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Dr. GINDI'S IAS ACADEMY

DAILY CURRENT AFFAIRS

COVER ALL IMPORTANT CURRENT UPDATES
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OCTOBER 8, 2026



Dr. GINDI'S I.A.S. ACADEMY
Civils & Competitive Careers
TRANSFORMING ASPIRANTS INTO ACHIEVERS

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DAILY CURRENT AFFAIRS

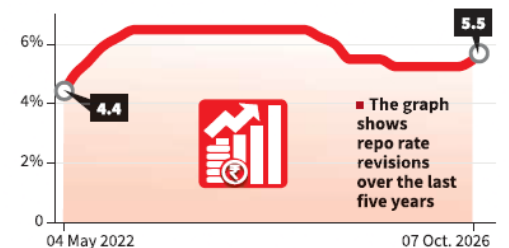
1. RBI Hikes Policy Repo Rate to 5.5% Amid Calibrated Tightening Stance

Key Highlights & Summary

- **Policy Rate Revision:** The Reserve Bank of India's Monetary Policy Committee (MPC) raised the policy repo rate under the Liquidity Adjustment Facility (LAF) by 25 basis points to 5.5%.
- **Stance Shift:** The MPC shifted its monetary policy stance from neutral to 'calibrated tightening', signalling that near-term rate cuts are ruled out.
- **Corridor Adjustments:** Correspondingly, the Standing Deposit Facility (SDF) rate was adjusted to 5.25%, while the Marginal Standing Facility (MSF) rate and the Bank Rate stand at 5.75%.
- **Macroeconomic Drivers:** The rate hike responds to global headwinds, including escalating crude oil prices driven by West Asia geopolitical conflicts, tightening global financial conditions, and persistent domestic headline inflation projected at 5.8%.
- **Inflation Dynamics:** The action aims to manage second-round effects of supply-side shocks, with core inflation projected at 4.4% for the current financial year.
- **Global Sentiment:** Factors like rising bond yields in advanced economies, dollar appreciation, and global growth deceleration in 2026 prompted central banks worldwide toward policy tightening.

Tighter grip

The shift in policy stance amid a sour global economic sentiment indicates that rate cuts are off the table in the near term, and policy action ahead can only be a rate hike or a pause



Essential Definitions

- **Repo Rate:** The rate at which the Reserve Bank of India lends short-term money to commercial banks against government securities to manage liquidity.
- **Standing Deposit Facility (SDF):** A liquidity-absorption facility through which banks park surplus funds with the RBI without the requirement of collateral.
- **Marginal Standing Facility (MSF):** A window through which scheduled commercial banks can borrow overnight funds from the RBI against government securities in emergency situations.
- **Liquidity Adjustment Facility (LAF):** A monetary policy tool that allows banks to borrow money through repurchase agreements or for banks to make loans to the RBI through reverse repo agreements.
- **Core Inflation:** A measure of inflation that excludes volatile food and energy components to reflect underlying long-term price trends.

Legal and Constitutional Framework

- **Statutory Basis:** Monetary Policy in India is governed by the Reserve Bank of India (RBI) Act, 1934.
- **MPC Constitution:** Under Section 45ZB of the RBI Act, 1934, the Central Government constitutes a six-member Monetary Policy Committee (MPC) to determine the policy interest rate required to achieve the inflation target.
- **Flexible Inflation Targeting (FIT):** Under Section 45ZA of the RBI Act, 1934, the Central Government, in consultation with the RBI, determines the inflation target (CPI inflation target of 4% with a tolerance band of +/- 2%) once every five years.

Conclusion

The MPC's shift to calibrated tightening highlights a proactive approach to anchor inflation expectations amidst compounding global geopolitical uncertainties and supply shocks. By maintaining domestic economic resilience while curbing second-round inflationary impacts, the central bank aims to balance growth dynamics with long-term price stability.

UPSC Relevance

- **GS Paper III (Indian Economy):** Directly covers topics under Monetary Policy, RBI's operational framework, liquidity management tools (LAF, SDF, MSF), and inflation management strategies.
- **Prelims Exam:** Important for conceptual questions on policy rates, corridors, statutory provisions of the RBI Act, 1934, and macroeconomic indicators.
- **Mains Exam:** Relevant for analytical questions regarding monetary policy transmission, global spillover impacts on domestic stability, and the inflation-growth trade-off.

2. Nobel Prize in Chemistry 2026: Expansion of Asymmetric Catalysis and Chirality

Key Highlights & Summary

- **2026 Nobel Laureates:** French chemist Henri B. Kagan and Japanese chemist Kenso Soai were awarded the 2026 Nobel Prize in Chemistry for demonstrating how chemical reactions amplify small asymmetric balances in chiral molecules.
- **Focus on Chirality:** Their work revolves around chiral molecules, which exist in non-superimposable left-handed and right-handed mirror-image forms.
- **Asymmetric Catalysis:** In 1986, Prof. Kagan proved that a minor imbalance in a catalyst's handedness could disproportionately bias the end products of a chemical synthesis.
- **Asymmetric Autocatalysis:** A decade later, Prof. Soai discovered that chiral molecules could catalyze their own formation (Soai reaction), exponentially producing molecules of their own handedness.

- **Industrial & Biological Importance:** Biological targets such as enzymes, receptors, and proteins are chiral; hence, producing single-handed enantiomers is critical to optimizing pharmaceuticals, agrochemicals, and fragrances.
- **Homochirality of Life:** The research provides key insight into why life on Earth predominantly uses specific molecular forms, such as L-amino acids in proteins.

Symmetric study

The duo's work is centred on molecules that can exist in two mirror-image forms, a property called chirality



■ **Henri B. Kagan**
Professor emeritus at the former Université Paris-Sud, France



■ **Kenso Soai**
Professor emeritus at the Tokyo University of Science, Japan

■ Their study of chiral molecules expanded the understanding of why many molecules essential for life prefer just one of the two possible forms. The findings have been used to optimise chemical reactions as well

Essential Definitions

- **Chirality:** A geometric property of molecules where two structures are mirror images of each other but cannot be superimposed, analogous to left and right human hands.
- **Enantiomers:** Pair of chiral molecules that are exact non-superimposable mirror images of each other, often possessing vastly different biological activities.
- **Asymmetric Synthesis:** A chemical reaction that selectively produces a specific enantiomer over its mirror-image counterpart using catalysts or chiral agents.
- **Asymmetric Autocatalysis:** A phenomenon where a chiral reaction product acts as an asymmetric catalyst for its own production, causing exponential amplification of one handedness.
- **Homochirality:** The exclusive preference for one specific optical isomer (handedness) over another in biological organisms and organic compounds.

Legal and Constitutional Framework

- **Statutory Oversight:** In India, the manufacture, quality control, and clinical safety of chiral drug enantiomers are regulated under the Drugs and Cosmetics Act, 1940, and the Drugs Rules, 1945.
- **Intellectual Property Rights:** Innovations in asymmetric catalysis and single-enantiomer drug formulations are protected under the Indian Patents Act, 1970 (specifically evaluated under Section 3(d) for efficacy enhancements).
- **International Standards:** Indian regulatory bodies align with International Council for Harmonisation (ICH) guidelines regarding the evaluation of impurity profiles and safety parameters for single enantiomers versus racemic mixtures.

Conclusion

The recognition of Kagan and Soai's groundbreaking research highlights the fundamental importance of molecular asymmetry in science. By mastering asymmetric amplification, researchers can synthesize purer therapeutic drugs with minimal side effects while simultaneously unraveling the origin of homochirality in living organisms.

UPSC Relevance

- **GS Paper III (Science & Technology):** Relevant for topics on recent developments in science and technology, applications of chemistry in healthcare, pharmaceuticals, and agricultural inputs.

3. Denial of FCRA Registration to Conversion-Engaged Entities: Madras HC

Key Highlights & Summary

- **Judicial Ruling:** The Madurai Bench of the Madras High Court ruled that organizations engaged in religious conversions shall be denied registration under the Foreign Contribution (Regulation) Act (FCRA).
- **Preserving Secular Fabric:** The court stated that only entities whose activities do not disrupt the nation's secular fabric and social amity are eligible for FCRA registration.
- **Background Case:** The ruling came during an appeal by the Kanzeon Public Charitable Trust against the rejection of its FCRA registration application by central authorities.
- **Mandatory Disclosures:** Under Rule 9 of the FCRA Rules, 2011, applicants must accurately disclose their organization's nature in Form FC-3A, without concealing religious intent.
- **Government Policy Upheld:** The bench supported government policy aimed at checking the inflow of foreign funds that could be used for conversion or activities detrimental to national integrity.
- **Pluralism Concept:** Highlighting India's social framework, the court cited Justice Ruma Pal's metaphor describing India as a 'salad bowl' rather than a melting pot, emphasizing that communal equilibrium must be preserved.

Essential Definitions

- **Foreign Contribution:** Any donation, delivery, or transfer made by a foreign source of any currency, security, or article beyond specified limits.
- **Secularism (Indian Model):** A constitutional principle wherein the state maintains equal distance from and equal respect for all religions (Sarva Dharma Sambhava), unlike the Western model of complete separation.
- **FCRA Registration:** A mandatory certification granted by the Ministry of Home Affairs allowing non-governmental organizations to receive foreign funds for educational, economic, religious, cultural, or social programs.
- **Salad Bowl Metaphor:** A sociological concept where various cultures and religions co-exist while retaining their distinct identities, contributing to a harmonious pluralistic society.

Legal and Constitutional Framework

- **Foreign Contribution (Regulation) Act, 2010:** Sections 11 and 12 govern the grant, renewal, and cancellation of certificates of registration for receiving foreign funds.
- **FCRA Rules, 2011:** Rule 9 requires detailed disclosures regarding the nature, aims, and financial transactions of applicant trusts through Form FC-3A.
- **Article 25:** Guarantees the freedom of conscience and free profession, practice, and propagation of religion. However, the Supreme Court in *Rev. Stainislaus v. State of MP* (1977) held that the right to propagate does not include the right to convert another person.

- **Article 26:** Grants religious denominations the right to manage their internal religious affairs, subject to public order, morality, and health.

Conclusion

The Madras High Court verdict reinforces the balance between fundamental religious freedoms and national security considerations. By subjecting foreign funding to strict regulatory scrutiny under FCRA, the decision aims to prevent foreign influence from altering the country's demographic balance and internal social harmony.

UPSC Relevance

- **GS Paper II (Polity & Governance):** Directly relevant to topics like Fundamental Rights (Articles 25-28), statutory bodies, regulation of NGOs, and social harmony.

4. Karnataka Seeks Review of Cauvery Water Allocation Citing Indus Waters Treaty Model

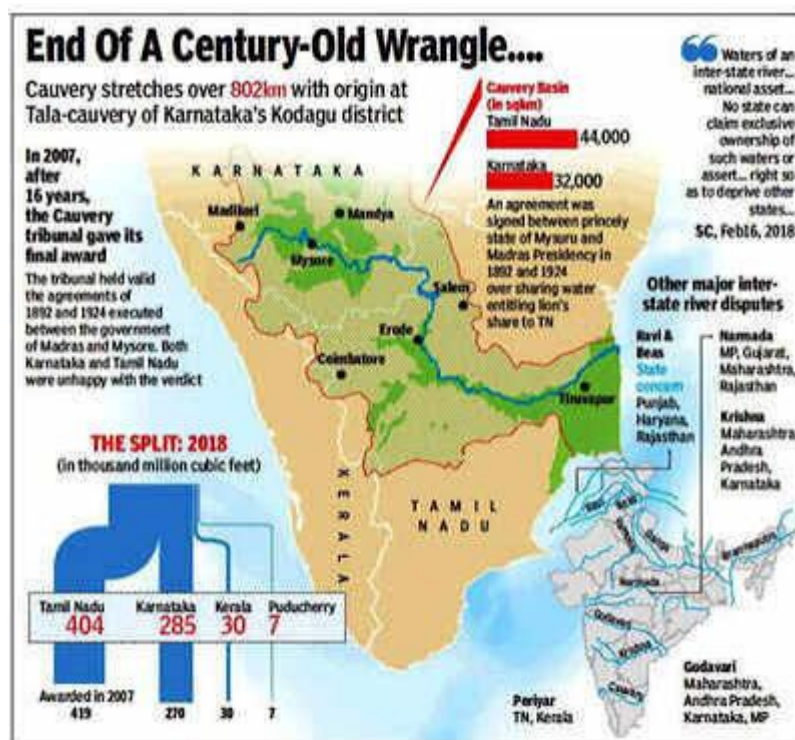
Key Highlights & Summary

- **Intent to Reopen Award:** Karnataka informed the Supreme Court of its intent to review the decades-old Cauvery water allocation award, citing "inequitable allocation" and "changed circumstances".
- **Indus Treaty Parallel:** Drawing a parallel with India's demand to modify the 1960 Indus Waters Treaty due to fundamental changes, Karnataka advocated applying international principles like *rebus sic stantibus* to inter-state water sharing.
- **Deficit Monsoon:** The State reported receiving only 551 mm of rainfall against the normal 852 mm during the southwest monsoon, marking a 35% shortage—the second lowest rainfall in 70 years.
- **Distress Sharing Mechanism:** Karnataka contested the existing framework, stating that no scientific or equitable formula exists for proportional distress sharing (*pro rata*) during severe drought years.
- **Existing Allocations:** Based on the 2018 Supreme Court verdict, total annual flow of 740 tmc ft is divided among Tamil Nadu (404.25 tmc ft), Karnataka (284.75 tmc ft), Kerala (30 tmc ft), and Puducherry (7 tmc ft).
- **Call for Periodic Review:** The State emphasized that international practice supports periodically revisiting inter-state water allocations through mutual agreement or judicial adjudication to adapt to changing environmental realities.

Essential Definitions

- **Rebus Sic Stantibus:** A legal doctrine in international law stating that a treaty or agreement becomes inoperative if there is a fundamental change in circumstances existing at the time of its conclusion.

- **Pro Rata Distress Sharing:** A mechanism of sharing available water resources among riparian states in proportion to their baseline allocated quotas during drought or sub-normal rainfall years.
- **TMC FT (Thousand Million Cubic Feet):** A standard unit of measurement for volume of water stored or released in large dams and river basins.
- **Environmental Flows:** The quantity, timing, and quality of freshwater flows required to sustain freshwater ecosystems and human livelihoods downstream.



Legal and Constitutional Framework

- **Article 262:** Empowers Parliament to enact laws for the adjudication of disputes relating to the use, distribution, or control of waters of inter-state rivers or river valleys.
- **Inter-State River Water Disputes Act, 1956:** Enacted under Article 262 to provide a legal framework for setting up ad-hoc tribunals for inter-state river water disputes.
- **Article 136:** Grants the Supreme Court extraordinary power to grant special leave to appeal against any judgment or order passed by tribunals or courts in India.
- **Entry 17 (State List) & Entry 56 (Union List):** Grants States jurisdiction over water supply and irrigation, while empowering the Union to regulate inter-state rivers in the public interest.

Conclusion

Karnataka's plea before the Supreme Court highlights the operational limitations of rigid historical river water allocations in an era of climate change and rainfall unpredictability. Developing a dynamic, science-based distress-sharing formula remains essential for balancing regional water security and maintaining federal cooperative spirit.

UPSC Relevance

- **GS Paper II (Polity & Governance):** Directly covers Inter-State Water Disputes, Article 262, federalism dynamics, and judicial review of tribunal awards.

5. Odisha Constitutes Panel to Study Political Backwardness of SEBCs

Key Highlights & Summary

- **Panel Formation:** The Odisha government notified a dedicated panel to assess numerical strength, political representation, and political backwardness among Socially and Educationally Backward Classes (SEBCs) in local self-government bodies.
- **Leadership & Composition:** Retired Odisha High Court judge Justice Pramath Patnaik heads the panel, with retired IAS officer Bijay Kumar Prusty as a member and Special Secretary Sujata Mishra as member-secretary.
- **Electoral Relevance:** The step comes ahead of upcoming rural panchayat and urban local body elections scheduled in the state.
- **Mandate:** The commission will examine SEBC representation across rural and urban local bodies relative to their overall population and assess the nature and extent of their political backwardness.
- **Triple Test Compliance:** This empirical inquiry aligns with the Supreme Court's mandated 'triple test' criteria required before granting political reservations in local governance.
- **Demographic Context:** A prior survey by the State Commission for Backward Classes estimated Odisha's OBC/SEBC population at 1.95 crore.



Essential Definitions

- **SEBC (Socially and Educationally Backward Classes):** A term specified in the Indian Constitution referring to backward communities identified based on socio-economic and educational parameters.
- **Political Backwardness:** Inadequacy of representation of backward classes in democratic political institutions, distinct from social or educational backwardness.
- **Triple Test Norm:** A legal standard laid down by the Supreme Court requiring a dedicated commission, empirical data collection on backwardness in local bodies, and adherence to a 50% reservation cap.
- **Local Self-Government:** Statutory and constitutional bodies at the grassroots level, such as Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs).

Legal and Constitutional Framework

- **Article 243D(6) & Article 243T(6):** Empowers State Legislatures to make provisions for reservation of seats in Panchayats and Municipalities in favor of backward classes of citizens.
- **Article 340:** Empowers the President to appoint a commission to investigate the conditions of socially and educationally backward classes.
- **105th Constitutional Amendment Act, 2021:** Restored the power of State Governments and Union Territories to identify and maintain their own list of SEBCs.
- **Vikas Kishanrao Gawali v. State of Maharashtra (2021):** The Supreme Court reiterated that empirical study by a dedicated commission is a mandatory precondition before providing political reservations to OBCs in local bodies.

Conclusion

The constitution of the Justice Patnaik panel reflects Odisha's commitment to judicial mandates while ensuring inclusive political participation. By empirically quantifying political backwardness, the state aims to institutionalize robust legal backing for SEBC quotas in forthcoming local body elections.

UPSC Relevance

- GS Paper II (Polity & Governance):** Relevant for local self-government reforms (73rd and 74th Amendments), welfare schemes for vulnerable sections, and constitutional provisions governing reservations.

6. Up to 30% of Cotton Area Under Unapproved GM Hybrids: FSII-NSAI Study

Key Highlights & Summary

- Unapproved GM Cultivation:** A joint study by FSII and NSAI revealed that 24-30% (26.2 to 29 lakh hectares out of 114.8 lakh hectares) of India's total cotton area is under illegal genetically modified (GM) hybrids.
- Unauthorised Genetic Traits:** The illegal seeds incorporate unapproved traits like herbicide tolerance via the cp4-epsps gene and next-generation insect resistance via the Vip3A Bt gene.
- Approved vs. Illegal Genes:** While India legally permits only cry1Ac and cry2Ab genes for bollworm control, farmers are adopting unapproved genes to tackle pink bollworm resistance and high weeding costs.
- State-Wise Breakdown:** Gujarat leads illegal HTBt cotton cultivation at 30-32% of its cotton area, followed by Telangana (27-30%), Maharashtra (25-28%), Andhra Pradesh (15-18%), and Rajasthan (8-10%).
- Economic Drivers:** Manual weeding costs Rs 12,000-15,000 per acre, whereas glyphosate-based weed management using illegal HTBt seeds costs only Rs 750-850 per acre.
- Glyphosate Import Surge:** Driven by unapproved HTBt cultivation, glyphosate imports jumped by 29% from 27,721 kilolitres in 2024-25 to 35,642 kilolitres in 2025-26.

• Estimated market share of illegal HTBt cotton			
	Total Cotton Area (lakh hectares)	Illegal HTBt Area (lakh hectares)	Illegal HTBt Area
Maharashtra	38.5	9.6-10.7	25-28%
Gujarat	20.9	6.2-6.6	30-32%
Telangana	20.5	5.5-6.1	27-30%
Andhra Pradesh	5.4	0.8-0.9	15-18%
Rajasthan	6.4	0.5-0.6	8-10%
Others	23.1	3.6-4.1	16-18%
TOTAL	114.8	26.2-29.0	24-30%

SOURCE: SOUTH ASIA BIOTECHNOLOGY CENTRE FIELD ASSESSMENT

Essential Definitions

- Herbicide-Tolerant (HT) Crops:** Genetically modified crops engineered to withstand specific broad-spectrum chemical herbicides like glyphosate, which otherwise destroy normal crops along with weeds.
- Bacillus thuringiensis (Bt):** A naturally occurring soil bacterium producing crystalline proteins toxic to specific insect pests, such as bollworms.

- **cp4-epsps Gene:** An alien gene sourced from an agrobacterium that confers resistance to glyphosate herbicide in transgenic plants.
- **Vip3A Gene:** A novel insecticidal protein gene derived from Bt that acts differently from conventional cry toxins, effectively controlling broader bollworm larvae strains.

Legal and Constitutional Framework

- **Environment (Protection) Act, 1986:** Regulates the manufacturing, import, use, research, and release of Genetically Modified Organisms (GMOs) and hazardous micro-organisms.
- **Rules for the Manufacture, Use, Import, Export and Storage of Hazardous Micro-Organisms/Genetically Engineered Organisms or Cells, 1989:** Statutory regulations under the EPA, 1986, making unauthorized commercial cultivation or sale of unapproved GM seeds a punishable offense.
- **Genetic Engineering Appraisal Committee (GEAC):** The apex statutory body functioning under the Ministry of Environment, Forest and Climate Change (MoEFCC) responsible for evaluating and approving field trials and commercial releases of transgenic crops in India.
- **Seeds Act, 1966 & Protection of Plant Varieties and Farmers' Rights Act, 2001:** Frameworks governing seed quality standards, mandatory certification, registration, and rights over plant varieties.

Conclusion

The widespread proliferation of unapproved HTBt cotton underscores a major gap between regulatory enforcement and field-level agrarian requirements. While cost efficiency and pest resistance drive farmer adoption, illegal GM cultivation bypasses biosafety appraisals, raising long-term ecological, health, and environmental concerns that demand urgent regulatory oversight.

UPSC Relevance

- **GS Paper III (Agriculture & Environment):** Highly relevant for topics covering biotechnology in agriculture, GM crops, seed technology, weed management, and environmental risk assessment.

7. 57th GST Council Meeting: States Oppose Blanket Removal of Taxmen's Arrest Powers

Key Highlights & Summary

- **Opposition by States:** Five major states—Maharashtra, Gujarat, Uttar Pradesh, Karnataka, and Andhra Pradesh—have expressed strong reservations against the proposed blanket removal of arrest powers under the GST framework.
- **Demand for Civil Arrest:** The states warned that a total removal of arrest powers would render the tax enforcement regime "toothless," proposing instead a provision for graded "civil arrest" in cases of serious tax violations.
- **Decriminalisation Proposal:** The Union government proposed removing pre-prosecution arrests and raising the threshold for criminal prosecution from Rs 1 crore to Rs 5 crore to boost investor confidence and curb tax officer overreach.

- **Shift to System-Based Enforcement:** Central officials advocate for a "money rather than custody" approach, utilizing AI-driven data analytics and technology for fraud detection rather than custodial deterrence.
- **Concerns of Harassment:** Industry representatives noted that pre-prosecution arrest provisions have frequently been misused as bargaining tools, leading to compliance harassment and legal battles for businesses.
- **Transition to GST 2.0:** The proposals form part of the broader GST 2.0 reforms aimed at establishing a trust-based tax administration while balancing revenue protection with ease of doing business.



Essential Definitions

- **Pre-Prosecution Arrest:** The detention of a suspect by tax authorities during the investigation phase before formal criminal charges or prosecution proceedings are initiated in a court of law.
- **Decriminalisation:** The process of reducing or removing criminal penalties for specific statutory offences, converting them into civil violations punishable by fines, interest, or administrative penalties.
- **Civil Arrest:** Non-criminal administrative detention or restraint imposed on habitual offenders or severe defaulters to secure statutory compliance or tax recovery without invoking full criminal prosecution.
- **GST 2.0:** The next phase of structural and procedural indirect tax reforms focusing on rate rationalisation, trust-based administration, and AI-driven compliance verification.

Legal and Constitutional Framework

- **Article 279A:** Establishes the GST Council as a joint constitutional forum of the Centre and States to make recommendations on tax rates, exemptions, administrative procedures, and legislative amendments.
- **Section 69 of the CGST Act, 2017:** Grants powers to the Commissioner to authorize the arrest of any person if there is reason to believe they have committed specified non-bailable and cognizable offences under Section 132.
- **Section 132 of the CGST Act, 2017:** Outlines penalties and prosecution criteria for tax offences, classifying fraudulent input tax credit claims and tax evasion above statutory monetary thresholds as criminal acts.
- **Article 21:** Guarantees the fundamental right to life and personal liberty, which serves as the legal foundation for judicial scrutiny regarding arbitrary pre-prosecution arrests and administrative overreach.

Conclusion

The debate surrounding arrest powers in the 57th GST Council meeting underscores the delicate balance between fostering a business-friendly environment and ensuring robust tax enforcement. Moving toward an AI-assisted, trust-based tax regime while maintaining strict civil recourse for

high-value fraud offers a sustainable path forward for cooperative federalism and economic growth.

UPSC Relevance

- **GS Paper II (Polity & Governance):** Highly relevant for constitutional bodies (GST Council under Article 279A), cooperative federalism, legislative checks on administrative overreach, and governance reforms.

8. Indian Air Force Modernisation: Fleet Shortfalls and Strategic Procurement Updates

Key Highlights & Summary

- **114 Multi-Role Fighter Deal:** The Indian Air Force (IAF) aims to finalize the acquisition process for 114 Multi-Role Fighter Aircraft (MRFA) by the end of FY 2026-27.
- **LCA Tejas Delivery Delays:** Air Chief Marshal AP Singh noted that supply chain and production delays in the delivery of LCA Tejas Mk1A are adversely impacting operational combat readiness.
- **Squadron Strength Shortfall:** The IAF currently operates only 30-31 active fighter squadrons against a sanctioned operational strength of 42 squadrons.
- **Two-Front Strategic Concerns:** Leadership highlighted growing security threats stemming from joint fifth-generation fighter jet development collaboration between Pakistan and China.
- **Transport Fleet Modernisation:** Embraer and Mahindra are exploring Nagpur as a site for a potential C-390 Millennium assembly line under the Medium Transport Aircraft (MTA) program.
- **Push for Atmanirbharta:** The force emphasizes balancing emergency foreign acquisitions with domestic defence manufacturing to address immediate operational gaps.



Essential Definitions

- **Multi-Role Fighter Aircraft (MRFA):** Advanced combat aircraft engineered to simultaneously perform air-to-air combat, air-to-surface strikes, and reconnaissance missions.
- **Squadron:** A primary operational flying unit in the Air Force, typically comprising 18 to 20 aircraft along with supporting aircrew and technical personnel.
- **Fifth-Generation Fighter:** Stealth combat aircraft featuring advanced avionics, integrated computer systems, supercruise capability, and low observability to radar detection.
- **Medium Transport Aircraft (MTA):** Tactical airlift aircraft capable of transporting troops, equipment, and supplies into military operating zones.

Legal and Constitutional Framework

- **Article 53(2):** Vests the Supreme Command of the Defence Forces of the Union in the President of India, exercised in accordance with law.
- **Defence Acquisition Procedure (DAP) 2020:** Governs the procurement and acquisition of capital equipment and weapons systems for the Indian Armed Forces, prioritizing domestic industry through 'Make in India' categories.
- **Seventh Schedule (Union List Entry 1 & 2):** Assigns exclusive legislative jurisdiction over Defence of India and Naval, Military, and Air Forces to the Parliament of India.
- **Armed Forces (Special Powers) Acts & Air Force Act, 1950:** Statutory enactments establishing the legal framework for administration, discipline, and operational deployment of Air Force personnel.

Conclusion

Addressing the IAF's expanding gap between sanctioned and active squadron strength remains vital for maintaining national airspace defense. A dual strategy combining timely execution of indigenous programs like Tejas Mk1A with accelerated capital acquisitions under DAP 2020 will ensure operational readiness against evolving regional air superiority challenges.

UPSC Relevance

- **GS Paper III (Internal Security & Defence):** Directly covers topics on security challenges, defense indigenization, modernizing armed forces, and technology transfer in defense production.

9. WWF Living Planet Report 2026: 73% Decline in Vertebrate Populations Over 52 Years

Key Highlights & Summary

- **Catastrophic Population Decline:** The World Wide Fund for Nature (WWF) Living Planet Report 2026 reveals an average 73% decline in monitored vertebrate populations (mammals, birds, amphibians, and fish) between 1970 and 2022.
- **Freshwater Ecosystems Worst Hit:** Freshwater ecosystems suffered the steepest decline at 85%, followed by terrestrial ecosystems at 69% and marine ecosystems at 59%.
- **Primary Drivers of Loss:** Habitat loss and degradation, overexploitation of natural resources, climate change, invasive alien species, pollution, and disease are the main causes of biodiversity decline.
- **Agri-Food System Impact:** The report highlights that global food production and consumption systems represent the single largest driver of habitat destruction and greenhouse gas emissions.
- **Living Planet Index Coverage:** Developed in partnership with the Zoological Society of London, the 2026 Index tracked 35,803 population trends across 5,790 vertebrate species globally.
- **Successes in Conservation:** Targeted intervention programs showed proven results, evidenced by global tiger numbers rising from 3,200 in 2010 to roughly 5,700 in 2025.

Essential Definitions

- **Living Planet Index (LPI):** A measure of global biodiversity that tracks average changes in the population size of wild vertebrate species over time rather than total absolute numbers.
- **Vertebrates:** Animals possessing a backbone or spinal column, including mammals, birds, reptiles, amphibians, and fish.
- **Ecological Tipping Point:** A critical threshold beyond which an ecosystem undergoes irreversible structural shifts and collapse due to cumulative environmental stress.
- **Relative Abundance:** The proportional representation of a species in a given ecosystem relative to other species or historical baseline levels.

Legal and Constitutional Framework

- **Article 48A (DPSP):** Directs the State to endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country.
- **Article 51A(g) (Fundamental Duties):** Casts a duty on every citizen of India to protect and improve the natural environment, including forests, lakes, rivers, and wildlife.
- **Wild Life (Protection) Act, 1972:** Provides the statutory framework for the protection of wild animals, birds, and plants, establishing protected areas like National Parks and Wildlife Sanctuaries.
- **Biological Diversity Act, 2002:** Enacted to implement the UN Convention on Biological Diversity (CBD), creating a three-tier regulatory mechanism (NBA, SBB, and BMCs) for conservation and sustainable use.

Conclusion

The WWF Living Planet Report 2026 underscores the alarming rate of ecological degradation globally while offering a blueprint for recovery. Achieving global sustainability goals requires transforming agri-food systems, scaling up community-led conservation, and enforcing strict legal safeguards to halt mass species loss.

UPSC Relevance

- **GS Paper III (Environment & Ecology):** Highly relevant for topics covering biodiversity conservation, environmental degradation, wildlife protection frameworks, and sustainable agriculture.

10. WHO Guidelines on Childhood and Adolescent Obesity Management

Key Highlights & Summary

- **Global Surge in Obesity:** The World Health Organization (WHO) released new guidelines addressing the sharp rise in childhood and adolescent obesity, which quadrupled globally from 2% in 1990 to 8% in 2024.
- **India Burden Projection:** According to the Comprehensive National Nutrition Survey, India is projected to have 27 million children and adolescents living with obesity by 2030, accounting for 11% of the global burden.

- **Core Management Strategy:** WHO strongly recommends structured dietary interventions, increased physical activity, behavior-change programs, and multimodal support as the foundation of pediatric obesity care.
- **Restraint on Invasive Interventions:** WHO advises strongly against weight-loss drugs (pharmacotherapy) and bariatric surgery for children under 9 years, keeping them conditional only for morbidly obese adolescents (ages 10-19) where lifestyle modifications fail.
- **NFHS Data Findings:** National Family Health Survey (NFHS) data indicates a 127% rise in overweight/obesity among Indian children under five between 2005-06 and 2019-21, alongside sharp increases among adolescent boys (288%) and girls (125%).
- **Associated Co-Morbidities:** Early-onset obesity is driving an increase in juvenile non-communicable diseases, including fatty liver disease, prediabetes, and high cholesterol levels among youth.

Essential Definitions

- **Pediatric Obesity:** A medical condition in children and adolescents characterized by excessive accumulation of body fat that negatively impacts health, generally determined via age- and sex-specific BMI percentiles.
- **Multimodal Interventions:** Comprehensive health management strategies that simultaneously combine dietary planning, physical exercise, behavioral counseling, and family engagement.
- **Pharmacotherapy (GLP-1 Analogues):** Medical treatments using anti-obesity drugs like semaglutide that regulate appetite and blood sugar, recommended with caution due to limited long-term efficacy data in children.
- **Bariatric Surgery:** Surgical procedures performed on the digestive system to induce significant weight loss, reserved only as a last resort for severe morbid obesity in older adolescents.



No Obesity Drugs for Under-10s

WHO's first childhood obesity guidelines advise against weight-loss drugs and bariatric surgery for children aged 9 and under. For severely obese adolescents aged 10-19, they may be used conditionally if health issues exist or lifestyle measures fail.

Legal and Constitutional Framework

- **Article 47 (DPSP):** Directs the State to raise the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties.
- **Article 21:** Guarantees the fundamental right to life, which the Supreme Court has expansively interpreted to include the right to health and safe, nutritious food.
- **Food Safety and Standards Act, 2006:** Governs the Food Safety and Standards Authority of India (FSSAI), which regulates front-of-pack nutritional labeling (FOPNL) and restricts marketing of high fat, sugar, and salt (HFSS) foods near schools.
- **National Health Policy, 2017:** Emphasizes preventive and promotive healthcare, setting targets to control the rising incidence of non-communicable lifestyle diseases across India.

Conclusion

The WHO guidelines underscore that tackling childhood obesity requires prioritising lifestyle and behavioral interventions over clinical procedures. Strengthening regulatory controls on unhealthy

foods, expanding school nutrition programs, and promoting physical activity are essential steps to curb the growing burden of lifestyle diseases among Indian youth.

UPSC Relevance

- **GS Paper II (Governance & Social Justice):** Highly relevant for topics covering Issues Relating to Development and Management of Social Sector/Services relating to Health, Human Resources, and Child Welfare.

Dr.

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