

Today's Prelims Topics

Reservation & 50% Cap

Context

- The Leader of Opposition in Bihar, has announced that if his alliance comes to power, they would raise the reservation quota to 85%.
 - Meanwhile, the Supreme Court has issued a notice to the Union government on a petition seeking the introduction of a 'creamy layer'-like system within reservations for Scheduled Castes (SCs) and Scheduled Tribes (STs).

Constitutional Provisions

- Article 15(1): Prohibits the State from discriminating against any citizen on grounds of religion, race, caste, sex, or place of birth.
- Article 15(4): Empowers the State to make special provisions for the advancement of socially and educationally backward classes (SEBCs), SCs, and STs.
- Article 15(5): Provides for reservation in educational institutions, including private ones (except minority institutions).
- Article 15(6): Introduced by the 103rd Constitutional Amendment (2019), provides for reservation of 10% for Economically Weaker Sections (EWS).
- Article 16(1): Guarantees equality of opportunity in public employment.
- Article 16(4): Allows reservation of appointments/posts for backward classes not adequately represented in State services.
- Article 16(4A): Provides for reservation in promotions for SCs/STs (inserted by the 77th Amendment, 1995).
- Article 16(6): Provides 10% EWS reservation in government jobs.

Key Judicial Pronouncements

- Balaji v. State of Mysore (1962)
 - Reservations should be within "reasonable limits."
 - Capped reservations at 50%.
 - Treated reservation as an exception to equality.
- State of Kerala v. N.M. Thomas (1975)
 - Broached the idea of **substantive equality**.
 - Held that reservations are not exceptions but part of equality of opportunity.
 - O Did not give a binding ruling on the 50% ceiling.
- Indra Sawhney v. Union of India (1992)
 - Upheld 27% reservation for OBCs.
 - Affirmed that caste can be a criterion for identifying backwardness.
 - Reaffirmed the **50% ceiling** (with rare exceptions).
 - o Introduced the concept of 'creamy layer' exclusion for OBCs.
 - Prohibited reservation in promotions for OBCs.
- M. Nagaraj v. Union of India (2006): Upheld SC/ST promotion quotas (77th, 81st, 82nd, 85th Amendments).
 - Imposed conditions:
 - Quantifiable data of backwardness,
 - Inadequate representation,
 - Administrative efficiency (Art. 335) must be maintained.
- Janhit Abhiyan v. Union of India (2022)
 - Upheld 103rd Amendment (10% EWS reservation).
 - **Economic criteria valid basis** for reservation.
 - 50% ceiling not inflexible; applies mainly to caste-based quotas.



Majorana Particles

Context

In the global push to build practical quantum computers, scientists are exploring unconventional concepts from advanced physics such as the use of Majorana particles.

What is Majorana Particle

- Proposed by Italian physicist Ettore Majorana (1937).
- A **fermion that is its own antiparticle** unlike electrons or protons which have distinct antimatter counterparts.
- Predicted in **high-energy physics**, but not conclusively observed in nature.
- In **condensed matter systems**, certain **quasiparticles** (collective excitations in superconductors at near absolute zero) behave like Majorana fermions.
- These are called **Majorana zero modes**, often found at the ends of **superconducting nanowires**.





Scheme to promote Critical Mineral Recycling

Context

Cabinet approves incentive scheme to promote Critical Mineral Recycling as a part of the National Critical Mineral Mission (NCMM).

About the Scheme

- **Objective:** Promote recycling of **critical minerals** (like lithium, cobalt, rare earths) to ensure **supply chain sustainability**, given the long gestation of new mining projects.
- Financial Outlay: ₹1,500 crore.
- Tenure: 6 years (FY 2025-26 to FY 2030-31).
- Key Features of Recycling Incentive Scheme
 - **Eligible Feedstock:** E-waste, Lithium-Ion Battery (LIB) scrap, Catalytic converters and other end-of-life vehicle scraps.
 - Beneficiaries: Both large recyclers and small/new entities (including start-ups).
 - One-third of the outlay earmarked for small entities.
 - o Incentive Mechanism:
 - Capex subsidy: 20% on plant & machinery for timely production.
 - Opex subsidy on incremental sales: 40% (Year 2) and 60% (Year 5).
 - **Incentive ceilings:** ₹50 crore for large, ₹25 crore for small entities.

National Critical Mineral Mission (NCMM)

- **Period:** FY 2024-25 to FY 2030-31.
- Aim: Secure India's supply of critical minerals from domestic and foreign sources.
- Scope: Entire value chain → exploration → mining → processing → beneficiation → recovery from end-of-life products.



Environment Audit Rules, 2025

Context

The Ministry of Environment, Forest and Climate Change (MoEFCC) has issued a notification introducing the Environment Audit Rules, 2025.

Key Features of Environment Audit Rules, 2025

- Environment Audit Designate Agency (EADA): Nodal body responsible for certification, registration, training, and oversight of environment auditors.
- Registered Environment Auditors (REAs):
 - Only certified and registered auditors are permitted to undertake environmental audits.
 - Certification based on qualification & experience review or through an examination.
 - Allocation of REAs done through a random assignment system to ensure neutrality.

• Responsibilities of REAs:

- Conduct sampling and analysis.
- o Calculate environmental compensation.
- Verify compliance under **Green Credit Rules**.
- Perform audits under waste management rules and other environment & forestrelated laws.

• Two-Tier Audit System:

- Tier-I: Traditional compliance reviews by CPCB, SPCBs, and MoEFCC regional offices.
- Tier-2: Independent auditing by REAs.

• Institutional Roles:

- MoEFCC: Provides overall supervision and issues guidelines.
- CPCB/SPCBs/Regional Offices: Continue inspections, verifications, and assist MoEFCC in implementation.
- Oversight Mechanism: A Steering Committee, chaired by an Additional Secretary,
 MoEFCC, will track implementation and recommend reforms.

Source: PIB



News In Short

Securities Appellate Tribunal (SAT)	News? U.S-based high-frequency trading firm Jane Street Group has moved the Securities Appellate Tribunal (SAT) against the Securities and Exchange Board of India (SEBI) in an ongoing market manipulation case. About SAT It is a statutory body constituted under Section 15K of the SEBI Act, 1992. It hears appeals against the orders passed by: SEBI Adjudicating Officers under the SEBI Act PFRDA (Pension Fund Regulatory and Development Authority) IRDAI (Insurance Regulatory and Development Authority of India), in certain cases. Members: Presiding Officer and two other Members. It has the same powers as vested in a civil court. Further, its orders can be appealed only in the Supreme Court of India (within 60 days). Source: The Hindu
Esrange Space Centre (Sweden)	News? Amid geopolitical tensions and reliance on the U.S. and French Guiana, Europe is developing independent space-launch capabilities through new sites like Sweden's Esrange Space Centre and Norway's Andøya Spaceport. Esrange Space Centre (Sweden) Location: Kiruna, Sweden — over 200 km north of the Arctic Circle. Established: 1966 (originally for sounding rockets and balloon experiments). Ownership: Operated by the Swedish Space Corporation (SSC). Source: The Hindu
National Maritime Heritage Complex	 News? Chief of the Naval Staff, visited the National Maritime Heritage Complex (NMHC) at Lothal, Gujarat. About National Maritime Heritage Complex Purpose: The project aims to showcase India's 4,500-year-old maritime heritage and will become the world's greatest maritime complex once completed. Components: The complex will include several features such as a Lighthouse Museum and a five-dimensional theatre offering interactive experiences. Development: By the Ministry of Ports, Shipping, and Waterways. Source: PIB
Spyware Graphite	News? The Trump administration has reinstated a suspended contract with Israel's Paragon Solutions, granting U.S. Immigration and Customs Enforcement (ICE) access to its Graphite spyware. About Graphite Spyware Developer: Paragon Solutions (co-founded by former Israeli PM Ehud Barak).



- Nature: A hacking tool designed for remote access to mobile phones.
- Capabilities:
 - Gain full control of the target phone.
 - Access photos, contacts, and messages.
 - Track real-time location.
 - Intercept encrypted messages (e.g., WhatsApp, Signal).
 - Convert the phone into a **listening device** by activating its microphone.

Source: Indian Express







Places in News



News? In Sudan's Darfur region, a massive landslide buried the mountain village of Tarasin in the Jebel Marra range.

Darfur region

- It is a region in western Sudan,
- It shares borders with: Libya, Chad, and the Central African Republic (CAR).





Mains Topics

India's Sports Governance Ecosystem

Context

The National Sports Governance Bill was recently passed by both Houses. Its aim is to address issues in sports governance and strengthen India's sports ecosystem.

Current Sports Governance System

- Policy Making:
 - Ministry of Youth Affairs & Sports (MYAS): Policy, funding, recognition of bodies.
 - **Sports Authority of India (SAI)**: Executes government programmes, runs National Centres of Excellence, hosts camps, sports science & medicine support.
 - National Sports Development Code of India, 2011
 - Governs recognition of National Sports Federations (NSFs).
 - Prescribes tenure and age limits for officials.
 - Lacks legal enforceability functioning depends on voluntary compliance.
- Sports bodies & Organisations:
 - National Sports Federations (NSFs): Each sport is governed by a federation that selects players, conducts tournaments, and represents India in international bodies. Eg: BCCI (cricket), AIFF (football), WFI (wrestling).
 - Indian Olympic Association (IOA): Apex body for Olympic sports. Recognised by the International Olympic Committee (IOC).
- Integrity & Compliance:
 - NADA/NDTL: Anti-doping agency & lab; WADA compliance.
 - Judicial Interventions: In many cases, courts had to appoint Committees of Administrators (CoA) (e.g., AIFF, BCCl, Hockey India) due to governance failures.

Challenges in Current System

Structural problems

- Political capture & patronage: Many NSFs turned into fiefdoms; age/tenure caps flouted; family/clique control common.
- **Democratic deficit:** Athlete representation tokenistic, women are under-represented and major selections are opaque.
- Legitimacy wars: Rival groups claim to be the 'real' federation; international bodies suspend India when interference/chaos persists (e.g., AIFF suspension 2022; WFI suspension 2023; AKFI suspension 2024)

Process & compliance gaps

- **Electoral Malpractices:** Tenure limits are being violated, officials overstaying beyond permissible terms, dubious electoral rolls etc.
- Financial opacity: Grants, sponsor money, ticketing, rights income not disclosed transparently.
- **Litigation spiral:** Over **350 cases pending** against various federations in different courts. Prolonged litigations stall decision-making and hurt athletes' careers.

Athlete-centric issues

- Selections & trials: Last-minute notices, ad hoc criteria and limited right to appeal.
- **Safeguarding:** Patchy mechanisms for **sexual harassment, bullying, retaliation** & lack of independent "safe sport" units.
- Lack of Support systems: Uneven access to sports science, physio, nutrition, psychology; disability sport still struggles for parity.



International compliance risk

- Autonomy vs oversight: IOC/International Federations demand autonomy; courts/government seek accountability. If autonomy and oversight are not balanced, it creates conflict.
 - **Eg:** IOC suspended the Indian Olympic Association in 2012 because of "government interference" in its functioning.
- Doping risk: When sports bodies are fighting internal battles (court cases, leadership disputes, government probes), their focus shifts away from anti-doping measures. This can invite sanctions from the World Anti-Doping Agency (WADA) and harm the country's global sporting image.

Need for a New System in Indian Sports Governance

- <u>Persistent misgovernance</u> in national sports federations has weakened India's standing in the international sports community.
- Political monopolisation has hindered transparency and accountability.
- <u>Lack of a comprehensive law</u> has left athletes vulnerable to arbitrary decision-making. (Presently govt. Has enacted National Sports Governance Act, 2025)
- As India aspires to host the **Commonwealth Games and Olympics**, global standards of governance and integrity become essential.

Main Provisions of the National Sports Governance Act, 2025

- National Sports Board (NSB):
 - A new **central authority** has been created to regulate and grant recognition to national sports federations and their state affiliates.
 - Purpose: To end the problem of "rival federations" that often exist in parallel, both claiming legitimacy and confusing athletes. <u>Recognition by NSB will be final and binding.</u>
- Creation of Apex Committees:
 - National Olympic Committee (NOC) and National Paralympic Committee (NPC) have been formally established under the law.
 - All sports federations must align their rules and functioning with the Olympic Charter, Paralympic Charter, and other international codes of conduct.
- Executive Committee Composition of Federations:
 - Maximum **15** members in the executive committee to prevent oversized and politicised bodies.
 - Mandatory inclusion of: At least 2 outstanding sportspersons (to ensure athlete voices in decision-making) & At least 4 women members (to improve gender diversity).
 - Age and tenure limits introduced (e.g., maximum age 70 years, maximum 3 terms of 4 years each) to break the cycle of political monopolisation.
- Dispute Resolution through National Sports Tribunal:
 - Establishment of a **specialised tribunal** to handle disputes between federations, athletes, and stakeholders.
 - Appeals will go **only to the Supreme Court**, ending the current cycle of endless appeals in High Courts and multiple forums.
- **Electoral Reforms:** Elections of national federations will be overseen by a national panel of independent electoral officers.
- Athletes' Rights and Welfare: Federations are legally bound to ensure:
 - Transparent selection criteria.
 - o Proper grievance redressal mechanisms.
 - Safeguards against harassment and exploitation.



• Transparency and Accountability: Federations must publish annual audited accounts, balance sheets, and decisions on public platforms. They are classified as public authorities under the RTI Act, ensuring citizen oversight.

Way Forward

- Athlete-Centric Governance: Ensure athletes' voices are central in decision-making. Also mandatory representation of women and players across federations.
- Transparency & Accountability: Independent audits and compliance checks.
- Grassroots to Elite Integration: Stronger pipeline from Khelo India → National Sports Federations → International Games.
- **Professionalisation of Sports Bodies:** Hiring of trained administrators, managers, and legal experts alongside sportspersons.
- **Global Best Practices:** Adopt models from countries with strong sports governance (e.g., UK Sport, US Olympic Committee).
- **Para-sport mainstreaming:** Accessible venues, classification expertise, dedicated physio/nutrition/tech support; equal rewards and media coverage mandates.
- Science & tech integration: Central Sports Science Cloud (injury logs, training loads, heat maps) with athlete consent; analytics to drive selection and load management.
- Anti-doping education first: Mandatory e-learning for all national campers;
 nutrition/supplement guidance; zero-tolerance with proportionate & quick adjudication.

Steps India Needs to Take to Increase Medals and Performance

• Strengthen Grassroots Development:

- o India must identify talent early through school, district, and rural scouting programmes.
- Mandatory playgrounds, sports leagues in schools, and proper implementation of the NEP
 2020 sports curriculum will ensure a steady talent pipeline.

• Upgrade Infrastructure and Training Ecosystem:

- World-class facilities such as National Centres of Excellence and regional academies should be expanded across states.
- Sports science, biomechanics, nutrition, and injury management must become integral to athlete preparation, with training environments simulating Olympic conditions.

• Ensure Athlete-Centric Governance:

 Selections should be transparent, with criteria published in advance and trials monitored publicly.

• Provide Financial and Institutional Support:

- Schemes like the Target Olympic Podium Scheme (TOPS) should be expanded to cover more athletes with direct support for coaching, exposure, and recovery.
- CSR funds and private sponsorships can supplement government funding, while pensions and insurance will secure athletes' future.

• Invest in Coaching and Human Resources:

 Hiring experienced foreign coaches, while simultaneously training Indian coaches, is essential.

• Diversify Medal Prospects and Exposure:

 India should invest in emerging sports like shooting, fencing, cycling, and gymnastics while sustaining strengths in wrestling, boxing, hockey, and athletics.

• Build a Strong Sports Culture:

- o India must move beyond an <u>education-only mindset and recognise sports as a viable career.</u>
- Role models like Neeraj Chopra and P.V. Sindhu should be celebrated, awareness campaigns should be held to encourage families and schools to support children in pursuing sports.