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Dr. GINDI'S IAS ACADEMY

DAILY CURRENT AFFAIRS

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Civils & Competitive Careers
TRANSFORMING ASPIRANTS INTO ACHIEVERS

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A/C CAMPUS

Table of Contents

DAILY CURRENT AFFAIRS	2
1. OPEC+ Delays Oil Capacity Review Amid Geopolitical Disruptions	2
2. Global Food Price Surge and Supply Chain Vulnerabilities.....	3
3. Surge in Public Procurement from Micro and Small Enterprises	5
4. India's Comprehensive Peace Proposal for the Russia-Ukraine Conflict.....	6
5. First-Ever Wild Release of Captive-Bred Great Indian Bustards.....	7
6. Resumption of Pending Post-Facto Environmental Clearance Appraisals.....	9
7. Presidential Assent to Gujarat Uniform Civil Code Bill.....	10
8. El Niño Calls for Wider Tracking of Climate Stress	12
9. Submerged Structures and Chola-Era Artifacts Discovered off Poompuhar Coast.....	13
10. Reintroduction of Big Cats in Buxa Tiger Reserve	14
11. Ship-to-Ship Transfers Boost India's West Asian Oil Imports.....	16
12. Payment Aggregators Seek Larger Share of UPI Merchant Discount Rate.	17

DAILY CURRENT AFFAIRS

1. OPEC+ Delays Oil Capacity Review Amid Geopolitical Disruptions

Key Highlights & Summary

- **Delay in Quota Benchmark:** OPEC+ has postponed its comprehensive review aimed at establishing member nations' maximum production capacities, which serve as the baseline for 2027 output quotas.
- **Impact of Conflict:** The delay stems directly from ongoing geopolitical turbulence in West Asia, which has severely disrupted infrastructure projects and capacity expansion programs across key regional producers.
- **Assessment Uncertainty:** Heightened instability and project halts have introduced significant unpredictability into calculating accurate long-term maximum sustainable production estimates.
- **Market Volatility Risks:** Deferring output baseline revisions complicates supply stabilization efforts, heightening price exposure for major net oil-importing economies like India.
- **Strategic Shift:** The decision underscores how regional military escalations directly impede global energy policy coordination and long-term supply planning.
- **Global Economic Fallout:** Protracted supply uncertainties pose persistent inflationary pressures, threatening macroeconomic stability and trade balances globally.

Essential Definitions

- **OPEC+:** An expanded alliance comprising the 12 core members of the Organization of the Petroleum Exporting Countries (OPEC) along with 10 non-OPEC crude-exporting nations (including Russia) to coordinate oil production levels.
- **Production Capacity:** The maximum level of crude oil output that a producer nation can achieve and sustain over a specified operational timeframe.
- **Output Quotas:** Mandatory or voluntary production limits allocated to individual member nations to regulate market supply and stabilize global crude prices.

Legal and Constitutional Framework

- **Article 297 (Indian Constitution):** Grants the Union ownership of all lands, minerals, and underlying ocean resources within India's territorial waters and Exclusive Economic Zone (EEZ), serving as the constitutional foundation for domestic oil exploration and energy security governance.

- **The Petroleum and Natural Gas Rules, 1959:** Formulated under the Oilfields (Regulation and Development) Act, 1948, regulating licensing, extraction, and strategic exploration of domestic hydrocarbon reserves.
- **Strategic Petroleum Reserves (SPR)**
Programme: Governed under the Ministry of Petroleum and Natural Gas via Indian Strategic Petroleum Reserves Limited (ISPRL), facilitating national energy safety nets during international supply disruptions.
- **International Energy Agency (IEA)**
Agreements: Bilateral and international policy frameworks that guide emergency response mechanisms, stockholding obligations, and global supply coordination.



Conclusion

The postponement of the OPEC+ oil capacity review highlights the fragile intersection of international energy security and geopolitical conflict. Unstable production baselines in West Asia risk driving persistent volatility in global energy markets. For oil-dependent developing economies, building resilient domestic strategic reserves, diversifying energy import origins, and accelerating renewable energy transitions remain imperative to mitigate external supply shocks.

UPSC Relevance

- **GS Paper-II (International Relations):** Bilateral, regional, and global groupings involving or affecting India's interests; impact of West Asian geopolitical conflicts on global energy governance.
- **GS Paper-III (Indian Economy & Energy Security):** Macroeconomic implications of import-driven inflation, Strategic Petroleum Reserves, crude oil price fluctuations, and India's energy transition path.

2. Global Food Price Surge and Supply Chain Vulnerabilities

Key Highlights & Summary

- **Four-Year High Index:** The UN Food and Agriculture Organization (FAO) Food Price Index averaged 136.0 points in September, marking its highest level since November 2022.
- **Sequential Escalation:** Global agricultural commodity prices rose steadily from a revised 134.0 points in August due to compounding supply-side constraints.
- **Weather and Logistic Disruptions:** Adverse weather patterns across major production zones and maritime logistics bottlenecks triggered sharp increases in crop valuation.
- **Import Inflation Pressure:** Surging global agricultural prices exacerbate domestic retail food inflation, squeezing real household income in emerging economies.
- **Fiscal Burden on Subsidies:** Elevated foreign market prices increase government outlay requirements for domestic food welfare programmes and input subventions.

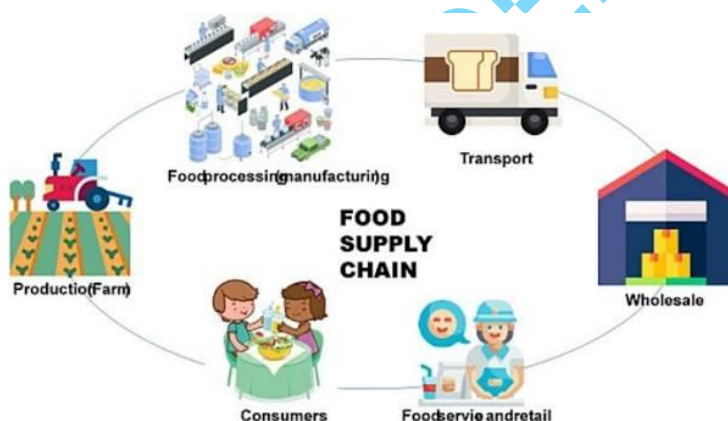
- **Supply Chain Fragility:** Global agricultural markets remain vulnerable to climate-induced yield contractions, highlighting the need for resilient trade corridors.

Essential Definitions

- **FAO Food Price Index (FFPI):** A measure of the monthly change in international prices of a basket of agricultural commodities, encompassing cereals, vegetable oils, sugar, meat, and dairy products.
- **Food Inflation:** A persistent rise in the general price level of food commodities, driven by supply-side shocks, demand surges, or external trade disruptions.
- **Imported Inflation:** Price level increases in a domestic economy resulting from the rising cost of imported essential goods, raw materials, and agricultural inputs.

Legal and Constitutional Framework

- **Article 47 (Indian Constitution):** Directs the State to raise the level of nutrition and the standard of living of its people, serving as the Directive Principle foundation for national food security.
- **National Food Security Act (NFSA), 2013:** Legally guarantees subsidized foodgrains to up to 75% of rural and 50% of urban populations via the Targeted Public Distribution System (TPDS).
- **Essential Commodities Act (ECA), 1955:** Empowers the Central Government to regulate the production, supply, distribution, and stock limits of essential food items to prevent hoarding and market manipulation.
- **Foreign Trade (Development and Regulation) Act, 1992:** Authorizes export/import restrictions, minimum export prices, and tariff adjustments to stabilize domestic food supply and prices during global shocks.



Conclusion

The escalation in the FAO Food Price Index highlights the vulnerability of global food security to climate anomalies and supply chain disruptions. For net agricultural importers and developing nations, sustained high prices pose serious macroeconomic and social welfare challenges. Mitigating these risks demands strengthening domestic strategic grain reserves, expanding climate-resilient agriculture, and deploying proactive trade policy interventions to insulate domestic consumers from international price volatility.

UPSC Relevance

- **GS Paper-II (Governance & Social Justice):** Issues relating to poverty, hunger, public distribution systems, and constitutional directives under Article 47 for socio-economic development.
- **GS Paper-III (Indian Economy & Agriculture):** Food inflation management, buffer stock norms, supply chain logistics, agricultural price trends, and the operational efficacy of the National Food Security Act.

3. Surge in Public Procurement from Micro and Small Enterprises

Key Highlights & Summary

- **Target Surpassed:** Central government procurement from Micro and Small Enterprises (MSEs) reached ₹48,635 crore in H1 FY27, accounting for 53% of total reported public procurement and significantly exceeding the mandated 25% target.
- **Historical Growth:** MSE procurement share has expanded consistently over the years, rising from 23.1% in FY17 to nearly 49% in FY26, and reaching 45.8% (₹38,000 crore) in H1 of the previous fiscal year.
- **Total Government Spending:** Overall central procurement stood at ₹90,745 crore in H1 FY27, representing 38.12% of FY26's total annual procurement of ₹2.38 trillion.
- **Exclusion of Medium Enterprises:** The statutory 25% public procurement target applies strictly to micro and small enterprises, excluding medium enterprises from this specific mandatory quota.
- **Domestic Priority Shift:** Intensified government spending and global supply disruptions have made domestic MSE suppliers crucial for maintaining strategic supply chain resilience.
- **H2 Expectations:** Industry representatives anticipate further procurement growth in H2 FY27, provided overall central capital outlay maintains its current momentum.



Essential Definitions

- **Micro and Small Enterprises (MSEs):** Businesses defined under the MSMED Act based on investment and turnover thresholds; micro enterprises have investment up to ₹1 crore and turnover up to ₹5 crore, while small enterprises have investment up to ₹10 crore and turnover up to ₹50 crore.
- **Public Procurement Policy for MSEs:** A mandatory framework requiring Central Ministries, Departments, and Public Sector Undertakings (CPSUs) to procure a minimum percentage of their annual purchases from MSEs.
- **MSME Sambandh Portal:** An official public procurement portal launched by the Ministry of MSME to monitor the implementation of the procurement policy across CPSUs and central government bodies.

Legal and Constitutional Framework

- **Article 301 & Article 304 (Indian Constitution):** Guarantees freedom of trade, commerce, and intercourse throughout India while permitting reasonable restrictions in the public interest, enabling affirmative procurement policies.
- **Micro, Small and Medium Enterprises Development (MSMED) Act, 2006:** Provides the statutory basis for policy measures, regulatory framework, financial access, and delayed payment protections for the MSME sector.

- **Public Procurement Policy Order, 2012 (Amended 2018):** Mandates 25% annual procurement from MSEs by Central Ministries/CPSUs, including sub-targets of 4% for SC/ST-owned MSEs and 3% for women-owned MSEs.
- **General Financial Rules (GFR), 2017:** Rule 153 empowers the government to reserve certain items for exclusive procurement from MSEs and grant price preference in public tenders.

Conclusion

Exceeding the statutory MSE procurement target in H1 FY27 demonstrates the strengthening integration of small businesses into formal government supply chains. This trend enhances domestic manufacturing capacity, fosters employment generation, and shields the domestic economy from international trade disruptions. Sustaining this momentum through efficient payment cycles and transparent digital platforms like GeM and Sambandh will be critical for long-term industrial decentralization.

UPSC Relevance

- **GS Paper-II (Governance & Policy):** Government policies and interventions for development in various sectors, public procurement transparency, and digital governance tools like MSME Sambandh.
- **GS Paper-III (Indian Economy & Employment):** Industrial growth, MSME sector promotion, domestic supply chain resilience, inclusive growth, and government budget expenditure dynamics.

4. India's Comprehensive Peace Proposal for the Russia-Ukraine Conflict

Key Highlights & Summary

- **Comprehensive Peace Plan:** Ukraine's Foreign Minister Andrii Sybiha acknowledged that India has submitted its first "comprehensive" and "broad" peace proposal to end the Russia-Ukraine conflict.
- **Global Recognition:** Russian President Vladimir Putin noted Prime Minister Narendra Modi's persistent dialogue and "very good ideas" aimed at reaching a mutually acceptable settlement.
- **Multi-Nation Proposals:** Ukraine has received four distinct ceasefire proposals, with India's initiative identified as the broadest, alongside submissions from Turkey, Egypt, and the United States.
- **Ceasefire Scope:** Ukraine expressed readiness for an energy and Black Sea ceasefire, provided it covers combat operations, port infrastructure protection, and energy safety.
- **Strategic Role Shift:** This development marks a significant transition in India's diplomatic posture, moving from strategic neutrality to proactive peace facilitation.
- **Black Sea & Energy Safety:** The proposal emphasizes halting attacks on critical energy assets and maritime transport corridors across the Black Sea to stabilize global supply chains.

Essential Definitions

- **Strategic Autonomy:** A diplomatic doctrine where a nation maintains independent foreign policy decision-making without aligning formally with global power blocs.
- **Line of Contact:** The geopolitical demarcation boundary separating actively opposing military forces in an active conflict zone.
- **Black Sea Grain Initiative / Truce:** A diplomatic mechanism aimed at securing safe navigation for agricultural and energy shipments through maritime trade routes despite ongoing hostilities.



Legal and Constitutional Framework

- **Article 51 (Indian Constitution):** Directive Principle of State Policy commanding the State to promote international peace and security, maintain just relations between nations, and foster respect for international law.
- **UN Charter (Article 2(3) & 2(4)):** Mandates all UN Member States to settle international disputes by peaceful means and refrain from the threat or use of force against territorial integrity.
- **Geneva Conventions (1949):** International humanitarian law agreements safeguarding civilian populations, critical public infrastructure, and energy facilities during armed conflict.
- **UNCLOS (1982):** United Nations Convention on the Law of the Sea regulating international navigation, maritime trade routes, and sovereignty rights in open seas like the Black Sea.

Conclusion

India's submission of a comprehensive peace proposal signifies its emerging stature as a credible global mediator capable of bridging ideological divides between major powers. By prioritizing energy security, agricultural trade continuity, and humanitarian stability in the Black Sea, New Delhi aligns its foreign policy goals with broader international welfare. Successfully operationalizing such peace frameworks will strengthen rules-based multipolarity and reinforce India's role as a global peacemaker.

UPSC Relevance

- **GS Paper-II (International Relations):** India's foreign policy, strategic autonomy, role in global conflict resolution, international institutions, and bilateral relations with Russia, Ukraine, and Western nations.
- **GS Paper-II (Polity & Governance):** Constitutional directives under Article 51 promoting international peace, treaty obligations, and foreign affairs governance.

5. First-Ever Wild Release of Captive-Bred Great Indian Bustards

Key Highlights & Summary

- **Milestone Rewilding Initiative:** Two male captive-bred Great Indian Bustard (GIB) chicks, aged four to six months, are set to be released into wild enclosures at Desert National Park (DNP), Jaisalmer.
- **Project GIB Milestone:** This pilot release marks the commencement of the official 'rewilding' phase under Project GIB, which has been in implementation since 2013 for species recovery.
- **Critical Population Status:** The wild population of GIB remains critically low, estimated at roughly 140 individuals, with around 130 residing in Rajasthan and small populations in Gujarat, Maharashtra, and Karnataka.
- **Post-Monsoon Timing:** The release aligns with the end of the monsoon to leverage high insect loads in grasslands, providing essential natural feed for the chicks.
- **Captive Breeding Success:** At least 98 bustards have been successfully bred in captivity at Wildlife Institute of India (WII) breeding centers in Sam and Ramdevra, Jaisalmer.
- **Threat Environment:** Major threats include low reproductive rates (1 egg per 1-2 years), habitat loss, predator depredation, and collisions with high-voltage renewable energy power lines.

Essential Definitions

- **Great Indian Bustard (*Ardeotis nigriceps*):** A flagship bird species of arid and semi-arid grassland ecosystems, classified as 'Critically Endangered' on the IUCN Red List.
- **Rewilding:** The progressive conservation practice of reintroducing captive-bred animals into their natural habitats to restore self-sustaining wild populations.
- **Ex-Situ Conservation breeding:** The process of breeding wild species in human-controlled environments like conservation centres to mitigate extinction risks before reintroduction.

For the first time, captive-bred Great Indian Bustard will set foot in the wild



Legal and Constitutional Framework

- **Article 48A (Indian Constitution):** Directive Principle of State Policy directing the State to protect and improve the environment and safeguard forests and wildlife.
- **Article 51A(g) (Indian Constitution):** Fundamental Duty of every citizen to protect and improve the natural environment and have compassion for living creatures.
- **Wildlife Protection Act, 1972:** The GIB is listed under Schedule I, providing it the highest level of legal protection against hunting, trade, and habitat destruction.
- **CITES Appendix I:** International trade in GIB specimens or derivatives is strictly prohibited due to its endangered status.

Conclusion

The rewilding of captive-bred Great Indian Bustards represents a pivotal milestone in India's biodiversity conservation efforts. Overcoming severe threats like habitat fragmentation and power

line collisions requires sustained coordination between conservationists, local communities, and energy sector authorities. Ensuring the long-term survival of the species is vital for maintaining the ecological equilibrium of India's fragile grassland and desert ecosystems.

UPSC Relevance

- **GS Paper-III (Environment & Ecology):** Biodiversity conservation, species recovery programmes, captive breeding initiatives, and habitat restoration strategies.
- **GS Paper-III (Infrastructure & Environment):** Balancing renewable energy infrastructure expansion with wildlife protection and overhead power line undergrounding mandates.

6. Resumption of Pending Post-Facto Environmental Clearance Appraisals

Key Highlights & Summary

- **Directive to Resume Appraisals:** The Ministry of Environment, Forest and Climate Change (MoEFCC) has instructed appraisal committees, state-level EIA authorities, and pollution control boards to conclude pending, rejected, or returned 'post-facto' environmental clearance proposals.
- **No Fresh Applications:** The ministry explicitly stated that while pending and previously submitted applications will be taken to their logical conclusion, no fresh post-facto applications will be accepted.
- **Supreme Court Verdict Implementation:** This directive implements the Supreme Court's July 2026 judgment in *Vanashakti vs Union of India*, which quashed the 2021 Office Memorandum (OM) but allowed pending cases to be processed under law.
- **Validity of Past Clearances:** The apex court ruled that projects already granted post-facto clearances under prior mechanisms will remain legally valid.
- **Origin of Post-Facto Regime:** First introduced as a one-time six-month amnesty window in 2017 to handle violation cases where construction or expansion began without prior clearance under the EIA Notification 2006, it was later extended via a 2021 OM.
- **Mandatory Prior Clearance Maintained:** The Supreme Court reiterated that prior environmental clearance remains a mandatory statutory requirement for all project proponents unless amended by formal legislation.



Essential Definitions

- **Post-Facto Environmental Clearance:** Ex-post-facto legal approval granted to industrial or infrastructure projects that commenced construction, expansion, or modernization without obtaining prior statutory environmental clearance.
- **Environmental Impact Assessment (EIA):** A statutory process evaluating the potential environmental consequences of a proposed development project prior to its execution.

- **Precautionary Principle:** A core principle of environmental jurisprudence stating that lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Legal and Constitutional Framework

- **Article 21 (Indian Constitution):** Guarantees the right to life, which the Supreme Court has consistently interpreted to include the fundamental right to a clean, healthy, and unpolluted environment.
- **Article 48A (Indian Constitution):** Directive Principle of State Policy obligating the State to protect and improve the environment and safeguard forests and wildlife.
- **Environment (Protection) Act, 1986:** Provides statutory authority to the Central Government to issue regulations, notifications, and Office Memoranda to regulate industrial activities.
- **EIA Notification, 2006:** Issued under section 3 of the Environment (Protection) Act, 1986, making prior environmental clearance mandatory for categorized development projects.

Conclusion

The MoEFCC directive operationalizes the Supreme Court's balanced approach between environmental compliance and economic continuity. By settling long-pending violation proposals without permitting fresh post-facto entries, the regulatory framework reaffirms the primacy of prior environmental assessments while mitigating economic distress for existing infrastructure investments. Strict enforcement of prior clearance norms remains vital for upholding sustainable development and the precautionary principle.

UPSC Relevance

- **GS Paper-III (Environment & Disaster Management):** Environmental Impact Assessment (EIA), environmental legislation, post-facto approvals, and judicial rulings on sustainable development.
- **GS Paper-II (Polity & Governance):** Judicial review, executive orders versus statutory notifications, and balancing environmental protection with infrastructure growth.

7. Presidential Assent to Gujarat Uniform Civil Code Bill

Key Highlights & Summary

- **Presidential Approval:** President Droupadi Murmu has granted assent to the Gujarat Uniform Civil Code (UCC) Bill 2026, clearing the path for its official enforcement across the state.
- **Statutory Scope:** Modeled largely on Uttarakhand's UCC, the law regulates personal civil matters including marriage, divorce, succession, adoption, and live-in relationships.
- **Expert Committee Recommendation:** The legislation was formulated following recommendations by a committee chaired by former Supreme Court judge Justice Ranjana Desai.

- **Mandatory Live-In Regulation:** The Code legitimizes and establishes a mandatory registration mechanism for live-in relationships alongside reforming inheritance and divorce rights.
- **Tribal Protection Exemption:** The law explicitly excludes Scheduled Tribes and communities whose customary rights receive constitutional protection under Part XXI.
- **Legislative Timeline:** The Bill was passed by the Gujarat Assembly during the March budget session and received Presidential assent under Article 201 on September 17.

Essential Definitions

- **Uniform Civil Code (UCC):** A common set of civil laws governing personal matters such as marriage, divorce, inheritance, adoption, and succession for all citizens irrespective of religion.
- **Live-In Relationship:** A domestic cohabitation arrangement between two consenting adults without formal solemnization of marriage, now subjected to legal registration under the state UCC.
- **Presidential Assent (Article 201):** The constitutional process by which a Bill passed by a State Legislature and reserved by the Governor is approved by the President of India.



Legal and Constitutional Framework

- **Article 44 (Indian Constitution):** Directive Principle of State Policy tasking the State to secure for citizens a Uniform Civil Code throughout the territory of India.
- **Article 25 to Article 28 (Indian Constitution):** Guarantees freedom of conscience and the right to freely profess, practice, and propagate religion, subject to public order, morality, and health.
- **Article 201 (Indian Constitution):** Empowers the President to assent to or withhold assent from a State Bill reserved for consideration by the Governor.
- **Concurrent List (Entry 5, Schedule VII):** Grants both Parliament and State Legislatures concurrent powers to enact laws on marriage, divorce, infants, adoption, wills, and succession.

Conclusion

The enactment of the Gujarat Uniform Civil Code Bill 2026 represents a major step toward standardizing personal laws at the state level. By balancing progressive civil reforms like live-in registration and gender-neutral inheritance with explicit protections for indigenous tribal customs, the law demonstrates a structured state approach to Article 44. Ensuring smooth implementation while safeguarding fundamental religious freedoms will be pivotal for maintaining constitutional harmony.

UPSC Relevance

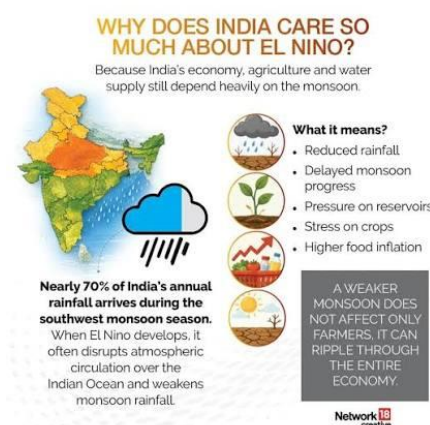
- **GS Paper-II (Polity & Governance):** Directive Principles of State Policy (Article 44), Fundamental Rights versus DPSP conflicts, federal legislative powers under the Concurrent List, and Article 201 presidential powers.

- **GS Paper-II (Social Justice & Indian Society):** Gender justice, personal law reforms, regulation of live-in relationships, and constitutional safeguards for tribal communities under Part XXI.

8. El Niño Calls for Wider Tracking of Climate Stress

Key Highlights & Summary

- **Post-Monsoon Moisture Deficit:** Following a 12.6% rainfall deficit during the southwest monsoon, India faces extremely dry conditions across most regions as El Niño conditions strengthen.
- **Cascading Ecological Impacts:** A strengthening El Niño reduces water availability in rivers and wetlands, elevating severe stress across agricultural systems, forests, and marine habitats.
- **Local Ecological Nuances:** Ecosystems respond differently to rainfall deficits based on localized factors like soil moisture, groundwater, vegetation cover, and anthropogenic pressure, necessitating micro-level field monitoring.
- **Real-Time Monitoring Initiatives:** Groundbreaking initiatives, such as Uttarakhand's real-time early warning sensors at Vasundhara Tal glacial lake, showcase the shift toward localized, continuous ecological surveillance.
- **Ecologists' Emergency Call:** Nearly 200 ecologists in India issued a joint appeal for an emergency ecosystem-wide monitoring network to track climate-induced stress in forests, coral reefs, and water bodies.
- **Integrated Coordination Framework:** Effective climate mitigation demands bridging fragmented monitoring efforts across research bodies, government departments, universities, and citizen science groups.



Essential Definitions

- **El Niño:** A periodic climate pattern characterized by the unusual warming of surface waters in the central and eastern tropical Pacific Ocean, which disrupts global weather patterns and weakens the Indian southwest monsoon.
- **Micro-Monitoring:** Detailed, site-specific monitoring of localized ecological parameters (such as soil moisture, canopy stress, and water levels) to complement high-altitude satellite observations.
- **Ecological Threshold:** The point at which a small change in environmental conditions produces a rapid, non-linear, and often irreversible change in an ecosystem's state.

Legal and Constitutional Framework

- **Article 48A (Indian Constitution):** Directive Principle obligating the State to protect and improve the environment and safeguard the country's forests and wildlife.

- **Article 51A(g) (Indian Constitution):** Fundamental Duty of every citizen to protect and improve the natural environment, including forests, lakes, rivers, and wildlife.
- **Disaster Management Act, 2005:** Provides the statutory institutional framework for proactive disaster risk reduction, early warning integration, and climate hazard mitigation across central and state authorities.
- **National Action Plan on Climate Change (NAPCC):** Overarching national policy framework operating through specialized missions like the National Mission for Sustaining the Himalayan Ecosystem (NMSHE) and National Water Mission.

Conclusion

While India has built robust atmospheric and cyclone forecasting capabilities, managing climate stress requires expanding field-level ecological tracking. Institutionalizing a coordinated, multi-stakeholder monitoring network will allow the early detection of ecosystem distress, enabling targeted resource allocation and enhanced climate resilience. Protecting vulnerable forests, wetlands, and glacial zones remains integral to national socio-economic stability.

UPSC Relevance

- **GS Paper-III (Environment & Climate Change):** Climate change impacts, El Niño dynamics, ecosystem conservation, micro-monitoring frameworks, and climate adaptation strategies.
- **GS Paper-III (Disaster Management):** Glacial lake outburst flood (GLOF) mitigation, drought monitoring, early warning systems, and disaster preparedness frameworks.

9. Submerged Structures and Chola-Era Artifacts Discovered off Poompuhar Coast

Key Highlights & Summary

- **Underwater Archaeological Breakthrough:** Explorations roughly 1.8 to 2.2 kilometres off the Tamil Nadu coast at depths of 10 to 12 metres have unearthed Chola-period pottery, structural formations, ring wells, and West Asian torpedo jar fragments.
- **Confirmation of Transoceanic Trade:** Recovered ceramics and torpedo-jar fragments confirm that the ancient port city of Poompuhar (Kaveripoompattinam) engaged in extensive, long-distance maritime trade across the Indian Ocean and Mediterranean.
- **Multi-Agency Exploration Project:** Executed by the Tamil Nadu State Department of Archaeology in collaboration with the Indian Maritime University, the ongoing project aims to map the submerged port, locate shipwrecks, and track historical sea-level changes.
- **Literary Corroboration:** Archaeological finds directly align with descriptions in classical Sangam literature (such as *Pattinappalai*) and Tamil epics (*Silappathikaram* and *Manimekalai*), which describe a bustling, cosmopolitan port populated by foreign merchants (*Yavanas*).
- **Regional Maritime Network:** The discoveries complement evidence from linked Indo-Roman trade sites like Pattanam (Muziris) in Kerala, Alagankulam near the Vaigai river, and Arikamedu in Puducherry.

- **Early Stage Assessment:** With only about 10% of the total underwater exploration completed, further typological and morphological studies by international experts are underway to establish firm dates for the artifacts.



Essential Definitions

- **Poompuhar (Kaveripoompattinam):** An ancient port city located at the mouth of the Kaveri River, serving as a primary maritime hub for the Early Chola dynasty.
- **Yavanas:** A term derived from "Ionian" initially used in ancient Indian literature to refer to Greeks, which later broadened to encompass Hellenistic, Roman, and other Mediterranean foreigners.
- **Torpedo Jar:** Distinctive elongated ceramic transport containers originating from West Asia and the Persian Gulf, widely utilized in maritime commerce for shipping liquid commodities.

Legal and Constitutional Framework

- **Article 49 (Indian Constitution):** Directive Principle of State Policy obligating the State to protect monuments, places, and objects of artistic or historic interest from spoliation, disfigurement, or destruction.
- **Entry 67, List I (Seventh Schedule):** Grants the Central Government exclusive legislative power over ancient and historical monuments, records, and archaeological sites declared to be of national importance.
- **The Antiquities and Art Treasures Act, 1972:** Regulates trade in antiquities, mandates the registration of historical artifacts, and prevents unlawful export of cultural heritage.
- **UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage:** An international treaty framework providing standards for protecting submerged archaeological sites and preserving maritime history.

Conclusion

The underwater discoveries off Poompuhar bridge empirical material evidence with India's rich classical literary heritage. Unearthing submerged architectural features and foreign trade items underscores the sophisticated maritime infrastructure and global economic connectivity of ancient Tamil academia and statecraft. Continued systematic marine archaeology will be instrumental in reconstructing ancient coastal geomorphology and preserving India's oceanic history.

UPSC Relevance

- **GS Paper-I (Indian Culture & History):** Ancient Indian maritime trade networks, Sangam literature, architectural heritage, and historical port cities of Southern India.
- **GS Paper-I (Geography):** Coastal geomorphology, sea-level fluctuations, and submerged landscapes along the Bay of Bengal coastline.

10. Reintroduction of Big Cats in Buxa Tiger Reserve

Key Highlights & Summary

- **Historical Reintroduction:** A three-year-old tigress (T138) brought from Bihar's Valmiki Tiger Reserve was released into West Bengal's Buxa Tiger Reserve, ending decades without a stable resident tiger population.
- **Phased Augmentation:** The release marks the first phase of a planned, phased reintroduction program, with three more tigers scheduled for relocation to Buxa within two months.
- **Prey Base and Habitat Restoration:** To support the reintroduction, wildlife authorities released over 800 chital (spotted deer) and restored or converted about 380 hectares of grassland since 2018.
- **Scientific Collaboration:** The initiative is part of the Tiger Augmentation and Recovery Project, executed collaboratively since 2018 by the West Bengal Forest Department, National Tiger Conservation Authority (NTCA), and Wildlife Institute of India (WII).
- **Landscape Level Connectivity:** Buxa's ecological linkages with North Bengal, Assam (Manas Tiger Reserve), and Bhutan create a vital corridor for wildlife movement and genetic dispersal across the eastern Sub-Himalayan landscape.
- **Monitored Dispersal:** Camera traps previously recorded transient tiger movements across the landscape in 2021, 2023, and 2026, confirming the corridor's functionality prior to soft release.

Essential Definitions

- **Buxa Tiger Reserve:** A protected area in the Alipurduar district of West Bengal, situated in the Sub-Himalayan Terai region bordering Bhutan and Assam.
- **Tiger Reintroduction & Augmentation:** The deliberate, science-based translocation of wild tigers into an area of their historic range where the native population has been extirpated or severely depleted.
- **Prey Base Restoration:** The process of enhancing herbivore populations (such as chital and sambar) and grassland habitats to support large carnivores within an ecosystem.

Legal and Constitutional Framework

- **Article 48A (Indian Constitution):** Directive Principle of State Policy directing the State to protect and improve the environment and safeguard the country's forests and wildlife.
- **Article 51A(g) (Indian Constitution):** Fundamental Duty requiring every citizen to protect and improve the natural environment, including forests, lakes, rivers, and wildlife.
- **Wildlife Protection Act, 1972:** Provides statutory backing for tiger conservation, establishing the National Tiger Conservation Authority (NTCA) under Section 38L for overseeing tiger reserve management and translocations.
- **Project Tiger (1973):** Centrally Sponsored Scheme providing financial and technical assistance to states for tiger conservation, habitat management, and ecological corridors.



Conclusion

The successful relocation of tigress T138 to Buxa Tiger Reserve represents a major milestone in science-based wildlife conservation in eastern India. By combining habitat restoration, prey base enhancement, and inter-state translocation, the project restores ecological balance to a historically vital tiger habitat. Strengthening landscape-level connectivity across West Bengal, Assam, and Bhutan will ensure long-term genetic viability and population resilience for Bengal tigers.

UPSC Relevance

- **GS Paper-III (Environment & Ecology):** Biodiversity conservation, species reintroduction programs, habitat restoration, prey base augmentation, and ecological corridors.
- **GS Paper-III (Governance & Conservation Policy):** Role of statutory bodies like NTCA and WII, Wildlife Protection Act provisions, and transboundary landscape management.

11. Ship-to-Ship Transfers Boost India's West Asian Oil Imports

Key Highlights & Summary

- **Rebound in West Asian Imports:** India's crude oil imports from West Asia jumped significantly in September as Gulf suppliers effectively utilized Ship-to-Ship (STS) cargo transfers to navigate high-risk maritime routes through the Strait of Hormuz.
- **Decline in Russian Supply:** Crude imports from Russia declined for the second consecutive month by nearly 9% to 1.9 million barrels per day (bpd), driven by Chinese competition and Ukrainian drone attacks on Russian energy infrastructure.
- **Spurt from Gulf Suppliers:** Sequential import gains from West Asia compensated for the Russian shortfall, with imports from Iraq surging by 238.2% (over 551,000 bpd), Saudi Arabia increasing by 56.2%, and Kuwait rising by 104.4%.
- **Mitigating Chokepoint Risks:** STS operations utilize shuttle tankers to transport crude through volatile waters before transferring cargo to main destination tankers outside the strait, with suppliers assuming transit risks.
- **US Legislative Pressures:** Newly proposed US sanctions framework under the Graham Act threatens tariffs of up to 100% on major buyers of Russian crude, increasing regulatory risks for Indian refiners.
- **Strategic Diversification:** India continues prioritizing energy security for its 1.4 billion citizens by maintaining flexible, multi-region crude procurement models across global suppliers.

Essential Definitions

- **Ship-to-Ship (STS) Transfer:** An operational process where crude oil or liquid cargo is transferred between ocean-going vessels at sea rather than at a shore terminal to manage maritime risks or vessel draft limits.
- **Strait of Hormuz:** A strategic maritime chokepoint connecting the Persian Gulf with the Gulf of Oman and the Arabian Sea, through which a major portion of global petroleum supply transits.

- **Secondary Sanctions:** Pressure tactics used by a nation to penalize third-party countries or foreign commercial entities for trading with a target state under primary sanctions.

Legal and Constitutional Framework

- **Article 297 (Indian Constitution):** Vests the Union with ownership over resources within territorial waters and the Exclusive Economic Zone (EEZ), underpinning domestic energy governance and strategic reserve management.
- **UNCLOS (1982):** Rules regulating freedom of navigation, innocent passage through international straits, and high-seas commercial shipping rights applicable to global tanker operations.
- **Foreign Trade (Development and Regulation) Act, 1992:** Empowers the Union Government to formulate trade policies, manage import quotas, and adapt procurement strategies to geopolitical contingencies.
- **Petroleum and Minerals Pipelines Act, 1962:** Provides legal framework for domestic pipeline transport networks, supporting strategic crude storage and distribution systems across Indian refineries.



Conclusion

The utilization of Ship-to-Ship cargo transfers demonstrates the adaptive logistics deployed by oil exporters to maintain energy supply chains amidst West Asian geopolitical tension. As US sanction pressures intensify alongside shifting market dynamics in Russian crude, India's strategy of flexible sourcing and supplier diversification remains vital for national macroeconomic stability. Fortifying domestic strategic petroleum reserves and expanding domestic processing resilience will further safeguard national energy security.

UPSC Relevance

- **GS Paper-II (International Relations):** Impact of West Asian geopolitics and US sanctions regimes on India's strategic autonomy and bilateral trade relations.
- **GS Paper-III (Indian Economy & Energy Security):** Supply chain vulnerabilities, strategic petroleum reserves, import inflation mitigation, and energy market diversification strategies.

12. Payment Aggregators Seek Larger Share of UPI Merchant Discount Rate

Key Highlights & Summary

- **MDR Revenue Sharing Negotiations:** Payment Aggregators (PAs) are actively negotiating with sponsor banks to secure 50% to 80% of the acquiring bank's share from the new Merchant Discount Rate (MDR) on Unified Payments Interface (UPI) transactions.

- **Implementation Timeline & Framework:** The new MDR framework, notified by the government and National Payments Corporation of India (NPCI), takes effect on October 15, applying a 0.4% charge on UPI transactions exceeding ₹2,000.
- **Acquiring Bank and PA Split:** Under the official framework, acquiring banks receive 0.12% out of the total 0.4% MDR, with the PA's cut carved directly out of the acquiring bank's portion rather than defined as a separate statutory share.
- **Illustrative Transaction Revenue:** For a ₹10,000 UPI transaction generating ₹40 in total MDR, the acquiring bank receives ₹12, out of which the PA aims to retain between ₹6 and ₹9.60 based on ongoing bilateral agreements.
- **Bargaining Dynamics:** A PA's negotiation leverage depends heavily on transaction volume, merchant float size, and technical capabilities, such as providing processing technology directly to sponsor banks.
- **E-Commerce Merchant Profiling:** PAs catering to high-value e-commerce merchants stand to gain higher MDR revenue due to a greater proportion of transactions crossing the ₹2,000 threshold.

Essential Definitions

- **Merchant Discount Rate (MDR):** The fee charged to merchants for processing digital payment transactions, expressed as a percentage of the transaction value.
- **Payment Aggregator (PA):** A third-party service provider that enables merchants to accept various payment instruments by onboarding them and pooling customer payments before settling with merchants.
- **Acquiring Bank:** The financial institution that maintains the merchant's bank account and processes credit, debit, or UPI payment transactions on behalf of the merchant.

Legal and Constitutional Framework

- **Article 246 (Seventh Schedule - Entry 45, List I):** Grants Parliament exclusive jurisdiction over banking, financial regulations, and digital currency management.
- **Payment and Settlement Systems Act, 2007:** Provides the regulatory statutory framework for the Reserve Bank of India (RBI) to oversee, license, and regulate payment systems and aggregators in India.
- **National Payments Corporation of India (NPCI) Guidelines:** Operational rules governing UPI architecture, transaction fee limits, interoperability, and settlement protocols across participant banks and PAs.
- **RBI Guidelines on Payment Aggregators and Payment Gateways (2020):** Regulates capital adequacy, merchant onboarding standards, escrow account operations, and governance for PAs.

Conclusion

The introduction of a tiered MDR on high-value UPI transactions represents a critical operational shift toward financial sustainability for India's fintech ecosystem. Resolving revenue-sharing dynamics between sponsor banks and payment aggregators will ensure commercial viability while driving further investment in robust digital payment infrastructure. Balancing merchant costs with digital ecosystem incentives remains vital for maintaining India's rapid transition toward a cashless economy.

UPSC Relevance

- **GS Paper-III (Indian Economy & Monetary Policy):** Financial inclusion, digital payment infrastructure, fintech regulation, banking sector developments, and revenue model dynamics of payment systems.
- **GS Paper-III (e-Technology in Agriculture & Services):** E-commerce growth, digital economy framework, role of NPCI, and regulatory oversight by the RBI under the Payment and Settlement Systems Act.

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