

DAILY CURRENT AFFAIRS (DCA)

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WHERE DOES INDIA STAND ON CHILD MARRIAGE?

In News

- Despite a strong legal framework and multiple schemes tackling Child marriage in India, India is still off-track to fully eliminate child marriage by the 2030 SDG deadline.

Concept, Trend and Legal Framework

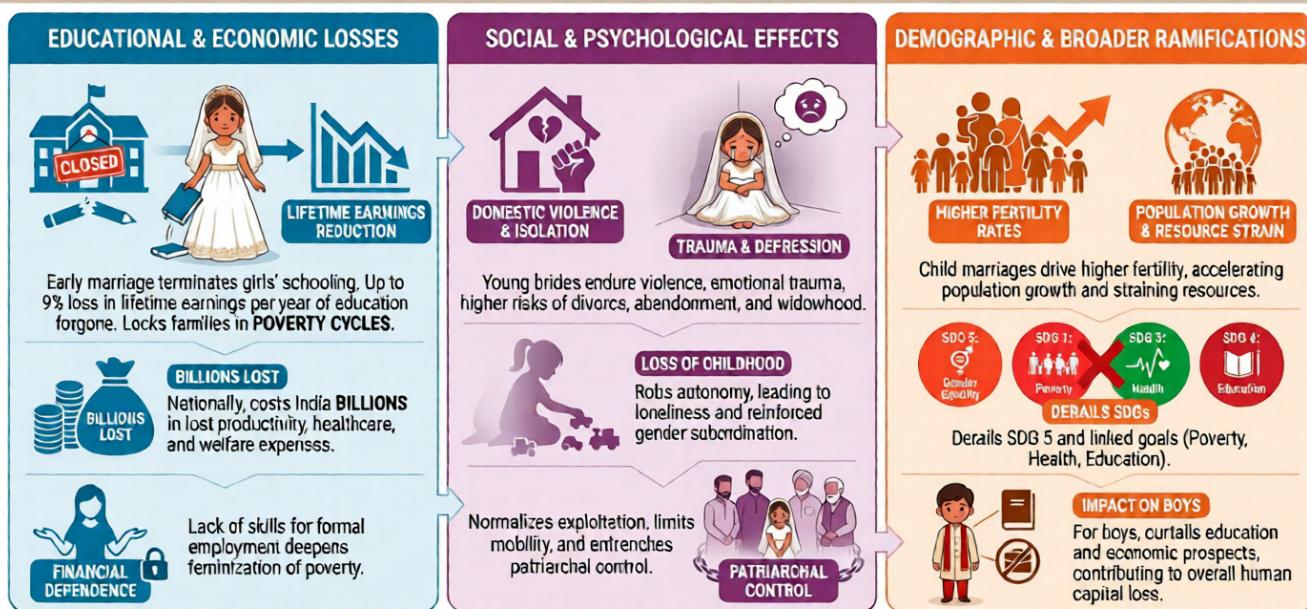
- Definition:** Child marriage refers to any marriage in which at least one party is below 18 years of age; globally, the UN Convention on the Rights of the Child defines a child as any human below 18 years.
- NFHS data:** The proportion of women aged 20–24 years married before 18 declined from about 47.4% (2005–06, NFHS-3) to 26.8% (2015–16, NFHS-4) and further to 23.3% (2019–21, NFHS-5).
- State variation:** Eight states are above the national average; West Bengal, Bihar and Tripura have over 40% of women 20–24 years married before 18, making them among the worst performers.

- Indian law:** The Prohibition of Child Marriage Act (PCMA), 2006 defines a “child” as a male below 21 years and a female below 18 years, and a “child marriage” as a marriage where either party is a child.
- Child Marriage Prohibition Officer:** Under Section 16, states appoint these officers to prevent child marriages, collect evidence for prosecution, create awareness and maintain statistics.

Major Factors

- Poverty and economic insecurity:** Poor households often see early marriage as a way to reduce economic burden and “secure” a girl’s future
- Patriarchy and gender norms:** Girls’ education and autonomy are devalued; they are pushed into unpaid domestic labour and early marriage to uphold family “honour”.
- Socio-cultural and religious practices:** In some communities, marrying girls before or soon after puberty is considered auspicious.

IMPACTS OF CHILD MARRIAGE: A MULTIDIMENSIONAL CRISIS



Addressing Child Marriage is Critical for a Sustainable and Equitable Future.

Initiatives

- The **Prevention of Child Marriage Act** was passed in 2006, and national child marriage rates have halved since then.
- The **Protection of Children from Sexual Offences Act, 2012** has also helped prevent child marriage.

- Beti Bachao Beti Padhao (BBBP)** aims to improve the child sex ratio and promote girls' education.
- District-level models** (e.g., Panchayats declaring themselves “child marriage-free”) use community monitoring, school-based vigilance and local campaigns to deter such marriages.

- States cash transfers and scholarship schemes to encourage girls schooling.
- India is party to the UN Convention on the **Rights of the Child and has endorsed the 2030 Agenda**, including SDG Target 5.3 to eliminate child, early and forced marriage.

Source: TH

FUTURE OF INDIA-BANGLADESH RELATIONSHIP: PARLIAMENTARY COMMITTEE ON MEA

Context

- According to a recent report by the **Parliamentary Standing Committee on External Affairs**, India is facing its **most formidable strategic challenge** in Bangladesh **since the 1971 Liberation War**.

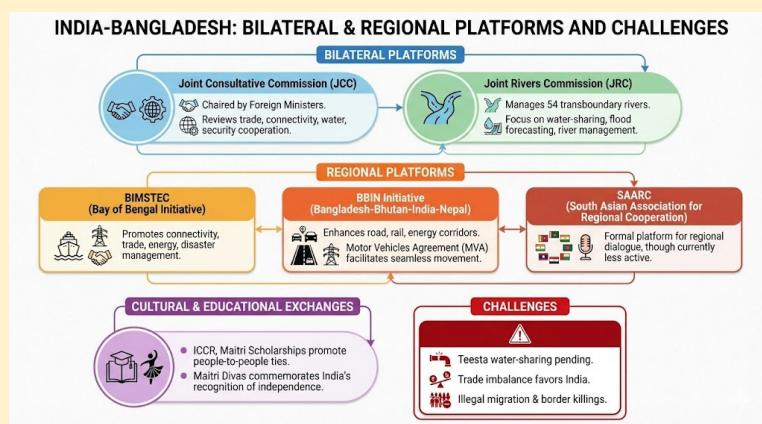
Key Highlights of Report

- **Strategic Challenge Post-2024 Regime Change:** India faces its 'greatest strategic challenge' in Bangladesh since the 1971 Liberation War.
 - ◆ The **ousting of Prime Minister Sheikh Hasina** in 2024 disrupted a decade-long strategic alignment between the two nations.
 - ◆ The issue gained further complexity after **Hasina was sentenced to death** in November, 2025, with Bangladesh's interim authorities accusing her and her associates of **inciting unrest** in parts of the country.
- **Rising Influence of External Powers:** The report warns of **increasing Chinese and Turkish influence** in Bangladesh, particularly in infrastructure and defense sectors, which could undermine India's traditional strategic foothold.
- **Emergence of a New Political Order in Dhaka:** The interim government has **banned all Awami League political activities**, and the party is **barred from contesting the February 2026 elections**.
- The **National Citizen Party (NCP)** has emerged, led by **student activists** who spearheaded the movement against Hasina. It has opened avenues for **greater Chinese and Pakistani influence** in Bangladesh's political and economic affairs.
- **Diminishing Strategic Space for India:** The new regime in Bangladesh has adopted a **more nationalistic and less India-friendly stance**, leading to a visible cooling of bilateral ties.
 - ◆ **Anti-India sentiments** have gained traction, with public protests targeting Indian diplomatic missions, including a significant demonstration at the Indian High Commission in Dhaka in December 2025.
- **Connectivity and Economic Cooperation at Risk:** India, in 2024, emphasized the importance of multi-modal connectivity, energy cooperation, and trade integration as pillars of the relationship.
 - ◆ Projects like the **India-Bangladesh Friendship Pipeline** and **cross-border rail links** were seen as symbols of deepening ties, now **potentially at risk due to political shifts**.
- **Regional and Security Implications:** Bangladesh remains vital to India's '**Neighbourhood First**' and '**Act East**' policies, as well as its **Indo-Pacific vision**.
 - ◆ The **4,096-km shared border** makes cooperation on border management, counterterrorism, and migration critical to regional stability.
- **Ganga Water Treaty and Bilateral Engagement:** The panel discussed the **Ganga Water Treaty**, which is **due for renewal in December 2026**.
 - ◆ **No formal discussions** have been initiated with Bangladesh, while India has begun consultations with state governments.
 - ◆ The committee has **recommended early bilateral engagement** to prevent any **post-2026 vacuum** in water-sharing arrangements, emphasizing that maintaining open communication channels is vital for long-term stability.

India-Bangladesh Relationship: An Overview

- **Historical Context:** India was the **first country to recognize Bangladesh** after its independence in 1971.
 - ◆ The **Treaty of Friendship, Cooperation and Peace (1972)** and further evolution into a **comprehensive partnership** encompassing political, security, economic, and cultural dimensions.

- **Defence & Security Cooperation:** Robust military exchanges between armed forces of both nations, like **Sampriti & Bongo Sagar joint exercises**.
 - ◆ **Muktijoddha (freedom fighters) programmes** renewed: scholarships and medical schemes extended through 2027.
 - ◆ Cooperation on **police, anti-corruption, drug trafficking, fake currency, and human trafficking** issues.
 - ◆ Regular **DG-level talks** between Border Guards and anti-narcotics agencies.
- Connectivity Cooperation:
 - ◆ **Railway Connectivity:** Rehabilitation of **6 pre-1965 cross-border rail links**, and three passenger trains **Maitri, Bandhan, and Mitali Express** in operation.
 - ◆ **Road and Inland Waterways:** **Five bus routes** connect Indian cities (Kolkata, Agartala, Guwahati) to Dhaka and Khulna.
 - ◆ **Port Connectivity:** **Chittagong and Mongla Ports** opened for Indian transit use (2023), reducing logistics costs and transport time.
 - Expansion of the **BBIN Motor Vehicles Agreement (MVA)**, improving logistics in Northeast India and Bangladesh.
 - Plans for a **Dhaka-Kolkata express cargo corridor**.
- **Economic and Commercial Relations:** Bangladesh is India's largest trade partner in South Asia; India is Bangladesh's 2nd largest in Asia.
 - ◆ FY 2023–24 trade volume: **USD 14.01 billion**, with **Bangladesh exports to India at USD 1.97 billion**.
- **Power and Energy Cooperation:** Bangladesh imports **1,160 MW of electricity** from India.
 - ◆ **Joint Working Group/Steering Committee on Power** manages cross-border electricity trade.
 - ◆ **Maitree Super Thermal Power Plant** operational.
 - ◆ **India-Bangladesh Friendship Pipeline (2023)** transports high-speed diesel.
 - Indian firms **ONGC Videsh Ltd, Oil India, and IOCL** are involved in energy collaboration.
- **Development Partnership:** Bangladesh is India's largest development partner with **USD 8 billion in Lines of Credit**.
 - ◆ Projects include **roads, railways, ports, and shipping infrastructure**.
 - ◆ 77 completed and 16 ongoing **High Impact Community Development Projects (HICDPs)** worth **USD 50 million**.
 - ◆ Human resource development via **ITEC training**, scholarships, and capacity-building programs for civil servants, police, and professionals.
 - ◆ **1,000 'Suborno Jayanti Scholarships'** and dedicated portal for Bangladeshi students to study in India.



RBI BOARD APPROVES RISK-BASED DEPOSIT INSURANCE FRAMEWORK FOR BANKS

Context

- The Central Board of Directors of the Reserve Bank of India (RBI) approved a risk-based deposit insurance framework for banks at its 620th meeting, held in Hyderabad.

What is the Deposit Insurance Framework?

- Deposit insurance is a mechanism to **protect bank depositors against the risk** of bank failure.
- In India, deposit insurance is administered by the **Deposit Insurance and Credit Guarantee Corporation (DICGC)**, a wholly owned subsidiary of the RBI.
 - Currently, deposits up to **₹5 lakh** per depositor per bank are insured.
- Banks pay an insurance premium to DICGC, which funds payouts to depositors if a bank fails.
- Existing System:** DICGC has been operating the flat rate premium-based deposit insurance scheme since **1962**.
 - Under the scheme, the banks are now charged a premium of **12 paise per ₹100 of assessable deposits**.

Risk-based Premium Structure

- Under the risk-based framework, premiums are expected to vary based on parameters such as **asset quality, capital adequacy, and overall risk exposure**.
- Such models are used in several banking systems globally to align **insurance costs with underlying risk** and reduce cross-subsidisation between banks.

Significance of the New Framework

- Promotes Financial Discipline:** Banks are incentivised to improve asset quality and capital buffers to reduce premium burden. It encourages prudent lending and better risk management practices.
- Reduces Cross-Subsidisation:** Under the flat-rate system, well-managed banks indirectly subsidise weaker banks. Risk-based pricing ensures that each bank bears the cost of its own risk.
- Aligns with Global Best Practices:** Several countries, including the **US and EU** members,

already follow risk-based deposit insurance models.

- More Efficient System:** Sound banks benefit from lower insurance costs, improving profitability and competitiveness.

Implementing Challenges

- Impact on Weak Banks:** Higher premiums may strain already stressed banks, particularly smaller or regional banks, reducing their lending capacity and worsening financial stress.
- Complexity in Assessment:** Risk evaluation requires robust data, transparent methodology, and continuous monitoring. Misclassification or opacity may raise concerns among banks.
- Procyclicality Risk:** During economic downturns, banks' risk profiles may deteriorate, leading to higher premiums when they can least afford them.
- Possibility of Regulatory Arbitrage:** Banks may attempt to temporarily improve metrics to reduce premiums without addressing structural weaknesses.

Way Ahead

- A **gradual and calibrated rollout** of the risk-based framework is essential.
- RBI and DICGC must ensure **transparent criteria**, periodic review, and safeguards against procyclicality.
- Special consideration may be required for **small banks and cooperative banks** during the transition.
- Combined with strong supervision, the framework can enhance depositor protection and systemic stability.

Source: AIR

DATA EXCLUSIVITY IN INDIA

Context

- The Indian government is considering implementing **"data exclusivity" in the pharmaceutical drugs sector**.
- The government's approach appears to be driven by the expectation that the provision could help bring in additional investment in the country.

Patent in Pharmaceutical Industry

- In the pharmaceutical industry, patents are broadly classified based on **what aspect of a drug or process is being protected**.

- ♦ **Pharma patents protect** drug molecules, processes, formulations, uses, and delivery systems.
- **Types of Patents in India are:** Product Patent, Process Patent, Improvement Patent and Biotechnology Patent.
- **Criteria:** An invention must satisfy:
 - ♦ Novelty i.e. it is new worldwide.
 - ♦ **Inventive Step:** An invention must not be an obvious modification or simple combination of existing knowledge.
 - ♦ **Industrial Applicability:** It is capable of being made or used in industry.
- **Term of Patent: 20 years** from date of filing which is compliant to **TRIPS**.
- **Compulsory Licensing (CL):** Compulsory licensing is when a government allows someone else to produce a patented product or process **without the consent of the patent owner**. It is allowed under **Section 84 of Patents Act, 1970** when:
 - ♦ Reasonable public requirements not met.
 - ♦ Drugs are not affordable.
 - ♦ The patented invention isn't worked (manufactured/exploited) in India.
- There is an international filing system known as **Patent Cooperation Treaty (PCT) system**.
 - ♦ When a PCT application is filed, an inventor of a member country of PCT can simultaneously obtain priority for his/her invention in all the PCT member countries.
 - ♦ **India joined PCT in 1998.**
 - ♦ All activities related to PCT are coordinated by the **World Intellectual Property Organization (WIPO) situated in Geneva**.

Trade-Related Aspects of Intellectual Property Rights (TRIPS)

- TRIPS is a **binding** WTO agreement that sets **minimum global standards** for the protection and enforcement of Intellectual Property Rights (IPRs).
- It has been in force since **1995**.
- It is binding on all WTO members, including India.

World Intellectual Property Organization (WIPO)

- It is a **self-funding agency of the United Nations**, that serves the world's innovators and creators, ensuring that their ideas travel safely to the market and improve lives everywhere.
- **History:** WIPO was established in **1967** by the **WIPO Convention**.
- **Members:** The organization has **194** member states including both developing and developed nations like India, Italy, Israel, Austria, Bhutan, Brazil, China, Cuba, Egypt, Pakistan, the U.S. and the U.K.
- India joined WIPO in **1975**.
- **Headquarters:** Geneva, Switzerland.

Data Exclusivity

- **In the Absence of Data Exclusivity:** When a company develops a new drug, it must **submit clinical trial data** demonstrating the safety and efficacy of its product **to regulators**.
 - ♦ The regulator may use this data to approve **another company's generic version** on the basis of much less resource-intensive bio-equivalence studies.
 - ♦ **The generic manufacturer** can then start marketing its **generic drugs on the date the original company's patent ends**.
 - ♦ Data exclusivity is not implemented in India's regulatory system **to prioritize affordable medicine access over originator data protection**.

- ♦ India's approach has enabled the country to develop the world's largest generic pharmaceutical sector.
- **Data Exclusivity:** This provision grants **innovator pharmaceutical companies exclusive rights** over the **clinical trial data**, meaning a regulator cannot use it to grant approvals to generic versions.
 - ♦ So, generic drug companies have to either wait until the exclusivity expires or carry out expensive clinical trials themselves to prove safety and efficacy.

Significance of Data Exclusivity

- **Incentive for Innovation:** Data exclusivity in India can protect the costly and risky clinical trial

investments which eventually encourages new drug discovery and R&D.

- **Attracts Foreign Investment:** By providing predictable regulatory protection, India might be seen as an IP-secure destination and will attract a large amount of FDI in the Pharma sector.
- **Boost to Original Research:** It encourages Indian firms to move from reverse engineering to innovative drug development.
- **Alignment with Global Practices:** Countries and groupings like USA, EU, Japan provide data exclusivity, India can also become a part of the nations protecting rights of the original innovator.

Concerns with Data Exclusivity

- **Delay in Generic Drug Entry:** It will block approval of generics creating a de facto monopoly beyond patent term.
- **Harms Domestic Generic Industry:** If India were to agree to data exclusivity provisions, its generics-focused pharmaceutical industry may lose its edge in international markets.
 - ◆ Almost 90% of Indian pharmaceutical companies manufacture generic drugs, they do not invest in developing new ones.
- **Increases Cost of Medicines:** This will also delay access to cheaper medicines to the people of the country.
- **Ethical Issues in Clinical Trials:** It can lead to Pharma companies conducting questionable, unnecessary clinical trials to get incentives.
- **Impact on Healthcare System:** It will lead to the lower availability of affordable medicines which will increase burden on public health systems in India.
- **Impact on Global Health:** India is the pharmacy of the world, exporting cheap generic drugs all over the world. Data Exclusivity will impact the supply of affordable drugs to Africa, Asia, Latin America.

Way Ahead

- While data exclusivity can incentivise innovation and investment, in India it risks delaying generic competition, raising drug prices, and undermining public health.
- India's cautious rejection of data exclusivity reflects a conscious choice to prioritise affordable access to medicines while using TRIPS flexibilities wisely.

Source: IE

COUNTING ELECTRONS REVEALS THORIUM'S NUCLEAR TICK IN SOLID CLOCK

Context

- Scientists have found a way to **detect thorium-229's nuclear 'tick'** in a solid, opening a path to **miniaturised nuclear clocks**.

About

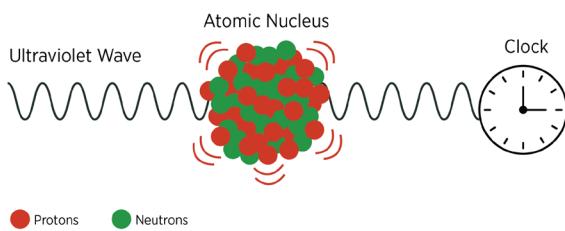
- **Conventional atomic clocks** count **electron transitions**, which are sensitive to external disturbances (electric/magnetic fields).
 - ◆ **Nuclear energy levels** are far more shielded, promising more stable timekeeping.
- **Why Thorium-229 (^{229}Th)?**
- It has a **uniquely low-energy nuclear excited state** which can be directly excited using vacuum-ultraviolet (VUV) lasers—a rare and crucial property.
- **Main experimental challenge:** In solid materials, the excited nucleus usually relaxes via internal conversion (energy transferred to an electron) instead of emitting a detectable photon, making direct detection difficult.
- **New breakthrough approach:** Instead of avoiding internal conversion, researchers used it as the signal by embedding ^{229}Th in thorium dioxide (ThO_2), exciting nuclei with VUV laser pulses and detecting the delayed electrons emitted during nuclear decay.
- **Key Results:**
 - ◆ Clear nuclear resonance detected at 2,020,407.5 GHz.
 - ◆ Internal conversion lifetime measured at 12.3 μs .
 - ◆ Implies a nuclear clock accuracy of 1 second error in ~ 15.8 billion years.
- **Significance:**
 - ◆ Opens **new materials and designs** for nuclear clocks.
 - ◆ **Enables miniaturisation**, since time can be read via electron current rather than complex optics.
 - ◆ Potential applications in fundamental physics, precision sensing, and tests of physical constants.

Nuclear Clock

- A nuclear clock works by using **ultraviolet light** to excite the **nucleus of a special atom, like thorium-229**.

- When the light hits the nucleus at just the right frequency, it causes the **nucleus to change its energy state, like flipping a tiny switch**.
- By precisely measuring and counting these energy flips, **scientists can create an extremely accurate timekeeping device**.

How a Nuclear Clock Works



Difference Between Atomic Clock and Nuclear Clock

Aspect	Atomic Clocks	Nuclear Clocks
Reference System	Electron orbital transitions.	Nuclear energy transitions.
Oscillation Frequency	Microwave to optical (MHz-THz range).	Higher frequencies (ultraviolet).
Precision & stability	Very high (defines 1 second).	Potentially much higher than atomic clocks.
Applications	GPS, telecom, internet, satellites.	Future deep-space navigation, fundamental physics.
Current status	Fully operational, widely used.	Experimental / research stage.

Key Advantages of Nuclear Clock over Atomic Clock

- Much greater accuracy and stability.
- Better for testing fundamental constants.
- Less environmental interference.
- Higher sensitivity to gravitational time dilation.

Source: TH

HUMAN-WILDLIFE CONFLICT

Context

- The National Tiger Conservation Authority appraised the expansion of Project Cheetah and

reviewed measures to address human-wildlife conflict.

What is human-wildlife conflict (HWC)?

- HWC refers to the **negative interaction between humans and wild animals**, leading to adverse impacts such as **injury or loss of human lives, crop, livestock and other properties**, and equally **negative impacts on wild animals** and or their habitats.
- In India, conflicts are most frequently associated with **elephants, tigers, leopards, bears and wild boars**, particularly in forest fringe and corridor regions.

Reasons for increase in human-wildlife conflict

- Degraded Habitats:** Deforestation, developmental activities, and agricultural expansion have shrunk and fragmented wildlife habitats.
- Rise in Certain Animal Populations:** Explosion in the population of wild pigs and monkeys, especially bonnet macaques, has worsened the conflict.
- Human Activities:** Grazing of cattle in forest areas and changes in cropping patterns attract wild animals.
- Ecological Imbalances:** Decline in top predator species due to historical hunting policies has led to an unnatural increase in herbivorous species.

Steps Taken by Government

- The National Wildlife Action Plan of India (2017–2035):** It serves as India's long-term strategic roadmap for wildlife conservation. It emphasises on;
 - Landscape-level conservation.
 - Mitigation of human-wildlife conflict.
 - Community participation and livelihood integration.
 - Strengthening wildlife crime control and scientific monitoring.
- Wildlife Protection Act 1972:** It lays down the rules and regulations for the conservation and protection of Animals in India.
- Protected Areas and reserves:** There are 107 National Parks, 573 Wildlife Sanctuaries, 115 Conservation Reserves.
- Plan Bee:** It is adopted by the **Northeast Frontier Railway (NFR)** which is a unique method to keep elephants away from railway tracks and plans are afoot to implement it all over the country to save the lives of elephants.

- **Operation Thunderbird:** Wildlife Crime Control Bureau (WCCB), Ministry of Environment, Forest and Climate Change, coordinated Operation in India to **fight against wildlife crime**.
- **Species-Specific Conservation Programmes:** Project Tiger, Project Elephant, etc. are national initiatives focusing on iconic species, involving habitat protection and anti-poaching.
- **Monitoring the Illegal Killing of Elephants (MIKE):** It was established by the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)** at the tenth Conference of the Parties in 1997.
- **Rapid Response Teams:** In Kerala the areas which see the highest incidence of human-animal conflict, Rapid Response Teams have been established, both, permanent and temporary.

Way Ahead

- **Mainstream human-wildlife conflict mitigation** into development planning, rather than treating it as a post-facto response.
- **Strengthen awareness and communication mechanisms** by improving regular interaction between forest departments and local communities, sensitising people about animal behaviour and early-warning signals.
- **Protect and restore wildlife corridors** to enable safe movement of animals between habitat patches without crossing human-made barriers, thereby reducing accidental encounters, roadkills and crop depredation.

Source: TH

NEWS IN SHORT

CHILLAI-KALAN

In News

- Kashmir is currently under the grip of '**Chillai-Kalan**'.

'Chilai Kalan'

- It is the coldest phase of winter in Kashmir, starts on December 21 and ends on January 31.
- The 40-day 'Chilai Kalan' is followed by a 20-day-long 'Chillai-Khurd' (small cold) and a 10-day-long 'Chillai-Bachha' (baby cold).

Relevance

- Heavy snowfall during Chillai Kalan replenishes water reservoirs in the higher reaches, sustaining

rivers, streams and lakes during the summer months.

- A poor snow season can lead to water stress later in the year.

Source :HT

NAAT TESTING

Context

- As the National Blood Transfusion Bill, 2025 gets introduced in Parliament, patients recount **how unsafe screening changed their lives** and why **screening donor blood should be mandatory**.

About

- It is mandatory by law for all blood banks to test for **five key transfusion transmissible infections**: HIV, hepatitis B, hepatitis C, syphilis and malaria.
 - ◆ However it is that most blood banks across the country use **ELISA-tests and not NAAT tests for screening**.

NAAT (A Nucleic Acid Amplification Tests)

- A NAAT test is a molecular diagnostic test that **detects the genetic material (DNA or RNA) of a pathogen**.
- **Uses:** COVID-19 diagnosis, Tuberculosis (CBNAAT/TrueNat) HIV, Hepatitis B & C, STIs (Chlamydia, Gonorrhoea) diagnosis.
- **Advantages:** It detects infection early, has been a gold standard for many diseases and is highly reliable for confirmation.
- **Disadvantages:** Requires lab infrastructure, costlier than rapid antigen tests.
- At present, the law **does not mandate NAAT testing**.
 - ◆ However, a 2023 guidance document by the Union Health Ministry said that while the **NAAT test is not mandatory, it is recommended**.

Source: IE

OPERATION HAWKEYE STRIKE

Context

- The US forces commenced '**Operation Hawkeye Strike**' in Syria to eliminate **Islamic State of Iraq and Syria (ISIS)** fighters, infrastructure, and weapons sites.

About

- The operation comes days after a suspected Islamic State attacker struck a convoy of US and Syrian forces in the central Syrian town of Palmyra.

- The US personnel who were targeted were supporting Operation Inherent Resolve, the international effort to combat IS, which seized swaths of Syrian and Iraqi territory in 2014.



Do you know?

- The terrorist organisation, ISIS, is banned in India under the Unlawful Activities (Prevention) Act, 1967.

Source: HT

SUPERKILONOVA

In News

- Researchers observed a bright cosmic event 1.3 billion light-years away that may be a **superkilonova**.

Superkilonova

- It is a rare kind of **cosmic explosion** and it is a more energetic version of a **kilonova**.
 - Kilonovae occur when two neutron stars merge**, ejecting heavy elements like gold and platinum, whose radioactive decay produces light.
- A **superkilonova** can be brighter and bluer than a regular kilonova because some ejected matter falls back onto the merged object, heats up, and warms the surrounding material, possibly extending the event's brightness.

Source :TH

SUPREME COURT'S UNIFORM DEFINITION OF ARAVALLI HILLS

Context

- The Supreme Court of India has accepted a uniform definition of the **Aravalli hills**, as recommended by a Central Government-appointed expert committee, and issued additional directions to strengthen conservation.

Supreme Court's Key Observations

- Conservation must be ecological and geological, not revenue-record based.

- The Aravalli should be protected as a single landscape system for hydrology, biodiversity, and climate resilience.
- Directed preparation of a comprehensive Management Plan for Sustainable Mining (MPSM) for the entire Aravalli landscape by the Indian Council of Forestry Research and Education (ICFRE).
- Piecemeal protection undermines long-term sustainability.

Expert Committee Recommendations

- Operational Definitions:
 - Aravalli Hills**: Any landform in notified Aravalli districts with local relief (elevation) of ≥ 100 metres.
 - Aravalli Range**: Two or more Aravalli Hills located within 500 metres of each other.
- Core / Inviolate Zones Safeguards:
 - Absolute prohibition of mining in protected Areas & Eco-Sensitive Zones (ESZs), tiger Reserves, wetlands & CAMPA plantation sites.

Significance of the Aravalli Range

- The Aravalli Range, stretching over approximately **692 kilometres** in a northeastern direction, traverses the Indian states of **Gujarat, Rajasthan, and Haryana** before culminating in **Delhi**, is the oldest mountain range in India.
 - Rajasthan** accounts for nearly **two-thirds** of the mountain range.
 - It acts as a **critical ecological barrier** preventing the eastward expansion of the **Thar Desert** into Haryana, Rajasthan, and western Uttar Pradesh.
 - The Aravallis support water-recharge systems and are the source of rivers such as the **Sabarmati and Luni**.
 - The region is **rich in minerals** including sandstone, limestone, marble, granite, lead, zinc, copper, gold, and tungsten.

Initiatives for Protection

- Matri Van Initiative**: Development of a 750-acre urban forest in Aravalli hills. Linked to 'Ek Ped Maa Ke Naam' campaign.
- Aravalli Green Wall Project**: Creation of a 5 km green buffer around Aravalli across four states.
 - Aims to combat desertification and land degradation.

Source: TH

GREAT INDIAN BUSTARD

In News

- The Supreme Court of India has tightened safeguards for the protection of the **Great Indian Bustard (GIB)** by revising and rationalising conservation areas in relation to **Green Energy Corridor (GEC)** transmission projects in Rajasthan and Gujarat.

About Great Indian Bustard (GIB)

About:

- One of the heaviest flying birds endemic to the Indian subcontinent mainly Rajasthan and Gujarat. It is also a State Bird of Rajasthan
- It is an omnivorous bird.

Habitat:

- Untamed, Arid grasslands.
- A maximum number of GIBs were found in Jaisalmer and the Indian Army-controlled field firing range near Pokhran, Rajasthan.
- Other areas:** Gujarat, Maharashtra, Karnataka and Andhra Pradesh.

Protection Status:

- IUCN Status:** Critically Endangered.
- Listed in **Wildlife Protection Act's Schedule 1**.

Threats to the Bird:

- Hunting, Intensification of agriculture, Power lines.

Source: TH

