

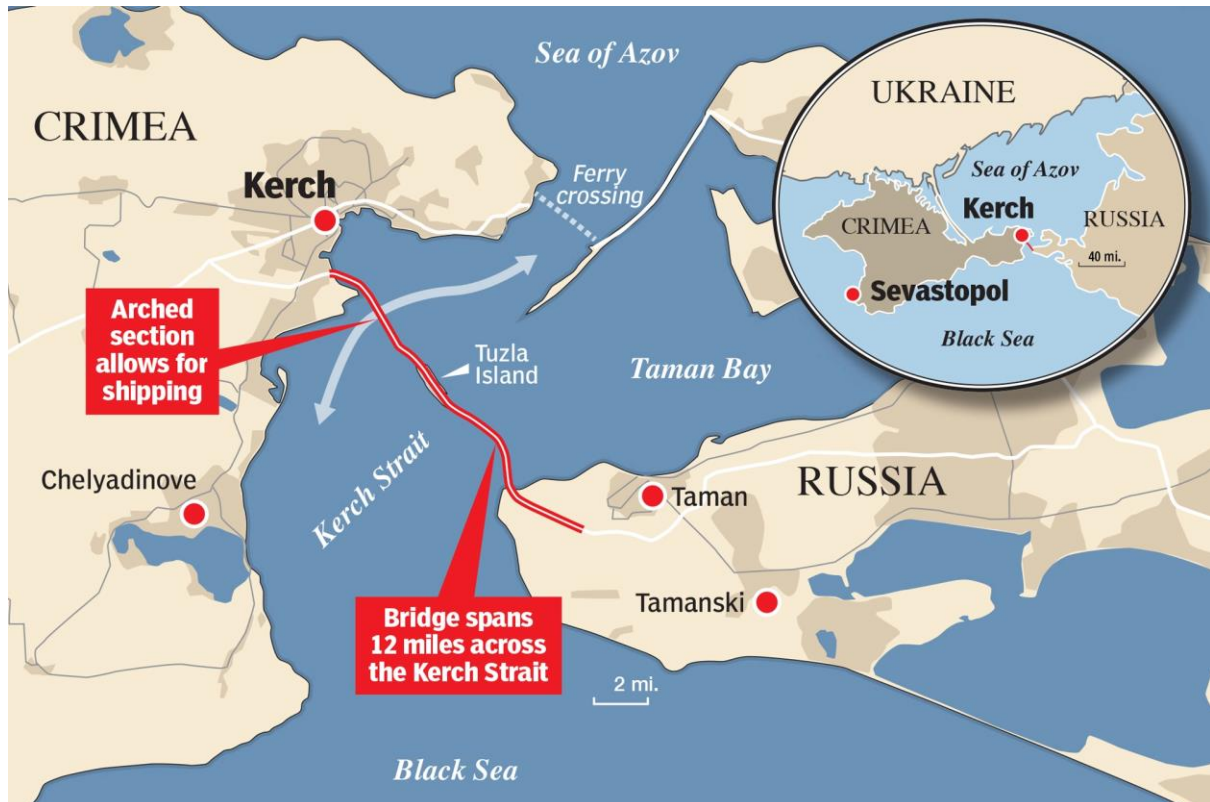
## Today's Prelims Topics

### Kerch Strait

#### Context

Recently, a Russian oil tanker carrying thousands of tonnes of oil products split apart during a heavy storm, causing an oil spill in the Kerch Strait.

#### About Kerch Strait



- It is located in **Eastern Europe** and is the only water body which **connects the Black Sea with the Sea of Azov**.
- It separates the **Kerch Peninsula (Crimea)** from the **Taman Peninsula (Russia)**.
- It is an **important global shipping route** & also a key point of conflict between Russia and Ukraine after Moscow annexed the Crimean peninsula in 2014.
- **Kerch Strait Bridge:**
  - It is also known as the **Crimean Bridge** as it links mainland Russia with Crimea.
  - Its construction was completed in 2018, it includes a road and rail connection and is the **longest bridge in Europe (19 km.)**

#### Facts

- A strait is a narrow waterway between two pieces of land that connects two large bodies of water.
- **Sea of Azov:** It is an **inland sea in Eastern Europe**. It is bounded by **Russia & Ukraine**.
- **Countries bordering Black Sea:** Turkey, Bulgaria, Ukraine, Russia, Georgia & Romania.  
(Trick to Remember - T-BURGeR)

#### Source:

- [The Hindu - Russian tanker splits in storm, spilling oil into the Kerch Strait](#)

## Olive Ridley Sea Turtles

### Context

Carcasses of Olive Ridley turtles are washing ashore along the Visakhapatnam coast. **Marine pollution and trawling activities** during the breeding season are the major causes behind this.

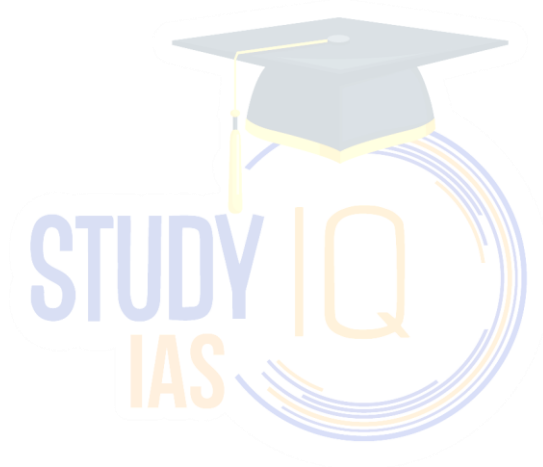
### About Olive Ridley Sea Turtles



- They are the **2nd smallest and most abundant** of all sea turtles found in the world.
  - **Smallest sea turtle in the world:** Kemp's ridley sea turtle.
  - **Largest Sea turtle:** Leatherback Turtle
- It gets its name from the **olive green colouration of its carapace (shell)**.
- **Features:**
  - They are known for unique **arribadas (synchronised mass nestings)**, where thousands of females come together on the same beach to lay eggs.
  - **Females nest every year** and produce up to 100 eggs.
  - Males and females grow to the same size, but females have a slightly more rounded carapace.
  - They are **omnivorous**, meaning they feed on both plants and animals.
- **Distribution:** Mainly found in warm waters of the Pacific, Atlantic and Indian oceans.
- **Major Sites in India:**
  - **Gahirmatha Marine Sanctuary:** Located in the Kendrapara district of Odisha, this is the **world's largest nesting site** for olive ridley turtles.
  - **Rushikulya Beach:** Located in the Ganjam district of Odisha. The mouth of the Rushikulya River is the 2nd largest nesting site for olive ridley turtles in India.
  - Velas Beach, Versova Beach & Tarkli Beach (Maharashtra)
- **Conservation Status:**
  - **IUCN Red List:** Vulnerable
  - **Wildlife Protection Act, 1972:** Schedule 1
  - **CITES:** Appendix I

**Source:**

- [The Hindu - Carcasses of Olive Ridley turtles continue to wash ashore in Vizag](#)



## Jalvahak Scheme

### Context

The Union government has launched the Jalvahak scheme to incentivize cargo movement via inland waterways.

### About Jalvahak Scheme

- **Aim:** To incentivize cargo transport, decongest roadways and railways, and boost the use of waterways as an **economical, eco-friendly, and efficient** mode of transport.
- **Launched by** – Ministry of Ports, Shipping & Waterways.
- **Implementing Agency:** It will be implemented jointly by the **Inland Waterways Authority of India (IWAI) and Inland & Coastal Shipping Ltd (ICSL)** -a subsidiary of the Shipping Corporation of India.
- **Incentive:** It will offer up to **35% reimbursement of the total operating costs** for transporting cargo on the National Waterways (NW) 1, 2 and 16.
  - **NW 1:** From Kolkata to Varanasi via Patna (Ganga)
  - **NW 2:** From Kolkata to Pandu in Guwahati (Brahmputra)
  - **NW 16:** Via the Indo Bangladesh Protocol Route (IBPR) (Barak)
- **Criteria for Incentive:** It will provide direct incentive to transport goods via inland waterways for a distance of **more than 300 kms.**
- The scheme will remain valid for **3 years.**
- **Target:** 200 million metric tons (MT) cargo movement by 2030 and 500 MT by 2047.

### Source:

- [The Hindu - Centre launches Jalvahak scheme for cargo movement via inland waterways](#)

## Santa Ana Winds

### Context

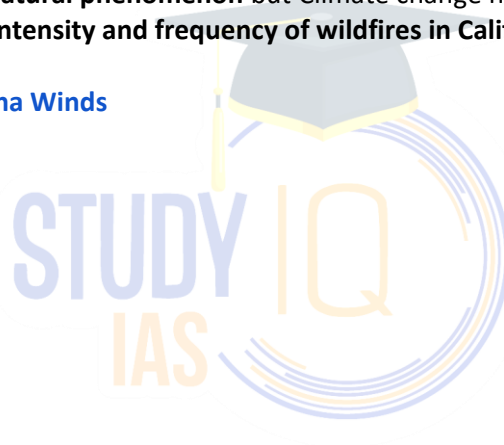
The Franklin Fire, which began recently in Malibu, California, has impacted around 22,000 people. According to experts Santa Ana' winds and climate change are fueling these wildfires.

### About Santa Ana Winds

- These are **dry and warm (often hot) winds in the Southern California** area that blow in from the desert -- which includes the Great Basin of the western United States.
- It is named after **Southern California's Santa Ana Canyon**.
- **Origin:** These winds blow **when high pressure builds over the Great Basin** - Area between the **Rocky Mountains and Sierra Nevada** (a mountain range in the Western United States) and the **pressure is low over California's coast**.
- The pressure difference triggers powerful winds to move from the Basin's inland deserts, located to the east and north of Southern California, over the mountains toward the Pacific Ocean.
- As these winds descend the mountains, they compress and heat up, causing their humidity to drop—sometimes to less than 20%, or even below 10%.
- This extremely low moisture dries out vegetation, making it highly flammable.
- Santa Ana winds generally occur from **October to January**.
- Santa Ana Winds are a **natural phenomenon** but Climate change has **prolonged wildfire seasons and also increased the intensity and frequency of wildfires in California**.

### Source:

- [Indian Express- Santa Ana Winds](#)



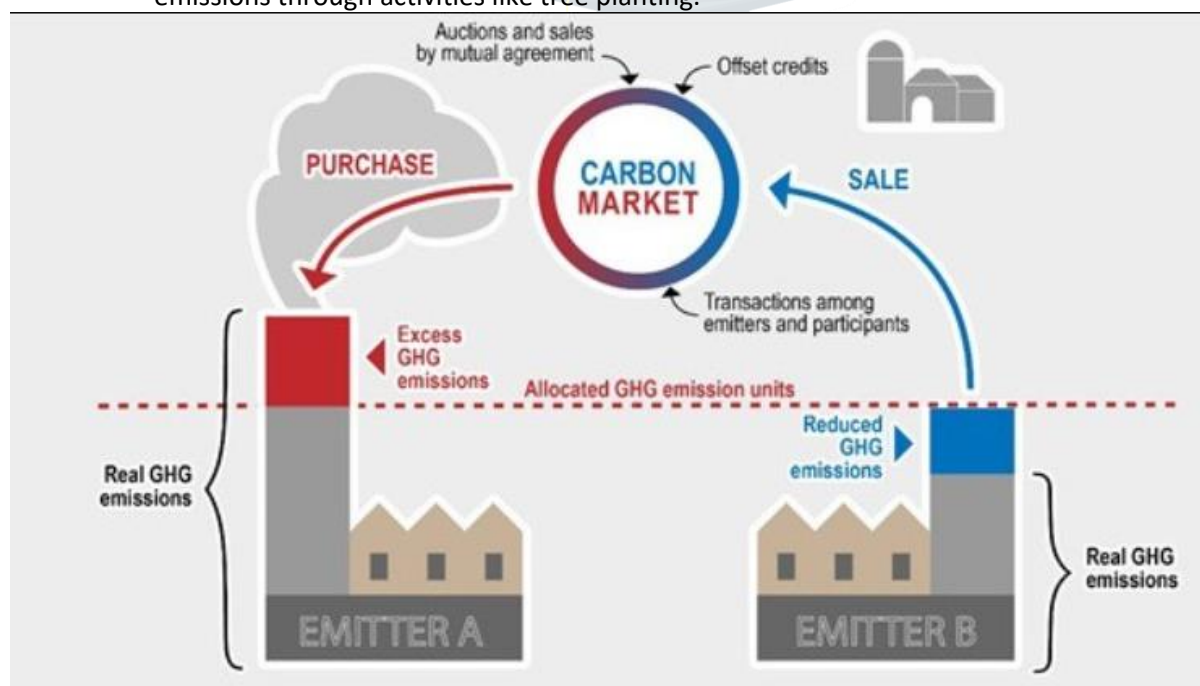
## How would a carbon market function?

### Context

The recently held Conference of Parties (COP- 29) of UNFCCC in Baku approved standards for establishing an international carbon market.

### What is a Carbon Market?

- A carbon market allows entities to buy and sell the right to emit carbon into the atmosphere.
- **Origin:** Carbon credits were first used in the 1990s in the U.S., which introduced the cap-and-trade model to control the emission of sulphur dioxide.
- **Mechanism:**
  - **Carbon credits:** Certificates allowing the emission of a fixed amount of carbon (1 credit = 1,000 kg of CO<sub>2</sub>).
  - By limiting the number of carbon credits that are issued, governments can control how much carbon is released into the environment.
  - Entities without carbon credits are not allowed to emit carbon.
- **Trading:**
  - Surplus credits can be sold by entities that don't need them, at market-determined prices based on supply and demand.
  - **Carbon offsets:** Purchased by polluters from entities (e.g., NGOs) promising to offset emissions through activities like tree planting.



Source:

- [The Hindu - How would a carbon market function?](#)

## Mirror life: a deadly geometry

### Context

Recently an international group of scientists published a 300-page technical report and a commentary in the **journal Science** warning against efforts to build mirror life.

### What is Chirality?

- Chirality refers to the property of objects or molecules having a **handedness** (left or right), where they cannot be superimposed on their mirror images.
- **E.g.** A bottle cap is unscrewed **anti-clockwise** in the real world but appears **clockwise** in a mirror.
- **Mirror Life:** Mirror life refers to organisms whose building blocks are **enantiomers** of their natural counterparts.
- **Molecular Chirality: Enantiomers**
  - Molecules that are mirror images of each other are called **enantiomers**.
  - Each enantiomer has distinct properties and biological effects, despite having the same chemical composition.

### Examples of Enantiomers

- **Thalidomide:**
  - It is a sedative drug which was sold in the late 1950s.
  - **Right-handed enantiomer:** Worked as a sedative.
  - **Left-handed enantiomer:** Caused **severe birth defects**, leading to the drug's withdrawal.
- **In the Human Body:**
  - **Proteins:** Built using **left-handed amino acids**.
  - **DNA:** The double-helix **twists to the right**.
  - The reasons behind this preference for specific handedness in life forms remain a mystery.

### Source:

- [The Hindu - Mirror life: a deadly geometry](#)

## News in Shorts

### Exercise Desert Knight

- It is a trilateral air combat exercise between **India, France and the UAE**.
- This exercise is a part of the **trilateral framework established in 2022** by the foreign ministers India, France & UAE. It includes collaboration in defence, technology, energy and environment.
- Last year, the navies of India, France and the UAE also conducted their **first-ever trilateral maritime partnership exercise**.
- **Other Defence Exercises between India & France:** Shakti (Army), Varuna (Navy) and Garuda (Air Force).

**Source:**

- [Economic Times- India, France, UAE strengthen defence ties with Desert Knight air combat exercise](#)

### Erg Chebbi Dunes

- They are a large sand sea in **southeastern Morocco**, known for its towering dunes and a popular destination for travelers.
- The dunes stretch about 28 kilometers from north to south and 5–7 kilometers from east to west and around 150 meters in height.

**Source:**

- [The Hindu - A camel caravan moves along the Erg Chebbi dunes](#)

### Potti Sriramulu

- Andhra Pradesh Govt. has announced that it will celebrate **125th Birth Anniversary of Potti Sriramulu** (16 March 2025) in a grand manner.
- He was born in **1901**, in Madras Presidency (present-day Nellore, Andhra Pradesh).
- He actively participated in the **Non-Cooperation Movement (1920-1922), Salt Satyagraha (1930) & Individual Satyagraha**.
- Post-Independence he became an important figure in the struggle for a **separate Telugu-speaking linguistic state**.
- He started a hunger strike in **1952**, demanding the creation of Andhra Pradesh, separate from the Madras Presidency.
- He had undertaken **fast unto death ('Amarajeevi') in Madras** on 19 October 1952.
- After his death, the formation of separate Andhra Pradesh was announced by the Union government.
- His death led to widespread rioting and violence in Andhra Pradesh.

**Source:**

- [The Hindu - Potti Sriramulu](#)



## Editorial Summary

### India's firmer attempts at mineral diplomacy

#### Context

- India, a major critical mineral importer, still depends on other countries, primarily China, for its mineral security, which has become a cause of strategic concern.
- In response, India has initiated efforts to engage in mineral diplomacy to secure its supply chains.

#### India's Critical Mineral Dependency: Challenges

- **Heavy Dependency:** India has a **100% reliance on imports of lithium, cobalt, and nickel**. This heavy dependence poses risks, especially given the geopolitical tensions surrounding these resources.
  - **China's Near-Monopoly:** Approximately 70% of India's lithium imports come from China, highlighting a near-monopoly that raises national security concerns.
- **Increased Demand:** The value of India's critical mineral imports has surged from \$475 million in FY15 to nearly \$4.93 billion in FY24.
- **Lack of domestic production:** Despite having reserves of certain critical minerals (e.g., cobalt and copper), India has not yet developed robust domestic production capabilities.

#### India's Perception of Mineral Diplomacy

- **Engagement Pillars:** India's mineral diplomacy relies on two major pillars:
  - **Bilateral and Multilateral Engagement:** Strengthening ties with resource-rich nations (e.g., Australia, Argentina, Chile, Kazakhstan) and participating in international forums like the Quad, Indo-Pacific Economic Framework (IPEF), and the Mineral Security Partnership (MSP).
  - **Strategic Partnerships:** Establishing joint ventures such as **Khanij Bidesh India Ltd. (KABIL)** to secure critical mineral resources through agreements and investments.
    - **Government Initiatives:**
    - **KABIL's Agreements:** Partnerships with Australia, Latin American countries (e.g., a \$24 million lithium pact with Argentina), and Kazakhstan (IREUK Titanium Limited) to bolster mineral security.
    - **Policy Cooperation:** MoUs with organizations like the **International Energy Agency (IEA)** to streamline policies and adopt global best practices.

#### India's Initiatives to Reduce Dependency

- The government has launched the **Critical Minerals Mission**.
- **Reduced import duties** on various critical minerals.
- Implemented measures to step up exploration campaign by **auctioning off mining blocks**.
- **Expanded the Deep Ocean Mission**.

#### Challenges in India's Mineral Diplomacy

- **Lack of Private Sector Participation:** Private enterprises are largely absent from India's critical mineral initiatives.
  - There is no clear roadmap or strategy to integrate the private sector into the mineral supply chain.
- **Weak Diplomatic Capacity:** India lacks a dedicated framework for mineral diplomacy within its diplomatic apparatus.

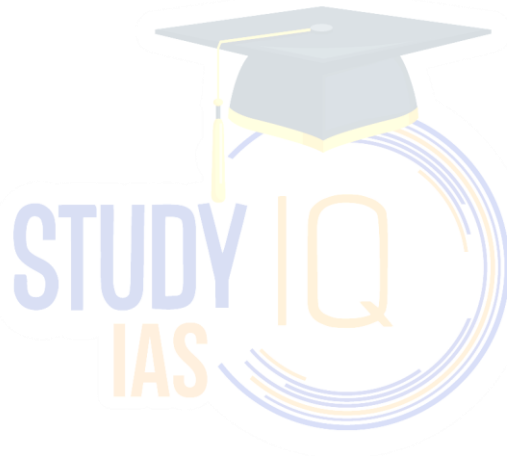
- The absence of specialized roles for mineral diplomacy in key missions hampers effective engagement.
- **Insufficient Sustainable Partnerships:** India's collaborations are yet to mature into long-term, sustainable partnerships.
- **Absence of a Clear Supply Chain Strategy:** A comprehensive critical mineral supply chain strategy is missing.

#### Way Forward

- Formulate a clear, long-term strategy that covers exploration, acquisition, processing, and utilization of critical minerals.
- Strengthening ties with trusted partners like the **EU, South Korea, and Quad members** is crucial for enhancing supply chain resilience.
- India needs to formulate policies considering national security and growth prospects to de-risk mineral acquisition.
- Ensure that India's mineral acquisition strategy prioritizes environmental and ethical standards.

#### Sources:

- [The Hindu: India's firmer attempts at mineral diplomacy](#)
- [Deccan Herald: Critical Minerals: Dependence on imports from China poses a security challenge to India](#)



## The digital frontier of inequality

### Context

In response to a surge in **tech-facilitated gender-based violence (TFGBV)**, Union Ministry of Women and Child Development recently launched '**Ab Koi Bahana Nahi (no more excuses)**', a national campaign aligned with the global '**16 Days of Activism Against Gender-Based Violence**' led by UN Women.

### India's Digital Landscape

- **Mobile Connections:** 1.18 billion
- **Internet Users:** 700 million
- **Smartphones:** 600 million
- **Gender Inclusion:** Women hold 55.6% of the accounts under the **Pradhan Mantri Jan Dhan Yojana (PMJDY)**.
- **Rural Internet Penetration:** 20% higher than urban areas (2021 Nielsen report).
  - India's digital infrastructure has unlocked new opportunities, especially for women in rural areas, by enabling direct benefits and cashless transactions via **Jan Dhan-Aadhaar-Mobile (JAM)** linkages.

### Risks of Digital Transformation for Women

Despite progress, increased digital connectivity has exposed women to various risks:

- **Forms of TFGBV:**
  - **Cyberstalking**
  - **Online Trolling**
  - **Non-Consensual Sharing of Intimate Images**
  - **Impersonation and Fraud** (fake profiles)
  - **Voyeurism**
  - **Grooming** (exploitation of vulnerable individuals)
- **Impact on Women:**
  - Women in public-facing roles, such as **journalists and politicians**, face rampant harassment.
  - Societal norms constrain women's digital literacy and confidence in navigating online spaces.
  - Many women are unaware of their rights and reporting mechanisms, leading to **retreat from digital spaces**.

### Government Initiatives and Legal Framework

India has implemented various measures to combat TFGBV:

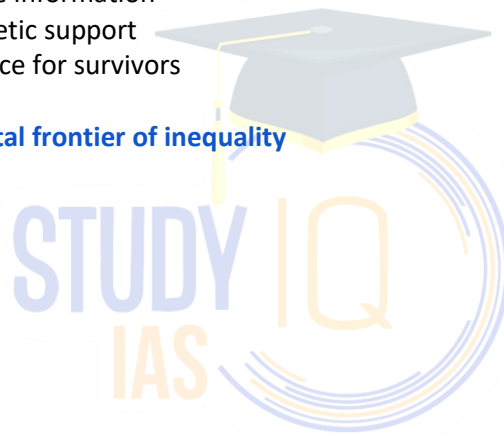
- **Legal Protections:**
  - **Information Technology Act, 2000**
  - **Bharatiya Nyaya Sanhita, 2024**
- **Reporting Mechanisms:**
  - **National Cyber Crime Reporting Portal** allows anonymous reporting.
- **Awareness and Education:**
  - **Information Security Education and Awareness Programme:** Promotes digital safety awareness.
  - **Digital Shakti:** Launched by the National Commission for Women to help women navigate online spaces securely.
- **International Engagement:**
  - Participation in the **67th Session of the Commission on the Status of Women:** India supported safeguards to promote a secure digital environment for women and girls.

### The Way Forward

To create truly safe digital spaces for women, India needs strategic and focused efforts:

- **Legal and Policy Frameworks:** Align efforts with the **Global Digital Compact** adopted at the **UN Summit of the Future (2024)**.
  - Prioritize combating TFGBV with **stricter laws, swift justice**, and holding **social media platforms accountable**.
- **Expanding Digital Literacy:** Target **rural areas** and integrate **safe online practices** into school curriculums.
  - Conduct **community workshops** for all demographics to build digital awareness.
- **Changing Societal Norms:** Launch **nationwide campaigns** to challenge societal norms.
  - Actively engage **men and boys** as allies in fostering inclusive digital spaces.
- **Collaboration with the Tech Industry:**
  - Enhance **safety features** on platforms.
  - Use **artificial intelligence** to detect and remove abusive content while ensuring human oversight.
  - Improve **user-friendly reporting mechanisms**.
- **Survivor Support Systems:** Strengthen **counselling services, legal aid**, and **rehabilitation support**.
  - Expand initiatives like **TechSakhi**, a helpline offering:
    - Accurate information
    - Empathetic support
    - Assistance for survivors

Source: [The Hindu: The digital frontier of inequality](#)



## Solutions for Unrest in Manipur

### Context

- Manipur's ongoing crisis is a complex mix of **ethnic conflict, tribal insurgency, drug trafficking, and infiltration from Myanmar**.
- Despite India's track record in handling insurgencies and terrorism, the situation in Manipur has deteriorated due to a lack of effective political and strategic measures.

### Key Issues

- **Law and Order vs. Political Solution:** The situation is treated primarily as a **law and order problem**, lacking meaningful political initiatives and **confidence-building measures**.
  - A "**healing touch**" is missing, contributing to a worsening crisis.
- **Missed Opportunities:** During lulls in violence, the government could have initiated dialogues and formed peace committees to reconcile differences.
- **Failure to Implement WHAM Strategy:** **WHAM (Winning Hearts and Minds)** approach, essential in tribal conflicts, has not been effectively deployed.

### Proposed Remedial Measures

- **Prime Minister's Visit:** A visit by the PM could signal seriousness and potentially ease tensions.
- **President's Rule and New Leadership:** Recommend declaring **President's Rule** and appointing a **governor** with experience in counter-insurgency operations.
- **Administrative Overhaul:** Replace officers hesitant to take decisive action with more proactive personnel.
- **Integrity of Manipur:** Maintain a firm stance on the state's territorial integrity.
- **Unified Command Action:** Target **three groups** regardless of ethnicity:
  - **Perpetrators of violence** or those inciting it.
  - Individuals giving a **religious color** to the conflict (vandalism of religious sites).
  - **Drug traffickers**.
- **Disarmament:** Disarm people holding **unlicensed weapons** with a clear deadline and enforce the **National Security Act** for violations.
- **Peace Committees:** Form peace committees at **district and state levels** with representation from all communities and tribes.

Source: [Indian Express: What Manipur Needs](#)

## POSH Act Applies to Political Parties

### Context

The Supreme Court of India recently addressed a Public Interest Litigation (PIL) concerning the applicability of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 (POSH Act) to political parties.

### More in News

- The court directed to first approach the Election Commission of India (ECI) as they were the competent authority “to prevail upon the recognised political parties for creation of an in-house mechanism to deal with complaints of sexual harassment” in a way that is consistent with the provisions of the POSH Act.

### ECI’s Role

- **Article 324 of the Constitution:** Grants the ECI the power of superintendence, direction, and control over elections to the Parliament, State Legislatures, the Office of the President, and the Vice-President.
- **Ensuring Compliance with Laws:** The ECI has the authority to issue advisories and guidelines to political parties to ensure adherence to laws during elections.
  - **Example:** Instructing parties to comply with the **Child Labour (Prohibition and Regulation) Act, 1986** during campaigns.
- **Transparency and Accountability:** The ECI ensures political parties disclose contributions and audited accounts, aligning with the **Right to Information Act, 2005**.
  - **Example:** Publishing financial information of parties based on the 2013 **Central Information Commission (CIC)** ruling.

### CIC Ruling 2013

In **2013**, the **Central Information Commission (CIC)** issued a landmark ruling declaring that **political parties** would be considered **public authorities** under the **Right to Information Act, 2005 (RTI Act)**.

### Kerala High Court (2022) Case

- **Case:** *Centre for Constitutional Rights Research and Advocacy v. State of Kerala & Ors.*
- **Verdict:**
  - Political parties do not have a formal employer-employee structure.
  - Parties do not constitute a workplace as defined under the POSH Act.
  - Therefore, they are not mandated to establish ICCs.

### Existing Rules or Mandates for Protection

- **POSH Act, 2013:**
  - **Purpose:** Protects women from sexual harassment in workplaces (public and private).
  - **Requirement:** Mandates the formation of an **Internal Complaints Committee (ICC)** in workplaces.
  - **Definition of Workplace:**
    - Public sector bodies
    - Private sector companies
    - Hospitals, nursing homes, sports venues
    - Locations visited by employees during employment
- **Internal Disciplinary Mechanisms**
  - **BJP Constitution:** Contains provisions for **Disciplinary Action Committees** at national and state levels.
    - Lists breaches of discipline like “lowering the prestige of the Party.”

- **Congress Constitution:** Allows higher committees to discipline lower ones for offences involving “moral turpitude.”

#### What are the Challenges Associated?

- **Ambiguous Authority Over Internal Party Affairs:** The ECI’s powers are largely related to elections. Its role in enforcing internal governance within parties, such as creating mechanisms for addressing sexual harassment, is unclear and limited.
- **Workplace Definition:** The POSH Act applies to workplaces, but political parties lack a conventional employer-employee structure.
- **Lack of Enforcement Mechanisms:** The ECI can issue advisories, but it does not have punitive powers to enforce compliance with laws like the POSH Act within political parties.
- **Resistance from Political Parties:** Parties often resist external regulation in internal matters, as seen in their non-compliance with the RTI Act, despite the CIC’s ruling.
- **Field Operations of Party Workers:** Political parties often employ workers temporarily and in decentralized locations, complicating the identification of a “workplace” and an “employer” for POSH Act enforcement.

#### Way Forward

- **Creation of Internal Complaints Committees (ICCs):** Political parties should be encouraged or mandated to establish **Internal Complaints Committees (ICCs)** for sexual harassment complaints.
  - These committees should be structured in accordance with the POSH Act, with **women and external members to ensure impartiality.**
- **Formal Definition of "Workplace":** The definition of "workplace" should be revisited in the context of political parties, taking into account the mobile and varied nature of their operations.
- **Clarity on Employer-Employee Relationship:** There needs to be a legal framework that clarifies the concept of "employer" within political parties.
- **Collaboration with ECI for Implementation:** The **Election Commission of India (ECI)**, given its role in overseeing political party functioning, should collaborate with parties to issue guidelines that align their internal processes with the POSH Act.

**Source:** Indian Express: [Could the POSH Act apply to political parties?](#)