

Today's Prelims Topics

Pradhan Mantri Matsya Kisan Samrudhi-Sah Yojana (PM-MKSSY)

Context

Karaikal in Puducherry will soon have an advanced fisheries processing cluster under the Pradhan Mantri Matsya Sampada Yojana (PMMSY). The scheme focuses on modernising fisheries, adding value to fish products, creating jobs, and improving incomes for fishing communities through better infrastructure and market access.

Pradhan Mantri Matsya Kisan Samrudhi-Sah-Yojana (PM-MKSSY)

- It is a **Central Sector Sub-scheme** under the **Pradhan Mantri Matsya Sampada Yojana (PMMSY)**, spanning **FY 2023-24 to FY 2026-27** with a total budget of **₹6,000 crore**.
- **Funding Structure**
 - Total estimated outlay: **₹6,000 crore**, divided as follows:
 - **₹3,000 crore (public financing)**—comprising ₹1,125 crore from the **World Bank**, ₹375 crore from the **Agence Française de Développement (AFD)**, plus ₹1,500 crore as **Gol counterpart funding**.
 - **₹3,000 crore** expected from **beneficiary investments** and **private sector leverage**.
- **Duration & Coverage**
 - Duration: **Four years**, FY 2023-24 to FY 2026-27.
 - Applicable **nationwide**, across **all States and Union Territories**.
- **Beneficiaries**
 - **Fishers, aquaculture (fish) farmers, fish workers, fish vendors**, and others directly involved in the fisheries value chain.
 - **Micro and Small Enterprises (MSEs)**: including proprietary firms, partnerships, companies, societies, LLPs, cooperatives, SHGs, FFPOs, and startups related to fisheries/aquaculture.
- **Key Objectives:**
 - **Formalization of the unorganized fisheries sector** via the creation of **work-based digital identities** for fishers and enterprises through the **National Fisheries Digital Platform (NFDP)**.
 - **Facilitating access to institutional credit** for small microenterprises, enabling them to benefit from government lending schemes like KCC and Mudra.
 - Providing **one-time incentives** to aquaculture farmers for purchasing **insurance**, thereby mitigating risks.
 - **Performance-linked grants** to:
 - Improve **value chain efficiency** and create jobs across fisheries microenterprises.
 - Enhance **safety and quality assurance** of fish and fish products.

Source: [TheHindu](#)

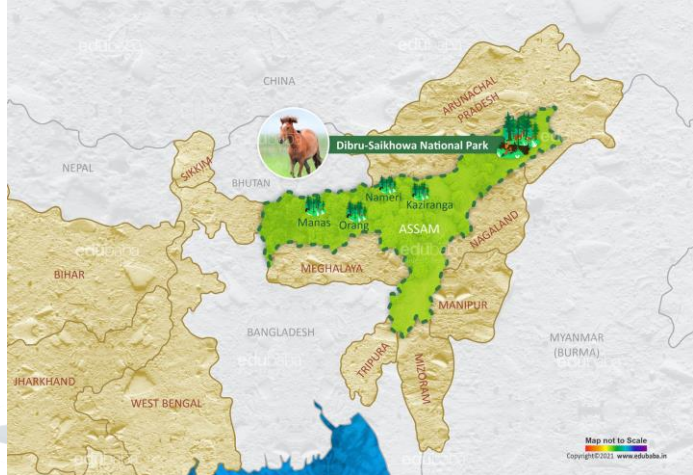
Dibru-Saikhowa National Park (DSNP)

Context

A study has found that invasive and native “grassland invader” plants are rapidly altering the riverine ecosystem of Assam’s Dibru-Saikhowa National Park (DSNP), the only habitat of feral horses in India.

Dibru-Saikhowa National Park

- **Location:** Situated in Dibrugarh and Tinsukia districts of Assam.
- **UNESCO Status:** Declared a Biosphere Reserve in 1997.
- **Boundaries:**
 - North – Brahmaputra and Lohit Rivers
 - South – Dibru River
- **Vegetation:**
 - Moist mixed semi-evergreen forests
 - Moist mixed deciduous forests
 - Canebrakes and grasslands
- **Unique Feature:** Largest Salix swamp forest in North-East India.
- **Climate:** Tropical monsoon type – hot, wet summers and cool, dry winters.
- **Flora:** Species include *Dillenia indica*, *Bischofia javanica*, *Bombax ceiba*, *Lagerstroemia parviflora*, etc.
- **Fauna:**
 - Large mammals – Tiger, Elephant, Leopard, Bear
 - Smaller species – Jungle Cat, Small Indian Civet, Squirrels
 - Primates – Slow Loris, Assamese Macaque
 - Aquatic – Gangetic Dolphin
- **Feral Horses:** The only habitat in India where feral (wild) horses are found.
- **Avifauna (Birds):** Identified as an Important Bird Area (IBA) with 382+ bird species, including:
 - Greater Adjutant Stork
 - Lesser Adjutant Stork
 - Greater Crested Grebe, among many others.



Source: [TheHindu](https://www.thehindu.com)

Healthocide

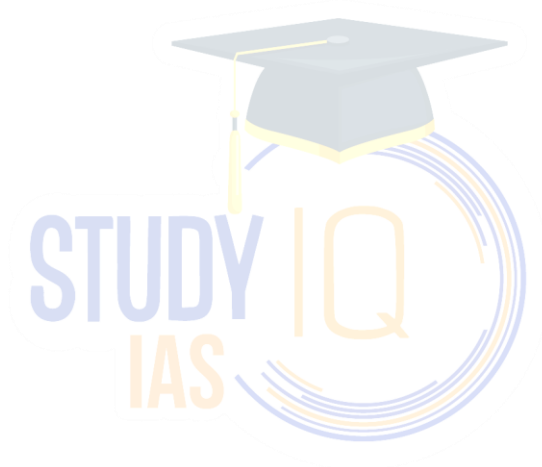
Context

Researchers from the American University of Beirut, Lebanon, coined the term “**Healthocide**” in *BMJ Global Health* to describe systematic destruction of healthcare in conflict zones.

About Healthocide

- Refers to **extreme, deliberate violence against entire health systems** beyond routine “attacks on healthcare.”
- Includes killing clinicians, bombing hospitals, blocking ambulances, dismantling medical supply chains.
- Seen as akin to **genocide** – destruction of a collective good essential for life and dignity.
- Coined to highlight large-scale collapse of healthcare ecosystems, e.g., in Gaza.
- Calls for **stronger international legal protections** for health systems.
- Physicians and educators urged to document violations and push for enforcement of humanitarian law.
- Aims to **galvanize the global medical community** against weaponisation of healthcare.

Source: [TheHindu](#)

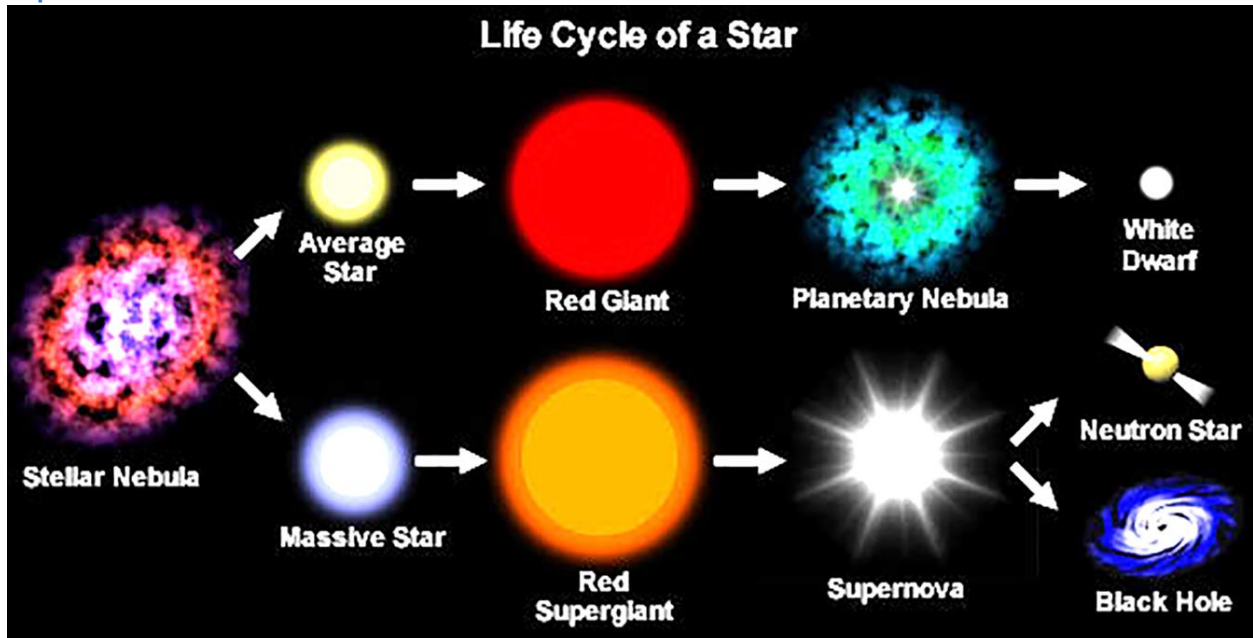


New Type of Supernova

Context

Astronomers reported in *The Astrophysical Journal* the discovery of a **new type of supernova** that occurs when a black hole wins a gravitational tug-of-war against a giant star.

Supernova



- **Definition:** A supernova is a powerful explosion that occurs at the end of a massive star's life cycle.
- **Types:**
 - **Type I** – Happens when a white dwarf in a binary system gains too much mass from its companion star and explodes.
 - **Type II** – Occurs when a massive star (at least 8 times the Sun's mass) runs out of nuclear fuel and its core collapses.
- **Energy Release:** In just a few seconds, a supernova releases more energy than the Sun will emit in its entire lifetime.
- **Brightness:** They can shine as bright as an entire galaxy for days or weeks.
- **Elements Creation:** Heavy elements like iron, gold, and uranium are formed in supernovae and spread into space.
- **Role in Universe:** The explosion enriches space with these elements, seeding new stars, planets, and even life.
- **Remnants:** After a supernova, what's left behind can be a **neutron star** or a **black hole**.
- **Observation:** Some can be seen from Earth with the naked eye and have been historically recorded (e.g., the Crab Nebula supernova in 1054 AD).

Source: [TheHindu](https://www.thehindu.com)

Honour Killing

Context

Rising cases of caste-based 'honour' killings in Tamil Nadu, Telangana, Maharashtra, and Kerala despite higher inter-caste marriages and Dalit empowerment.

What is 'Honour' Killing?

- Murder of a family member, usually a woman, by relatives/community members for allegedly bringing dishonor/shame to the family.
- Rooted in **strict cultural, social, and religious norms** about family honor, morality, and behavior.
- Closely linked to **women's choices** in marriage, relationships, sexuality, and modesty.

Causes

- **Caste System:** Fear of losing caste purity/status; hostility to inter-caste/same gotra marriages.
- **Patriarchal Norms:** Women denied autonomy; marriages seen as family's honor transaction.
- **Caste Panchayats (e.g., Khap):** Informal caste bodies impose punishments, often killings.
- **Gender Imbalance:** Skewed sex ratios fuel control over women's marriage choices.
- **Social Status:** Family honor prioritised over personal liberty or individual achievements.

Consequences

- **Human Rights Violation:** Direct attack on the fundamental right to life; reinforces gender inequality.
- **Social Impact:** Families/communities suffer trauma and long-term psychological damage.
- **Governance Challenge:** Weak legal enforcement and social sanction help culprits evade justice.
- **Cultural Backwardness:** Restricts women's education/employment; sustains regressive traditions.
- **International Impact:** Attracts global criticism for human rights violations, harming India's image.

Constitutional Aspects

- **Article 14** – Right to Equality before law.
- **Article 15** – Prohibits discrimination on grounds of caste, religion, sex, etc.
- **Article 17** – Abolition of untouchability.
- **Article 19** – Freedom to choose partner and association.
- **Article 21** – Right to life and personal liberty, includes right to marry a partner of choice.
- **Article 39(f)** – State to ensure children are free from exploitation and given opportunities for development.

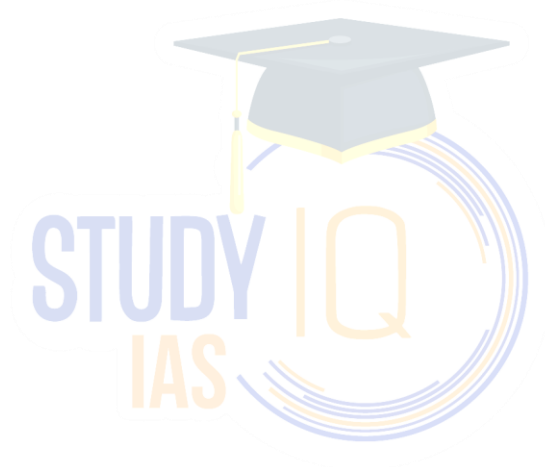
Judicial Stand

- **Lata Singh vs State of UP (2006):** SC condemned violence against inter-caste couples; termed honour killings "barbaric."
- **State of UP vs Krishna Master (2010):** SC upheld life imprisonment for honour killing convicts.
- **Arumugam Servai vs State of Tamil Nadu (2011):** Parents may disown but not harass children for inter-caste marriages.
- **Shakti Vahini vs Union of India (2018):**
 - Honour killings = violation of fundamental rights.
 - Directed states to set up **special cells** and provide **protection to threatened couples**.

Attempts for Reform

- **Prohibition of Unlawful Assembly (Interference with Freedom of Matrimonial Alliances) Bill, 2011:** Targeted khap panchayat-led unlawful assemblies against self-choice marriages; lapsed without enactment.
- **Law Commission's 242nd Report (2012):** Recommended a **separate anti-honour killing law** with clear guidelines for investigation, prosecution, and punishment.

Source: [TheHindu](https://www.thehindu.com)



How Jellyfish Disrupt Nuclear Power Plants

Context

- Since the 1990s, several nuclear power plants worldwide have faced shutdowns after jellyfish clogged their cooling systems.
 - In recent years, the frequency of such disruptions has grown, driven by climate change and marine pollution that have led to a surge in jellyfish populations.

What are Jellyfish?

- **Nature:** Jellyfish are soft-bodied, spineless marine animals belonging to the phylum *Cnidaria*.
- **Structure:** They have a gelatinous umbrella-shaped bell and trailing tentacles armed with stinging cells (cnidocytes) used for capturing prey.
- **Reproduction:** They reproduce both sexually and asexually. Under favorable conditions (like warm water and abundant plankton), their populations can rapidly increase, forming **blooms** (large swarms).
- **Adaptability:** Unlike many marine animals, jellyfish can survive in low-oxygen and polluted waters, which gives them an edge in degraded ecosystems.

How Jellyfish Disrupt Nuclear Power Plants

- **Cooling Water Requirement:** Nuclear power plants need a constant flow of water from nearby seas, rivers, or lakes to cool reactors, turbines, and condensers.
 - Intake pipes draw millions of gallons of water per minute, passing through **screening areas** designed to block debris and marine life.
- **Jellyfish Swarm Problem:** When a **massive bloom** occurs near coastal nuclear plants, millions of jellyfish get sucked into the intake pipes.
 - They **clog the screens** within minutes, blocking water flow.
- **Consequences of Blockage:** Reduced cooling water supply raises the risk of **overheating**.
 - Critical components like **turbines, condensers, and boilers** may get damaged.
 - To avoid accidents, reactors are forced to **shut down temporarily**.
- **Dead Jellyfish Issue:** Dead jellyfish often **turn into a gelatinous mass** that can slip past screens and cause problems deeper inside the cooling system.
- **Operational Challenges:** Clearing clogged intake pipes is complex and dangerous.
 - Workers may face **stings** while removing jellyfish.
 - In some cases, cleaning can take **up to two days**, leading to significant power loss and financial impact.

Why Incidents Are Rising

- **Climate Change:** Warmer waters increase plankton (jellyfish food) and extend breeding seasons.
- **Overfishing:** Fewer predators (like tuna and turtles) allow jellyfish populations to surge.
- **Plastic Pollution:** Plastic debris provides surfaces for jellyfish to breed, pushing them closer to coastlines and nuclear plants.
- **Pollution Tolerance:** Jellyfish can thrive in low-oxygen, degraded marine environments where other species struggle.

Source: [Indian Express](#)

Editorial Summary

Need to Restore Judicial Safeguards in ECI Appointments

Context

- Some from the ruling party have questioned why the Opposition has not formally moved the Supreme Court regarding electoral roll concerns.
- Opposition reluctance is linked to recent developments in the legal and institutional framework governing the appointment of Election Commissioners.

The 2023 Act

- The **Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023** was enacted to override the Supreme Court's ruling in *Anoop Baranwal v. Union of India (2023)*.
- The Act removed the Chief Justice of India (CJI) from the ECI Selection Committee and replaced him with a Cabinet Minister nominated by the Prime Minister.
- This strengthened executive control over appointments.

Judicial Developments

- The Act was legally challenged through multiple writ petitions.
- Petitioners sought a stay, but in *Dr. Jaya Thakur v. Union of India (2024)*, the Supreme Court refused, citing the **presumption of validity of statutes**.
- As a result, the 2024 Lok Sabha elections and subsequent Assembly polls were conducted under the ECI shaped by the 2023 Act.

Why this matters

- In *Anoop Baranwal*, the Constitution Bench had stressed the need to **take appointments out of the exclusive control of the executive** to ensure free and fair elections.
- The judgment recognized that a pliant ECI could undermine democracy by favoring those in power.
- By not staying the 2023 law, the Supreme Court effectively weakened its own precedent and allowed an ECI "under the thumb of the executive."

Comparative Perspective

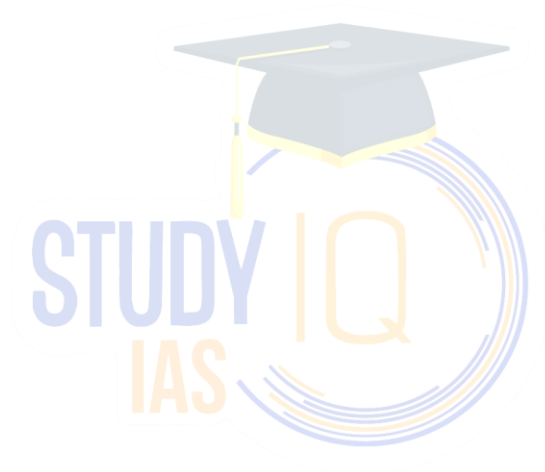
- Globally, scholars (Landau & Dixon, 2020) have noted how courts sometimes aid authoritarian regimes by legitimizing manipulations before elections.
- Countries like Venezuela and Bolivia saw courts facilitating electoral fraud, whereas rare instances of vigilance, like *Anoop Baranwal*, show the judiciary safeguarding democracy.
- **Fourth Branch Institutions:**
 - Modern Constitutions (e.g., South Africa) create independent "fourth branch" bodies like electoral commissions to strengthen democracy.
 - India's Constitution is silent, but the *Baranwal* verdict was an example of creative interpretation to fill this gap.
 - Parliament's 2023 Act rolled back this safeguard, and the Court's refusal to intervene compounded the setback.

Way Forward

- Restoring democracy requires:
 - Reinstating the Baranwal principle (CJI in the Selection Committee).
 - Nullifying the 2023 Act.

- Establishing a truly independent ECI capable of investigating electoral irregularities as a “Truth Commission.”

Source: [The Hindu](#)



India–Namibia Relations: A New Model of Engagement

Context

PM Modi's July 2024 address to Namibia's Parliament symbolised India's people-centric diplomacy: quoting local poets, invoking cultural symbols like the *Welwitschia mirabilis* (national plant) and Springbok, and using Oshiwambo phrases.

India's Three-Step Diplomatic Logic

- **Shared Historical Solidarities**
 - Evoking anti-colonial heritage and liberation struggles.
 - India's role in Namibia's independence: hosting SWAPO's first diplomatic office and Indian General Prem Chand commanding UN peacekeeping forces during transition.
 - Builds credibility of "long-haul" engagement vs. episodic Western presence.
- **Present Pragmatic Cooperation**
 - Bilateral trade: ~\$800 million.
 - India's wider \$12 billion development partnership across Africa.
 - Key projects:
 - India-Namibia Centre of Excellence in IT at NUST.
 - "India Wing" at Ongwediva campus (funded by \$12 million).
 - Capacity-building in IT aligns with Namibia's youthful, tech-ready population.
- **Future-Oriented Knowledge Partnerships**
 - Namibia: first African nation to adopt India's **Unified Payments Interface (UPI)**.
 - Potential transfer of not just digital tools but also India's **regulatory models and institutional design** in tech governance.
 - Signals rise of *tech diplomacy* as a pillar of South-South cooperation.

Namibia's Strategic Importance for India

- **Stability & Resources:** Politically stable, rich in uranium and other minerals, with a growing tech base.
- **Alignment in Vision:** Namibian leadership echoes India's calls for **fairer global financial systems** and South-South solidarity.
- **Global South Role:** Seen as a like-minded partner in reshaping international rules.

Gaps and Missed Opportunities

- **Symbolism vs. Substance:** First Indian PM visit in nearly 30 years produced only modest outcomes—two MoUs (entrepreneurship and health), Namibia joining Global Biofuels Alliance and CDRI.
- **Critical Minerals Gap:** Despite Namibia's status as a top uranium producer, no concrete strategic framework on resource cooperation was finalised (e.g., value addition, workforce training, resilient supply chains).
- **Consistency Problem:** India's Africa engagement has historically seen long gaps, raising concerns about sustained follow-through.

Way Forward

- **Beyond Symbolism:** India needs consistent, institutionalised engagement, not episodic gestures.
- **India-Africa Forum Summit:** Upcoming summit could be a platform to:
 - Formalise cooperation frameworks.
 - Expand knowledge partnerships (digital, health, education).
 - Secure critical minerals collaboration.
- **Credibility Test:** India's role as a Global South leader depends not only on commitments but also on **delivery, consistency, and inclusivity**.

Source: [The Hindu](#)