10** and **Post-Matric Scholarships for their higher education** at the post-matriculation or post-secondary level.
  - **Exceptional students** also have the opportunity to **receive scholarships for top-tier schools and colleges**.
  - Additionally, **hostel facilities are provided for OBC students** through a construction scheme.
  - **Eligibility:**
    - Other Backward Class (OBC), Economically Backward Classes (EBC), and **Denotified, Nomadic, and Semi-Nomadic Tribes (DNT)**
    - **Parents or guardians annual income is not more than Rs. 2.50 Lakhs.**
    - Studying in a Top Class School in Class 9 or 11.
  - These scholarships shall be **available for studies in India only** and will be awarded by the Government of State/Union Territory to which the applicant actually belongs, i.e., permanently settled.
  - **Entitlement: Upto Rs. 75,000 p.a. for Class 9/10, 1,25,000 p.a. for Class 11/12, covering the school tuition fee/hostel fee.**
  - **Implementing Agency: Department of Social Justice and Empowerment, Ministry of Social Justice and Empowerment.**

## GS 2 (Governance)

- **Why in News:** The mandatory implementation of Aadhaar-Based Payment Systems (ABPS) in the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) raises concerns about potential exclusions and violation of rights.
  - **Exclusionary Design and Technological Glitches:**
    - **ABPS Process:** The ABPS requires the seeding of Aadhaar numbers with job cards, linking Aadhaar to bank accounts, and mapping Aadhaar through a software mapper.
    - **Potential Errors and Exclusion:** Errors in any step can lead to denial of work, wage non-payment, or funds directed to the wrong account.
    - **Worker's Hardship:** Workers face financial losses and spend significant time rectifying technological glitches, challenging the government's claims of efficiency gains.
  - **Government Claims vs. Reality:**
    - **Efficiency Claims:** The government asserts that ABPS would eliminate duplicate job cards, reduce payment delays, and lower rejections. However, research papers question the validity of these claims.
    - **Deletion Issues:** Job card deletions have surged by 247% in FY 2022–23, raising concerns about the accuracy and motives behind the deletions.
    - **Lack of Audit:** No publicly available audits on the procedures followed for deleting job cards.
  - **Misrepresentation of Research Findings:**
    - **ABPS Efficiency:** The Ministry misrepresents a study by LibTech, claiming endorsement of ABPS. However, the study, based on a sample of 3.2 crore transactions, finds no statistically significant difference in efficiency between ABPS and account-based payments.
    - **Rejection Rates:** Contrary to government claims, the research paper shows no statistically significant difference in rejection rates between ABPS and account-based payments.
    - **Advocacy for Account-Based Payments:** The difficulties in resolving problems with ABPS outweigh the challenges in account-based payments, leading to the advocacy for the latter.
- Aadhaar-based pay a bad idea for MGNREGS**

On January 10, the Rural Development Ministry issued a questionnaire regarding the impact of ABPS. Keeping the trade of Mahatma Gandhi NREGS, this 20-page report is also a very significant gain for the Ministry.

The paper, titled "Aadhaar-based payment system: A bad idea for MGNREGS," was released by the Ministry of Rural Development. It contains a detailed analysis of the impact of ABPS on the scheme, highlighting the various challenges faced by workers and the government.

The paper states that the Ministry has taken cognizance of the fact that the current system of payment through ABPS is facing several issues, which are causing hardship to the workers. It also mentions that the Ministry has been receiving numerous complaints from the workers regarding the delay in payment and the rejection of their applications.

The paper further states that the Ministry has conducted a thorough investigation into the matter and has found that the current system of payment through ABPS is indeed facing several challenges, which are causing hardship to the workers. These challenges include the following:

  - **Delay in payment:** The paper states that the Ministry has received numerous complaints from the workers regarding the delay in payment through ABPS. It mentions that the average time taken for payment through ABPS is around 15-20 days, which is significantly higher than the 7-day timeline set by the Ministry.
  - **Rejection of applications:** The paper also mentions that the Ministry has received many complaints from the workers regarding the rejection of their applications for payment through ABPS. It states that the rejection rate is around 10-15%, which is quite high.
  - **Hardship to workers:** The paper highlights that the current system of payment through ABPS is causing significant hardship to the workers, especially those who are dependent on the scheme for their livelihood. It mentions that the delay in payment and the rejection of applications are leading to financial losses and food insecurity for many workers.

In light of these findings, the paper recommends that the Ministry should consider alternative modes of payment, such as direct bank transfers or cash payments, to ensure timely and hassle-free payment to the workers. It also suggests that the Ministry should take steps to improve the efficiency of the current system, such as by streamlining the application process and reducing the rejection rate.

The paper concludes by stating that the Ministry should act upon the recommendations made in the report to ensure that the workers receive their wages promptly and without any hindrance. It emphasizes that the primary objective of the MGNREGS is to provide employment and income to the rural population, and any system that hinders this objective is not serving its purpose.

### **GS 3 (Science and Tech)**

- **Why in News:** End-to-end (E2E) encryption protects information in a way that has transformed human rights organisations', law-enforcement agencies', and technology companies' outlook on their ability to access and use information.
- **About End-to-end encryption (E2EE):**
  - Encryption is a **way of protecting data** from unauthorised access or tampering.
  - It works by transforming the data into a secret code that only the intended recipient can decipher. This comes in useful for various cases, such as securing online communications, storing sensitive information, and verifying digital identities.
  - There are **two main types of encryption**:

[illegible][illegible]

- i. **Symmetric:** It uses the **same key to encrypt and decrypt** the data. In symmetric encryption, the key used to encrypt some information is also the key required to decrypt it.
- ii. **Asymmetric:** It uses a pair of keys: **one public and one private**. The public key can be shared with anyone, but the private key must be kept secret.
- The term encryption is generally used when referring to the privacy of stored data, while end-to-end encryption protects data as it's **transferred between a location – which is crucial** wherever there's a rapid exchange of information.
- In an E2EE-enabled app, only the person on each end – the sender and receiver – can read any exchanged messages.
- This is because messages get encrypted on your device before being sent and only are decrypted when they reach your intended recipient.
- **Issues with End-to-end encryption**
  - Some **potent malware can also 'snoop'** on your messages by infiltrating your device via other means – an SMS and reading them before they are encrypted.
  - The company that installs E2E encryption on its products can **install a backdoor** or an exception that allows the company to surmount the encryption and access the messages.

### 3. Proposals of UGC for Govt aid to colleges

#### GS 2 (Education)

- **Why in News:**
  - The University Grants Commission (UGC) has released new draft guidelines "UGC (Fitness of Colleges for Receiving Grants) Rules, 2024" for public comment.
  - If approved, the new guidelines will replace 1975 UGC guidelines that cover all institutions recognised by the commission.
- **The University Grants Commission (UGC):**
  - **Genesis:**
    - **The Sargeant Report** was the first attempt to formulate a national system of education in India in 1944.
    - It recommended the formation of a **University Grants Committee**, which was established in 1945 and was tasked with dealing with all of the then-existing Universities in 1947.
    - Soon after independence, the **University Education Commission** was established (in 1948) under the **chairmanship of Dr. S Radhakrishnan** to report on Indian university education and suggest improvements and extensions.
    - It proposed **reorganizing** the University Grants Committee along the lines of the **University Grants Commission of the United Kingdom**.
    - As a result, the UGC was **formally inaugurated in 1953** by Maulana Abul Kalam, the then Minister of Education.
    - However, the UGC was established [by the Ministry of Education's Department of Higher Education] as a **statutory body in November 1956** by the UGC Act 1956.
    - A proposal to replace UGC with another new regulatory body called the **Higher Education Commission of India (HECI)** is under consideration by the Government of India.
  - **Mandate:**
    - The UGC has the **unique distinction of being the only grant-giving agency** in the country which has been vested with two responsibilities of:
      - i. Providing funds
      - ii. Coordination, determination and maintenance of standards in institutions of higher education.
- **National Institute Ranking Framework (NIRF):**

#### Vacant faculty posts won't be de-reserved: UGC Chairman

Draft provision will not be part of final guidelines, says Jagadeesh Kumar, after it draws backlash from academics and activists; educators say UGC has 'no legal right' to open up the matter

The Hindu Bureau  
NEW DELHI

The draft provision allowing "de-reservation" of faculty vacancy meant for the Scheduled Castes (SC), the Scheduled Tribes (ST), and the Other Backward Classes (OBC) in Central universities will not be part of the final guidelines, University Grants Commission (UGC) Chairperson M. Jagadeesh Kumar said on Sunday evening, hours after the provision drew a severe backlash from the academic community and activists across the country. It proposed that the vacancy reserved for SC, ST, and OBC candidates can be declared unreserved if enough candidates from these categories are not available.

**'Final draft'**  
Mr. Kumar said it was just a "final draft" and that it would be revised and corrected after analysing the public feedback on the



The final draft was put in the public domain on December 27, with a deadline of January 28 to send feedback. FILE PHOTO

document. "There is nothing like de-reservation and there will not be any de-reservation. The entire draft guidelines are meant for feedback, that will not be part of final guidelines," he told presspersons. The final draft guidelines were put in the public domain by the government on December 27, with a deadline of January 28 to send feedback and comments. Amid the controversy, the UGC posted a statement from Mr. Kumar on X, which said, "This is to clarify that there has been no de-reservation of reserved category positions in Central Educational Institutions (CEI) in the past and there is going to be no such de-reservation. It is important for all HEIs [Higher Education Institutions] to ensure that all backlog positions in reserved category are filled up through concerted efforts."

Sanjishree Pandit also clarified that no such de-reservation had ever taken place at the university.

The Education Ministry, in a statement on X, said, "Reservation in Central Educational Institutions (CEI) is provided for all posts in direct recruitment in Teacher's cadre as per the Central Educational Institutions (Reservation in Teachers' Cadre) Act, 2019. After enactment of this Act, no reserved post is to be de-reserved. Ministry of Education has given directives to all the CEIs to fill up the vacancies strictly as per the 2019 ACT."

After media reports on Sunday morning highlighted this provision for de-reservation, outlined in Chapter X of the Final Draft Guidelines, many educators, including former UGC Chairperson Sukhdeo Thorat, told *The Hindu* that the UGC had "no legal authority" to open up the question of de-reservation in the first place.

- The NIRF was launched by the Ministry of Human Resource Development (MHRD now **Ministry of Education**) in **2015** (first edition came in 2016).
- This framework, which is the **first-ever effort** by the Government of India, **outlines a methodology** to rank HEIs across the country.
- While participation in the NIRF was initially voluntary, **it became mandatory** in 2018 for all government-run educational institutions.
- **Key highlights of the draft guideline**
  - **Applicability**
    - The new rules will be applicable to every college affiliated to universities that are established by a central or under a state act under Section 2(f) of the UGC Act, 1956.
    - The UGC has made it mandatory for colleges to be listed under Section 2(f).
    - This section allows implementation of statutory rules across all colleges and holds colleges accountable to the UGC.
    - This was brought to maintain quality standards across all institutions.
    - The draft policy paves way for these colleges to get 12(B) status.
    - The 12(B) status only makes colleges eligible for funding.
    - This makes the college eligible for receiving grants from the UGC, Centre, and other funding agencies for varied academic and research activities.
  - **Eligibility criteria to receive grants**
    - The UGC has proposed that universities should:
      - either have accreditation **awarded by the National Assessment and Accreditation Council (NAAC)**; or
      - NAAC is primary body for assessing and accrediting higher education institutions.
    - have at least 60% of the programmes, in case a college offers more than three programmes **accredited by the National Board of Accreditation (NBA)**.
    - NBA is another statutory body that assess the qualitative competence of programmes.
    - In case a college offers less than three programmes, then each of the eligible programmes must have been accredited, the guidelines states.
    - If these institutes do not have both NAAC or NBA accreditation, then they should be **ranked in the National Institutional Ranking Framework (NIRF)**.
    - They should be ranked in NIRF at least thrice after participating five times or at least twice after participating thrice.
    - The draft states that these colleges **should charge a reasonable fee set by the government and should not ask for extra fees like capitation fees**.
    - As per the draft, these colleges will be required to have at least **75% of the total sanctioned teaching posts filled and duly follow reservation policy**.
    - Not just hired, but the teachers will have to be paid according to the UGC or Central or state government policy as well.
  - **Application for recognition under Section 12B of the UGC Act, 1956**
    - The colleges can apply online on the UGC portal to be considered for recognition under Section 12B of the UGC Act, 1956.
    - The affiliating university will be responsible for examining this application and recommend the UGC for approval within 60 days.
    - If at any point, the UGC finds a college in violation of its rule, their status can be withdrawn.

## 4. Supreme Court of India (SC)

### GS 2 (Judiciary)

- **Why in News:** The Prime Minister recently inaugurated the Diamond Jubilee celebration of the Supreme Court.
- **About Supreme Court of India (SC):**

#### ○ History:

- The Supreme Court of India is the **apex judicial body** under the Constitution of India.
- **Article 124** of the Constitution states that "There shall be a **Supreme Court of India.**"
- The Supreme Court **came into existence on January 26, 1950**, with the coming into force of the Constitution.
- **On January, 28, 1950**, two days after India became a Sovereign Democratic Republic, **the Supreme Court was inaugurated.**
- The Supreme Court **initially functioned from the old Parliament House** till it moved to the present building located on **Tilak Marg, New Delhi, in 1958.**
- The **first President of India, Dr. Rajendra Prasad**, inaugurated the present building of the Supreme Court of India on August 4, 1958.

#### ○ Number of Judges:

- The **original Constitution** of 1950 envisaged a Supreme Court with a **Chief Justice and 7 puisne Judges**, leaving it to Parliament to increase this number.
- Considering the increase in workload, **Parliament increased the number of Judges** from 8 in 1950 to 11 in 1956, 14 in 1960, 18 in 1978, 26 in 1986, 31 in 2009, and **34 in 2019 (current strength).**

- Today, the **judges sit in benches of two and three and come together in larger benches of 5 and more (Constitution Bench) to decide any conflicting decisions** between benches of the Supreme Court or any substantial questions concerning the interpretation of the Constitution.

- The **proceedings** of the Supreme Court are **conducted in English.**

#### ○ Powers and Functions:

- The Supreme Court has **original, appellate, and advisory jurisdiction.**
- It serves both as the **final court of appeals** and the **final interpreter of the Constitution.**
- Its **exclusive original jurisdiction** extends to any dispute between the Government of India and one or more States or between the Government of India and any State or States on one side and one or more States on the other, or **between two or more States**, if and insofar as the dispute involves any question (whether of law or fact) on which the existence or extent of a legal right depends.
- In addition, **Article 32** of the Constitution gives extensive original jurisdiction to the Supreme Court for the enforcement of Fundamental Rights.
  - It is **empowered to issue directions, orders, or writs**, including writs in the nature of habeas corpus, mandamus, prohibition, quo warranto, and certiorari, **to enforce them.**
- The Supreme Court has been conferred **with the power to direct the transfer of any civil or criminal case from one High Court to another High Court or from a Court subordinate to another High Court.**
- Under the Arbitration and Conciliation Act, 1996, **International Commercial Arbitration** can also be initiated in the Supreme Court.
- The **appellate jurisdiction** of the Supreme Court can be invoked by a certificate granted by the High Court concerned under Article 132(1), 133(1) or 134 of the Constitution in respect of any judgement, decree, or final order of a High Court in both civil and criminal cases, involving substantial question of law as to the interpretation of the Constitution.
- **Appeals also lie** to the Supreme Court in civil matters if the High Court concerned certifies:
  - that the case involves a substantial question of law of general importance, and
  - that, in the opinion of the High Court, the said question needs to be decided by the Supreme Court.
- **In criminal cases, an appeal lies** to the Supreme Court if the High Court

## Ease of justice is the right of every citizen, SC its medium: Modi

PM says 2800 crore approved for expansion of Supreme Court building complex at event marking top court's diamond jubilee year celebrations

The Hindu Bureau  
NEW DELHI

Prime Minister Narendra Modi on Sunday said 2800 crore had been approved for the expansion of the Supreme Court building complex, while underlining that "ease of justice is the right of every Indian citizen and the Supreme Court is its medium".

The Prime Minister was speaking at the diamond jubilee celebrations of the Supreme Court.

Complimenting Chief Justice of India D.Y. Chandrachud for his efforts to improve ease of justice in the country, Mr. Modi said over 27,000 cases had been disposed since 2014 to upgrade the physical infrastructure of the court.

Mr. Modi highlighted the importance of using technology for ease of justice.

He said the entire legal system rests on the advice and direction given by the Supreme Court.

Accessibility to the top court should be available to those in the farthest cor-



PM Narendra Modi with CJI D.Y. Chandrachud at the diamond jubilee celebrations of the Supreme Court in New Delhi. ani

ners of the country, the Prime Minister said.

Chief Justice Chandrachud said the diamond jubilee year of the top court should be the time to recognise challenges threatening the relevancy of the court as an institution.

"Let us begin the conversation on long vacations and whether alternatives such as flexible time for lawyers and judges are possible," the CJI said, adding the "adjudgment culture" should give way to a "culture of professionalism".

Speaking on the role played by technology, the Chief Justice said, "We have dealt with over five

lakh cases through hybrid hearings.

The five proceedings of the Supreme Court Constitutional Benches are popular and speak to the genuine curiosity that people have towards our courts and procedures."

The Prime Minister launched citizen-centric information and technology initiatives such as the Digital Supreme Court Reports (DigiSCRs), which has 36,368 cases of the top court, dating back from 1950, accessible to the public in a digital format. He also inaugurated the launch of a new bilingual website of the top court.

- has on appeal reversed an order of acquittal of an accused person and sentenced him to death or to imprisonment for life or for a period of not less than 10 years, or
- has withdrawn for trial before itself any case from any Court subordinate to its authority and has in such trial convicted the accused and sentenced him to death or to imprisonment for life or for a period of not less than 10 years, or
- certified that the case is a fit one for appeal to the Supreme Court.
- Parliament is authorised to confer on the Supreme Court any further powers to entertain and hear appeals from any judgement, final order or sentence in a criminal proceeding of a High Court.
- The Supreme Court also has a very wide appellate jurisdiction over all Courts and Tribunals in India in as much as it may, in its discretion, grant special leave to appeal under Article 136 of the Constitution from any judgement, decree, determination, sentence or order in any cause or matter passed or made by any Court or Tribunal in the territory of India.
- The Supreme Court has special advisory jurisdiction in matters which may specifically be referred to it by the President of India under Article 143 of the Constitution.
- Election Petitions under Part III of the Presidential and Vice-Presidential Elections Act, 1952, are also filed directly in the Supreme Court.
- Under Articles 129 and 142 of the Constitution, the Supreme Court has been vested with power to punish for contempt of Court, including the power to punish for contempt of itself.
- The Supreme Court can reconsider its final judgement or order by way of a curative petition on limited grounds after the dismissal of the review petition.
- As the highest court in India, the Supreme Court's judgments are binding on all other courts in the country.

## 5. Insat-3DS

### GS 3 (Science and Tech)

- **Why in News:** Indian Space Research Organisation has completed all key tests on Insat-3DS satellite before the final review which will be followed by its shipping to the spaceport in Srihari Kota, Andhra Pradesh.
- **About Insat-3DS:**
  - It is a collaborative effort between ISRO and the India Meteorological Organisation (IMD).
  - It is part of a series of climate observatory satellites aimed at enhancing climate services. Comprising three dedicated Earth observation satellites, including INSAT-3D and INSAT-3DR already in orbit.
  - It will be launched by using the Geosynchronous Launch Vehicle (GSLV-F14).
- **What is GSLV-F14?**
  - It is a more advanced rocket utilising liquid propellant.
  - The rocket, distinguished by its higher capacity and the use of cryogenic liquid propellants in all three stages, presents a more complex engineering challenge but allows for a substantially higher lift-off weight capacity.
- **Key facts about INSAT-3DR**
  - It is an advanced meteorological satellite of India configured with an imaging System and an Atmospheric Sounder.
  - The significant improvements incorporated in INSAT-3DR are:
    - Imaging in Middle Infrared band to provide night time pictures of low clouds and fog
    - Imaging in two Thermal Infrared bands for estimation of Sea Surface Temperature (SST) with better accuracy
    - Higher Spatial Resolution in the Visible and Thermal Infrared bands
  - **Payloads:** INSAT-3DR carries a multi spectral Imager, 19 channel Sounder, Data Relay Transponder and Search and Rescue Transponder.

## INSAT-3DS satellite sent to launch port in Sriharikota

**The Hindu Bureau**  
BENGALURU

The Indian Space Research Organisation (ISRO) has said that the INSAT-3DS satellite has been flagged off to the launch port at the Satish Dhawan Space Centre in Sriharikota.

The satellite is an exclusive meteorological satellite with the primary objective to provide continuity of services to the existing in-orbit INSAT-3D and 3DR satellites and significantly enhancing the capabilities of the INSAT system.

The satellite is likely to be launched on board the GSLV F14 next month.

The ISRO said it had successfully completed satellite assembly, integration and testing activities at the U.R. Rao Satellite Centre, Bengaluru.

"Pre-shipment review was held with the partici-



INSAT-3DS, a meteorological satellite realised by ISRO.

platform with a lift-off mass of 2,275 kg.

The satellite is designed for enhanced meteorological observations and monitoring of land and ocean surfaces for weather forecasting and disaster warning with state-of-the-art payloads such as a six-channel imager and 19-channel sounder meteorology payloads, communication payloads, a data relay transponder (DRT) and a satellite-aided search and rescue (SAS&R) transponder.

The DRT instrument receives meteorological, and oceanographic data from automatic weather stations and augments weather forecasting capabilities. The SAS&R transponder is incorporated in the satellite to relay a distress signal/alert detection for search and rescue services with global receive coverage.

## 6. Shastra (Knowledge) and Shastra (Weapons) GS 2 (Governance)

### • Why in News:

- India is in the process of formulating its inaugural National Security Strategy, with a focus on accelerating domestic defence production.
- However, amidst the evolving dynamics of global conflicts, the intersection of knowledge (Shastra) and weapons (Shastra) becomes increasingly evident.
- The blurring lines between civilian and military technologies, as seen in the cases of drones, satellite internet, artificial intelligence (AI), etc., necessitate a strategic approach that adapts to these technological advancements.

### • An Overview of Geopolitical Shifts and Technological Fences

- Reassessing Economic Integration**
  - Previously, the United States played a pivotal role in accelerating China's global economic integration.
  - However, the recognition of the strategic implications of advanced technologies has led to a revaluation of this approach.
  - The idea of placing foundational technologies behind a high fence, as articulated by the U.S. National Security Advisor, indicates a shift towards safeguarding crucial technological advancements for national security reasons.
- Friend Shoring Under Scrutiny**
  - The concept of friend shoring, wherein economic partnerships between countries with conflicting interests are maintained, is facing heightened scrutiny.
  - Recent suggestions from the White House Economic Council Director that a Japanese company with Chinese operations acquiring a U.S. steel company may impact national security.
  - It exemplifies the growing concerns around economic ties with potential adversaries.
- China's Response and Tech Restrictions**
  - China, in response to perceived threats to its technological sovereignty, has implemented measures to restrict the use of certain foreign technologies.
  - Notably, Tesla cars and Apple phones have been banned from Chinese army bases due to concerns over sophisticated surveillance features such as cameras, microphones, and cloud backups.
- Xi Jinping's Dual Circulation Strategy**
  - The Chinese leadership, under Xi Jinping, has adopted a dual circulation strategy, emphasising the use of Chinese technologies whenever possible and relying on foreign technologies only when necessary.
  - This strategy reflects a conscious effort to reduce dependence on external sources, aligning with a broader goal of technological self-sufficiency.
- Challenges in Indo-Pak Relations and China's Changing Approach**
  - India faces persistent geopolitical challenges, notably from Pakistan, which refuses to abandon its decades-old conflict stance.
  - China's policy shift towards prioritising domestic technologies reflects a changing global landscape.
- A Historical Context: Military-University Collaborations - Forging Technological Advancements**
  - MIT's Contributions to World War II**
    - During World War II, the Massachusetts Institute of Technology (MIT) emerged as a focal point for cutting-edge research and technological contributions that significantly impacted the war effort.
    - Vannevar Bush, the first dean of MIT's School of Engineering, played a pivotal role by transitioning to chair the National Defence Research Committee and the Office of Scientific Research and Development in 1939.
    - This move facilitated a seamless collaboration between academia and the military.
    - MIT's contributions during World War II were extensive and varied, encompassing the development of radars for planes, ships, guns, airports, and the Long-Range Navigation (LORAN) system.

## Shastra and Shastra



MANISH SARHAWAL AND ASHISH DHAWAN

Proposed National Security Strategy must include goal of 10 Indian universities in global Top 100

THE BOOK THE Alliance of 2017 by Gopal Hegde argues that while the military history of India is rich, its technological and strategic prowess is not. India's first National Security Strategy document is being formulated, and it is crucial to ensure that it reflects the country's technological and strategic capabilities. The document should focus on the intersection of knowledge (Shastra) and weapons (Shastra), which are the two pillars of a nation's power. The document should also focus on the intersection of knowledge (Shastra) and weapons (Shastra), which are the two pillars of a nation's power. The document should also focus on the intersection of knowledge (Shastra) and weapons (Shastra), which are the two pillars of a nation's power.

Bush's first MIT doctoral student, Frank Bunker, long-time dean of Stanford's engineering school, embodied Silicon Valley and its deep military connections. The global university rankings a helpful goal? The criteria that they are popularly known as: quality of teaching, research, and reputation. The quality of teaching is the most important, followed by research and reputation. The quality of teaching is the most important, followed by research and reputation. The quality of teaching is the most important, followed by research and reputation.

Global rankings matter. Among universities, 71 per cent have a ranking goal, 68 per cent use them as a tool for management, and 50 per cent use them as a tool for recruitment. The QS Top 100 universities suggest what matters to us: average 22,000 per student, with 2,000 plus faculty, budgets (the top 100 have \$2 billion, double the next 100), triple the next 100, age (youngest is 40 years old), and internationalisation (70 per cent of students). China has 71 universities in the top 500 (as compared to 19 in 2015), with 100 universities in the top 1,000 (as compared to 19 in 2015). The QS Top 100 universities suggest what matters to us: average 22,000 per student, with 2,000 plus faculty, budgets (the top 100 have \$2 billion, double the next 100), triple the next 100, age (youngest is 40 years old), and internationalisation (70 per cent of students).

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- **The collaboration between MIT and the military showcased the ability of academic institutions to rapidly respond to wartime needs**, providing technological solutions that had far-reaching implications beyond the immediate conflict.
- **Silicon Valley's Genesis**
  - **The post-World War II era witnessed the continuation of military-university collaborations**, notably seen in the birth of Silicon Valley.
  - **Frank Terman, Vannevar Bush's first MIT doctoral student** and the long-time dean of Stanford's engineering school, **played a crucial role in fostering ties between academia and the military.**
  - **Terman's influence midwifed Silicon Valley, which became a global hub for technological innovation.**
- **Symbiotic Relationship Between Academia and Defence**
  - **The collaboration between universities and the military during critical junctures in history exemplifies the symbiotic relationship between academic research and national defence.**
  - These collaborations **not only propelled technological advancements but also demonstrated the importance of knowledge exchange between academia and the military** for strategic innovation.
- **Debates on the Merits of Global University Rankings**
  - **Popularity Contests and Unreliable Metrics**
    - One of the primary criticisms directed at global university rankings is that **they often function as popularity contests rather than accurate indicators of educational quality.**
    - Peer surveys, a common component of these rankings, are susceptible to biases and may not necessarily reflect the actual academic standing of institutions.
    - **Moreover, the reliability of certain metrics employed in the rankings is questioned**, as variables may serve as poor proxies for overall educational quality.
  - **Incomplete Assessment and Ideological Bias**
    - **Critics argue that global university rankings provide an incomplete assessment of educational institutions** by focusing predominantly on research output and international reputation.
    - **Teaching quality, a crucial aspect of academic excellence, is often neglected** in these rankings.
    - **Moreover, the one-size-fits-all approach is deemed ideological**, as it fails to consider the diverse educational objectives and values across institutions.
- **Significance of Global Rankings**
  - Despite the criticisms, **global university rankings hold substantial importance in the academic landscape.**
  - A majority of universities worldwide have ranking goals, **utilising these benchmarks as tools for management and publicity.**
  - **Institutions often strategize and allocate resources based on their positioning in these rankings.**
- **An Assessment of India's University Ranking Goals: A Strategic Imperative**
  - **Proposed Interventions for Improvement- The Government's Efforts Include**
    - **Identifying and investing in 20 government universities to create research hubs with substantial resources**, including large research offices and industry liaison offices.
    - **Consolidation of Research Labs and merging independent research labs** into the top 20 government institutions to streamline resources and foster collaborative research efforts.
    - Directing government research funding predominantly to universities, following the model of established institutions like the U.S. National Institute of Health and National Science Foundation.
    - **Encouraging corporate research collaborations** with local universities through financial incentives, such as tax deductions for companies engaging in research at Indian institutions.
  - **Strategic Partnerships with Defence Initiatives**
    - **The government has plans on collaborating with defence initiatives, as exemplified by the proposed Defence Technology Council**, further reinforces the synergy between academic excellence and national security.
    - **Strategic partnerships with universities can enhance project management efficiency, addressing concerns raised by the Comptroller and Auditor General (CAG) regarding timelines in defence projects.**
- **Conclusion**
  - **India's National Security Strategy must adapt to the changing landscape of geopolitics and technology.**
  - **Integrating the goals of elevating universities to global prominence becomes imperative**, given the intertwined nature of knowledge, weapons, and national security.

- By strategically addressing the challenges and leveraging collaborative efforts between academia and government, India can position itself as a formidable player in the evolving global security paradigm.

## 7. Addressing Malnutrition: Strengthening Government Initiatives

### GS 2 (Health)

- Why in News:** The two-way relationship between nutritional deficiencies and disorders necessitates the need for effective government interventions to combat malnutrition.
- Challenges in Malnutrition Tackling Programs:**
  - Anaemia Mukh Bharat (AMB):** A major government initiative addressing iron deficiency through the administration of iron and folic acid (IFA) tablets faces challenges in implementation.
  - Mid-day Meal Scheme:** Another targeted measure for school children faces obstacles in ensuring effective execution. Utilizing community radio, videos, door-to-door outreach, and vernacular languages to enhance understanding, dispel misconceptions, and build trust.
  - Challenges in Acceptance:** Misgivings about the appearance and texture of fortified foods, e.g., fortified rice kernels, necessitate intensive Information, Education, and Communication (IEC) campaigns. Beneficiaries need to be informed about stringent fortification standards, addressing concerns about iron toxicity.
- Role of Diet in Malnutrition:**
  - Historical Dietary Norms:** Traditional diets comprised a balanced mix of cereals, pulses, vegetables, fruits, seeds, nuts, and dairy, promoting overall health.
  - Shifting Dietary Patterns:** Modern diets are characterized by processed and sugar-laden foods, leading to caloric density but nutritional deficiency.
  - Public Responsibility:** Urges individuals to reduce processed food consumption for better health outcomes.
- Access to Balanced Diets in South Asia:**
  - FAO Data and Indian scenario:** Approximately 46% of South Asia's population lacks access to an affordable balanced diet. Around 74% of India's population cannot afford a healthy diet, with 39% falling short of nutrient-adequate intake.
  - Government Interventions:** Large-Scale Food Fortification (LSFF) initiatives are timely to enhance ongoing efforts at individual and community levels.
  - Importance of Food Fortification:** Adoption of iodized salt under the National Iodine Deficiency Disorders Control Programme in 1992 significantly reduced goitre rates. India's food fortification program includes adding micronutrients to staples like wheat flour, rice, edible oils, and salt.



TULIKA SETH

AS A HAEMATOLOGIST, I regularly examine patients with anaemia. One of the many causes of anaemia is low haemoglobin in iron deficiency. It primarily impacts children and women. It's common knowledge that good nutrition is critical for overall health, but what's not as well known is the two-way relationship between nutritional deficiencies and certain disorders. Consistent intake of food lacking in essential micronutrients can lead to iron deficiency anaemia and Vitamin A, and zinc deficiency, and impact immunity. Conversely, conditions such as celiac disease and infections like typhoid or worm infestations can disturb the digestive system, leading to nutrient deficiencies. Malnutrition caused by micronutrient deficiency has intergenerational impacts – anaemic mothers are known to give birth to anaemic babies.

Government programmes like Anaemia Mukh Bharat (AMB) are among the biggest targeted measures to tackle the disorder. It involves administering iron and folic acid (IFA) tablets and other prophylactic measures. The Mid-day Meal Scheme for school children is another such intervention. However, challenges of effective implementation persist. The broader malnutrition is complex and needs to be addressed through multiple interventions. Diet plays a significant role. In post-industrial times, a diverse and balanced diet was the norm. The traditional diets comprised a balanced quantity of cereals, pulses, and vegetables seasoned with spices and herbs.

## THE BURDEN OF MALNUTRITION

Government initiatives to tackle nutritional deficiencies need effective execution

Consuming fruits, seeds, nuts and dairy options has historically been regarded as an effective means of maintaining a balanced diet. Today, dietary patterns have shifted from seasonal and varied foods to processed and sugar-laden alternatives, which are calorically dense but nutritionally deficient. This poses a serious threat to people to recognise that reducing consumption of processed foods is a crucial step towards ensuring better health outcomes.

The bigger challenge is that about 46 per cent of South Asia's population lacks access to an affordable balanced diet, as per FAO data. According to the State of Food Security and Nutrition in the World, 2023, around 74 per cent of India's population could not afford a healthy diet, and 39 per cent fell short of a nutrient-adequate one. Recent government interventions, such as Large-Scale Food Fortification (LSFF) are timely. These could augment the ongoing efforts at individual and community levels. LSFF, when aligned with micronutrient supplementation programmes, diet diversity promotion and measures to reduce behavioural change has immense potential to improve the efficacy of existing initiatives. Food fortification is the most direct remedy. However, it is a vital first step. Many countries have adopted fortification of food for several years ago. India lags behind here.

At the same time, fortification in India is a complexly novel strategy. The adoption of iodized salt under the National Iodine Deficiency Disorders Control Programme in

1992 significantly reduced goitre rates. The country's food fortification programme now includes adding micronutrients to staples such as wheat flour, rice, edible oils, and salt.

Awareness is critical to the acceptance of fortified foods among the targeted beneficiaries. The appearance and texture of such foods – fortified rice kernels, for instance – often create misgivings. Addressing such concerns requires an intensive information, education and communication (IEC) campaign. An important step in this direction is to inform the beneficiaries about the stringent standards of fortification. Research also shows no danger of toxicity from such food – the quantity of iron fortified is less than the amount of the naturally occurring nutrient. In any case, the body's haemoglobin in people with normal health prevents excess iron absorption.

Multiple awareness strategies can be adopted to foster greater awareness. This includes utilising communication channels such as community radio, video and door-to-door outreach. Messages in vernacular languages ensure that the information is easily understood and also helps dispel misconceptions and build trust. The way forward involves not just adoption of healthier dietary practices at individual and community levels but also strategies by the state such as LSFF.

The writer is professor of Pharmacology at AIIMS Delhi

## 8. Black Tigers or Melanistic Tigers: Odisha to Establish a First of its Kind Safari in the World

### GS 3 (Environment)

- Why in News:**
  - The Odisha government announced plans to start a melanistic tiger safari near Similipal Tiger Reserve (STR) and is likely to be ready for visitors by October this year.
  - The safari will be the first of its kind anywhere in the

## Behind Odisha's plan of a safari around its famous black tigers of Similipal

SULAT BISNOY

10 JANUARY 2024

ODISHA HAS announced plans to start a melanistic tiger safari near Similipal Tiger Reserve (STR), Chief Minister Nara Chandrababu Naidu said on Tuesday.

The state government's plan has received approval from the Ministry of Environment, Forest and Climate Change, New Delhi.

The safari will be the first of its kind anywhere in the world.

What are melanistic tigers?

Melanistic is a genetic condition that causes a tiger's fur to be black or dark brown instead of the usual orange and black stripes.

It is a rare condition, and only a few tigers in the world are melanistic.

Why is Odisha planning a safari?

Odisha is home to one of the largest populations of tigers in the world, and the state government wants to showcase its commitment to wildlife conservation.

The safari will be a major attraction for tourists and will help generate revenue for the state.

What are the challenges?

The main challenge is to ensure the safety of the tigers and the tourists. The state government is working on various measures to address this.

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world, and it will give a chance to the tourists to see “**the rare and majestic**” melanistic tiger species “**found only in Odisha**”.

- **Similipal Tiger Reserve (STR):**

- Similipal is a tiger reserve in the **Mayurbhanj district** (adjoining Jharkhand and West Bengal) in the Indian state of **Odisha** covering 2,750 km<sup>2</sup> (1,060 sq mi).
- It is part of the **Mayurbhanj Elephant Reserve**, which includes three protected areas - Similipal Tiger Reserve, Hadagarh Wildlife Sanctuary and Kuldiha Wildlife Sanctuary.
- Similipal National Park derives its name from the **abundance of red silk cotton trees** growing in the area.
- The park is home to **Bengal tiger, Asian elephant, gaur and chausingha**, and this protected area is part of the UNESCO World Network of Biosphere Reserves since **2009**.
- The STR is Asia’s **second largest biosphere** (after the Gulf of Kachchh, Gujarat), and the country’s **only wild habitat for melanistic royal Bengal tigers**.



- **What are Black Tigers or Melanistic Tigers?**

- **Melanism is a genetic condition** in which an increased production of melanin, a substance in the skin that produces hair, eye and skin pigmentation, **results in black (or nearly black) skin, feathers or hair in an animal**.
- Many royal Bengal tigers of Similipal belong to a unique lineage with **higher-than-normal levels of melanin**, which gives them **black and yellow interspersed stripes** on their coats.
- **These tigers are not entirely black**, and are therefore more accurately described as being **pseudo-melanistic**.
- As per the 2022 cycle of the All-India Tiger Estimation, 16 individuals were recorded at STR, **out of which 10 were melanistic**.
- The state government’s ongoing tiger survey (which will be released soon), however, suggests that the number of royal Bengal tigers in STR is more than what has been mentioned in the NTCA report.

- **What Makes Tigers (Pseudo) Melanistic?**

- According to research of the National Centre for Biological Sciences (NCBS, Bengaluru), **a single mutation in the gene Transmembrane Aminopeptidase Q (Taqppep)** causes black tigers' stripes to enlarge or spread into the yellow background.
- Genetic analyses of other tiger populations in India and computer simulations suggest that the **Similipal black tigers may have arisen from a very small founding population of tigers**, and are inbred.
  - The STR cats live isolated from other tigers, because of which they breed among themselves.

- **What is Odisha’s Plan for the Melanistic Tiger Safari?**

- The state government’s plan has received in-principle approval from the technical committee of the **National Tiger Conservation Authority (NTCA)**, the national body for the conservation of the big cat.
- According to the Principal Chief Conservator of Forests (Wildlife), Odisha, **around 200 hectares of land** along the Dhanbad-Balasore NH-18 has been identified for the proposed safari.
- The site is about 15 km from the STR, and its landscape matches that of Similipal.
- **Initially**, 3 melanistic tigers from the Nandankanan zoo (Bhubaneswar) and rescued/ orphaned tigers who are not fit for wild but fit for display, will be housed in the safari in an open enclosure.
- An NTCA committee will visit the proposed site **to carry out a feasibility study** before final clearance is given to the project.
- The state government will also have to obtain other statutory clearances, including approval from the **Central Zoo Authority**, a body under the Environment Ministry that has oversight over zoos in the country.

- **Why has Odisha Come up with this Plan?**

- The safari aims to **allow wildlife conservationists, researchers, and enthusiasts** to see the rare big cats from up close, and to create awareness about the need for their conservation.
  - The sighting of tigers is difficult in STR because of its vast area, and the safari has been proposed as an added attraction for visitors to Similipal.
- This pioneering attraction will highlight the State’s commitment to preservation and showcasing its unique biodiversity.

## 9. Nitrogen hypoxia

### Recent events of importance

- **Why in News:** Recently, Alabama successfully executed a man who spent decades on death row using a new method called nitrogen hypoxia.
- **About Nitrogen hypoxia:**
  - Hypoxia is a medical term for a state of **insufficient oxygen** in the body.
  - **Nitrogen hypoxia** is a process where **pure nitrogen gas**, or nitrogen gas at concentrations high enough to be lethal, is inhaled to the point of **causing asphyxiation**.
  - It is a relatively new alternative to more common forms of **capital punishment**, like lethal injection and electrocution.
  - In this method of execution, a respirator mask is placed over the inmate's face, and pure nitrogen is pumped into the person's lungs instead of oxygen.
  - It leads to unconsciousness and then death from lack of oxygen.
- **Key facts about Nitrogen**
  - It appears as a **colourless odourless gas**.
  - It makes up the major portion of the atmosphere.
  - It is important for **plant growth** and can be 'fixed' by lightning or added to soils in fertilisers.
  - It is important to the **chemical industry**. It is used to make fertilisers, nitric acid, nylon, dyes and explosives.
  - Nitrogen gas is also used to provide an **unreactive atmosphere**. It is used in this way to preserve foods and in the electronics industry during the production of transistors and diodes.
  - Large quantities of nitrogen are used in **annealing stainless steel** and other steel mill products. Annealing is a heat treatment that **makes steel easier to work**.
  - Liquid nitrogen is often used as a **refrigerant**. It is also used to rapidly freeze foods, helping them to maintain moisture, colour, flavour and texture.

## Alabama carries out first nitrogen gas execution

ASSOCIATED PRESS  
ATMORE, JANUARY 26

ALABAMA EXECUTED a convicted murderer with nitrogen gas Thursday, putting him to death with a first-of-its-kind method that once again placed the U.S. at the forefront of the debate over capital punishment. The state said the method would be humane, but critics called it cruel and experimental.

Officials said Kenneth Eugene Smith, 58, was pronounced dead at 8:25 p.m. at an Alabama prison



Kenneth Eugene Smith, 58

after breathing pure nitrogen gas through a face mask to cause oxygen deprivation.

It marked the first time that a new execution method has been used in the United States since lethal injection, now the most commonly used method, was introduced in 1982.

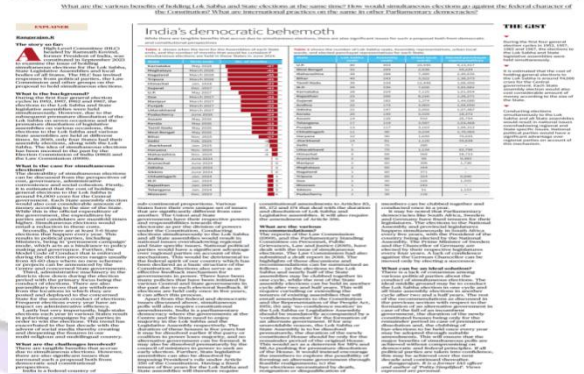
30<sup>th</sup> Jan, 2024

## 1. Pros and Cons of Simultaneous Elections in India

### GS 2 (Elections)

- **Why in News:** The concept of simultaneous elections for the Lok Sabha, State Legislative Assemblies, and local bodies has been under scrutiny, with a High-Level Committee (HLC) headed by former President Ramnath Kovind investigating the matter.
- **Key issues:**
  - This initiative, aimed at **streamlining the electoral process**.
  - Debates surrounding its **impact on the federal character** of India's Constitution.
- **Background**
  - Historically, during the **initial four general election cycles** from 1952 to 1967, elections to the Lok Sabha and State legislative assemblies were synchronized.
  - However, due to **premature dissolutions and varying election timings**, the current system prevails.
  - The idea of simultaneous elections has been **proposed by the Election Commission of India in 1982 and reiterated by the Law Commission in 1999**.
- **Case for Simultaneous Elections:**
  - **Cost Efficiency:**
    - Simultaneous elections offer **substantial cost savings**, estimated at around Rs.4,000 crore for the Central government per Lok Sabha election. State assembly elections also incur considerable expenses.
    - With parties and candidates spending significantly, **synchronized polls would alleviate financial burdens**.
  - **Governance and Administrative Convenience:**
    - Frequent State elections keep **political parties in perpetual campaign mode**, hindering policymaking and governance.
    - **The Model Code of Conduct**, enforced during elections, further restricts announcements of new schemes or projects.
    - **Administrative machinery experiences slowdowns**, affecting efficiency, and paramilitary forces are redeployed, disrupting routine operations.
  - **Social Cohesion:**
    - Annual high-stakes elections contribute to **polarizing campaigns**, especially with the influence of social media.
    - Simultaneous elections could potentially **reduce divisive tactics**, fostering social cohesion in India's diverse landscape.
- **Challenges Involved:**
  - **Federal and Democratic Concerns:**
    - Simultaneous elections **may overshadow State-specific issues**, favoring national political parties and compromising the federal spirit of India.
    - Elections serve as a **feedback mechanism**, and **infrequent polls could impede** effective governance and policy adjustments based on electoral feedback.
  - **Constitutional Amendments:**

### Pros and cons of simultaneous elections



- Conducting simultaneous polls necessitates **amendments to various articles of the Constitution, including Articles 83, 85, 172, 174, and 356**, addressing the duration and dissolution of the Lok Sabha and Legislative Assemblies.
- **Recommendations:** Reports from the Law Commission (1999) and the Parliamentary Standing Committee (2015) provide insights:
  - **Staggered Simultaneous Elections:**
    - One proposal suggests **conducting Lok Sabha and half of the State assembly elections together**, with the remaining State assembly elections after two and a half years.
    - This would **require constitutional amendments and modifications** to the Representation of the People Act, 1951.
  - **Deterrents for Premature Dissolution:**
    - Introducing **mandatory simultaneous 'no-confidence' and 'confidence' motions** in case of premature dissolution could discourage MPs and MLAs from pushing for early elections.
    - Newly constituted houses' **durations should align with the original term**.
  - **Clubbing Bye-Elections:**
    - Conducting bye-elections resulting from death, resignation, or disqualification annually could streamline the electoral process.
- **International Perspectives:** Parliamentary democracies like **South Africa, Sweden, and Germany have fixed tenures** for their legislatures, demonstrating successful implementation of simultaneous elections and stability in governance.
- **Ideal Solution:**
  - Striking a balance between diverse opinions, a middle ground could involve **conducting Lok Sabha elections in one cycle and State assembly elections in another after two and a half years**.
  - Implementing **recommended measures to prevent premature dissolution and streamline bye-elections** could offer the benefits of simultaneous elections without compromising democratic and federal principles.
- The debate on simultaneous elections in India requires a nuanced approach that considers the unique federal and democratic aspects of the nation. Implementing carefully crafted recommendations could pave the way for synchronized polls, enhancing efficiency and reducing costs, while safeguarding the essence of India's diverse political landscape.

## 2. INS Sumitra GS 2 (Security)

- **Why in News:** The Indian Navy's INS Sumitra recently rescued fishermen hijacked by pirates along the east coast of Somalia and the Gulf of Aden.
- **About INS Sumitra:**
  - It is the fourth and **last Saryu-class patrol vessel** of the Indian Navy.
  - It is based on an **indigenous design and constructed by Goa Shipyard Limited**.
  - It was commissioned in 2014 and is **based in Chennai** under the **Eastern Naval Command**.

## Navy ship foils hijack bid on Iranian-flagged vessel

**Dinakar Peri**  
NEW DELHI

A swift response by an Indian Navy ship, *INS Sumitra*, deployed in the Gulf of Aden ensured that a hijack situation was quickly resolved, ensuring safe release of an Iranian-flagged fishing vessel and its crew.

"INS Sumitra, on anti-piracy operations along the East coast of Somalia and the Gulf of Aden, responded to a distress message regarding hijacking of an Iranian flagged Fishing Vessel (FV) *Iman*. The FV had been boarded by pirates and the crew taken as hostages," the Navy said in a statement on Monday.

"INS Sumitra intercept-



**To the rescue:** The fishing vessel that was released from pirates following INS Sumitra's intervention in the Gulf of Aden. PTI

ed the vessel, acted in accordance with the established Standard Operating Procedures to coerce the pirates for safe release of crew along with the boat and ensured successful release of all 17 crew members along with the boat." The fishing vessel was subsequently sanitised and released for onward transit, the Navy said. Piracy, which had vanished since its peak around 2010, has come back now in the region against the backdrop of the Houthi attacks on commercial shipping.

- The **primary role** of the ship is to undertake **surveillance** of the country's **exclusive economic zone (EEZ)** besides other operational tasks such as **anti-piracy patrols, fleet support operations**, maritime security of offshore assets, and escort operations.
- **Features:**
  - Measuring about 105 metres in length, 13 metres in breadth, and displacing 2,200 tonnes, the ship can achieve a speed of 25 knots.
  - The ship has a **range of 6,500 nautical miles**.
  - It is **propelled by two diesel engines**.
  - The ship's weapon and sensor outfits include a 76.2 mm gun (super rapid gun mount), close-in weapon systems, and the latest navigational and early warning radars.
  - It is **capable of embarking one Dhruv/Chetak helicopter**.
  - It is also equipped with two rigid inflatable fast-motor boats.

### 3. Prohibition of Child Marriage (Amendment) Bill, 2021

#### GS 2 (Governance)

- **Why in News:** A parliamentary committee is granted another extension to review the Prohibition of Child Marriage (Amendment) Bill, 2021, which aims to increase the minimum age of marriage for women from 18 to 21. The impending end of the Lok Sabha's tenure in June adds urgency to the committee's task, raising questions about the fate of the bill.
- **Background**
  - The Prohibition of Child Marriage (Amendment) Bill, 2021, **introduced in the Lok Sabha in December 2021**, seeks to address the issue of child marriage by raising the minimum age for women.
  - The parliamentary committee responsible for its examination has **received several extensions, with the current extension granted until May 2024**.
- **Examining the Bill:**
  - The Prohibition of Child Marriage (Amendment) Bill, 2021, aims **to amend the Prohibition of Child Marriage Act, 2006, and increase the minimum age of marriage for females to 21 years**.
  - The bill emphasizes **overriding any existing laws, customs, or practices related to marriage**.
- **Key Amendments:**
  - **Age of Marriage Increase:** The Bill proposes raising the minimum age of marriage for females from 18 to 21 years, aligning it with the age of majority.
  - **Annulment Period Extension:** Under the 2006 Act, individuals married below the minimum age can apply for annulment within two years of attaining majority. The Bill extends this period to five years, allowing annulment before the age of 23.
- **Key Issues and Analysis:**
  - **Age Discrepancy:**
    - The proposed minimum age of **marriage at 21 is higher than the minimum age of majority, which is 18**.
    - The Supreme Court's recognition of marriage between **adults as a fundamental right** prompts questions about whether restricting marriage for individuals aged 18 to 21 is a reasonable limitation on their right to marry.
  - **Impact on Child Marriage:**
    - Despite the minimum age **of marriage being 18 since 1978**, around a quarter of women aged 20-24 are married before turning 18.



#### Committee examining Bill on marriage age gets extension

A parliamentary committee examining a Bill seeking to raise the age of marriage of women from the present 18 to 21 has been given another extension to table its report. The Budget Session of Parliament beginning January 31 is the last session of the present Lok Sabha before the election is announced. The committee will now finalise its report by May, following the four-month extension, while the term of the 17th Lok Sabha ends on June 16. The Prohibition of Child Marriage (Amendment) Bill, 2021, which was introduced in the Lok Sabha and remains pending there, is likely to lapse when the tenure of the House ends in June. PTI

- This prompts a critical examination of **whether increasing the minimum age would significantly reduce the incidence of child marriage.**
- **Committee's Challenges:**
  - With the **Lok Sabha's tenure ending in June 2024**, there is a looming concern about the fate of the Prohibition of Child Marriage (Amendment) Bill, 2021.
  - The parliamentary committee faces the challenge of **ensuring a thorough examination and producing a report before the legislative body dissolves.**
- The examination of the Prohibition of Child Marriage (Amendment) Bill, 2021, holds significance in addressing the persistent issue of child marriage in India. The parliamentary committee's diligence in reviewing the bill and presenting a comprehensive report will play a crucial role in shaping legislative decisions and contributing to the broader goal of safeguarding the rights and well-being of young women.

#### 4. **NBS Fertilisers: Govt Brings Non-Urea Fertilisers Under Price Control**

##### **GS 3 (Economy)**

- **Why in News:**
  - The Central government has brought di-ammonium phosphate (DAP), muriate of potash (MOP) and all other such fertilisers that receive **nutrient-based subsidy (NBS)** support under “reasonable pricing” controls.
  - NBS fertilisers - unlike urea, whose maximum retail price (MRP) is fixed by the government - are technically decontrolled.
- **What is the NBS Scheme?**
  - **Fertilisers** are essentially food for crops, which need nutrients (**Primary** [N, P, K]), **Secondary** [S, calcium, magnesium] and **Micro** [iron, zinc, copper, manganese, boron, molybdenum]) for plant growth and grain yield.
  - Under the NBS scheme, introduced in **April 2010**, their **MRPs are supposed to be market-determined** and set by the individual companies selling them.
  - **The government merely pays a fixed per-tonne subsidy** on each of these fertilisers, linked to their nutrient content or specific percentage of nitrogen (N), phosphorus (P), potassium (K) and sulphur (S).
  - Unlike the earlier product-specific subsidy regime, NBS was intended **to promote balanced fertilisation** by discouraging farmers from applying too much **urea (46% N)**, **DAP (46% P plus 18% N)** and **MOP (60% K)**.
    - These are fertilisers with high content of a single nutrient.
  - **NBS was meant to encourage product innovation**, as well as increased use of complex fertilisers (with lower amounts of N, P, K, and S) and single super phosphate - SSP (with just 16% P but 11% S).
  - However, **urea consumption rose** by over a third since 2009-10, worsening the nutrient imbalance and leading to the failure of NBS.
- **Decision Taken by the Central Govt w.r.t Non-Urea Fertilisers:**
  - **The Department of Fertilisers (DoF)**, Ministry of Chemicals & Fertilisers, has issued **detailed guidelines for the evaluation of “reasonableness” of the MRPs** for all non-urea fertilisers covered under NBS.
  - The guidelines, **to be effective retrospectively from April 1, 2023**, have prescribed maximum profit margins that will be allowed for fertiliser companies –
    - 8% for importers,
    - 10% for manufacturers and
    - 12% for integrated manufacturers (those producing finished fertilisers as well as intermediates such as phosphoric acid and ammonia).
  - **Companies earning “unreasonable profit”,** i.e. over and above the stipulated percentages, in a particular financial year (April-March) **will have to refund the same to the DoF** by October 10 of the following fiscal year.

#### **Govt brings non-urea fertilisers under price control, fixes profit margins**

**HARISH DAMODARAN**  
NEW DELHI, JANUARY 29

THE NARENDRA Modi government has brought di-ammonium phosphate (DAP), muriate of potash (MOP) and all other such fertilisers that receive nutrient-based subsidy (NBS) support un-

der “reasonable pricing” controls. NBS fertilisers — unlike urea, whose maximum retail price (MRP) is fixed by the government — are technically decontrolled. Under the NBS scheme, introduced in April 2010, their MRPs are supposed to be market-determined and set by the individual companies selling them. The gov-

ernment merely pays a fixed per-tonne subsidy on each of these fertilisers, linked to their nutrient content or specific percentage of nitrogen (N), phosphorus (P), potassium (K) and sulphur (S). But the Department of Fertilisers (DoF) has now, in an office memorandum dated

**CONTINUED ON PAGE 2**

- **If they don't return** the money within the said time limit, **an interest @12% per annum** on a pro-rata basis would be charged on the refund amount from the next day of the end of financial year.
- The unreasonable profits **would also get adjusted** against subsequent fertiliser subsidy payments by the government.
- **How will Companies' "Unreasonable Profit" be Assessed?**
  - The guidelines have mandated fertiliser companies to **"self-assess" unreasonable profits**, based on the cost auditor's report along with audited cost data approved by their board of directors.
  - **This report and data have to be furnished to the DoF** by October 10 of the following fiscal year.
  - **The DoF will then scrutinise** the "reasonability of MRPs", as submitted by the companies, by 28th February for each completed previous financial year.
  - Following that, it will finalise a report on unreasonable profits earned (if any) and to be recovered from the companies.
- **Significance of the New Guidelines of the DoF:**
  - Non-urea fertilisers are already under informal price control, which will definitely continue till the Lok Sabha elections are over.
  - The new guidelines **impose indirect MRP controls on non-urea fertilisers** by capping the profits that companies can earn from their sales.
    - **These will be based on their "total cost of sales"**, which would cover cost of production/ import, administrative overheads, selling and distribution overheads, and net interest and financing charges.
  - **This means**, the new guidelines basically extend the regime of detailed cost monitoring and price control currently applicable on urea to other fertilisers.

## 5. United Nations' refugee agency for Palestinians (UNRWA)

### GS 2 (International Relations)

- **Why in News:**
  - UN officials have urged countries to reconsider their decision to suspend the funding for the United Nations Relief and Works Agency for Palestinian refugees (UNRWA).
  - Recently, Israel accused some of the agency's staff members of involvement in the October 7 attack.
  - After this, the US and eight other Western countries, which together provided more than half of UNRWA's 2022 budget, cut the money.
- **United Nations' refugee agency for Palestinians (UNRWA)**
  - **About**
    - UNRWA stands for UN Relief and Works Agency for Palestinian Refugees in the Near East.
    - It was founded in 1949 to provide aid to about 700,000 Palestinians who were forced to leave their homes in what is now Israel during the 1948 Arab-Israeli war.
  - **Working region**
    - The UN agency operates in Gaza and the Israeli-occupied West Bank, as well as Lebanon, Syria, and Jordan — countries where the refugees took shelter after their expulsion.
  - **Areas of work**
    - The agency runs education, health, relief and social services, microfinance and emergency assistance programmes inside and outside refugee camps based in the aforementioned areas.
  - **Funding**
    - UNRWA is funded almost entirely by voluntary contributions by donor states like the US.
    - It also gets a limited subsidy from the UN, which is used only for administrative costs.
  - **Performance**
    - Currently, around 5.9 million Palestine refugees — most of them are descendants of original refugees — access the agency's services.

### Why some nations have paused UNRWA funding

ALIND CHAUHAN  
NEW DELHI, JANUARY 29

UN OFFICIALS Sunday urged countries to reconsider their decision to suspend the funding for the United Nations agency for Palestinian refugees (UNRWA), saying that it would take strict action against any staff members found to be involved in Hamas' October 7 attack on Israel.

The officials said two million Palestinians in Gaza are dependent on UNRWA's services that would be scaled back by February if the funding is not restored. The UN and eight other countries, which provided more than half of UNRWA's 2022 budget, cut the money after Israel accused some of the agency's staffers of involvement in the October 7 attack.

**What is UNRWA?**  
UNRWA stands for UN Relief and Works Agency for Palestinian Refugees in the Near East. It was founded in 1949 to provide aid to about 700,000 Palestinians who were forced to leave their homes in what is now Israel during the 1948 Arab-Israeli war.

The UN agency operates in Gaza, the Israeli-occupied West Bank, Lebanon, Syria, and Jordan. According to its website, it runs education, health, relief and social services, microfinance and emergency assistance programmes, currently around 5.9 million Palestine refugees, most of them are descendants of original refugees — across the agency's services.

UNRWA is funded almost entirely by voluntary contributions by donor states like the UN.

**What has Israel accused UNRWA of?**

The details of the accusations are scant. Israel has alleged that 12 staff members of UNRWA were involved in the October 7 attack. It has also claimed that Hamas siphoned off funds given to



A Palestinian man holds a flour bag provided by UNRWA in Khan Younis in November 2023, Israel.

UNRWA and fights from in and around the agency's facilities. Israel has alleged that "Hamas tunnels (are) running next to or under UNRWA facilities and across the agency of teaching banned of Israel in its schools", the Associated Press reported.

**How has UNRWA responded?**

The UNRWA has denied all the allegations, saying it has no links to Hamas. In the statement, UN officials said out of 12 staff members who were accused of being involved in the attack, nine have been terminated. One is confirmed dead and the identity of the two others is being clarified.

Chris Gunness, a former UNRWA spokesman, told Al Jazeera that the allegations against the agency are a "coordinated political attack" by Israel.

**What happens now?**

UNRWA is crucial for the survival of people living in Gaza, which has plunged into a humanitarian crisis. The agency has been the main supplier of food, water and shelter to civilians of the enclave. UNRWA, however, would run out of money needed for its aid work within weeks if the funding isn't restored, according to Gunness, which would exacerbate the situation in Gaza.

- In Gaza, over 1 million are sheltering in UNRWA schools and other facilities.

### • News Summary:

- Recently, United Nations (UN) officials urged countries to reconsider their decision to pause funding for the UN agency for Palestinians.
- It also said that any staff found involved in Hamas' attack on Israel would be punished and warned that aid for some two million people in Gaza was at stake.

### • What has Israel accused UNRWA of?

- Israel has alleged that 12 staff members of UNRWA were involved in the October 7 attack. It has also claimed that Hamas siphons off funds given to UNRWA and fights from in and around the agency's facilities.
- Israel has alleged that Hamas tunnels are running next to or under UNRWA facilities and accuses the agency of teaching hatred of Israel in its schools

### • How has UNRWA responded?

- The UNRWA has denied all the allegations, saying it has no links to Hamas.
- In the statement, UN officials said out of 12 staff members who were accused of being involved in the attack, nine have been terminated.
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### • What happens now?

- UNRWA is crucial for the survival of people living in Gaza, which has plunged into a humanitarian crisis after the outbreak of the conflict.
- The agency has been the main supplier of food, water and shelter to civilians of the enclave.
- UNRWA, however, would run out of money needed for its aid work within weeks if the funding is not restored.

## 6. UGC's Draft Guidelines Spark Outrage over 'Dereservation' in Faculty Recruitment

### GS 2 (Education)

### • Why in News:

- The Union government and the University Grants Commission (UGC) have clarified that faculty positions in universities reserved for SC, ST, OBC, and EWS candidates will not be opened to the general category
- This was done after academicians criticised the UGC's draft guidelines which suggested the possibility of opening unfilled vacancies for SC, ST, OBC candidates to general candidates in "rare and exceptional cases".

### • University Grants Commission (UGC)

- The University Grants Commission of India is a **statutory body** under the provisions of UGC Act, 1956.
- It is **responsible for coordination, determination and maintenance of standards of higher education**.
- It provides recognition to universities in India, and disburses funds to such recognized universities and college.
- **Nodal Ministry:** Department of Higher Education, Ministry of Education
- **Mandate of UGC**
  - Promoting and coordinating university education.
  - Determining and maintaining standards of teaching, examination and research in universities.
  - Framing regulations on minimum standards of education.
  - Monitoring developments in the field of collegiate and university education; disbursing grants to the universities and colleges.
  - Serving as a vital link between the Union and State governments and institutions of higher learning.
  - Advising the Central and State governments on the measures necessary for the improvement of university education.

### • News Summary:

## Quota row in UGC draft norms

After a chapter about dereservation of posts in higher educational institutes in the UGC's draft guidelines sparked outrage, the regulator and the Education Ministry have been quick to issue clarifications

BY HIMAN CHOPRA  
NEW DELHI, JANUARY 29

THE UGC's draft guidelines for implementing reservation in faculty positions in higher educational institutions (HEIs) have sparked a row over the possibility of opening unfilled vacancies for SC, ST, OBC candidates to general candidates in "rare and exceptional cases".

Why did UGC issue the guidelines?

The UGC issued the guidelines to implement reservation in faculty positions in HEIs. The guidelines are part of the UGC's efforts to improve the quality of higher education in India.

What does the chapter on dereservation say?

The chapter states that while there is a general reservation for SC, ST, OBC and EWS candidates, there may be instances where the reservation is not applicable. In such cases, the posts may be opened to general candidates.

Why did this chapter cause an outcry?

The chapter was seen as a move to undermine the reservation policy, which has been a cornerstone of higher education in India.

NO DERESERVATION, GOVT MAINTAINS

There has been no dereservation of reserved positions in central institutions, and there is no dereservation.

According to the draft guidelines, the UGC will not open reserved posts to general candidates.

What was the government's reaction?

The government has clarified that the reservation policy will remain unchanged. The UGC's draft guidelines are only for implementation purposes.

Why did this chapter cause an outcry?

The chapter was seen as a move to undermine the reservation policy, which has been a cornerstone of higher education in India.

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UGC is direct recruitment.

The draft UGC guidelines were initially sent to the states for their views.

Why did the UGC committee include the dereservation provision in the draft guidelines?

The UGC committee was of the view that the reservation policy should be flexible enough to cater to the needs of the country.

What is the UGC's stance on the reservation policy?

The UGC is committed to the reservation policy and will not open reserved posts to general candidates.

What was the government's reaction?

The government has clarified that the reservation policy will remain unchanged. The UGC's draft guidelines are only for implementation purposes.

Why did this chapter cause an outcry?

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- In December, 2023, the higher education regulator had shared draft guidelines on implementing the reservation policy in higher education institutions for public feedback by the end of January, 2024.
- This draft is prepared by a four-member committee headed by the director of the Institute of Public Administration, **Dr H S Rana**.
- Among the key recommendations of the committee, it proposed de-reservation of unfilled quota posts meant for teachers, officers, and employees of a university.
- The committee suggested that there is a “general ban on de-reservation of reserved vacancies in case of direct recruitment”, **in exceptional circumstances it can be done if the university can provide adequate justification for it.**
- The draft guidelines specify that proposals for de-reservation concerning job positions designated for Group A and Group B posts should be submitted to the Education Ministry.
  - Similarly, proposals for Group C and D posts should be forwarded to the Executive Council (the top decision-making body) of the university for special permission.
- These proposals would have to provide information such as the designation, pay scale, name of the service, responsibilities, required qualifications, efforts made to fill the post, and why it cannot be allowed to remain vacant.
- This led to criticism by sections of the academia.
- The UGC chairman then clarified that it is just a draft and anything related to de-reservation will be taken out of it while making the final document.
- **What is the Current Position?**
  - In the current scenario, **reserved faculty positions are not converted to recruit general candidates.**
  - While the Department of Personnel and Training (DoPT) permits de-reservation in exceptional circumstances exclusively for Group A posts, this provision has not been put into effect in universities.
  - Unfilled quota positions undergo re-advertisement, and universities organise special recruitment drives until suitable candidates are identified, without opening these positions to the general category.

## 7. Overhaul of cybersecurity framework

### GS 2 (Governance)

#### ● Why in News:

- As per the media reports, the government has drawn up a guiding policy called the **National Cybersecurity Reference Framework (NCRF)** to help manage cybersecurity better.
- The framework is based on existing legislations, policies and guidelines. It outlines implementable measure with clear articulation of roles and responsibilities for cybersecurity.
- **National Critical Information Infrastructure Protection Centre (NCIIPC)**
  - NCIIPC is a government organization that protects critical information infrastructure (CII) for the public. It was established in 2014 and is based in New Delhi.
  - The NCIIPC's mission is to protect critical information infrastructure from unauthorized access, modification, use, disclosure, disruption, incapacitation, or destruction.
  - It also provides advice to reduce the vulnerabilities of critical information infrastructure from cyber terrorism, cyber warfare, and other threats.
  - The **NCIIPC defines CII as computer resources whose incapacitation or destruction would have a debilitating impact on national security, economy, public health, or safety.**
- **National Cybersecurity Coordinator (NCSC)**
  - The NCSC provides guidance and support to **state governments and private industry** to help formulate policies.
  - They also provide guidance on internet governance, network management, and response strategies for cyberattacks.

#### OVERHAUL OF CYBERSECURITY FRAMEWORK

### To safeguard cyber infra, Govt may push use of made in India products

National Critical Information Infrastructure Protection Centre is behind the framework

SOU MYARENDRA BARIK  
NEW DELHI, JANUARY 29

ASSERTING THAT there has been significant progress over the last few years in the development of indigenous cybersecurity products and solutions, the Centre is expected to recommend enterprises – especially those in critical sectors like banking, telecom, and energy – to use only security products and services developed in India. The Indian Express has learnt.

The government has drawn up a guiding policy called the National Cybersecurity Reference Framework (NCRF) in an attempt to provide an implementable measure – with clear articulation of roles and responsibilities for cybersecurity – based on existing legislations, policies and guidelines.

The action comes as India faces a barrage of cybersecurity-related incidents – most recently a high-profile attack on the systems of AIIMS Delhi in 2022 – which pose a major challenge to New Delhi's national security imperatives. At least three union ministers told The Indian Express that they feel hamstrung by the lack of an overarching framework on cybersecurity when

they are formulating sector-specific legislations. This is what the NCRF is expected to solve.

In recent years many threat actors backed by nation-states and organised cyber-criminal groups have attempted to target Critical Information Infrastructure (CII) of the government and enterprises. In addition, availability of cyber-attacks-as-a-service has reduced the entry threshold for new cyber criminals, thus increasing the exposure to individuals and organisations,” the NCRF is learnt to say.

The framework has been drawn up by the National Critical Information Infrastructure Protection Centre (NCIIPC) – which reports to the Prime Minister's Office – with support from the National Cybersecurity Coordinator (NCSC).

The NCRF was shared privately with companies and other government departments for consultation in May last year, but is yet to be made public. Apart from the main policy document, at least three supporting documents detailing global cybersecurity standards, products and solutions have also been formulated.

This paper has also learnt that the NCRF could recommend

that enterprises allocate at least 10 per cent of their total IT budget towards cybersecurity.

“Adequate resources must be allocated for cybersecurity, and these should be distinct from IT resources... Based on global best practice, it is recommended that at least 10 per cent of the total IT budget should be allocated to cybersecurity. Such allocation should be mentioned under a separate budget head for monitoring by the top-level management / board of directors,” the NCRF is likely to recommend.

Last June, former National CyberSecurity Coordinator Lt General Rajesh Pant had said that the NCRF will be released for the public soon. The current guiding framework on cybersecurity for critical infrastructure in India comes from an UPW-era measure, the National Cybersecurity Policy of 2013.

“It (NCRF) is an important document that supersedes the 2013 policy from 2013 till 2023, the world has changed as new threats and new cyber organisations have emerged calling for new strategies. The document will be put in public domain after a final check by the committee to ensure that nothing confidential is released,” he said.

However, the NCRF is a guideline, meaning that its recommendations will not be binding – although, organisations can use the NCRF to improve their cybersecurity posture, reduce their risk of data breaches or any cybersecurity incidents, ensure compliance with regulations, increase confidence with customers and enhance operational efficiency.

Queries sent to the NCRF's office remained unanswered until publication.

The NCRF could also recommend that along with the directions to regulate the operations in the critical sector, regulators overseeing and auditing them must also define information security requirements.

“The regulators may also need to access sensitive data and deficiencies related to the operations in the critical sector, and therefore they also would need to have an effective Information Security Management System (ISMS) instance,” the policy may recommend.

It could also prescribe that national nodal agencies evolve platforms and processes for machine-processing of data from different entities to carry out sectoral and cross-sectoral analysis of audit compliance, audit effectiveness and grading of auditors.

- It works under **National Security Council Secretariat (NSCS)** and coordinates with different agencies at the national level for cyber security matters.
- **National Cybersecurity Reference Framework (NCRF)**
  - **Background**
    - The NCRF was shared privately with companies and other government departments for consultation in May 2023, but is yet to be made public.
    - Apart from the main policy document, at least three supporting compendiums detailing global cybersecurity standards, products and solutions have also been formulated.
    - In June 2023, former National Cyber-Security Coordinator Lt. General Rajesh Pant had said that the NCRF will be released for the public soon.
  - **About**
    - NCRF is a framework that sets the standard for cybersecurity in India.
    - The NCRF can serve as a template for **critical sector** entities to develop their own governance and management systems for strong cyber-security systems.
      - The government has identified telecom, power, transportation, finance, strategic entities, government entities and health as critical sectors.
  - **Institutions involved in framing the framework**
    - The framework has been drawn up by the **National Critical Information Infrastructure Protection Centre (NCIIPC)** with support from the **National Cybersecurity Coordinator (NCSC)**.
  - **Key highlights**
    - **Non-binding in nature**
      - The NCRF is a guideline, meaning that its recommendations will not be binding.
    - **Separate budget allocation**
      - It recommends that enterprises allocate at least 10 per cent of their total IT budget towards cybersecurity.
      - Such allocation is to be mentioned under a separate budget head for monitoring by the top-level management / board of directors.
    - **Evolution of ways to use machines to analyse data from different sources**
      - The framework might suggest that **national nodal agencies evolve platforms and processes** for machine-processing of data from different entities.
      - This would help check if audits are done properly and rate auditors based on their performance.
    - **Greater powers to the regulators**
      - The NCRF might suggest that regulators overseeing critical sectors can:
        - set rules for information security;
        - define information security requirements to ensure proper audit.
    - **Effective Information Security Management System (ISMS)**
      - The regulators may also need to access sensitive data and deficiencies related to the operations in the critical sector.
      - Hence, they also would need to have an effective Information Security Management System (ISMS) instance.
    - **Common but Differentiated Responsibility (CBDR)**
      - The policy is based on a CBDR approach, recognising that different organisations have varying levels of cybersecurity needs and responsibilities.
- **Need for National Cybersecurity Reference Framework (NCRF)**
  - **Growing cyberattacks and lack of an overarching framework on cybersecurity**
    - India faces a barrage of cybersecurity-related incidents which pose a major challenge to New Delhi's national security imperatives.
      - E.g., A high-profile attack on the systems of AIIMS Delhi in 2022.
    - Many ministries feel hamstrung by the lack of an overarching framework on cybersecurity when they are formulating sector-specific legislations.
  - **Emergence of threat actors backed by nation-states and organised cyber-criminal groups**
    - In recent years many **threat actors backed by nation-states and organised cyber-criminal groups** have attempted to target Critical Information Infrastructure (CII) of the government and enterprises.

- In addition, availability of **cyber-attacks-as-service** has reduced the entry threshold for new **cyber criminals**, thus increasing the exposure to individuals and organisations.
- **National Cybersecurity Policy of 2013 is still guiding the cybersecurity of the nation**
  - The current guiding framework on cybersecurity for critical infrastructure in India comes from the National Cybersecurity Policy of 2013.
  - From 2013 till 2023, the world has changed as new threats and new cyber organisations have emerged calling for new strategies.



