

## DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 14-08-2025

### Table of Content

RBI prescribes seven sutras for AI adoption in financial sector

Satellite internet : a new dimension of strategic power.

Uttarakhand Freedom of Religion (Amendment) Bill, 2025

SC's Notice to Centre for 'creamy layer' Within SC, ST Reservation

India & Singapore: Boosting Ties From Healthcare to Tech

#### NEWS IN SHORT

South China Sea

India's First Commercial Earth Observation Satellite Constellation

BNS Section 152

Dhirio

Whale strandings increased tenfold in a decade: CMFRI study

Export Promotion Mission Plans

Kancha Gachibowli Forest

Expanding SC/ST Scholarships

Norms governing Overseas Citizens of India (OCI).

International Olympiad on Astronomy and Astrophysics

SabhaSaar

## RBI PRESCRIBES SEVEN SUTRAS FOR AI ADOPTION IN FINANCIAL SECTOR

### In News

The RBI committee developing the FREE-AI framework recommends regulated entities establish shared infrastructure to democratize data and computing access and create an AI Innovation Sandbox for the financial sector.

### AI in the Financial Sector

- Artificial Intelligence (AI) is transforming the financial services landscape globally and in India.
- AI is increasingly being adopted across the financial services sector.
- This adoption is being driven by multiple needs, including enhancing customer experience, improving employee productivity, increasing revenue, reducing operational costs, ensuring regulatory compliance, and enabling the creation of new and innovative products.

### Benefits

- It enhances customer experience through chatbots, virtual assistants, and personalized banking.
  - ♦ AI can help financial institutions better understand customer behaviour, improve efficiency, and offer more personalised services at scale.
- It improves operational efficiency via Robotic Process Automation (RPA) and predictive analytics.
- It Strengthens risk management using AI-powered fraud detection, credit scoring, and compliance tools.
- It enables financial inclusion by automating low-cost services and expanding access to underserved populations.

### Challenges in AI Adoption

- RBI Governor Shaktikanta Das warned that over-reliance on a few tech providers could amplify systemic risks.
- **Data Privacy and Cybersecurity:** AI systems are vulnerable to breaches and opaque decision-making, complicating regulatory compliance.
- **Infrastructure Gaps:** Many financial institutions lack the compute power and skilled workforce needed for AI deployment.
- **Regulatory Uncertainty:** The fast-evolving nature of AI challenges traditional regulatory frameworks.

### RBI and Government Initiatives

- The RBI constituted a committee in December 2024 to develop a **Framework for Responsible and Ethical Enablement of AI (FREE-AI)**.
  - ♦ **Key steps include Seven Sutras for AI Adoption** which comprises Trust, People First, Innovation, Fairness, Accountability, Understandability, and Safety.
  - ♦ It balances innovation and risk through 6 pillars: Infrastructure, Policy, Capacity (innovation) and Governance, Protection, Assurance (risk).
  - ♦ The report includes 26 recommendations, urging board-approved AI policies, expanded consumer protection, audits, and stronger cybersecurity to foster responsible AI adoption.
- The **IndiaAI Mission**, approved by the Union Cabinet under the leadership of the Hon'ble Prime Minister on 7 March 2024, is a landmark initiative to build a comprehensive and inclusive AI ecosystem in India.
  - ♦ It focuses on seven strategic pillars: Compute Capacity, Innovation Centre, Datasets Platform, Application Development Initiative, FutureSkills, Startup Financing, and Safe & Trusted AI.

### Way Ahead

- Generative Artificial Intelligence (AI) has the potential to improve banking operations in India by up to 46 per cent, according to a report by the Reserve Bank of India (RBI).
- Therefore to ensure responsible and inclusive AI adoption in the financial sector, it is essential to implement board-approved AI policies and expand audit and consumer protection frameworks to cover AI-related aspects.
- Shared infrastructure should democratize access to data and computing, while promoting the development of indigenous AI models tailored to India's financial needs.
- Capacity building through training in AI ethics, data science, and cybersecurity is vital, along with fostering collaboration among government, academia, and industry.
- Additionally, regulatory frameworks should evolve dynamically based on risk, ensuring transparency and explainability in AI decision-making.

**Source :TH**

## SATELLITE INTERNET : A NEW DIMENSION OF STRATEGIC POWER.

### In News

Various countries across the globe are increasingly viewing the Satellite internet as a new dimension of strategic power.

### Satellite Internet

- It is a type of internet connection that uses satellites to provide broadband service.
- It works by transmitting data between a satellite dish installed at the user's location and an orbiting satellite, which then communicates with a network operations center on the ground.

### How does satellite internet work?

- A satellite internet network is composed of a space segment and a ground segment.
- The space segment consists of the satellites in orbit, while the ground segment includes all equipment on Earth that communicates with them.
- The satellites are the most capital-intensive component.
- They carry communication payloads for data transmission and have a service life of five to 20 years.
- Satellites are deployed in three main orbits: **the Geostationary Earth Orbit (GEO), the Medium Earth Orbit (MEO), and the Low Earth Orbit (LEO).**

### Do you know ?

- **GEO satellites (35,786 km altitude)** remain fixed relative to Earth and cover about one-third of its surface.
  - ♦ They are large and act as simple signal relays ("bent-pipes"), but suffer from high latency, making them unsuitable for real-time applications. Example: Viasat's Global Xpress.
- **MEO satellites (2,000–35,786 km)** offer lower latency than GEO and require constellations for global coverage.
  - ♦ While better for some applications, they still face latency issues for real-time use and are costly to launch. Example: O3b constellation.
- **LEO satellites (below 2,000 km)** have very low latency and are small and cheaper to deploy. However, each covers a limited area, requiring massive constellations for global coverage.

- ♦ Starlink leads this model with over 7,000 satellites and plans for up to 42,000.
- ♦ LEO mega-constellations use large numbers of small, intelligent satellites with onboard signal processing to enhance efficiency, signal quality, and reduce the cost of ground terminals.

### Need for satellite internet

- Ground-based internet networks, common in urban areas, rely on physical infrastructure but struggle in sparsely populated or disaster-prone regions and can't always provide mobile connectivity.
- Satellite internet addresses these issues by offering global, resilient coverage independent of terrain or infrastructure, enabling rapid deployment and connectivity for moving platforms and remote sites.
  - ♦ It is a transformative technology with significant impact on the digital economy, civil infrastructure, and military strategy.

### Applications

- Satellite internet, enabled by mega-constellations like Starlink, offers wide-ranging applications across military, disaster response, healthcare, agriculture, and transportation.
- It Provides resilient communication during calamities such as Hurricane Harvey and the Russia-Ukraine conflict, aiding rescue and defense operations.
  - ♦ Its use by militaries in remote areas highlights its strategic value.
- It is pivotal for bridging the **digital divide**, especially in remote and underserved regions.
  - ♦ It enables broadband access in areas lacking fiber or mobile towers.
- It Facilitates remote healthcare and learning.
- It can ensure secure communication in border and maritime zones.
- It can support precision farming via weather and soil data integration.

### Challenges

- Modern LEO satellite internet offers compact, easy-to-use terminals, though it remains costlier than terrestrial broadband.
  - ♦ High setup costs and monthly fees may deter rural users.



- Concerns over foreign ownership and data privacy (e.g., Starlink's real-time tracking requirements).
- Ground station deployment and latency management remain technical challenges.

### Conclusion and Way Forward

- Satellite internet is not just a technological solution—it's a strategic imperative for the digital future.
- It is imperative for countries like India to develop comprehensive strategies to integrate the technology into national resilience plans.
- India should also leverage it to bridge the digital divide and foster economic development.
- Finally, active participation in shaping its international governance is crucial as these mega-constellations will define the next era of global connectivity and strategic advantage.

Source :TH

## UTTARAKHAND FREEDOM OF RELIGION (AMENDMENT) BILL, 2025

### Context

- The **Uttarakhand Freedom of Religion (Amendment) Bill, 2025**, was approved by the Uttarakhand State Cabinet.

### Stand of Central Government

- In an affidavit filed in the Supreme Court in 2022, the Union Ministry of Home Affairs said that the **right to religion did not include the right to convert other people to a particular religion**, especially through fraud, deception, coercion, allurement and other means.
  - ♦ The MHA reiterated the interpretation of **Article 25 given by the Supreme Court in the Stainislaus judgement of 1977**.
    - "Fraudulent or induced conversion impinged upon the right to freedom of conscience of an individual apart from hampering public order and, therefore, the state is well within its power to regulate/restrict it.
- **Other states with similar laws** : Rajasthan, Uttar Pradesh, Madhya Pradesh, Odisha, Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand and Uttarakhand— have their own anti-conversion law.

### Major Provisions of Uttarakhand Freedom of Religion (Amendment) Bill, 2025

- **Ban on Digital Propaganda:** Promoting or inciting conversion via social media, messaging apps, or any online medium is a punishable offence.
- **The definition of inducement has been expanded** in the bill to include gifts, cash/goods benefits, employment, free education, a promise of marriage, hurting religious faith, or glorifying another religion, categorizing all of them as a crime.
- **Stricter Punishments:**
  - ♦ **General violation:** 3–10 years imprisonment
  - ♦ **Sensitive class cases:** 5–14 years imprisonment
  - ♦ **Serious offences:** 20 years to life imprisonment + heavy fines
- **Marriage-related Provisions:** It includes punishment for marriage by fake identity or hiding religion.
- **Purpose of the Law as per the State Government:**
  - ♦ Protect the religious rights of citizens.
  - ♦ Prohibit conversions by fraud, inducement, or pressure.
  - ♦ Maintain social harmony.
- **Victim support:** Medical, travel, rehabilitation, and maintenance expenses.

### Arguments Against the Law

- **Constitutional Concerns:** It violates fundamental rights guaranteed by the Indian Constitution, such as the right to freedom of religion and the right to privacy.
- **Ambiguity in Definitions:** The bill has been criticized for its ambiguous definition of inducement, which can lead to arbitrary interpretation and misuse by law enforcement agencies.
- **Impact on Interfaith Relationships:** The law could be misused to target interfaith couples, particularly those involving Hindu-Muslim relationships, by accusing one party of converting the other through coercion or fraud.
- **Social Polarization:** The enactment of such laws has the potential to exacerbate social tensions and polarize communities along religious lines, leading to increased communal disharmony.

### Arguments in Favour of the Law

- **Prevention of Forced Conversions:** The primary objective of the Bill is to prevent forced

conversions, such conversions often exploit vulnerable individuals, particularly women and members of marginalized communities, and the law is necessary to protect their rights and autonomy.

- **Preservation of Social Harmony:** Regulating religious conversions helps to maintain social harmony and prevent tensions between different religious communities.
- **Deterrence Against Conversion Rackets:** The Bill serves as a deterrent against conversion rackets and fraudulent religious organizations that exploit individuals for financial or other gains.
- **Promotion of Religious Freedom with Responsibility:** The bill is viewed as a balanced approach to safeguarding religious freedom while preventing abuses and ensuring that conversions are conducted ethically and transparently.

#### Way Ahead

- The Uttarakhand Freedom of Religion (Amendment) Bill, 2025, seeks to curb illegal religious conversions through fraud, inducement, or coercion.
- However, for it to uphold both social harmony and constitutional freedoms, it must be implemented with precision, safeguards, and transparency.
- Striking this balance will ensure that the law serves its intended purpose without undermining India's pluralistic ethos.

Source: TH

#### SC HAD ISSUED A NOTICE TO CENTRE ON A PLEA FOR 'CREAMY LAYER' WITHIN SC, ST RESERVATION

##### Context

- **The Supreme Court** has decided to examine a petition to introduce a “**system**”, **similar to the creamy layer concept** for the Other Backward Classes (OBC) in reservation benefits among the **Scheduled Castes and the Scheduled Tribes**.

##### Reservation in India

- As per existing instructions, reservation is provided to Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs) at the rate of **15%, 7.5% and 27%, respectively**, in case of direct recruitment on an all-India basis by open competition.
  - ♦ In direct recruitment on an all-India basis, other than by open competition, the percentage fixed is 16.66% for SCs, 7.5% for STs, and 25.84% for OBCs.

- The **Constitution (103rd Amendment) Act 2019** enables the State (i.e., both the Central and State Governments) to provide **10% reservation to the Economically Weaker Sections (EWS) of the society**.

##### What is the 50% Rule?

- The Supreme Court has historically maintained that reservations, whether in jobs or education, **should not exceed 50%** of the total seats/posts.
- **Mandal Commission Case:** In **1992**, the SC in the **Indra Sawhney case** had ruled that reservations should **not exceed 50%**, barring certain **extraordinary situations**.
  - ♦ Such as to provide reservations to communities that hail from far-flung areas of the country and have been kept out of the mainstream of society. This is not a geographical test but a social one.
- **EWS Judgement:** The Supreme Court upheld the **103rd Constitutional Amendment**, which provides for **10% additional reservations** to the EWS.
  - ♦ This means, for the time being, that the 50% limit applies only to non-EWS reservations, and States are permitted to reserve a total of **60%** of the seats/posts, including EWS reservations.

##### Creamy Layer Principle

- It is a concept used to ensure that reservations in educational institutions and government jobs are extended to those **who are economically and socially disadvantaged within a certain group**.
  - ♦ It aims to **prevent the more affluent or advantaged members** of a reserved category from availing themselves of these benefits.
- **Origin:** The concept was first articulated by the Supreme Court of India in the **Indra Sawhney case (1992)**, also known as the Mandal Commission case.
  - ♦ The Court's ruling emphasized that within the OBC (Other Backward Classes) category, those who are relatively more privileged should not benefit from reservations.
- **Criteria:** The “creamy layer” is determined based on various criteria, including income and education levels.
- **Impact:** By applying the creamy layer principle, the government aims to make its affirmative action policies more effective and equitable,

ensuring that those who are most in need receive the support intended for them.

### Supreme Court Judgement on Sub-Categorisation of Scheduled Castes (SC)

- **In 2024**, the Supreme Court **upheld the validity of sub-classification within Scheduled Caste categories** in a 6:1 majority, overruling the five-judge bench decision in **E.V. Chinnaiah v State of Andhra Pradesh (2004)**.
  - ♦ It held that the criteria for identifying the creamy layer among SCs/STs should differ from those used for the Other Backward Castes (OBCs).
- **In 2004**, the Supreme Court held in the **E V Chinnaiah v State of Andhra Pradesh case** that the SC/ST list is a **'homogeneous group'** and cannot be further divided.
- **Argument of SC in 2024 Judgement:**
  - ♦ **Equality under Article 14** means treating equals equally, but allows the State to classify groups that are differently placed.
    - If a reserved category (like Scheduled Castes) is not uniform inside, the State can create smaller groups within it for fair distribution of benefits.
  - ♦ **Not Homogeneous:** The Presidential list is a legal fiction, used to identify disadvantaged groups, not a uniform class.
    - Inclusion in the SC list does not bar further classification for targeted benefits.
- **The SC held that the Sub-classification must be based on:**
  - ♦ Quantifiable data;
  - ♦ Proof of greater disadvantage;
  - ♦ Evidence of inadequate and ineffective representation in public services.
  - ♦ States must avoid arbitrary classification — must show rationale and empirical backing.
  - ♦ Effective representation, not just numerical presence, is key.

### Arguments in Favour

- **Unequal Backwardness Within SCs:** Some castes within the SC communities are more socially and educationally backward than others and have been consistently underrepresented.
  - ♦ Treating unequals equally perpetuates inequality, defeating the purpose of the reservation.

- **Not Homogeneous:** The SC list under Article 341 is a legal fiction created for affirmative action.
  - ♦ Chief Justice Chandrachud stated that inclusion in the list does not mean that castes are homogeneous, and law must recognize internal differences.
- **Constitutional Mandate allows it:** Articles 15(4) and 16(4) empower the state to make special provisions for the advancement of any socially and educationally backward class.
- **Promotes Effective Representation:** The goal is effective representation, not mere numbers. Sub-classification can help achieve meaningful inclusion.
- **Backed by Empirical Data:** Allows the government to target affirmative action where it's needed the most.

### Arguments Against

- **Article 341:** Article 341 allows only the President to modify the SC list.
  - ♦ State-led sub-classification is seen as indirect interference with the list and beyond state powers.
- **Fragmentation Within Community:** Sub-quotas can lead to increased caste-based divisions among SCs.
  - ♦ It may undermine the collective political strength and social solidarity of SC communities.
- **Defining Criteria:** Establishing objective, empirical measures of disadvantage within SCs is challenging.
  - ♦ Risk of inaccurate classification and legal challenges.
- **Opens the 'Creamy Layer' Debate:** Introducing the 'creamy layer' concept for SCs could dilute the protection provided to SCs as a whole.
  - ♦ Reservation for SCs is not just about economic backwardness, but historical discrimination and stigma, which persists across income groups.

### Way Ahead

- **Respect Constitutional Boundaries:** Ensure sub-classification stays within Articles 14, 15(4), 16(4), and does not alter the Presidential List under Article 341.
- **Evaluate Creamy Layer Applicability Carefully:** If applied to SC/ST, set separate criteria from OBCs, ensuring it does not dilute historical safeguards for these groups.

- **Strengthen Social Uplift Measures Beyond Quotas:** Complement reservations with targeted education, skill development, entrepreneurship support, and anti-discrimination enforcement to reduce long-term dependency on quotas.
- **Promote Social Cohesion:** Accompany policy changes with awareness drives to prevent divisions within SC communities and maintain the spirit of collective upliftment.

Source: TH

## INDIA & SINGAPORE: BOOSTING TIES FROM HEALTHCARE TO TECH

### Context

- Recently, India and Singapore, at the **third edition of the India-Singapore Ministerial Roundtable (ISMR)**, have reaffirmed their strategic partnership with a renewed focus on collaboration across critical sectors including healthcare, digitalisation, advanced technology, and connectivity.

### India & Singapore Relations: Historical Background

- India and Singapore have shared cultural and commercial ties for over a millennium, with maritime trade routes connecting the two regions.
- **Singapore was governed from Kolkata until 1867** under British rule, leaving a legacy of shared institutions, legal systems, and the widespread use of English.
- India was **among the first countries** to recognize **Singapore's independence in 1965**.

### Present-Day Cooperation

- **Strategic Partnership:** India & Singapore elevated their ties to a **Strategic Partnership** during the India's Prime Minister visit to Singapore in 2015.
  - ♦ It was further upgraded to a **Comprehensive Strategic Partnership in 2023**.
- **Economic and Trade:** As per the Ministry of Commerce, **India's Exports** to Singapore was \$14.4 billion, and **India's Imports** from Singapore was \$21.2 billion in 2023–24. Singapore is **India's largest trading partner in ASEAN** and a top source of **Foreign Direct Investment (FDI)**. Key agreements include:
  - ♦ **Comprehensive Economic Cooperation Agreement (CECA)** – signed in 2005, reviewed in 2018.
  - ♦ **Double Taxation Avoidance Agreement (DTAA);**

- ♦ **FinTech Cooperation Agreement;**
- **Digital and Financial Connectivity:** In 2023, **India's UPI** was linked with **Singapore's PayNow**, enabling seamless cross-border digital payments.
  - ♦ Singaporean firms are investing in India's digital infrastructure and smart cities.
- **Defence and Security:** Joint military exercises and training programs are held regularly.
  - ♦ **Defence Cooperation Agreement** signed in 2003, enhanced in 2015.
- **Geopolitical Significance:** Singapore is central to **India's Act East Policy** and **Indo-Pacific vision**.
  - ♦ Both nations are active members of forums like **G20, East Asia Summit, and IORA**.
- **Ministerial Roundtable Mechanism (ISMR):** It is a high-level dialogue platform, launched in 2022. It covers **six strategic pillars** like **advanced manufacturing, connectivity, digitalisation, healthcare & medicine, skills development, and sustainability**.
  - ♦ Its **inaugural meeting** was held in **New Delhi** in 2022 the **2nd meeting** was held in **Singapore** in August 2024, and **third edition** was held in **New Delhi** in 2025.

### Key Concerns & Challenges

- **Investment Bottlenecks:** Despite Singapore being India's largest FDI source, investment levels dropped by over 30% in the past year.
  - ♦ Singaporean businesses cite regulatory complexity, bureaucratic delays, and unpredictable policy shifts as barriers to investing in India.
- **Missed Trade Opportunities:** India's withdrawal from the **Regional Comprehensive Economic Partnership (RCEP)** was seen by Singapore as a 'missed opportunity' for **deeper ASEAN integration**.
  - ♦ Although India cited strategic **concerns over China's influence**, the move created a gap in regional trade alignment.
- **Infrastructure and Connectivity:** Ambitious proposals like the undersea solar energy and data cable between India and Singapore face technical and regulatory hurdles.
  - ♦ Building trusted data corridors and energy pipelines requires alignment on cybersecurity, environmental standards, and cross-border protocols.



- **Talent and Skilling Gaps:** Singapore has expressed interest in India's demographic dividend, but matching skills with industry needs remains a challenge.
  - ♦ Joint skilling initiatives are underway, but scaling them to meet demand in sectors like semiconductors and AI is still a work in progress.

### Path Forward

- As India rises on the global stage and Singapore continues to lead in innovation and finance, their partnership is poised for even greater expansion.
- The **India–Singapore Ministerial Roundtable (ISMR)** provides a high-level mechanism to address concerns and chart new areas of collaboration.

Source: IE

## NEWS IN SHORT

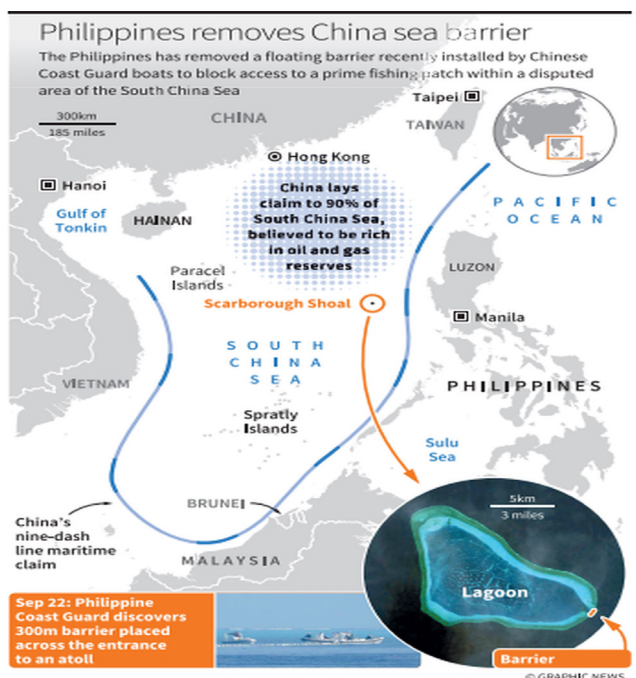
### SOUTH CHINA SEA

#### Context

- Recently, the United States deployed two warships near the disputed **Scarborough Shoal** in the **South China Sea** following a collision between Chinese naval vessels attempting to block a Philippine coast guard ship.

#### About the South China Sea

- It is a vital **maritime corridor in the Indo-Pacific**, bordering **China and Taiwan** to the north, **Vietnam, Malaysia, Thailand, and Singapore** to the west, **Indonesia and Brunei** to the south, and **Philippines** to the east.



- It has become a flashpoint of geopolitical tension, territorial disputes, and strategic maneuvering, including **Spratly Islands, Paracel Islands, and Scarborough Shoal**.
- China asserts control over nearly the entire region via its **'nine-dash line'**.
  - ♦ China has built artificial islands and military outposts, defying a 2016 international tribunal ruling that invalidated its expansive claims.
- Philippines, Vietnam, Malaysia, Brunei, and Taiwan have overlapping claims.
  - ♦ **Scarborough Shoal** is claimed by China, Philippines, Vietnam, Malaysia, Brunei, and Taiwan.

### India's Position and Engagement

- India views the South China Sea as part of the **global commons** and **supports freedom of navigation under international law**.
- India's evolving approach includes:
  - ♦ Backing the 2016 tribunal ruling in favor of the Philippines.
  - ♦ Participating in oil exploration projects in Vietnam's EEZ through ONGC Videsh.
  - ♦ Transitioning from **Look East to Act East**, emphasizing strategic engagement with ASEAN and Indo-Pacific partners.

Source: TH

### INDIA'S FIRST COMMERCIAL EARTH OBSERVATION SATELLITE CONSTELLATION

#### Context

- Recently, India launched its **first fully indigenous commercial Earth Observation (EO) satellite constellation**.
  - ♦ It is the **first time a private Indian consortium**, led by PixxelSpace, will design, build, launch, and operate under a **PPP model**.

#### Satellite Capabilities and Applications

- This **commercial Earth Observation (EO) satellite constellation** aims to feature cutting-edge sensors like **Panchromatic, Multispectral, Hyperspectral and Microwave Synthetic Aperture Radar (SAR)**.
  - ♦ It aims to deliver **Analysis Ready Data (ARD) and Value-Added Services (VAS)**.
- **Key Applications:** Climate change monitoring, Disaster management, Agriculture and infrastructure planning, Marine surveillance, Urban development, and National security.



- **Strategic Significance:** Reduce India's reliance on foreign satellite data, ensure national data sovereignty, and position India as a global leader in geospatial intelligence.

#### Working of Earth Observation (EO) Satellites

- EO satellites work by **capturing electromagnetic radiation** reflected or emitted from Earth's surface.
  - ♦ They use specialized sensors to detect and record data across various spectral bands—visible, infrared, microwave, and more.
- These satellites **orbit the Earth in Low Earth Orbit (LEO) or Sun-Synchronous Polar Orbit (SSPO)**, allowing them to **revisit the same location at regular intervals** and capture high-resolution imagery.
- **Key Components and Payloads:**
  - ♦ **Electro Optical Infrared (EOIR):** To capture images in mid-wave and long-wave infrared bands, useful for day/night surveillance, fire detection, and environmental monitoring.
  - ♦ **Synthetic Aperture Radar (SAR):** To penetrate cloud cover and darkness to provide all-weather imaging.
  - ♦ **Hyperspectral Sensors:** To detect hundreds of spectral bands for detailed analysis of vegetation, minerals, and pollution.
  - ♦ **GNSS-Reflectometry (GNSS-R):** It uses reflected GPS signals to measure ocean surface winds, soil moisture, and flood zones.
  - ♦ **SiC UV Dosimeter:** It monitors UV radiation, especially for crewed missions like Gaganyaan.
- EO satellites transmit raw data to ground stations where it is processed into Analysis Ready Data (ARD) and Value-Added Services (VAS), and processed data disseminated.

#### Indian National Space Promotion and Authorisation Centre (IN-SPACe)

- It is an autonomous, single-window agency under the **Department of Space, Government of India**.
- It is designed to promote, enable, authorize, and **supervise space activities by non-governmental entities (NGEs)**.
- It **acts as a bridge between ISRO and private players**, facilitating the growth of a vibrant commercial space ecosystem.

Source: TH

#### BNS SECTION 152

##### In News

The Supreme Court Friday issued a notice on a plea challenging the constitutional validity of Section 152 of the Bharatiya Nyaya Sanhita (BNS).

- The petition contends that the provision "reintroduces the colonial sedition law".

#### Section 152 of the Bharatiya Nyaya Sanhita

- It penalizes anyone who, knowingly or purposely, through speech, writing, signs, electronic means, or financial support, promotes or attempts to promote secession, armed rebellion, subversive or separatist activities, or endangers India's sovereignty, unity, and integrity.
  - ♦ Punishment includes life imprisonment or up to seven years in prison, along with a fine.

#### Supreme Court's Observations

- The Supreme Court questioned whether the potential misuse of Section 152 of the Bharatiya Nyaya Sanhita could make the law unconstitutional.
  - ♦ This arose during a hearing on a petition filed by the Foundation of Independent Journalism and editor of The Wire, who faces an FIR under Section 152 in Assam over a news article.
  - ♦ The Court reaffirmed the importance of protecting press freedom while maintaining public order.

Source :TH

#### DHIRIO

##### In News

Goa MLAs across party lines recently called for the legalisation of bull fighting, known locally as dhirio or dhiri, arguing it is a vital part of the state's cultural heritage.

#### Dhirio

- It is also spelled Dhiri and refers to traditional bullfighting events in Goa, where two bulls are pitted against each other.
  - ♦ The bulls fight head-to-head until one retreats or is injured.
- It is historically tied to post-harvest festivities and church feasts.
  - ♦ Bulls were named (e.g., Tyson, Rambo) and had fan followings.

### Legal Status

- It was banned in 1996 by the Bombay High Court at Goa under the Prevention of Cruelty to Animals Act, 1960 due to concerns over animal welfare.
- In 2014, the Supreme Court passed an order prohibiting all animal races and fights
  - ♦ Despite the ban, clandestine fights continue, especially in South Goa's coastal villages.

Source :IE

### WHALE STRANDINGS INCREASED TENFOLD IN A DECADE: CMFRI STUDY

#### In News

Whale strandings along India's southwest coast (Kerala, Karnataka, Goa) rose tenfold in the past decade.

#### Whale

- Whales are marine mammals classified under Cetacea, comprising baleen (Mysticeti) and toothed (Odontoceti) species.
- They breathe air and they are warm-blooded mammals
- Blue whales are the largest animals ever known to have lived on Earth.

#### Ecological Role

- Whales are crucial to ocean health: each great whale sequesters tons of CO<sub>2</sub>, acting as a carbon sink.
- Their nutrient-rich fecal plumes stimulate plankton growth, which captures CO<sub>2</sub> and produces atmospheric oxygen.
- Six of the 13 great whale species are classified as endangered or vulnerable

#### Threats

- Whale Strandings rose from 0.3% per year (2003–2013) to 3% per year (2014–2023), with nine cases reported in 2023 alone, mostly between August and November.
  - ♦ Causes include climate change, high vessel traffic, fishing, noise pollution, ship strikes, habitat degradation, and shallow coastal areas.
  - ♦ Bryde's whales are the most commonly stranded species, with blue whales occasionally found. Two genetically distinct forms of Bryde's whale exist in Indian waters.
- Rising sea temperatures and strong coastal currents contribute to strandings.

### Suggestions

- There are calls for the development of region-specific conservation strategies, including real-time alert systems, marine conservation networks, fisher training, and enhanced citizen science efforts to better protect these endangered marine mammals.

Source :IE

## EXPORT PROMOTION MISSION PLANS

### Context

- The government is revising its earlier **Export Promotion Mission plans** to focus more on specific sectors, in response to the **higher tariffs the U.S. has imposed on Indian imports**.

### About

- **In the Union Budget for 2025-26**, the Finance Minister announced an Export Promotion Mission with a ₹2,250 crore allocation for the current financial year.
  - ♦ It would facilitate easy access to export credit, cross-border factoring support, and support to MSMEs to tackle non-tariff measures in overseas markets.
- **Ministeries:** Driven jointly by the Ministries of Commerce and Industry, the Ministry of Micro, Small, and Medium Enterprises, and the Ministry of Finance.
- **Revised Mission Plans:** This would entail reducing the cost of credit for medium, small, and micro enterprise (MSME) borrowers in the worst-hit sectors, expediting clearances, and providing them with some sort of export incentives.
  - ♦ The sectors that will be most impacted by the U.S. tariffs are apparel and textiles, shrimp exporters, organic chemicals, and machinery and mechanical appliances.
- The revised plan will be a **joint effort across several Ministries** and involves detailed consultations with industry stakeholders.

Source: TH

## KANCHA GACHIBOWLI FOREST

### Context

- The Chief Justice of India said that the Telangana government must submit a proposal **to restore the “devastated” Kancha Gachibowli forest**.

- ♦ The government had cleared **over 100 acres in the Kancha Gachibowli forest area** abutting the University of Hyderabad for an IT infrastructure project.

#### About Kancha Gachibowli Forest (KGF)

- Kancha Gachibowli Forest (KGF) is a vital urban forest spanning around 400 acres adjacent to the University of Hyderabad, located in **Telangana**.
- ♦ It belongs to the **Deccan scrub forest ecosystem**—one of India's most ecologically significant and under-protected landscapes.
- **Biodiversity:** About 233 bird species, including migratory ones, approximately 72 tree species, and over 40,000 trees.
- ♦ Scheduled and protected fauna, including spotted deer, wild boars, monitor lizards, star tortoises, Indian rock pythons, peacocks, and the rare tree-trunk spider (*Murricia hyderabadensis*)—the only known habitat of this species.

#### The Deccan Thorn Scrub Forests

- The Deccan Thorn Scrub Forests are a tropical dry shrubland ecoregion found mainly in the **Deccan Plateau and adjoining areas of India and parts of northern Sri Lanka**.
- They represent the **driest and most degraded form of tropical dry deciduous forests**, occurring in regions with very low and erratic rainfall.
- These areas are often subject to **overgrazing, fuelwood collection, and agricultural expansion**, leading to sparse vegetation.
- **Major states:** Andhra Pradesh, Telangana, Maharashtra, Karnataka, Tamil Nadu.

#### Ecological Importance

- Provides habitat for arid-adapted species and endemic birds.
- Acts as a buffer against desertification.
- Grazing lands for pastoral communities.

Source: **TH**

#### EXPANDING SC/ST SCHOLARSHIPS

##### Context

- The Union government is considering major reforms to its scholarship programs for Scheduled Castes (SCs) and Scheduled Tribes (STs) for the next financial cycle (FY 2026–27 to FY 2030–31).

##### Post and pre-matric scholarships for SCs, Scheduled Tribes (STs), and OBCs

- The government runs post and pre-matric scholarships for SCs, STs, and OBCs as **centrally sponsored schemes**, funded jointly by the Union and State governments in a 60:40 ratio (90:10 for northeastern states).
- Post-matric scholarships are for Indian students studying beyond 10th grade, while pre-matric scholarships are mainly for grades IX and X
  - ♦ However, SC students from classes 1 to X are also eligible if their parents work in hazardous or unclean occupations.
  - ♦ In both cases, the annual parental income must be below 2.5 lakh for eligibility.

##### Current Trends

- ♦ SC pre-matric scholarships fell by 30.63% between 2020–21 and 2024–25.
- ♦ SC post-matric scholarships dropped by 4.22% in the same period.
- ♦ ST scholarships also saw declines: pre-matric by 4.63 lakh, post-matric by 3.52 lakh.
- ♦ For OBCs, EBCs, and DNTs, pre-matric beneficiaries dropped from 58.62 lakh in 2021–22 to 20.25 lakh in 2023–24.

##### Proposed Expansions

- **Raising income limits** to ₹4.5 lakh for ST scholarships (currently below ₹2.5 lakh);
  - ♦ Similar revisions for SC, OBC, and DNT scholarships under discussion by the Social Justice Ministry;
- **Extending pre-matric scholarships** to younger OBC students (from Class V onwards).
  - ♦ Currently, only if parents are in hazardous occupations.
- Increasing scholarship amounts (e.g., up to ₹60,000 annually under new schemes)



## CONSTITUTIONAL PROVISIONS RELATED TO SCS AND STS IN INDIA

### Definitions and Identification

- **Article 341 (SCs):** The President may, by public notification, specify castes, races, or tribes deemed to be SCs in relation to a State or Union Territory, after consulting the Governor.
  - ♦ Parliament can amend this list by law.
- **Article 342 (STs):** It allows the President to notify tribal communities and Parliament to modify the list.
- **Article 366(24) & (25):** It provides definitions for SCs and STs as per Articles 341 and 342.

### Fundamental Rights and Social Safeguards

- **Article 15(4):** It allows the State to make special provisions for the advancement of SCs and STs.
- **Article 16(4):** It permits reservation in public employment for backward classes, including SCs and STs, not adequately represented.
- **Article 17:** It abolishes untouchability and makes its practice punishable by law.
- **Article 25(2)(b):** It enables the State to open Hindu religious institutions of public character to all classes and sections of Hindus.

### Educational and Economic Safeguards

- **Article 46:** It directs the State to promote the educational and economic interests of SCs and STs and protect them from social injustice and exploitation.
- **Article 330 & 332:** It provides for reservation of seats for SCs and STs in the Lok Sabha and State Legislative Assemblies.
- **Article 335:** It states that claims of SCs and STs shall be considered in appointments to services and posts, consistent with administrative efficiency.

### Schemes Related To SCs & STs

- **Education-Based Schemes:**
  - ♦ **National Overseas Scholarship:** For SC/ST students pursuing higher education abroad; Income ceiling: 6–8 lakh/year.
  - ♦ **Dr. B.R. Ambedkar International Scholarship:** Offers guidance and financial support for SC/ST students seeking global academic opportunities.
- **Employment and Skill Development:**
  - ♦ **Welfare of SC/ST Jobseekers Scheme:** Implemented via 25 **National Career Service Centres**; Offers vocational guidance, computer training, and pre-recruitment coaching.
  - ♦ **Free Coaching for SC/OBC Students:** Central Sector Scheme offering coaching for competitive exams like UPSC, NEET, JEE.
  - ♦ **Pradhan Mantri Kaushal Vikas Yojana (PMKVY):** Skill training for SC/ST youth across sectors; Includes reskilling and entrepreneurship modules.
- **Infrastructure and Residential Support:**
  - ♦ **SCSP-TSP (Scheduled Castes Sub-Plan & Tribal Sub-Plan):** Residential schools in underserved areas; Hostels for UPSC aspirants in Delhi; Laptops and stipends for students.

Source: TH

## NORMS GOVERNING OVERSEAS CITIZENS OF INDIA (OCI).

### Context

- The Ministry of Home Affairs (MHA) has tightened the norms governing Overseas Citizens of India (OCI).

### About OCI

- Introduced: **2005**
- **Purpose:** Offers multiple-entry, multi-purpose lifelong visas to persons of Indian origin (PIOs) and their spouses.

- **Benefits:**

- ♦ No need to register with **Foreign Regional Registration Officer or Foreign Registration Officer** for any length of stay in India. However, permission is required to visit protected areas in India.
- ♦ Can open special bank accounts, buy non-farm property, apply for driver's licence and PAN card.

- **Eligibility Criteria**

- ♦ It provides for registration as an OCI of all Persons of Indian Origin (PIOs) who were citizens of India on **26th January, 1950**, or thereafter, or were eligible to become citizens of India on the said date.
- ♦ A foreign national who;
  - Belonged to a territory that became part of India after **15th August, 1947**; or
  - A child or a grandchild or a great grandchild of such a citizen; or
  - A minor child of such persons mentioned above; or
  - A minor child whose both parents are citizens of India or one of the parents is a citizen of India is eligible for registration as OCI cardholder.

- **Restrictions:**

- ♦ No person whose parents, grandparents, or great-grandparents are or were citizens of **Pakistan or Bangladesh** is eligible for registration as an **OCI cardholder**.
- ♦ Foreign military personnel either in service or retired are also not entitled for grant of OCI.
- ♦ OCI is not to be misconstrued as 'dual citizenship'.

### Key Updates

- OCI registration **will be cancelled** if an individual:
  - ♦ Is sentenced to imprisonment for **2 years or more**, or
  - ♦ Is charge-sheeted for an offence **punishable with imprisonment of 7 years or more**.
- This applies whether the offence occurs in India or abroad, as long as it is **recognised under Indian law**.
  - ♦ These rules are notified under the **Citizenship Act, 1955**, and **Citizenship Rules, 2009**, which allow the central government to cancel OCI registration under specified conditions.

Source: AIR

### INTERNATIONAL OLYMPIAD ON ASTRONOMY AND ASTROPHYSICS

The 18th International Olympiad on Astronomy and Astrophysics (IOAA) is being hosted in India.

#### International Olympiad on Astronomy and Astrophysics (IOAA)

- It was established in 2006 to provide a global platform for high school students interested in astronomy.
  - ♦ The first IOAA was held in 2007 in Thailand, with 21 countries participating and the event marking the formal adoption of its statutes and governance structure.
- **Annual editions** of the Olympiad have been hosted by countries across Asia, Europe, and South America, including Brazil, China, Colombia, Georgia, Greece, Hungary, India, Indonesia, Iran, Poland, and Romania.
  - ♦ The Olympiad aims to promote scientific education and international collaboration among young astronomers.
- **This year's highlights :** over 300 high school students from 64 countries participating in the 10-day event.
  - ♦ This is the second time that India is hosting the IOAA, after the 2016 edition in Bhubaneswar.
  - ♦ This year's theme is 'Vasudaiva Kutumbakam', the "ancient Indian idea of the world is family under one sky".

Source :TH

### SABHASAAR

#### Context

- The Union Government will launch '**SabhaSaar**' in Tripura on **Independence Day (15 August)**, with plans to extend it to other states.

#### About SabhaSaar

- **Purpose:** AI-powered tool to automatically generate minutes of gram sabha meetings.
- **Functioning:**
  - ♦ Generates **transcriptions** from audio or video recordings.
  - ♦ Panchayat officials can upload recordings using **e-GramSwaraj login credentials**.
- **Technology Base:** Built on **Bhashini**, the government's AI-powered **language translation platform**.
- **Language Support:** All major Indian languages — **Hindi, Bengali, Tamil, Telugu, Marathi, Gujarati** — and **English**.

**Do you know?**

- **Gram Sabha:** Primary body of the **Panchayati Raj system**, comprising all **registered voters** in a gram panchayat.
- **Meetings:** At least **four times a year** — **26 Jan, 1 May, 15 Aug, and 2 Oct.**
- There are **2,55,397 village panchayats**, 6,742 intermediate panchayats, 665 district panchayats, and 16,189 traditional local bodies across the country.

Source: IE

