

## Current Affairs 26<sup>th</sup> August 2025 by Right IAS

### India's fossils

**Fossil Discoveries in India** Western India's open coal mines contain some of the richest fossil beds. Work conditions: dusty, noisy, and physically demanding. In 2024, palaeontologist Sunil Bajpai (IIT Roorkee) discovered *Vasuki indicus*, a giant snake (~49 feet, 47 million years old). Fossils currently lack secure storage; risk of loss, theft, or vandalism.



**Absence of Legal Safeguards** India has no national law or fossil repository for systematic preservation. Draft plan for a National Fossil Repository exists but has not progressed. Concerns raised: fossils may vanish like other cultural artefacts. **Global Context – Fossil Commercialisation** Fossils increasingly appear in auctions, shops, and private collections. Example: Sotheby's (New York, 2024) sold a near-complete stegosaurus fossil for \$44.6 million (record). Fossils owned by wealthy individuals (e.g., Kenneth Griffin, Hollywood actors). Thomas Carr's study (2024): 71 T. rex fossils in private hands vs. 61 in public institutions.



**Heritage Concerns in India** India's fossil record: Early plants and dinosaurs. Whale ancestor (*Indohyus*). Ancient human skulls. Rich fossil history due to Gondwanaland separation (150 million years ago) and later Himalayan uplift. Historical precedent: Indian artefacts (e.g., Buddhist relics in 1898) lost to private hands; fossils face similar risk.



**Unsung Custodians & Local Efforts** Ranga Rao–Oberghell Trust (Dehradun): Large private fossil collection, including whale ancestors; remains unsorted and unstudied. Vishal Verma (Madhya Pradesh): Schoolteacher who collects fossils from riverbeds and hills; rescued

dinosaur eggs, shells, ammonites, fossil wood.

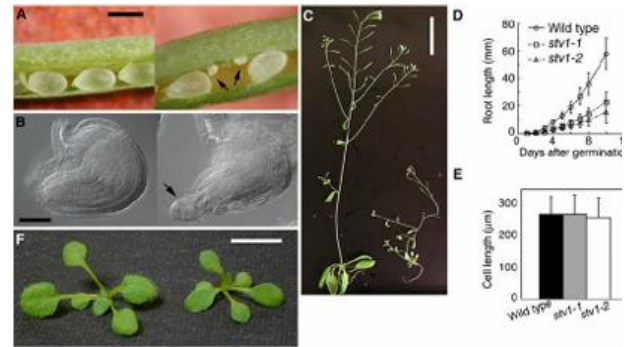
Issues: theft of fossils (Mandav museum lost dinosaur eggs despite security). Rising Fossil Trade & Black-Market Fossils openly sold online, including dinosaur eggs. Increasingly treated as luxury collectibles and trophies. Lack of legal prohibition → possible smuggling of Indian fossils abroad. Present Risk Fossils often deteriorate (heat, rain, poor storage) or get stolen. Without laws and infrastructure, India risks losing irreplaceable heritage. Example: Vasuki indicus fossils still stored casually in IIT Roorkee, future uncertain.



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### **Pleiotropic Effects**

General Meaning Pleiotropy = a situation where one genetic change or adaptation affects multiple traits in an organism. In evolution, this means that adaptation in one environment automatically has side effects in another environment.

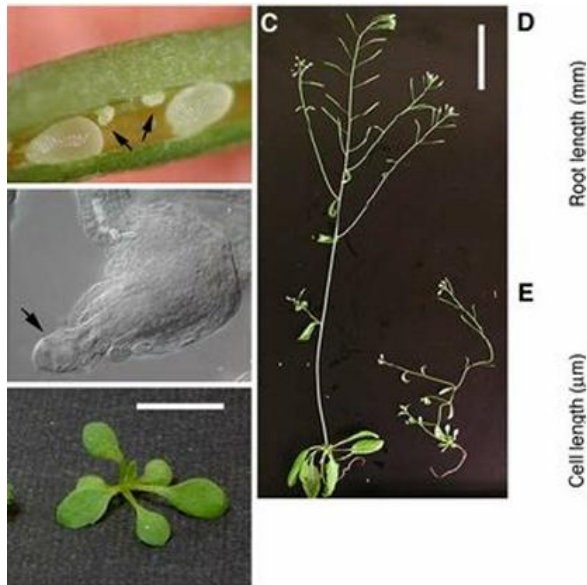


### **In the IIT-Bombay Study**

Researchers evolved *E. coli* and yeast on specific sugars (glucose + galactose, lactose, melibiose). Over 300 generations, microbes adapted differently (growth rate vs. biomass). When these evolved microbes were transferred to new sugar environments: Their growth followed predictable side-effect patterns. Example: A strain adapted for faster growth in one sugar might consistently show reduced performance in another.

#### **Key Insights**

**Flexibility in Evolution** In the same environment, microbes evolved in different ways → showing flexibility. **Constraint via Pleiotropy** When placed in a new environment, the side effects of earlier adaptations were consistent and predictable. Thus, pleiotropy acted as a constraint on possible future adaptations. **Implications** Helps scientists anticipate evolutionary outcomes. **Useful for:** Industry → guiding microbial evolution for food, pharma, biofuels. Medicine → designing nutrient conditions or therapies to limit how pathogens evolve, especially against antibiotics.



speed rail corridor (E10 Shinkansen) with technology transfer. Japan signals long-term confidence in India's growth while global investors remain cautious about China.

Strategic & Security Cooperation Revision of 2008 Joint Declaration on Security Cooperation. Launch of Economic Security Initiative: Areas: semiconductors, critical minerals, pharma, clean energy. Upgraded digital partnership: AI, startup ecosystems. Objective: strengthen Indo-Pacific stability and diversify supply chains.

## The Hindu

### PM Modi's Japan–China visit

Context PM Modi begins visit to Japan and China (from August 29). Global situation: Slight easing in India–China tensions after years of strain. Growing uncertainty in India U.S. ties under Trump 2.0. Visit is significant beyond bilateral engagement, part of larger strategic balancing.



India's Balancing Act Modi's itinerary: Tokyo → Tianjin (SCO Summit in China). Approach: With Japan → deepen defence, economy, Indo-Pacific role. With China → manage tensions, explore CBMs, maintain dialogue. Balancing shows India's ability to engage trusted partner (Japan) and competitor (China) simultaneously. U.S. Factor & Quad Concerns Trump's unpredictability raises doubts about U.S. reliability. Past India–U.S. progress (Bush → Biden) at risk of erosion.

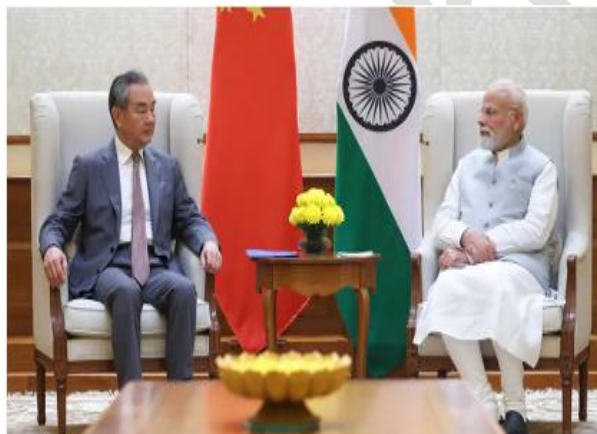
Japan's Investment & Economic Cooperation ¥10 trillion (~\$68 billion) investment plan by Japan in India over next decade. Focus sectors: infrastructure, manufacturing, clean energy, technology. Major project: Mumbai Ahmedabad high-

Quad (India, Japan, Australia, U.S.) faces uncertainty: Dependent on Washington's consistent engagement. Under Trump, risks losing coherence and operational

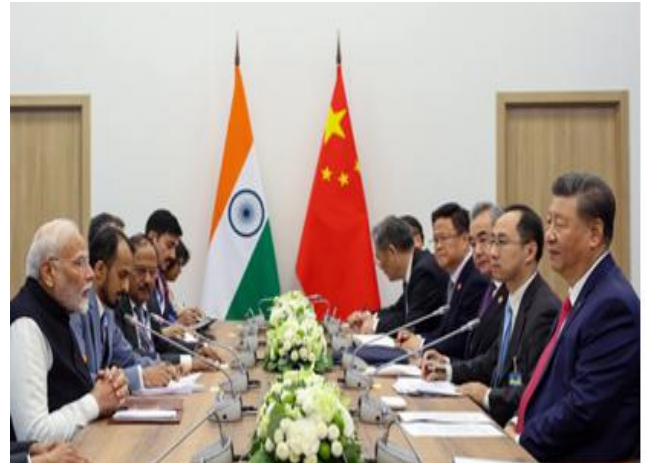
depth. Raises challenges for India, Japan, Australia in sustaining Indo-Pacific strategy.



**Political & Strategic Message** Japan's commitments show: India as reliable Indo-Pacific partner in economy & security. Proof that long-term, steady cooperation yields outcomes. India's diplomacy reflects: Flexibility in engaging multiple powers. Strategic clarity in prioritising dependable partnerships.



**Broader Significance** Japan as anchor partner: stable, resourceful, democratic, long-term. China: competitor, cautious engagement, underlying mistrust persists. U.S.: unpredictable, transactional, risks weakening strategic trust. Visit highlights: India's most dependable ballast lies with Japan in current geopolitics



### The Hindu

#### Parliament power to make laws

**Constitutional Context** Constituent Assembly rejected absolute parliamentary sovereignty (unlike British model). Parliament can legislate, but laws cannot override the Constitution. Judicial review was meant to be exceptional, not routine.



**Judiciary's Expanding Role** Courts often act as parallel legislators due to weak parliamentary lawmaking. Example: Waqf (Amendment) Act, 2025 challenged in SC within days of passage even by MPs. Data: By 2022, 35 challenges to Central laws/constitutional amendments pending in SC since 2016. Sources of Legal

**Challenges Types of challenges:**

### 1. Constitutional scrutiny (fundamental rights/basic structure).

Political theatre (laws challenged for political motives). Flawed drafting (technical/linguistic errors).



Execution failures: Vague definitions. Incoherent/contradictory clauses. Poor harmonisation with existing laws. Constitutional violations. Consequences: Economic loss, social disharmony, strained legislature–judiciary relations.

Parliamentary Law-Making: Theory vs Practice Procedure on paper (Manual of Parliamentary Procedure, Ch. 9): Policy proposal → stakeholder consultation → Law Ministry → Cabinet approval → three readings in Parliament → committee scrutiny → clause by-clause debate.



Reality: Rushed Bills, inadequate notice, committees bypassed, superficial debates.

. Example of Poor Drafting Transgender Persons (Protection of Rights) Act, 2019 (Sec. 18(d)): Max 2 years punishment for sexual abuse of transgender persons. Bharatiya Nyaya Sanhita, 2023: similar abuse of women = up to 7 years/life imprisonment. Shows lack of legal contextualisation and constitutional sensitivity. Structural Issues in Law-Making Drafts often in dense legalese, difficult for MPs to analyse. Legislators expected to engage in high constitutional reasoning without adequate support. Result: MPs vote along party lines, reducing debate quality to slogans and rhetoric



Proposed Reform: Role of Attorney-General (AG) 1. 2. Article 88: AG has right to participate in Parliamentary proceedings (seldom used). Could serve as a constitutional advisor to Parliament before laws are passed. Benefits: Flags constitutional/language f laws during debate. Provides MPs with non-partisan expert guidance. Outcome: Stronger, well-drafted statutes → fewer judicial invalidations.



Core Message Flawed lawmaking weakens democracy and burdens courts. Parliament must reclaim legislative precision. Strengthening procedure, improving drafting, and institutionalising AG's role are key to restoring balance between legislature and judiciary.



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#### Promotion and Regulation of Online Gaming Act, 2025

Passage of the Act Passed in Lok Sabha on August 20, 2025 after just 7 minutes of discussion. Cleared by Rajya Sabha on August 21 and received Presidential Assent on August 22. Becomes law regulating and banning certain types of online games.

Rationale Behind the Act Government data: Indians lose ~₹15,000 crore annually on Real Money Games (RMGs). WHO findings: RMGs linked to compulsive behaviour, financial hardship, family disruption, psychological distress. Suicides: 32 cases in Karnataka (past 31 months) due to online gaming addiction. Concerns: Terror financing, tax evasion, money laundering, consumer protection, and unfair opaque algorithms



Segments of Online Games under the Act E-sports Recognised under the National Sports Governance Act, 2025. Registered with the regulatory authority. May involve registration/participation fees, prize money. Examples: Call of Duty, GTA. Social Gaming Games for recreation/education. No clear legal definition; facilitated under Section 4 of the Act.

Real Money Games (RMGs) Any game played with fee/stakes (money, coins, credits, tokens, virtual currency convertible to money). Banned entirely (Poker, Rummy, Ludo variants, Fantasy Cricket, etc.). Advertisements of RMGs also prohibited.



**Regulatory Provisions Offering RMGs:** Imprisonment up to 3 years + Fine up to ₹1 crore (or both). **Unlawful advertisement:** Imprisonment up to 2 years + Fine up to ₹50 lakh (or both). **Offences under BNSS 2023:** Cognisable and non-bailable. **CERT-IN** to block/disable apps providing banned services; Interpol can be roped in for offshore operators. **Regulatory Authority:** Central government to notify and establish for recognition, categorisation, and registration of games.

**Budget allocation:** From Consolidated Fund of India to promote social gaming. **Previous Regulatory Attempts & Context IT Rules Amendment, 2021 (amended in 2023):** Treated gaming firms as intermediaries, imposed KYC norms, parental controls, age ratings. **State Laws:** Telangana (2017) – first to ban all forms of online gaming. Andhra Pradesh (2020) – ban on online gambling. Tamil Nadu (2022) – ban on Rummy & Poker. **Taxation Issues:** 2022 report – ₹2,000 crore tax evasion. GST evasion of ₹30,000 crore. 2023 GST move: 28% tax on total entry fee/deposit, not just commission → industry opposed.

**Judicial Position & Pending Issues** SC earlier rulings: Games like Rummy and Fantasy Sports involve substantial skill → not

gambling. Current Act does not differentiate between skill-based games & chance-based gambling. Possible violation of Article 19 (1) (g) – right to trade/occupation. Supreme Court stay on retrospective GST notices to gaming firms. Pending decisions: Whether fantasy sports, poker, rummy are skill games or gambling.



**IR IN NEWS** Cambodian MPs passed legislation on Monday allowing people who “collude” with foreign countries to be stripped of citizenship, a law rights groups fear will be used to banish dissent. **What is Super Garuda Shield?** Annual Multinational Exercise: Super Garuda Shield is a large-scale joint military drill hosted by Indonesia since 2007. It originally began as a bilateral exercise between Indonesia and the U.S., and has since expanded to include multiple partner nations. **Objectives:** Enhance military interoperability and capabilities among participating forces. Demonstrate collective commitment to a free and open Indo-Pacific. Strengthen regional security and strategic partnerships

### **Project 17A Stealth Frigates: Udaygiri & Himgiri**

**Event:** Indian Navy to commission Udaygiri and Himgiri at Visakhapatnam Naval Base. First-ever simultaneous commissioning of two frontline warships built at different shipyards



**Shipbuilders:** Udaygiri: Built by Mazagon Dock Shipbuilders Ltd. (MDL), Mumbai. Himgiri: Built by Garden Reach Shipbuilders & Engineers (GRSE), Kolkata. **Overall Impact:** Boosts Navy's operational reach and maritime dominance in Indo-Pacific. Demonstrates India's capacity for simultaneous large-scale shipbuilding projects. Marks milestone in indigenous warship design and naval modernization.

**Design & Development:** Designed in-house by the Navy's Warship Design Bureau (WDB). Udaygiri marks the 100th vessel designed by WDB in 50 years of indigenous warship design. Adoption of modular construction techniques enabled faster delivery of Udaygiri. **Class & Features:** Both are follow-on variants of Shivalik-class frigates (Project 17A). Enhanced stealth features, advanced weaponry, and modern sensor systems. Equipped with Combined Diesel or Gas

(CODOG) propulsion, Integrated Platform Management System. High level of indigenisation (~75%), involving several MSMEs



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