Prelims Exam Topics

DRUG TRADEMARK DISPUTES IN INDIA

Context

- A trademark dispute arose when Novo Nordisk sued Dr. Reddy's Laboratories in the Delhi High Court, alleging that the drug name "Olymviq" was deceptively similar to its diabetes drug Ozempic, highlighting India's strict rules on pharmaceutical trademarks.

Legal Framework for Naming of Drugs in India

Drug names in India are regulated under the **Trade Marks Act, 1999**. Its important sections are as:

Section (Trade Marks Act)	Provision (with respect to Drug Naming)
Section 9 – Distinctiveness	Trademarks must be **distinctive**.
Section 11 – Similarity with earlier marks	Pharmaceutical trademarks must not be **"deceptively similar" to existing drug names**, especially when such similarity could cause confusion among doctors, pharmacists or patients.
Section 13 – International Non-Proprietary Names (INN)	Prohibits monopolising **International Non-Proprietary Names (INN)**—the globally recognised generic names for active pharmaceutical ingredients. Companies may derive brand names from INNs, but the resulting name must be **clearly distinguishable**.
Section 29 – Trademark infringement	Use of a registered trademark or a deceptively similar mark for similar goods without permission amounts to infringement.
Section 27 – Passing off remedy	Even without trademark registration, courts can **prevent use of a misleading drug name that falsely suggests association with another manufacturer**.

Supreme Court Jurisprudence on Drug Trademarks

- **Cadila Healthcare case (2001)** established strict standards for determining **"deceptive similarity"** in pharmaceutical trademarks.
  - E.g. **phonetic similarity, visual resemblance, nature and therapeutic use of the drug, likelihood of confusion among doctors, pharmacists or patients**.
- **Bombay High Court (2023):** The court held that **even the slightest probability of confusion in medicinal trademarks is sufficient to restrain use** of a similar brand name.
- **Delhi High Court ruling on Letroz vs Letero (2022):** The court allowed both names because they were derived from the same **INN "Letrozole"** and were prescribed by specialised oncologists, reducing risk of confusion.
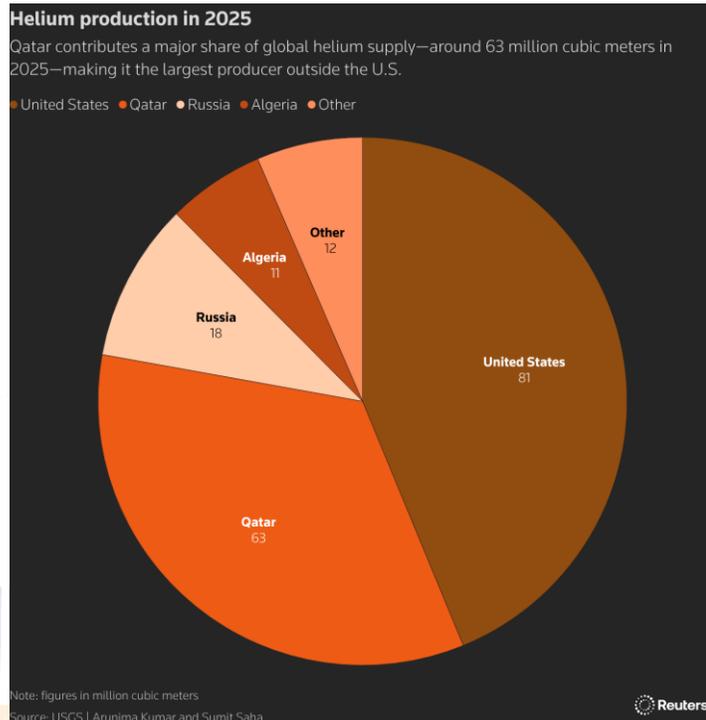
HELIUM SHORTAGE HAS STARTED IMPACTING TECH SUPPLY CHAINS

Context

- Rising geopolitical tensions in West Asia have tightened global **helium supply**, affecting industries dependent on the gas for high-precision manufacturing and cooling processes.

Helium Production

- **Source:** Helium is primarily obtained as a **by-product of natural gas processing**, where it accumulates in underground gas reservoirs through radioactive decay of elements like uranium and thorium.

- **Extraction:** During natural gas refinement, helium is separated through **cryogenic distillation**.

- **Major Producers:** The **United States and Qatar** are among the largest global producers, with Qatar contributing a significant share of global supply.

- **Supply Characteristics:** Production is **geographically concentrated**, making global supply vulnerable to geopolitical disruptions and transport delays.

Helium production in 2025

Qatar contributes a major share of global helium supply—around 63 million cubic meters in 2025—making it the largest producer outside the U.S.

● United States ● Qatar ● Russia ● Algeria ● Other

- United States 81
- Qatar 63
- Russia 18
- Algeria 11
- Other 12

Note: figures in million cubic meters
Source: USGS | Arunima Kumar and Sumit Saha
Reuters

Uses of Helium – Key Sectors

Sector	Use of Helium
Semiconductor Industry	Used for **cooling, leak detection and precision manufacturing** in chip fabrication processes.
Medical Sector	Liquid helium cools superconducting magnets in **MRI scanners**.
Space & Aerospace	Used to **pressurise rocket fuel tanks and purge propulsion systems**.
Cryogenics & Scientific Research	Enables **ultra-low temperature experiments** due to its extremely low boiling point.
Industrial Manufacturing	Used in **arc welding, leak detection, and vacuum systems**.
Electronics & Fibre Optics	Provides **controlled atmosphere for semiconductor and fibre-optic production**.
Meteorology	Used in **weather balloons and atmospheric research balloons** because it is lighter than air and non-flammable.

INDIA'S NATIONALLY DETERMINED CONTRIBUTIONS (NDCS) FOR 2035

Context

India announced its third set of Nationally Determined Contributions (NDCs) for the period 2031–2035.

The New 2035 Targets vs. 2030 Commitments

The updated NDC is a response to the First Global Stocktake (GST), which concluded that the world is currently not on track to limit warming to 1.5°C.

Goal Category	2030 Target (Updated Aug 2022)	2035 Target (Announced Mar 2026)
Non-Fossil Fuel-Based Power Capacity	50% of installed electricity capacity from non-fossil sources	60% of installed electricity capacity from non-fossil sources
Emissions Intensity of GDP	Reduce by 44% from 2005 levels	Reduce by 47% from 2005 levels
Carbon Sink (Forests & Tree Cover)	Create additional sink of 2.5–3 billion tonnes of CO_2 equivalent	Enhance sink to 3.5–4 billion tonnes of CO_2 equivalent

The Positives

- **Early Achievement of 2030 Targets:** India has demonstrated "strong resolve" by meeting its 50% non-fossil capacity target four years ahead of schedule (reaching 52.5% by early 2026). This creates a credible foundation for the more ambitious **60% target for 2035**.

- **Decoupling Growth from Emissions:** Achieving a 36% reduction in emissions intensity by 2020 proves that India can maintain high GDP growth while slowing the rate of carbon output. The new **47% target** signals a commitment to further "green" the industrial sector.

- **Nuclear and Hydrogen Pivot:** The **SHANTI Act (2025)** is a major positive, opening the nuclear sector to **49% FDI**. This enables the deployment of **Small Modular Reactors (SMRs)** of 200–250 MW, providing decentralized, carbon-free baseload power that complements intermittent solar and wind.

- **Global South Climate Evangelism:** While developed nations like the US are retreating from climate commitments, India's reaffirmation of the "clean energy pathway" reinforces its role as a principled leader of the Global South, emphasizing **Common but Differentiated Responsibilities (CBDR)**.

- **Focus on Adaptation:** The NDC rightly prioritizes **Heat Action Plans** and Himalayan glacier monitoring, acknowledging that for a tropical country, adaptation is just as critical as mitigation for national security.

Criticism: Are India's 2035 Targets Too Conservative?

- **The "Slack" Argument:** With India already reaching **52.5% non-fossil capacity by 2026**, critics argue that a **60% target for 2035** is overly cautious.
    - This "incrementalism" may undersell the actual exponential growth of solar and wind, potentially signaling a loss of momentum.

- **The 1.5°C Alignment Gap:** While India is outperforming many developed nations, climate models suggest these pledges are **insufficient** to meet the 1.5°C global warming limit.
    - Raising the emissions intensity target by only **2%** indicates a priority for "energy security" over aggressive decarbonization.

- **Strategic Underselling:** Experts suggest India is **intentionally keeping formal NDCs low** to avoid international legal pressure if Western financial support fails.

○ This allows for domestic over-achievement but draws criticism for a perceived lack of "high-level ambition" on the global stage.

The Challenges in Achieving the NDCs

● **The "Finance Vacuum":** The primary hurdle is the failure of the developed world to provide the **$1.3 trillion annual climate finance** demanded at COP29 (Baku).

● **Capacity vs. Actual Generation:** A major structural issue is that while 52.5% of *capacity* is non-fossil, only about **20–25% of actual electricity generated** comes from these sources. Bridging this gap requires massive investments in battery storage and grid stabilization.

● **The Carbon Sink Paradox:** Increasing the sink to **4 billion tonnes** necessitates large-scale afforestation. However, experts warn that "monoculture plantations" (often used to meet targets) lack the biodiversity of natural forests and can cause **adverse ecological consequences** for local soil and water.

● **Hard-to-Abate Sectors:** Reducing emissions intensity by an additional 2% (from 45% to 47%) is technically difficult. As the economy becomes more efficient, each further percentage of reduction becomes "exponentially harder" and more expensive to achieve through efficiency measures alone.

● **Unilateral Trade Barriers:** India faces external pressure from "green protectionism," such as carbon border taxes imposed by rich countries. These measures threaten Indian exports while the developed world simultaneously "backtracks" on its own climate ambitions.

Nationally Determined Contributions (NDCs)

● **Definition:** NDCs are self-defined climate pledges where each country outlines its strategy to contribute to the global goal of limiting warming to well below **2°C**, preferably **1.5°C**, compared to pre-industrial levels.

● **Scope:** They cover **mitigation** (reducing greenhouse gases), **adaptation** (building resilience), and often the financial and technological support required to achieve these goals.

● Every party to the Paris Agreement is required to communicate or update an NDC **every five years**.

● **"Ratchet Mechanism":** Under **Article 4.3** of the Paris Agreement, each successive NDC must represent a **progression** beyond the previous one and reflect the country's "highest possible ambition."

● The mandate is guided by **Common but Differentiated Responsibilities and Respective Capabilities**.

● Countries are legally required to communicate their NDCs to the **UNFCCC Secretariat** and report on their progress through the **Enhanced Transparency Framework (ETF)**.

WILDLIFE CRIME

Context

A study reveals that Punjab, one of India's least forested states (less than 3.6% forest cover), has become a critical hub for high-intensity wildlife crime and international trafficking networks.

Wildlife Crime Control Bureau (WCCB)

● **Statutory Body:** Established under the **Wildlife (Protection) Act, 1972** (amended in 2006).

● **Headquarters:** New Delhi.

- **Regional Offices:** Five regional offices located in **Delhi, Kolkata, Mumbai, Chennai, and Jabalpur**. It also maintains three sub-regional offices and various units at major border points.

- **Mandate**

  ○ **Intelligence Collection:** To collect and collate intelligence related to organized wildlife crime activities and disseminate the same to State and other enforcement agencies for immediate action.

  ○ **Centralized Database:** Maintaining a data bank on wildlife crimes and criminals to help in identifying patterns and repeat offenders (e.g., the **Wildlife Crime Database Management System**).

  ○ **Inter-Agency Coordination:** Coordinating actions among various stakeholders including the State Forest Departments, Police, Customs, **Directorate of Revenue Intelligence (DRI)**, and the **Central Bureau of Investigation (CBI)**.

  ○ **International Cooperation:** Acting as the nodal agency for international organizations like **INTERPOL**, the **CITES** Secretariat, and the **World Customs Organization (WCO)** to track transboundary trafficking.

  ○ **Capacity Building:** Conducting specialized training for enforcement officers on wildlife laws, species identification, and digital forensics.

- **Major Initiatives**

  ○ **Operation Save Kurma:** Focused on the illegal trade of live turtles and tortoises.

  ○ **Operation Soft Gold:** Targeted at the illegal trade of **Shahtoosh** shawls (derived from the Tibetan Antelope).

  ○ **Operation Birbil:** Aimed at curbing the illegal trade in wild cat and bear species.

  ○ **Operation Thunder Bird:** A multi-national operation coordinated with INTERPOL against wildlife crime.

  ○ **Operation Wildnet:** Launched to monitor and counter the increasing use of **social media and e-commerce platforms** for illegal wildlife trade.

NEW BUTTERFLY SPECIES DISCOVERED IN ARUNACHAL PRADESH

Context

A new butterfly species, Euthalia zubeengargi, has been discovered in Arunachal Pradesh (Leparada district) and named after Assamese cultural icon Zubeen Garg.

About the Species

- **Common name:** "Basar Duke", inspired by a local Arunachal Pradesh police constable.

- **Habitat and Distribution:** The butterfly was recorded in semi-evergreen forests at elevations ranging between 600 and 750 metres in Leparada district.

- **Biology and Characteristics**

  ○ The species belongs to the genus Euthalia, which is widely distributed across South and Southeast Asia.

    ■ Members of this genus are typically associated with dense forest ecosystems.

  ○ The butterfly is characterised by: Earthy brown wings, Pale spot markings, typical of the genus.

HOPE ISLAND

Context

In a significant conservation success, officials from the Wildlife Management Authority and the Coringa Wildlife Sanctuary have successfully conserved nearly 20,000 Olive Ridley turtle eggs on Hope Island.

About Hope Island

- **Type:** It is a **16 km long sandspit** (a depositional landform) formed by the sediment carried by the waters of the **Godavari River**.
- **Shape:** It is famously described as being **tadpole-shaped**.
- **Protective Barrier:** The island acts as a natural breakwater, protecting the port city of **Kakinada** from the direct impact of high waves, cyclonic storms, and tidal surges from the Bay of Bengal.
  - This creates the "Kakinada Bay," which is one of the safest natural harbors on India's east coast.
- **Kakinada Port:** The calm waters of the bay created by Hope Island allow the Kakinada Deep Water Port to operate year-round, even during turbulent weather.

About Olive Ridley Turtles

Feature	Olive Ridley
Scientific Name	*Lepidochelys olivacea* -Its a marine turtle species
IUCN Status	**Vulnerable**
WPA 1972	Schedule I
Size	Smallest (60-70 cm)
Distinguishing Physical Feature	Heart-shaped, olive-grey shell.
Primary Diet	Omnivorous (Crabs, jellies, shrimp).
Key Indian Nesting Sites	**Odisha** (Gahirmatha, Rushikulya).
Unique Fact	Famous for **Arribada** (Mass Nesting).

CENTRAL CONSUMER PROTECTION AUTHORITY

Context

Recently, the Central Consumer Protection Authority directed hotels and restaurants not to levy additional charges, such as LPG charges and fuel cost recovery, on consumers.

About Central Consumer Protection Authority

- The CCPA was established under **Section 10 of the Consumer Protection Act, 2019.**
- The Consumer Protection Act, 2019, which replaced the 1986 Act, was notified on August 9, 2019, and came into force on July 20, 2020.

- **Nodal Ministry:** Ministry of Consumer Affairs, Food & Public Distribution.
- **Composition of CCPA**
- A Chief Commissioner heads the CCPA and has **two other commissioners:**
  - One commissioner deals with goods-related issues.
  - The other commissioner handles service-related complaints.

Functions and Powers of CCPA

- The CCPA protects, promotes, and enforces the rights of consumers as a class under the Act.
- It prevents unfair trade practices and curbs false or misleading advertisements.
- It ensures that no one publishes or disseminates false or misleading advertisements.
- It can initiate class-action suits, including recall, refunds, and cancellation of licenses, when necessary.
- The CCPA can conduct inquiries and investigations through its Investigation Wing, headed by a Director-General.
- It can order the discontinuation of unfair practices, impose penalties on errant businesses, and enforce consumer welfare measures.

RURAL SELF EMPLOYMENT TRAINING INSTITUTES

Context

The Minister of State, Ministry of Rural Development, informed the Rajya Sabha, highlighted the significant role of Rural Self Employment Training Institutes (RSETIs).

About Rural Self Employment Training Institutes

- The Rural Self Employment Training Institutes (RSETIs) are empowering rural youth through skill development and entrepreneurship promotion.
- RSETIs have emerged as key institutions with a wide national outreach, providing free residential training and facilitating sustainable livelihoods for rural youth.
- These are functioning through a unique partnership between banks and government,
- These institutes not only impart skills but also ensure post-training support through handholding and credit linkage.
- **One RSETI** is established in every district in the country. The concerned bank is the lead bank in the district and takes responsibility for creating and managing it.
- **RSETIs provide short-duration, practical, and residential training programs for unemployed rural youth aged 18–50 years.**
- The institutes offer 73 NSQF-aligned courses across sectors such as: Agriculture, Manufacturing, Services and Entrepreneurship Development Programs (EDPs).
- **Progress:** Currently, 632 RSETIs are operational across 619 districts in 33 States/UTs, sponsored by 25 banks
- **Recognition of RSETI trainees:** Certificates issued by an RSETI will be recognised by all banks for purposes of extending credit to the trainees.

PERIODIC LABOUR FORCE SURVEY (PLFS) ANNUAL REPORT, 2025

Context

The Ministry of Statistics and Programme Implementation (MoSPI) released the **Periodic Labour Force Survey (PLFS) Annual Report for 2025.**

About Periodic Labour Force Survey (PLFS) Annual Report, 2025

- The PLFS was launched by the National Statistical Office (NSO) in 2017 to estimate key employment and unemployment indicators.
- **It provides data in two formats:** Usual Status, which maps activity over the preceding 365 days, and Current Weekly Status (CWS), which maps the preceding 7 days.

Key Summary of the PLFS Annual Report 2025

- **Stable Participation:** The Labour Force Participation Rate (LFPR) for ages 15+ remained stable at 59.3%, with male participation at 79.1% and female at 40.0%.
- **Steady Employment:** The Worker Population Ratio (WPR) stood at 57.4%. Notably, rural female WPR held steady at 44.9%, sustaining gains made since 2022.
- **Declining Unemployment:** The overall Unemployment Rate (UR) was 3.1%. Youth unemployment (ages 15-29) saw a drop to 9.9% from 10.3% in the previous year.
- **Shift to Regular Wage:** There is a positive shift in employment quality, with regular wage/salaried employees increasing to 23.6%, while self-employment declined to 56.2%.
- **Sectoral Recomposition:** Agriculture's share of employment decreased from 44.8% to 43.0%, while manufacturing saw an improvement to 12.1%.
- **Education & Unemployment:** The unemployment rate among educated persons (secondary and above) reduced to 6.5%, reflecting better absorption of the skilled workforce.
- **Gender Wage Growth:** Nominal wages for women grew across all sectors, with the highest growth of 8.8% observed in the self-employed category.
- **Education Attainment:** At the all-India level, the average number of years in formal education for those aged 15+ reached 10.0 years.

Challenges Associated

- **Gendered Reasons for Inactivity:** A massive disparity exists in why individuals stay out of the labor force.
  - **E.g.:** While 69.8% of males cite continued studies, 44.4% of females cite child care/home-making, highlighting persistent socio-economic barriers for women.
- **Working Hour Disparity:** There is a significant gap in the duration of economic work between genders.
- **High NEET Rates:** A large portion of the youth remains outside the productive ecosystem.
  - **E.g.:** Approximately 25.0% of persons aged 15-29 are Not in Employment, Education, or Training (NEET), posing a risk of a wasted demographic dividend.
- **Low Vocational Training:** The reach of formal skill development remains minimal.
- **Comparability Issues:** The change in survey methodology makes historical trend analysis difficult.

Way Ahead

- **Bridging the Gender Gap:** Implement policies that reduce the home-making burden on women, such as expanded affordable childcare and flexible work models.

- **Scaling Vocational Training:** Revitalize the Skill India Mission to increase the 4.2% vocational training rate to at least 20% to meet manufacturing demands.

- **Targeting Urban Youth:** Address the higher urban youth unemployment rate (13.6%) by incentivizing start-ups and service-sector hubs in Tier-2 and Tier-3 cities.

- **Formalization of Jobs:** Continue the shift from self-employment to regular salaried jobs by providing social security benefits to a wider array of workers.

- **Utilizing the NEET Population:** Create targeted bridge courses and apprenticeships specifically for the 25% of youth currently not in education or employment.

EV CHARGING INFRASTRUCTURE

Context

The Government informed Parliament about the status and expansion of EV charging infrastructure across India under schemes like **FAME-II and PM E-DRIVE.**

Background

- EV Charging Infrastructure refers to a network of charging stations (EVPCS) that supply electricity to recharge electric vehicles.

- It includes public, private, and highway-based charging systems, with participation from both government and private players.

Data / Key Statistics:

- **Total EV Public Charging Stations (till March 2026):** 27,737 installed; 22,753 operational.

- **Highest installations in:** Uttar Pradesh, Karnataka, Maharashtra, Tamil Nadu.

- **FAME-II Scheme:** ₹912.5 crore sanctioned; ₹655.43 crore utilized.

- **PM E-DRIVE Scheme:** ₹2,000 crore allocated (no funds released yet).

- EV charging setup is de-licensed, enabling private sector participation.

RBI PAYMENTS VISION 2028

Context

- The Reserve Bank of India (RBI) has released its **'Payments Vision 2028'** document, titled *Shaping India's Payment Frontier.*

- This strategic roadmap succeeds the **4Es (Everyone, Everywhere, Every time) vision of 2025, shifting the focus toward deepening consumer trust.**

About

- It is a comprehensive policy framework and roadmap designed to guide the evolution of India's payment systems. It marks a transition from just expanding reach to scaling global dominance and ensuring the digital ecosystem is secure, interoperable, and resilient against emerging cyber threats.

- **Organization Involved:** Reserve Bank of India (RBI).

- **Aim:** The primary goal is to empower users while providing robust safeguards against fraud.

Key Features

- **Interoperability in TReDS:** Proposes a unified framework for Trade Receivables Discounting Systems to streamline MSME financing and extend services to export-oriented MSMEs.

- **Payments Switching Service (PaSS):** A centralized service allowing customers to migrate payment instructions seamlessly when switching bank accounts (Account Portability).

- **Enhanced User Controls:** Introduction of a Switch On/Off facility for all digital payment modes (UPI, IMPS, etc.), similar to current credit/debit card controls, to mitigate fraud.

- **Shared Liability Framework:** A new responsibility model where both issuing and beneficiary banks share liability for unauthorized transactions to protect consumers.

- **Cyber Resilience (KRI):** Introduction of Cyber Key Risk Indicators for non-bank payment operators to provide early warning signals for potential security breaches.

- **Cross-Border Overhaul:** A Single-Window authorization for international payments and periodic benchmarking of transaction costs and speeds against global standards.

- **Cheque Modernization:** Reviewing physical cheque security while introducing Electronic Cheques to merge traditional reliability with digital speed.

- **AI and Data Integration:** Creation of an AI-enabled payments data repository for better transparency and research-led policy making.

Small Payment System Providers (SPSPs): Recognition of smaller players under a Perpetual Regulatory Sandbox to encourage niche innovations.

OLYMPIC POLICY TO BAR TRANSGENDER WOMEN

Context

The International Olympic Committee (IOC) has introduced a new policy restricting participation in women's events to biological females. The policy will be implemented from the 2028 Olympic Games and aims to ensure fairness in competition.

Key concepts

- **Difference between sex and gender**: This distinction lies at the heart of the debate on sports eligibility.
  - **Sex** refers to biological characteristics such as chromosomes and reproductive organs.
  - **Gender** refers to a person's identity, which may or may not match their biological sex.

- **Intersex and transgender athletes**: Some individuals are intersex, meaning their biological traits do not fit typical male/female categories.
  - Transgender athletes identify with a gender different from their birth sex.
  - Their inclusion in women's sports has raised questions of fairness and equality.

Key Features of the new IOC Policy

- **Restriction based on biological se**x: Only athletes classified as biological females can compete in women's events.
  - This excludes many transgender women and some intersex athletes.

- **Focus on fair competition:** The policy is based on the idea that biological differences may create unequal advantages in strength, speed, and endurance.
  - It seeks to protect the integrity of women's sports.
- **Shift from earlier approach:** Earlier, eligibility was often based on testosterone levels.
  - The new approach places greater emphasis on biological sex instead of hormone levels.

Critical analysis

- **Fairness vs inclusion:** One side argues that restrictions are needed for fair competition.
  - The other side highlights the need for inclusion and equal opportunity for all athletes.
- **Scientific uncertainty:** Studies suggest testosterone may affect performance, but the exact impact is not fully clear.
  - This creates uncertainty in setting uniform rules.
- **Natural advantages debate:** Critics question why some biological advantages (like height or lung capacity) are accepted, while others are restricted.
  - It raises concerns about selective standards.
- **Athlete-level controversies:** Cases like Caster Semenya highlight disputes over eligibility rules for athletes with natural biological variations.
- **Actions by other sports bodies:** Several international federations have introduced restrictions or eligibility rules for transgender athletes.
  - This indicates a broader global shift toward stricter participation norms.

Wider implications

- **Impact on international sports**: The IOC policy is likely to influence global sports rules, as many organisations follow its guidance.
- **Effect on grassroots participation:** The policy may discourage participation of transgender individuals in local and amateur sports. This could reduce inclusivity in sports culture.
- **Legal and ethical challenges:** The policy may face challenges on grounds of equality, rights, and non-discrimination.
  - Courts and human rights bodies may play a role in future decisions.
- **Political and social debate**: The issue has become part of a larger discussion on gender identity and rights worldwide.
  - It reflects tensions between science, society, and law.

Possible alternatives

Open Category in Sports

- Some experts suggest creating a separate open category for all athletes.
- However, this may face challenges due to low participation numbers.

Sport-Specific Rules

- Another approach is to frame rules based on individual sports, considering different physical demands.