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DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

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1. Restructuring of Tobacco Taxation Regime (Effective Feb 1, 2025)

The Union Finance Ministry has notified a comprehensive overhaul of the taxation structure for tobacco products, aimed at aligning India's fiscal policy with global public health standards. This shift marks a transition from the GST compensation cess model to a more robust excise and GST-based framework to curb affordability.

Key Highlights of the New Tax Regime

- **Legislative Foundation:** The changes are enforced through the Central Excise (Amendment) Act, 2025, and the Health Security & National Security Act, 2025, both passed during the Winter Session of Parliament.
- **End of GST Compensation Cess:** Effective February 1, the GST compensation cess—originally intended to bridge state revenue gaps for five years—will cease to exist for tobacco products.
- **Revised GST Slabs:** Tobacco products have been redistributed across tax brackets; beedis are moved from the 28% slab to 18%, while all other tobacco products (including cigarettes) are placed in a new 40% GST bracket.
- **Curbing Affordability:** The Ministry aims to ensure "real cigarette prices rise faster than incomes," addressing the stagnation in tobacco pricing relative to purchasing power observed since 2017.
- **Specific Levies on Pan Masala:** The new Health Security & National Security Act empowers the government to levy a dedicated cess on pan masala manufacturing units to fund public health initiatives.
- **Nominal to Substantial Excise:** The reform corrects a previous anomaly where excise duty on cigarettes was a mere "fraction of a paisa," replacing it with a more significant specific excise duty structure.

Tax reset

The Central Excise (Amendment) Act, 2025 specifies new rates of excise duty on tobacco products

■ The Finance Ministry has notified that provisions of the Health Security & National Security Act, 2025, which intends to levy a cess on pan masala units, will come into force from February 1

■ Beedis have been moved to the **18%** GST category from the now-defunct **28%** slab
■ All other tobacco products have been moved to the **40%** slab



Essential Concepts and Definitions

- **Excise Duty:** An indirect tax levied on the manufacture of goods within the country, as opposed to customs duty which is levied on imports.
- **GST Compensation Cess:** A surcharge levied on "sin" or luxury goods to compensate states for potential revenue losses during the first five years of the GST rollout (2017–2022).
- **Real Price:** The price of a good adjusted for inflation and changes in consumer income, reflecting its actual "affordability" over time.
- **Specific Excise Duty:** A tax based on the quantity or weight (e.g., per cigarette stick) rather than the value (ad valorem) of the product.

Constitutional and Legal Provisions

- **Article 246A:** Grants Parliament and State Legislatures power to make laws with respect to GST. However, the Centre retains the power to levy Central Excise duty on tobacco and tobacco products (Entry 84 of the Union List).



- **Article 47 (Directive Principles):** Mandates the State to endeavor to bring about prohibition of the consumption of intoxicating drinks and drugs which are injurious to health.
- **Cigarettes and Other Tobacco Products Act (COTPA), 2003:** The primary legal framework for tobacco control, including regulations on advertising, packaging, and sales to minors.
- **Health Security & National Security Act, 2025:** A new legislative tool focused on fiscal measures to mitigate the national health burden caused by tobacco and related products.

Conclusion

The shift in tobacco taxation reflects a strategic pivot from purely revenue-centric goals to health-conscious fiscal policy. By dismantling the stagnation caused by the frozen compensation cess and introducing higher GST slabs and specific excise duties, the government seeks to meet World Health Organization (WHO) recommendations. This move balances the dual objectives of generating "sin tax" revenue and reducing the long-term economic and healthcare costs associated with tobacco consumption.

UPSC Relevance

- **GS Paper II:** Government policies and interventions for development in various sectors; Issues relating to development and management of Social Sector/Health.
- **GS Paper III:** Indian Economy and issues relating to planning, mobilization of resources; Changes in industrial policy and their effects on industrial growth.
- **Prelims:** Understanding of GST slabs, the difference between Excise and GST, and specific constitutional entries (Union List vs. State List) regarding "sin goods."

2. Inaugural Sunrise Festival at Dong (2025-26): India's First Dawn

The state of Arunachal Pradesh celebrated the arrival of 2026 with the inaugural "Sunrise Festival" in the Dong Valley. The event centered on the unique geographical distinction of Dong as the first human habitation in India to witness the sunrise, blending indigenous cultural heritage with sustainable tourism initiatives.

Highlights of the Sunrise Festival 2026

- **Geographical Landmark:** Dong village in the Anjaw district, situated at an altitude of approximately 1,240 metres near the tri-junction of India, China, and Myanmar, welcomed the nation's first rays of the sun for the year 2026.
- **Signature Performance:** The highlight of the celebration was "Alo Prabhat: Dance of the Dawn," an artistic narrative featuring ritual chants, indigenous rhythms, and folk songs performed by the Meyor and Mishmi communities.
- **Cultural Synergy:** The festival showcased the "Sunrise People" (Meyor tribe) and other diverse ethnic groups like the Mishmi, Singpho, and Monpa, highlighting their sun-worshipping traditions and deep spiritual connection to the nature of the Eastern Himalayas.
- **Tourism and Livelihoods:** Conceptualized by the State Tourism Department, the festival aims to promote "responsible and eco-friendly tourism" while generating sustainable livelihood opportunities for local entrepreneurs and small businesses.





- **Strategic Significance:** Beyond culture, the event underscores the strategic importance of India's easternmost frontier, integrating remote border habitations into the national cultural consciousness through "Border Tourism."
- **Sustainability Commitment:** Adhering to the "Sun Commitment" of "no trash, no trace, no excuses," the festival established a model for community-led, environmentally conscious event management in ecologically sensitive zones.

Key Definitions for Civil Services

- **Meyor (Zakhring) Tribe:** A small, indigenous community in Arunachal Pradesh, primarily inhabiting the Walong and Kibithu circles. They are traditionally known as the "Sunrise People" due to their geographic location and cultural reverence for the sun.
- **Mishmi Tribe:** Comprising groups like the Idu, Digaru (Taraon), and Miju (Kaman), they are major inhabitants of the Lohit and Anjaw districts, known for their distinct weaving, social structures, and animistic traditions.
- **Alo Prabhat:** Literally translating to "Light of the Dawn," it represents a specific cultural ceremony performed to greet the first light, combining traditional instruments with oral narratives of hope and peace.

Constitutional and Legal Provisions

- **Article 371-H:** Provides special provisions for the State of Arunachal Pradesh, primarily concerning the responsibility of the Governor with respect to law and order and the protection of tribal interests.
- **Fifth and Sixth Schedules:** While Arunachal is not a Sixth Schedule state, its tribal areas are governed under specialized administrative frameworks to preserve indigenous customary laws and land rights.
- **Inner Line Permit (ILP):** Regulated under the Bengal Eastern Frontier Regulation, 1873, it is a mandatory travel document for Indian citizens to enter protected areas like Arunachal Pradesh to safeguard tribal culture from outside encroachment.
- **Directive Principles (Article 49):** The State's duty to protect monuments and places of national and geographical importance, applicable here to the conservation of the unique Dong Valley landscape.

Conclusion

The Sunrise Festival at Dong is more than a New Year celebration; it is a strategic exercise in cultural diplomacy and regional development. By elevating the status of the "First Sunrise" to a national festival, the government is effectively bridging the geographical isolation of the Northeast while fostering a sense of pride and economic resilience among its frontier communities.

UPSC Relevance

- **GS Paper I (Art and Culture):** Significant for questions on tribal festivals, indigenous communities (Meyor, Mishmi), and the cultural diversity of the Eastern Himalayas.
- **GS Paper III (Environment & Economy):** Relevant for sustainable tourism models and eco-tourism initiatives in ecologically sensitive border regions.
- **GS Paper III (Internal Security):** Strategic importance of border area development and "Vibrant Villages Program" alignment through tourism to ensure national integrity.

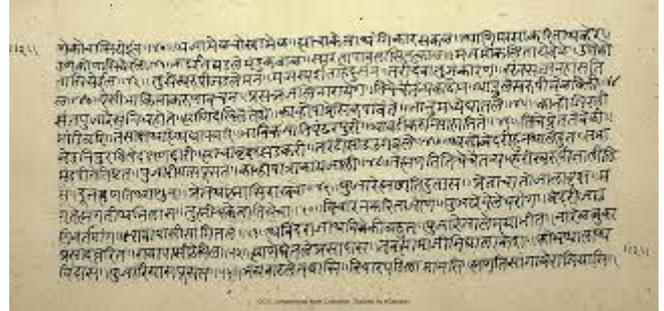


3. Historical Ecology: Ancient Marathi Texts Challenge Savanna Degradation Myths

A pioneering study published in the journal *People and Nature* has utilized medieval Marathi literature and oral traditions to demonstrate that the savannas of western Maharashtra are ancient, natural ecosystems rather than degraded forests. By analyzing texts from the 13th to 20th century CE across districts like Pune, Satara, and Solapur, researchers have debunked the colonial-era narrative that open-canopy landscapes resulted solely from deforestation or overgrazing.

Core Findings of the Ecological Study

- **Long-term Persistence:** Literary evidence from biographies, hagiographies, and *ovi* (verse-prose) reveals that tree–grass landscapes have remained stable for at least 750 years, predating colonial timber extraction.
- **Botanical Indicators:** Researchers identified 62 plant species in historical texts; 27 were specific "savanna indicators" like *hivara* (*Vachellia leucophloea*) and *tarai*, while only three were "forest indicators," confirming an open-canopy past.
- **Evolutionary Adaptations:** The flora described—featuring thick bark, spines, and clonal resprouting—reflects traits shaped by millennia of fire and grazing, proving these are evolved ecosystems rather than "ruined" forests.
- **Decoding Terminology:** The study clarifies that historical terms like *vana* (forest) and *jangala* (jungle) in Marathi/Sanskrit referred to wild, dry scrublands and grasslands, distinct from wet, closed-canopy forests (*anupa*).
- **Multi-proxy Validation:** Literary records were triangulated with 11 other lines of evidence, including Chalcolithic pottery motifs (blackbuck), hero stones (*virgal*) depicting cattle raids, and colonial revenue records of hay meadows.
- **Typological Classification:** The research distinguishes between "fine-leaf savannas" in dry zones (under 1000 mm rainfall) and "broadleaf savannas" in wetter zones, both of which are indigenous to the Deccan Plateau.



Important Keypoints and Ecological Context

The study challenges the "Forest-Centric" bias in Indian conservation policy, which often views grasslands as "wastelands" or "degraded" stages of a forest. This misconception has led to well-intentioned but ecologically damaging afforestation drives where carbon-sequestering grasslands are replaced by monoculture plantations. The presence of *Dhanagara* pastoralist songs (*ovis*) further highlights a deep-seated socio-ecological link between local livelihoods and savanna health.

Constitutional and Legal Provisions

- **Article 48A:** Mandates the State to protect and improve the environment; this study suggests that "improvement" should include restoring natural savannas rather than just planting trees.
- **Forest Rights Act (FRA), 2006:** Recognizes the rights of pastoralist communities (like the Dhanagars) to use and manage grazing lands, which this study identifies as ancient, legitimate ecosystems.
- **National Grassland Policy (Draft):** There has been a long-standing demand for a dedicated policy to protect grasslands, as they currently lack the legal protection accorded to "notified forests."



- **Biological Diversity Act, 2002:** Provides for the conservation of biological diversity and sustainable use of its components, emphasizing the need to protect "Indicator Species" mentioned in the study.

Key Definitions for UPSC

- **Savanna:** A mixed woodland-grassland ecosystem characterized by trees being sufficiently widely spaced so that the canopy does not close, allowing an unbroken herbaceous layer (grasses) to grow.
- **Generalist Species:** Species that can thrive in a wide variety of environmental conditions and can make use of a variety of different resources.
- **Indicator Species:** An organism whose presence, absence, or abundance reflects a specific environmental condition or habitat type.
- **Hagiography:** A biography of a saint or an ecclesiastical leader; in this context, used as a historical record for environmental conditions.

Conclusion

The integration of humanities and ecology proves that western Maharashtra's "scrub jungles" are high-value, ancient ecosystems with a 750-year documented history. Recognizing savannas as distinct biomes—rather than failed forests—is crucial for future conservation strategies. This "Long-Duree" perspective ensures that ecological restoration aligns with both historical reality and the cultural heritage of pastoral communities.

UPSC Relevance

- **GS Paper I (History & Geography):** Intersection of medieval literature (Bhakti period) with environmental history; understanding the Deccan's physical geography beyond the Western Ghats.
- **GS Paper III (Environment):** Critical for questions on "Wasteland" reclamation, afforestation myths (e.g., CAMPA funds), and the importance of biodiversity in non-forest biomes.
- **Essay Paper:** Themes related to "Traditional Knowledge vs. Modern Science" and "Decolonizing Indian Ecology."

4. Sangita Kalanidhi Award 2025-26: Honoring Musical Excellence

The 99th Annual Conference and Concerts of the Music Academy, Chennai, culminated with the prestigious Sadas (convocation), where eminent violinist R.K. Shriramkumar was conferred with the Sangita Kalanidhi award. The ceremony featured Hindustani violin legend N. Rajam, who highlighted the spiritual and technical depths of Indian classical music, emphasizing the "Gayaki Ang" and the tradition of "Sadhana."

Key Highlights of the Music Academy Awards

- **Sangita Kalanidhi:** Awarded to R.K. Shriramkumar, a renowned violinist and researcher known for his deep expertise in the compositions (*keertanas*) of Muthuswami Dikshitar.
- **Gayaki Style in Hindustani Music:** Chief Guest Dr. N. Rajam was recognized for her pioneering role in adapting the violin—traditionally an accompanying instrument—to the *Gayaki* style (vocal style) in the Hindustani tradition.
- **Sangita Kala Acharya:** Conferred upon Thavil exponent T.R. Govindarajan and vocalist Shyamala Venkateswaran for their significant contributions to teaching and preservation of music.





- **TTK Awards:** Presented to Kathakali musician Madambi Subramanian Namboodiri and the veena duo J.T. Jeyaraaj Krishnan and Jaysri Jeyaraaj Krishnan.
- **Musicologist Award:** Bestowed upon Professor C.A. Sreedhara for his academic research into the theoretical frameworks of Indian music.
- **Institutional Legacy:** The Music Academy, Chennai, celebrated its ongoing journey toward its centenary (founded 1928), serving as a primary custodian of Carnatic music tradition.

Important Terms and Concepts

- **Sangita Kalanidhi:** Considered the highest accolade in the field of Carnatic music, awarded annually by the Music Academy, Chennai.
- **Gayaki Ang:** A technique in Hindustani instrumental music where the instrument (like violin or sitar) is played to mimic the nuances, ornaments, and emotional delivery of the human voice.
- **Ragam-Tanam-Pallavi (RTP):** A complex, three-part improvisational form in Carnatic music that tests a musician's creative and technical mastery.
- **Sadas:** The traditional assembly or convocation of scholars and musicians where awards are formally conferred.
- **Muthuswami Dikshitar:** One of the "Trinity of Carnatic Music" (along with Tyagaraja and Syama Sastri), known for his heavy, Sanskrit-rich compositions often set in slow tempo.

Constitutional and Legal Provisions

- **Article 51A(f):** Part of the Fundamental Duties, it mandates every citizen to value and preserve the rich heritage of the country's composite culture.
- **Article 29(1):** Provides any section of citizens residing in India the right to conserve their distinct language, script, or culture, which includes the preservation of classical music traditions.
- **Ministry of Culture Schemes:** Various fellowships and the "Sangeet Natak Akademi" awards represent the State's role in fulfilling the Directive Principle of promoting cultural interests.

Conclusion

The conferment of the Sangita Kalanidhi on R.K. Shriramkumar underscores the importance of scholar-musicians in the contemporary era. By honoring both Carnatic and Hindustani exponents, the Music Academy promotes a "composite culture" that transcends regional boundaries. The emphasis on "Sadhana" and the "Gayaki style" reminds aspirants that Indian classical music is a living tradition that evolves through rigorous practice and innovative adaptation of instruments.

UPSC Relevance

- **GS Paper I (Art and Culture):** Significant for questions on the differences between Hindustani and Carnatic music, the Trinity of Carnatic music, and the evolution of musical instruments.
- **Prelims:** Important for identifying major awards (Sangita Kalanidhi vs Sangeet Natak Akademi), musical personalities, and specific terms like *Gayaki Ang* or *Ragam-Tanam-Pallavi*.
- **Ethics (Case Studies/Quotes):** The concept of "Sadhana" (disciplined practice) and lifelong learning mentioned by Dr. N. Rajam can be utilized as examples of professional integrity and dedication.



5. Global Outlook 2026: Indian Optimism Amidst Systematic Risks

A comprehensive survey by Ipsos titled "Predictions 2026" reveals that India enters the new year as one of the most optimistic nations globally. Despite a volatile 2025 marked by geopolitical tensions and economic pressures, the Indian populace shows high confidence in global recovery and personal financial growth, while simultaneously acknowledging domestic risks like recession and security threats.

Key Highlights of Ipsos Predictions 2026

- **Global Optimism Leader:** India ranks among the top five countries globally in terms of positive outlook. Approximately 85% of Indians expect 2026 to be a better year than 2025, significantly higher than the global average.
- **Economic Rebound Expectations:** About 81% of Indian respondents believe the global economy will strengthen in 2026. Domestically, 57% anticipate an increase in their disposable income, driven by India's status as a fast-growing major economy.
- **Geopolitical Hopes:** Contrary to global skepticism, 54% of Indians expect the war in Ukraine to conclude in 2026. Interestingly, 51% of Indian respondents believe US President Donald Trump could win the Nobel Peace Prize, the highest share globally.
- **Dichotomy of Concern:** While optimistic, a significant section remains wary; 49% fear a domestic recession and 52% believe their local area may become less safe, reflecting anxieties over inflation and social stability.
- **Technological Outlook:** The perception of Artificial Intelligence is balanced; while 62% fear AI-led job redundancies, 57% are hopeful about the creation of new roles, viewing it as a dual-edged sword for the labor market.
- **Climate & Environment:** 60% of Indians expect global temperatures to rise further. Despite recent extreme weather events, climate change remains lower in the "hierarchy of worries" compared to the cost of living and unemployment.



Essential Concepts and Definitions

- **Disposable Income:** The amount of money that households have available for spending and saving after income taxes have been accounted for.
- **Consumer Confidence Index (CCI):** An economic indicator that measures the degree of optimism that consumers feel about the overall state of the economy and their personal financial situation.
- **Recession:** A period of temporary economic decline during which trade and industrial activity are reduced, generally identified by a fall in GDP in two successive quarters.
- **Net Optimism:** A metric calculated by subtracting the percentage of pessimistic responses from the percentage of optimistic responses to gauge the overall sentiment of a population.

Constitutional and Legal Provisions

- **Article 38 (Directive Principles):** Mandates the State to promote the welfare of the people by securing a social order in which justice—social, economic, and political—shall inform all institutions of national life. Public optimism often reflects the perceived success of these mandates.



- **Article 300A:** While not a fundamental right, the right to property and the protection of individual assets are crucial for maintaining the consumer confidence highlighted in the survey.
- **National Security Act (NSA), 1980:** Relates to the concerns of safety expressed by respondents; it allows the government to detain individuals to prevent them from acting in any manner prejudicial to the security of India or the maintenance of public order.
- **Fiscal Responsibility and Budget Management (FRBM) Act, 2003:** Sets targets for the government to reduce fiscal deficits, ensuring macro-economic stability which directly influences the "recession" fears cited in the report.

Conclusion

The Ipsos 2026 report paints a picture of a "Resilient India" that is decoupling its emotional sentiment from global gloom. While the world remains split on economic recovery, the Indian consumer's bullishness on disposable income suggests a robust domestic demand engine. However, the underlying fears of recession and security indicate that this optimism is "cautious," requiring proactive government intervention in price stability and internal security to sustain this positive momentum.

UPSC Relevance

- **GS Paper III (Economy):** Highly relevant for topics on "Mobilization of Resources," "Growth and Development," and "Consumer Sentiment" as a driver of GDP.
- **GS Paper II (Governance & International Relations):** Pertains to public perception of foreign policy (Ukraine war, US relations) and the efficacy of government social welfare schemes.
- **Prelims:** Understanding indices like the Consumer Confidence Survey (published by RBI) and the impact of global geopolitical events on domestic economic outlook.

6. Strategic Realignment of India's Quality Control Regime (2025-26)

The Government of India has initiated a significant policy shift in its Quality Control Order (QCO) framework, moving away from rapid expansion toward a more calibrated, laboratory-ready approach. This "reset" is designed to balance the national ambition of "Zero Defect, Zero Effect" with the practicalities of domestic testing infrastructure and mounting pressure from international trade bodies like the World Trade Organization (WTO).

Key Highlights of the New Quality Strategy

- **Recalibration and Rollback:** Following years of rapid expansion, the government has begun withdrawing QCOs for several industrial chemicals (e.g., acetic acid, methanol, aniline) and viscose fibers, reducing the total regulated products from 761 to 736 by late 2025.
- **Testing Capacity Linkage:** Future QCOs will now be strictly tied to "laboratory readiness." The government will ensure that sufficient Bureau of Indian Standards (BIS) certified labs exist before making standards mandatory, preventing bottlenecks for manufacturers.
- **WTO and Global Scrutiny:** The shift is partly a response to concerns raised by the US Trade Representative (USTR) and the WTO regarding non-alignment with global norms, particularly in the chemicals and plastics sectors, which were flagged as trade barriers.
- **Support for MSMEs:** Acting on the recommendations of the Rajiv Gauba Committee (NITI Aayog), the government is easing norms for Micro, Small, and Medium Enterprises that rely on imported raw materials, which had seen cost escalations due to strict QCO compliance.



- **Focus on Emerging Tech:** While withdrawing some industrial QCOs, the Centre has notified 12 new standards covering strategic sectors like cybersecurity, digital infrastructure, and wind energy to replace outdated specifications by April 2026.
- **Inter-Ministerial Coordination:** A massive exercise involving 37 ministries is underway to ensure that future quality interventions are justified by clear regulatory impact assessments rather than arbitrary targets.

Essential Definitions for Civil Services

- **Quality Control Order (QCO):** A regulatory tool issued under the BIS Act that makes it mandatory for specific products (domestic or imported) to bear the BIS standard mark, ensuring safety and quality.
- **Technical Barriers to Trade (TBT):** A WTO agreement that tries to ensure that technical regulations, standards, and testing procedures do not create unnecessary obstacles to international trade.
- **Bureau of Indian Standards (BIS):** The National Standard Body of India established under the BIS Act 2016 for the harmonious development of the activities of standardization, marking, and quality certification.
- **Lab Readiness:** The availability of accredited facilities equipped with the technology and personnel required to test products against notified Indian Standards.

Constitutional and Legal Provisions

- **The Bureau of Indian Standards Act, 2016:** The primary legal pillar that empowers the Central Government to notify goods for mandatory certification in the public interest, safety, or national security.
- **Article 301-304:** While the Constitution guarantees freedom of trade and commerce, Article 302 empowers Parliament to impose restrictions in the public interest. QCOs are legally viewed as such "reasonable restrictions."
- **Union List (Entry 51):** Grants the Union Government the power to establish standards of quality for goods to be exported out of India or transported from one State to another.
- **WTO TBT Agreement:** An international legal obligation where India must notify the WTO of any new technical regulation that may significantly affect trade, allowing other members to provide comments.

Conclusion

The 2026 reset of India's quality regime represents a maturation of "Brand India." By shifting from a quantity-based target (notifying thousands of products) to a capacity-based strategy, the government is reducing "compliance drag" on MSMEs and aligning with global trade obligations. This pragmatic approach ensures that while quality remains a non-negotiable pillar of *Viksit Bharat*, it does not inadvertently stifle industrial growth or invite retaliatory trade actions.

UPSC Relevance

- **GS Paper III (Economy):** Issues relating to "Industrial Policy," "Ease of Doing Business," and "MSME Sector." The tension between protectionism (via QCOs) and free trade is a recurring theme.



- **GS Paper II (International Relations):** Role of the WTO and international trade disputes; India-US trade relations and the impact of non-tariff barriers.
- **Prelims:** Specifics of the BIS Act, the difference between mandatory and voluntary standards, and the role of NITI Aayog committees in policy formulation.

7. Indo-Bangladesh Joint Water Measurement: Ganges Water Sharing Treaty 2026

India and Bangladesh have initiated the joint water measurement process for the Padma and Ganga rivers, marking a critical diplomatic juncture as the historic 1996 Ganges Water Sharing Treaty enters its 30th and final year. This technical exercise is essential for ensuring transparency and data-driven cooperation in transboundary river management between the two neighbors.

Key Highlights of the Joint Measurement Exercise

- **Final Year of Treaty:** The measurement comes as the 30-year "Ganges Water Sharing Treaty," signed in 1996, is set to expire in December 2026, necessitating a review or renewal.
- **Geographical Locations:** Joint teams are conducting measurements at two strategic points: 3,500 feet upstream of the Hardinge Bridge on the Padma River (Bangladesh) and at the Farakka Manfe point (India).
- **Technical Collaboration:** The exercise involves experts from the Joint Rivers Commission (JRC) of both nations to verify the flow of water during the "lean season" (January to May).
- **Data Transparency:** Accurate flow measurement is vital to resolve long-standing disputes regarding water availability at Farakka and the actual discharge reaching downstream Bangladesh.
- **Strategic Rejuvenation:** This move signals a commitment to "Hydro-diplomacy" despite political transitions, ensuring that bilateral ecological and agricultural needs are prioritized.
- **Future Framework:** The data collected during this final year will form the scientific basis for negotiating a successor treaty or extending the existing 1996 agreement.



Essential Concepts and Definitions

- **Lean Season:** The period between January 1 and May 31 each year when the water flow in the Ganga is at its lowest, requiring a structured sharing formula.
- **Farakka Barrage:** A barrage across the Ganga river located in West Bengal, India, designed to divert water into the Hooghly River to flush out silt and keep the Kolkata Port operational.
- **Transboundary River:** A river that crosses at least one political border, either within a nation or an international boundary, requiring cooperative management frameworks.
- **Joint Rivers Commission (JRC):** A bilateral body established in 1972 to work for the common benefit of both countries in harnessing the waters of shared rivers.

Constitutional and Legal Provisions

- **Ganges Water Sharing Treaty (1996):** A bilateral agreement that established a 30-year formula for sharing the Ganga waters at Farakka during the lean season. It includes a provision for review every five years.



- **Article 253:** Empowers the Indian Parliament to make laws for implementing any treaty, agreement, or convention with any other country or decisions made at international conferences.
- **Entry 14 (Union List):** Deals with "Entering into treaties and agreements with foreign countries and implementing of treaties, agreements and conventions with foreign countries."
- **Article 262:** Provides for the adjudication of disputes relating to waters of inter-State rivers or river valleys, though international water sharing falls under the Union's executive power in foreign affairs.

Conclusion

The commencement of joint water measurement is a proactive step in stabilizing the "Upper Riparian vs. Lower Riparian" dynamic between India and Bangladesh. As the 1996 treaty reaches its sunset clause, the success of this measurement exercise will determine the trust levels required for a new water-sharing paradigm. Beyond the Ganga, this process sets a precedent for resolving similar issues on other shared rivers like the Teesta, emphasizing that scientific data remains the best antidote to political friction in transboundary water management.

UPSC Relevance

- **GS Paper II (International Relations):** Crucial for topics on "India and its Neighborhood-Relations" and the impact of transboundary water disputes on bilateral ties.
- **GS Paper I (Geography):** Important for understanding the drainage system of the Ganga-Brahmaputra-Meghna (GBM) basin and the hydrological impact of the Farakka Barrage.
- **Prelims:** Specific focus on the locations (Hardinge Bridge, Farakka), the year of the treaty (1996), and the role of the Joint Rivers Commission (JRC).

8. Neuralink and the Scale-up of Brain-Computer Interfaces (BCI) in 2026

Elon Musk has announced that Neuralink is poised to enter "high-volume production" of its brain-chip implants starting in 2026. This transition aims to move beyond experimental trials toward mass manufacturing and fully automated surgical procedures, potentially revolutionizing the treatment of neurological disorders and the future of human-AI integration.

Key Highlights of the 2026 Neuralink Roadmap

- **Mass Production Transition:** Neuralink intends to move from limited clinical prototypes to high-volume manufacturing of its BCI hardware in 2026, targeting a wider consumer base of patients with paralysis.
- **Automated Surgical Robotics:** A core component of the 2026 plan is the deployment of an entirely automated "R1" surgical robot, capable of inserting ultra-fine threads into the brain without manual human intervention.
- **Clinical Focus:** The primary medical objective remains the restoration of digital autonomy for individuals with quadriplegia and spinal cord injuries, allowing them to control computers and mobile devices through thought.
- **Neural Lace Technology:** The device utilizes high-bandwidth, flexible electrode threads that record and stimulate neural activity, minimizing the inflammatory response compared to traditional rigid electrodes.





- **Cognitive Enhancements:** Musk has signaled long-term goals of "human-AI symbiosis," aiming to expand human memory and cognitive capacity, though these remain in the speculative domain of development.
- **Regulatory Milestones:** The company is working through FDA (USA) pathways, with 2026 marking a critical year for moving from "investigational device" status to broader commercial accessibility.

Essential Concepts and Definitions

- **Brain-Computer Interface (BCI):** A direct communication pathway between an enhanced or wired brain and an external device. It reads electrical signals from neurons and translates them into digital commands.
- **Electrophysiology:** The study of the electrical properties of biological cells and tissues, specifically how neurons communicate through action potentials.
- **Biocompatibility:** The ability of a material to perform with an appropriate host response in a specific application; crucial for implants to avoid being rejected by the immune system.
- **Haptics:** Technology that stimulates the sense of touch and motion; in BCIs, this could eventually allow users to "feel" digital objects.

Constitutional and Legal Provisions

- **Right to Health (Article 21):** The Indian Constitution interprets the "Right to Life" to include the right to access advanced healthcare and life-improving technologies.
- **National Policy on Electronics (2019):** Encourages the development of core electronic components; BCIs represent the frontier of medical electronics that India seeks to incentivize.
- **Draft Charter on AI Ethics (NITI Aayog):** While focusing on software, it lays the groundwork for the ethical deployment of neuro-technologies, emphasizing privacy and "neural rights."
- **Medical Devices Rules, 2017:** Governs the import, manufacture, and clinical investigation of medical devices in India, categorizing implants under high-risk (Class D) categories requiring stringent DCGI oversight.

Conclusion

The transition to high-volume production of brain implants in 2026 signifies the transition of neuro-technology from science fiction to medical reality. While the potential for treating spinal injuries is profound, the move toward automated surgery and mass-market BCIs raises critical questions regarding data privacy, bioethics, and the "digital divide." As Neuralink scales, the global regulatory framework must evolve to safeguard the "final frontier" of human privacy—the mind.

UPSC Relevance

- **GS Paper III (Science & Technology):** Developments in the field of Biotechnology, Robotics, and Artificial Intelligence; issues relating to intellectual property rights and ethical considerations in neuro-tech.
- **GS Paper IV (Ethics):** The ethics of human enhancement, "Neural Rights," and the implications of merging biological intelligence with synthetic systems.
- **Essay Paper:** Themes centered on "Man vs. Machine," "The Future of Healthcare," and "Technological Determinism vs. Human Agency."



9. Indian Economy: GST Collections Hit ₹1.75 Trillion in December 2025

India's gross Goods and Services Tax (GST) collections reached ₹1.75 trillion in December 2025, recording a 6.1% year-on-year growth. This performance is particularly significant as it follows a major rate rationalization exercise in late 2024. The data highlights a robust surge in import-linked revenues and a steady, albeit maturing, domestic consumption base, providing a stable fiscal foundation for the final quarter of the financial year.

Key Highlights of December 2025 GST Collections

- **Revenue Growth:** Gross GST collections rose to ₹1.75 trillion from ₹1.64 trillion in December 2024. After accounting for ₹28,980 crore in refunds (a 31% increase), net GST revenue stood at ₹1.46 trillion, reflecting a 2.2% annual growth.
- **Import-Driven Momentum:** Integrated GST (IGST) on imports grew by nearly 20% to ₹51,977 crore. This suggests resilient supply chains and significant manufacturing activity, as a substantial portion of these imports typically feeds into export-oriented production.
- **Impact of Rate Rationalization:** Despite the sweeping GST rate cuts implemented on September 22, 2025 (affecting nearly 375 items), the 6.1% growth indicates that increased transaction volumes and improved compliance are effectively counterbalancing lower tax rates.
- **Cess Phase-Out:** Compensation cess collections fell sharply to ₹4,238 crore (down from ₹12,003 crore last year). The levy is currently restricted to tobacco and related products as the transition period for state revenue compensation concludes.
- **Cumulative Performance:** For the April-December FY26 period, gross collections reached ₹16.5 trillion, registering an 8.6% annual growth, which keeps the government's fiscal targets within reach.
- **Regional Disparities:** Large industrial states like Maharashtra (15%), Gujarat (12%), and Haryana (16%) continued to drive growth, while some regions in the North saw contractions, highlighting the uneven nature of the post-reform recovery.



Essential Concepts and Definitions

- **Integrated GST (IGST):** A tax levied on all inter-state supplies of goods and services and on imports into India. It ensures that imports are taxed at the same level as domestic products.
- **Compensation Cess:** An additional levy on demerit and luxury goods intended to compensate states for revenue losses during the first five years of GST implementation (extended until March 2026 to repay pandemic-era loans).
- **Net GST Revenue:** The actual amount available to the government after subtracting tax refunds from the gross collections.
- **Basic Customs Duty (BCD):** A tariff levied on imports over and above IGST, providing a protectionist barrier for local domestic products.

Constitutional and Legal Provisions

- **Article 279A:** Empowered the President to constitute the GST Council, which is the apex decision-making body for GST rates, exemptions, and administrative rules.



- **GST Compensation Act, 2017:** Provides the legal framework for the levy of cess to compensate states. The recent decision to restrict this to "sin goods" follows the discharge of most back-to-back loan obligations.
- **Central Excise (Amendment) Act, 2025:** Recently passed to adjust excise duties on tobacco to ensure tax incidence remains stable as the compensation cess is phased out by February 2026.
- **101st Constitutional Amendment Act:** The foundational law that introduced the GST regime in India, subsuming various central and state indirect taxes.

Conclusion

The December 2025 GST figures underscore the "Laffer Curve" effect, where lower tax rates have spurred higher consumption and better reporting, preventing a revenue collapse. While the reliance on import-related IGST remains high, the steady performance of domestic collections post-rationalization signals that the Indian indirect tax system is reaching a state of maturity. This fiscal resilience provides the government with the necessary space for social spending and infrastructure development in the upcoming Union Budget.

UPSC Relevance

- **GS Paper III (Economy):** Direct relevance to topics like "Government Budgeting," "Mobilization of Resources," and "Growth and Development."
- **GS Paper II (Governance):** Issues related to "Federalism" and "Centre-State Relations" concerning the GST Council and the winding down of the compensation cess.
- **Prelims:** Understanding the components of GST (CGST, SGST, IGST), the functioning of the GST Council, and trends in indirect tax buoyancy.

10. Rising Tiger Mortality in 2025: Challenges of Habitat Saturation

India witnessed a significant spike in tiger mortality in 2025, recording 166 deaths compared to 126 in 2024. According to the National Tiger Conservation Authority (NTCA), while the overall population remains robust (estimated at 3,682 in the 2022 census), the rising death toll underscores critical challenges related to habitat fragmentation, territorial conflicts, and the shrinking of wildlife corridors.

Key Highlights of the 2025 Tiger Mortality Data

- **Surge in Fatalities:** India lost 166 tigers in 2025, a nearly 32% increase from the previous year. This marks the second-highest annual mortality in the last five years, following the 182 deaths recorded in 2023.
- **State-wise Distribution:** Madhya Pradesh, the "Tiger State," reported the highest toll with 55 deaths. Other major contributors included Maharashtra (38), Kerala (13), and Assam (12), reflecting the pressure in high-density tiger landscapes.
- **Territorial Infighting:** Experts identify "intraspecific competition" or territorial fighting as the leading cause of natural deaths. As tiger reserves reach saturation levels, adult males frequently clash over limited space and resources.
- **Vulnerability of Cubs and Dispersing Sub-adults:** Out of the 166 deaths, 31 were cubs. Young tigers dispersing from their natal areas are particularly vulnerable to attacks from resident males or accidental deaths in human-dominated landscapes.



- **Mortality Outside Protected Areas:** Data indicates that approximately 60% of these deaths occurred outside Tiger Reserves. The lack of secure ecological corridors forces tigers into "sink" habitats where they face higher risks of conflict and accidents.
- **Poaching and Anthropogenic Factors:** While natural causes dominate, human-induced factors persist. In Madhya Pradesh alone, several deaths were linked to electrocution (often non-targeted, intended for wild boars) and road or rail accidents.



**INDIA LOST 166 TIGERS IN 2025
UP FROM 126 IN 2024**



Constitutional and Legal Framework

- **Article 48A (DPSP):** Directs the State to protect and improve the environment and safeguard the forests and wildlife of the country.
- **Article 51A(g) (Fundamental Duties):** Mandates every citizen to protect and improve the natural environment, including forests, lakes, rivers, and wildlife.
- **Wildlife (Protection) Act, 1972:** The primary legal instrument for tiger conservation. The 2006 amendment provided statutory status to the National Tiger Conservation Authority (NTCA).
- **Section 38V of WPA, 1972:** Obligates State Governments to prepare a "Tiger Conservation Plan" (TCP) for each reserve, covering core, buffer, and corridor areas.

Essential Definitions for UPSC

- **National Tiger Conservation Authority (NTCA):** A statutory body under the Ministry of Environment, Forest and Climate Change, established in 2006 to strengthen tiger conservation through oversight and normative guidelines.
- **Carrying Capacity:** The maximum number of individuals of a species that a particular habitat can sustainably support without degrading the ecosystem.
- **Ecological Corridors:** Narrow strips of habitat that connect larger patches of forest, allowing for the safe movement and genetic exchange of wildlife between isolated populations.
- **Source-Sink Dynamics:** A model where "source" habitats (protected reserves) produce surplus animals that disperse into "sink" habitats (forest fringes/human areas) where death rates often exceed birth rates.

Conclusion

The spike in tiger deaths in 2025 is a paradox of conservation success. As India's tiger population grows, the existing protected areas are hitting their ecological carrying capacity. The transition from "Project Tiger" (focusing on protected reserves) to "Landscape-scale Conservation" is now imperative. To sustain the growth of the national animal, the focus must shift from merely increasing numbers to securing functional corridors and managing human-wildlife interfaces effectively.

UPSC Relevance

- **GS Paper III (Environment & Biodiversity):** Crucial for topics on "Conservation," "Wildlife Protection," and "Man-Animal Conflict." The data directly links to the effectiveness of Project Tiger.



- **GS Paper II (Governance):** Role of statutory bodies like NTCA and the implementation of the Wildlife (Protection) Act.
- **Prelims:** Important for identifying the "Tiger State," NTCA protocols (like M-STRIPES), and the geographic locations of major tiger reserves mentioned in the report (Pench, Kanha, Bandhavgarh).

11. Bilateral CBMs: India-Pakistan Exchange of Nuclear and Prisoner Lists (2026)

In a sustained diplomatic tradition, India and Pakistan on January 1, 2026, exchanged comprehensive lists of their nuclear installations and facilities. This marks the 35th consecutive year of such an exchange, conducted even as bilateral relations remain strained following recent military hostilities in May 2025. Simultaneously, both nations exchanged lists of civilian prisoners and fishermen in their respective custody, underscoring the humanitarian dimension of their engagement.

Key Highlights of the Bilateral Exchange

- **Nuclear Non-Attack Pact:** The exchange of nuclear facility lists is a mandate of the 1988 "Agreement on the Prohibition of Attack against Nuclear Installations and Facilities."
- **Continuity Amidst Conflict:** Despite the "deep freeze" in ties following cross-border military friction in mid-2025, the annual practice has remained uninterrupted since its inception in 1992.
- **Geographical Transparency:** Under this pact, both countries provide the precise latitude and longitude of their nuclear assets to prevent miscalculations during times of war.
- **Humanitarian Cooperation:** Lists of 424 Pakistani prisoners in India and 257 Indian prisoners (including 199 fishermen) in Pakistan were shared under the 2008 Consular Access agreement.
- **Repatriation Concerns:** India has specifically urged Pakistan to expedite the release of 167 Indian fishermen and civilian prisoners who have already completed their sentences.
- **Consular Access Requests:** New Delhi has sought immediate access to 35 Indian prisoners currently held in Pakistan without such permissions, emphasizing the "right to welfare" of incarcerated nationals.

Constitutional and Legal Provisions

- **Agreement on the Prohibition of Attack (1988):** Signed by PM Rajiv Gandhi and PM Benazir Bhutto, it provides a crucial Confidence-Building Measure (CBM) to avoid nuclear catastrophes.
- **Agreement on Consular Access (2008):** Mandates the exchange of prisoner lists twice a year (January 1 and July 1) to ensure the rights of nationals detained across the border.
- **Article 51 (Directive Principles):** The Indian Constitution mandates the State to promote international peace and security and maintain just and honorable relations between nations.
- **Vienna Convention on Consular Relations (1963):** The overarching international legal framework that governs the rights of states to assist their nationals in foreign prisons.

Essential Definitions for UPSC

- **Confidence-Building Measures (CBMs):** Planned procedures used to prevent hostilities, limit escalation, and build trust between two or more rival states.
- **Consular Access:** The right of a representative of a state to visit, communicate with, and provide legal assistance to its nationals who are imprisoned or detained in a foreign country.



- **Nuclear Installation:** Under the 1988 pact, this includes nuclear power and research reactors, fuel fabrication, uranium enrichment, and facilities storing radioactive materials.
- **Strategic Stability:** A state in bilateral relations where neither side has an incentive to initiate a first strike due to the risk of mutual destruction.

Conclusion

The annual exchange of nuclear and prisoner lists remains one of the few functional "safety valves" in the volatile India-Pakistan relationship. By prioritizing nuclear transparency and humanitarian issues, both nations maintain a baseline of strategic restraint. However, the recurring issue of repatriating prisoners who have completed their terms highlights the persistent "trust deficit" that complicates even the most institutionalized CBMs.

UPSC Relevance

- **GS Paper II (International Relations):** Direct relevance to "India and its neighborhood relations" and the role of "Bilateral agreements and treaties."
- **Internal Security:** Understanding nuclear CBMs as a tool for managing regional security and preventing accidental escalations.
- **Prelims:** Knowledge of the 1988 and 2008 agreements, the frequency of exchanges, and the specific statutory bodies involved (MEA).

12. Unified Payments Interface (UPI): Evolution and Strategic Growth in 2025-26

The Unified Payments Interface (UPI) has set unprecedented benchmarks in 2025, solidifying its position as the primary architecture of India's digital economy. As the platform transitions into 2026, the focus is shifting from simple transaction volume to sophisticated user-centric features, improved transparency against manipulative digital practices, and deeper penetration into rural markets.

Key Highlights of UPI's Performance and Innovations

- **Record-Breaking Metrics:** In 2025, UPI processed an astounding 228 billion transactions worth ₹300 trillion, representing a 33% year-on-year increase in volume and a 21% rise in value.
- **Peak Monthly Activity:** December 2025 marked a historic high with 21.6 billion transactions valued at ₹30 trillion, averaging nearly 698 million transactions daily.
- **Combating "Dark Patterns":** To protect consumer autonomy, NPCI launched a central mandate-management portal to help users identify and cancel deceptive recurring payment traps often hidden by e-commerce platforms.
- **Strengthening AutoPay:** The new 2025 guidelines require all UPI members to implement a dedicated portal by December 31, enhancing transparency for subscriptions, utilities, and SIPs.
- **Technological Frontiers:** 2026 is projected to be the year of "Intelligent Payments," integrating AI-driven intent recognition, biometric authentication, and vernacular conversational interfaces to reach the "last mile" in Tier-III towns.





- **Cross-Border Expansion:** Beyond domestic growth, UPI is evolving into a tool for intelligent cross-border flows, moving from reactive transactions to intent-based international remittances.

Essential Concepts and Definitions

- **Unified Payments Interface (UPI):** A real-time payment system developed by NPCI that facilitates inter-bank peer-to-peer (P2P) and person-to-merchant (P2M) transactions via mobile devices.
- **Dark Patterns:** Deceptive user interface (UI) designs used by digital platforms to trick users into taking actions they did not intend, such as signing up for recurring subscriptions without clear consent.
- **Mandate Management:** A system that allows a user to authorize a merchant to debit a specified amount from their bank account at regular intervals (e.g., monthly OTT fees or insurance premiums).
- **Agentic Payments:** An emerging concept where AI agents or bots perform financial transactions on behalf of a user based on pre-defined preferences and intent.

Constitutional and Legal Provisions

- **Payment and Settlement Systems Act, 2007:** The primary legal framework that empowers the Reserve Bank of India (RBI) to regulate and supervise all payment systems in the country, including those operated by NPCI.
- **Consumer Protection (E-Commerce) Rules, 2020:** These rules, along with recent CCPA advisories, provide the legal basis for penalizing platforms that employ "dark patterns" to mislead consumers.
- **Digital Personal Data Protection (DPDP) Act, 2023:** Regulates how payment apps process user data, ensuring that consent for transactions and mandates is "free, specific, informed, and unambiguous."
- **Article 21 (Right to Privacy):** The Supreme Court's interpretation of privacy as a fundamental right underpins the regulatory move toward giving users more control over their digital mandates and financial data.

Conclusion

The 2025 data confirms that UPI is no longer just a "fast" payment tool but has become a structural pillar of the Indian household economy. The government's focus on eliminating "dark patterns" and enhancing user control over AutoPay mandates indicates a shift toward a more ethical digital ecosystem. As the platform embraces AI and biometric security in 2026, it is poised to bridge the remaining digital divide, ensuring that financial inclusion reaches the "Bharat" beyond metropolitan hubs.

UPSC Relevance

- **GS Paper III (Indian Economy):** Directly relates to "Digital Public Infrastructure (DPI)," "Financial Inclusion," and "Changes in Industrial Policy."
- **GS Paper II (Governance):** Issues concerning "Consumer Protection" in the digital age and the regulatory role of the RBI and NPCI.
- **Internal Security:** Understanding the role of secure payment systems in reducing the shadow economy and preventing financial frauds.
- **Essay Paper:** Potential themes on "The Digital Revolution in India," "Ethics in E-Commerce," or "India's Leadership in Global Real-Time Payments."