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# Having majority no reason for lawmakers to defy party: top court

**Krishnadas Rajagopal**  
NEW DELHI

The Supreme Court made it clear on Wednesday that a group of MLAs or MPs cannot override the official directives of the parent political party merely for the reason that they hold a majority among the elected members.

Justice Joymalya Bagchi, part of a three-judge Bench headed by Chief Justice of India Surya Kant, said the maturity of a democracy was measured by the constancy of political parties and their members to their ideology. The court was hearing a dispute between the Shiv Sena factions led by Uddhav Thackeray and current Maharashtra Deputy Chief Minister Eknath Shinde over who was the real party and the rightful

bearer of the party symbol.

Senior advocate Kapil Sibal, appearing for Mr. Thackeray, said "mergers" orchestrated by a faction of MLAs/MPs was not dictated by democratic or ideological powers, but a naked pursuit of power. "You are carrying this shenanigan to an absurd level where the entire electoral process becomes a farce because the electoral verdict can be changed through manipulation and defection. The government that comes into existence is not the government that the people voted for. This has huge repercussions," he said.

The court also indicated the striking of a balance between the electorate's decision to vote a party to power and the individual representatives' liberty to express disagreement with



the party's decisions.

The dispute being heard by the court dated back to June 2022 when the Shiv Sena had split into two rival camps. The Thackeray government was toppled as Mr. Shinde, backed by 40 out of 55 party MLAs, teamed up with the Devendra Fadnavis-led BJP side and formed the government. The Election Commission (EC) later concluded that Mr. Shinde's was the "real" Shiv Sena and

gave it the party symbol.

The senior advocate said it was time the Supreme Court examined the "trend" of "coordinated and unilateral" shift of loyalties by legislators of one political party to another, leading to the overthrow of elected governments in multiple States. He asked whether a few legislators could unilaterally decide a "merger" with another party without the knowledge of the pa-

rent political party.

"The control of the political party subsists over the legislature party. Any valid decision of the political party has to prevail over the will of the majority of the legislature party," Justice Bagchi observed orally.

"Suppose a set of legislators of a political party, merely because they are in the majority, pass a resolution seeking to remove the office-bearers of the political party and, in furtherance of that, undertake a series of coordinated acts. They cannot remove the office-bearers of the political party. Those very acts amount to voluntarily giving up the membership of the political party. As this court has held, voluntary giving up of membership is determined from the con-

duct of the individual; nothing more is required," Mr. Sibal submitted.

He, quoting an earlier judgment of the Supreme Court in the Shiv Sena case, said rebel legislators cannot be allowed to "conflate" the political party with the legislative party.

"If this is allowed, you can topple any government at any point in time. Legislators can switch over, form a new government and not bother about the political party," he argued.

Mr. Sibal said the EC's decision was erroneously based on which faction had the majority in the legislature party.

He argued that the concept of a 'split' in the legislature party under the Tenth Schedule was unknown. There was no concept of a majority within a

legislature party. A split, as a defence against the charge of defection under the Tenth Schedule, while it was in existence, only related to the political party.

A 2023 Constitution Bench judgment in *Subhash Desai versus Principal Secretary, Governor of Maharashtra*, confirmed that the 'original political party' and the 'legislature party' were "distinguishable concepts" under the Tenth Schedule.

The judgment said the Tenth Schedule recognised the independent existence of a legislature party only to the limited extent of presenting a defence for Members, who back a merger or split (the latter was omitted as a defence in 2003) initiated by the original political party, against bulk disqualification action.

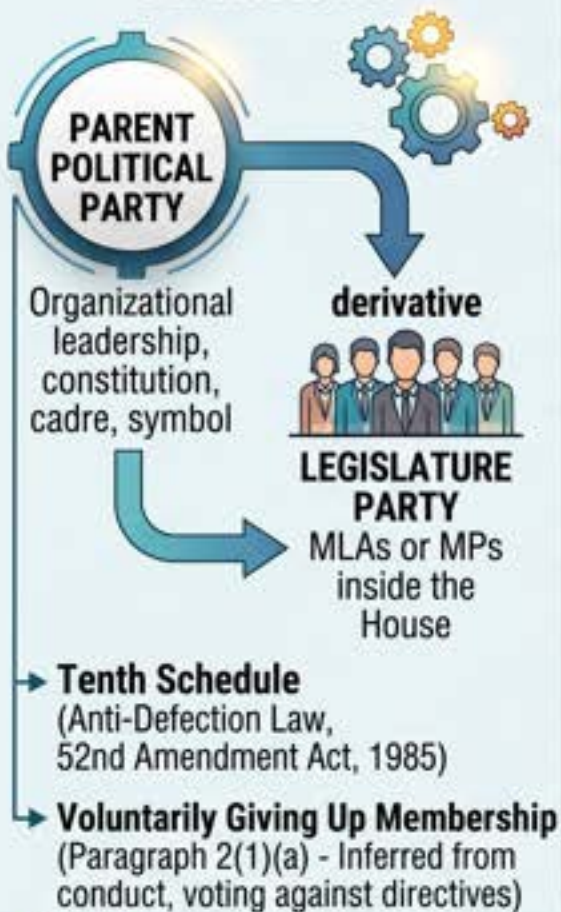
- **Key Terms and Explanations**
  - **Political Party (Parent Party):** The overarching registered political organization recognized by the Election Commission of India. It comprises the organizational leadership, cadre, constitution, and election symbol. The parent party is the entity to which citizens extend their electoral mandate during polls.
  - **Legislature Party:** The collective group of elected representatives (MLAs or MPs) belonging to a specific political party within a legislative house. While functioning inside the House, its existence is legally derivative of the parent political party.
  - **Tenth Schedule (Anti-Defection Law):** Inserted into the Constitution of India via the 52nd Constitutional Amendment Act, 1985. It sets out the grounds and process for disqualifying legislators who defect from their political party to preserve legislative stability.
  - **Voluntarily Giving Up Membership:** A ground for disqualification under Paragraph 2(1)(a) of the Tenth Schedule. The Judiciary has clarified that "voluntarily giving up membership" is not limited to formal resignation; it can be inferred from a lawmaker's conduct, such as voting against party directives, working against party interests, or attempting to overturn the parent party's leadership.
  - **Split vs. Merger Defense:** Under the original 1985 Anti-Defection provisions, a "split" involving at least one-third of a party's legislators protected them from disqualification. The 91st Constitutional Amendment Act, 2003 omitted the split exception entirely. Currently, defense against disqualification requires a "merger," where at least two-thirds of the legislature party members agree to merge with another political party, provided the original political party also decides on such a merger.
- **Main Arguments and Substantive Parts**
  - **Primacy of the Organizational Political Party:** The primary mandate in a parliamentary democracy belongs to the political party, not merely to individual elected candidates. Voters cast their ballots predominantly based on the party's ideology, manifesto, leadership, and election symbol. Consequently, an elected legislative wing remains subordinate to the parent organizational structure.
  - **Fallacy of Legislative Majority as Party Control:** A numerical majority within a legislature party does not grant lawmakers the authority to declare themselves the "real" political party or to alter party decisions unilaterally. Allowing a legislative faction to hijack the party organization undermines the foundational structure of party-based electoral politics.
  - **Limited Scope of Legislative Autonomy under the Tenth Schedule:** As affirmed in constitutional jurisprudence (notably *Subhash Desai v. Principal Secretary, Governor of Maharashtra*), the Tenth Schedule recognizes the legislature party primarily as a functional unit inside the House. Its independent existence is recognized only to offer a limited defense against disqualification during valid mergers, not to override the parent party's executive authority.
  - **Prevention of Engineered Mandates:** Permitting a subset of legislators to orchestrate split-like actions under the guise of an internal majority destabilizes elected governments. It converts the electoral process into a transactional exercise, allowing factional leaders to bypass the strict anti-defection prohibitions established by constitutional amendments.

- **Historical Evolution of the Issue**
  - **Pre-1985 Era ("Aaya Ram, Gaya Ram" Politics):** Following the 1967 general elections, Indian politics witnessed frequent floor-crossing by legislators switching allegiance for ministerial posts or financial gain. This structural instability led to the collapse of multiple state governments, prompting the creation of the P. Venkatasubbaiah High-Powered Committee in 1968 to examine defection.
  - **52nd Constitutional Amendment Act (1985):** Enacted under the Rajiv Gandhi administration, this amendment introduced the Tenth Schedule to the Constitution, penalizing floor-crossing while retaining exceptions for a one-third legislative "split" and a two-thirds "merger."
  - **Kihoto Hollohan v. Zachillhu (1992):** A landmark Supreme Court ruling that upheld the constitutional validity of the Tenth Schedule. It established that the Speaker/Chairman acts as a quasi-judicial tribunal when deciding defection petitions, making their final decisions subject to judicial review under Articles 226 and 136.
  - **91st Constitutional Amendment Act (2003):** Formulated on recommendations of the Law Commission (170th Report) and the Venkatachaliah Commission (NCRWC), this amendment deleted the "split" clause (Paragraph 3) to plug loopholes that permitted bulk defections. It raised the bar for protected mergers to two-thirds of the legislative wing.
  - **Contemporary Constitutional Jurisprudential Shift (2020–Present):** Recent Constitution Bench verdicts have refined the boundaries between the Election Commission's powers under the Symbols Order (1968) and the Speaker's duties under the Tenth Schedule, reinforcing that legislative majorities cannot retroactively legitimize acts of defection.
- **Way Forward**
  - **Independent Adjudicating Authority:** Shift the authority to decide defection cases from the Speaker/Chairman to an independent body—such as a permanent tribunal headed by a retired judge or the Election Commission of India—as recommended by the 170th Law Commission Report and the Supreme Court in *Keisham Meghachandra Singh (2020)*.
  - **Time-Bound Decision Making:** Mandate a strict statutory deadline (e.g., 3 months) within which defection petitions must be decided to prevent deliberate delays that alter legislative balances.
  - **Narrowing the Scope of Whips:** Limit the application of party whips under the Tenth Schedule exclusively to motions that affect government stability (such as No-Confidence Motions, Confidence Motions, Money Bills, and Budgetary Votes), restoring freedom of speech for legislators on general policy debates.
  - **Democratizing Inner-Party Structures:** Enact statutory regulations under the Representation of the People Act to mandate periodic, transparent internal elections within political parties, ensuring organizational decisions reflect broad intra-party consensus rather than high-command directives.

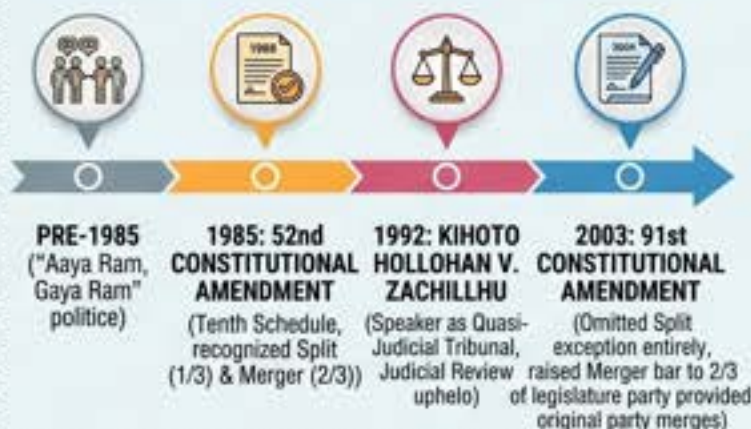


# AXIA IAS ACADEMY PRESENTS: A COMPREHENSIVE ANALYSIS OF INDIA'S ANTI-DEFECTION LAW (TENTH SCHEDULE): POLITICAL PARTIES, EVOLUTION, & THE DEMOCRATIC MANDATE

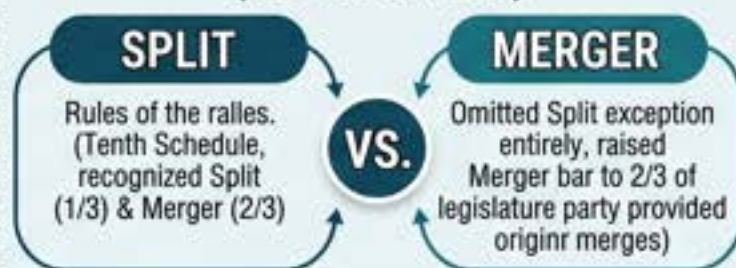
## FOUNDATIONS & DEFINITIONS



## HISTORICAL EVOLUTION TIMELINE



## SPLIT VS. MERGER DEFENSE (COMPARISON)



Post-2003 removed the Split enlitional rules on e:mphasion of the Split clause.

## MAIN ARGUMENTS & CONCEPTUAL FRAMEWORK

- Primacy of Organizational Political Party**  
(Electoral Mandate to Party)
- Fallacy of Legislative Majority as Party Control**
- Limited Scope of Legislative Autonomy under Tenth Tenth Schedule**
- Prevention of Engineered Mandates**

## MULTIDIMENSIONAL ANALYSIS



## WAY FORWARD

- 1. INDEPENDENT ADJUDICATING AUTHORITY**  
(e.g., Tribunal)
- 2. TIME-BOUND DECISION MAKING**  
(e.g., 3 months)
- 3. DEMOCRATIZING INNER-PARTY STRUCTURES**
- 4. NARROWING SCOPE OF WHIPS**  
(Limit to stability motions)

UPSC/NCERT LINKAGES (GS Paper 2, GS Paper 4, PSIR Optional, NCERT Class 10/11 Topics)



# Cut, copy: Why books are being destroyed to feed AI



ANAGHA JAVAKUMAR

RECENT weeks, bookstores in Australia and Europe have raised concerns about unusual, bulk purchases of books and reports that artificial intelligence (AI) companies are acquiring physical copies to maintain their datasets.

It is the manner of such training, however, that has caused alarm: unwanted documents in a copyright lawsuit against Anthropic revealed that the company was resorting to "destructive scanning", a process in which books are destroyed after their contents are scanned.

The *Guardian* reported recently that Australian bookstores had received requests for books ranging from rare and obscure titles to cheap paperback through to bestsellers. *Forbes* reported a similar incident involving a Dutch bookstore.

In many cases, intermediaries source books in bulk from sellers before sending them for digitisation, making it difficult for sellers to know who the eventual buyer is.

The reports build on earlier findings about Anthropic's Project Panama. In January, *The Washington Post* reported that the company had bought millions of physical books, removed their bindings and scanned them to build a massive collection of high-quality training data for its models.

The new reports suggest that a practice once visible mainly through covert filings and investigative reporting is now becoming visible further up the supply chain, with bookstores noting a unusual demand.

## Why books?

The terms AI and generative AI usually refer to a subset of artificial intelligence called large language models (LLMs). LLMs learn statistical patterns from enormous volumes of content and generate output based on the quality of data fed into them.

While the AI competition in recent times has largely centred on the race for computing power through chips, the push for physical books reflects a growing demand for another critical resource: high-quality training data.

For years, frontier AI companies have relied heavily on text scraped from the public Internet. But as AI-generated content

## • UNDER THE SCANNER: THE TWO WAYS TO DIGITISE BOOKS

### Non-destructive scanning

- Digitises a book without physically altering it, using a flatbed scanner or a special open.
- An overhead scanner photographs each page while the book remains fully intact.
- Ideal for rare or valuable books that must be preserved.

### Destructive scanning

- Digitises a book by cutting off the spine and separating the pages.
- Loose sheets are scanned individually using automated scanners, producing high-quality images.
- The process is irreversible, making it suitable only for replacement books that do not need physical preservation.



The 'Sciber' scanner used by Internet Archive. The non-profit digital library says it uses non-destructive digitisation.

has proliferated online and copyright disputes have made large-scale web scraping increasingly contentious, companies have begun looking elsewhere for reliable, human-written material. Books offer long-form, edited text across a wide range of subjects, much of which is either unavailable or difficult to obtain in digital form.

BNPb, which markets book-scanning services to AI companies, has argued that books published before the AI boom are particularly valuable because they are free of AI-generated content. As AI-generated content proliferates online, older books are increasingly seen as a source of cleaner training data.

Josiah Lemons, Visiting Professor at Humboldt-Universität zu Berlin, argues in an essay titled *AI is Eating the Book World* that the current debate over book digitisation began with Google Books, Google's effort to digitise millions of library books in the 2000s. The project sparked years of litigation over copyright and mass digitisation.

Lemons argues that the current digitisation efforts by AI companies resemble Google Books in technique but differ in purpose. Instead of making books searchable or accessible online, the goal is to convert them into machine-readable training data for AI systems.

### Destructive scanning

Many books are unavailable in e-book format, while publishers often control access to commercial ebooks. Physical copies therefore remain one of the simplest ways to obtain large volumes of text for digitisation.

## What Indian copyright law says

The legal position under Indian copyright law remains unsettled.

Section 52 of the Copyright Act, 1957, outlines the fair dealing exception, which allows the limited use of protected material without the owner's permission for specific purposes.

The present controversy extends beyond the acquisition of books to what happens to them during digitisation. Once acquired, the books must be converted into machine-readable text before they can be used for training. Many AI companies have turned to destructive book scanning, a process that permanently disassembles physical books for their high-speed digitisation. In the process, they cut the spines of books and feed the loose sheets into automated document scanners, creating images or scanned the remaining pages. The scanned images are then converted into text using optical character recognition, allowing AI models to ingest them during training.

Destructive scanning has long been used in some mass digitisation projects because it is faster and produces flat, high-quality images for optical character recognition. However, preservationists often favour non-destructive scanning to avoid damaging physical books.

The Internet Archive, a digital library best known for preserving web pages and digitising books, has long maintained that it uses non-destructive digitisation, photographing books without dismantling them to preserve the original copy.

In an analogy to *The Indian Express*, Chris Prentiss, Director of Library Services at Internet Archive, said the organisation's 2021 explanation of its scanning process "continues to be the best description of its digitisation process today".

In that post, the Internet Archive said its use of commercial book scanners, which

feature a vacuum-powered page-turning arm, threatened the integrity of both books, rare volumes and other special collections that its library partners wanted digitised.

## The legal questions

The acquisition and digitisation of physical books for AI training also raises a fresh set of copyright questions, even if the books themselves were lawfully purchased.

Anal George Scaria, professor at the National Law School of India University, argues that hoarding physical books and digitising them for AI training represents a middle ground between negotiating licenses with publishers and relying on shadow libraries. "Hoarding physical copies and getting them digitised for training appears to be the middle path taken by many AI developers now, as many presume that this is better to the authors and publishers," he told *The Indian Express*.

The legal position under Indian copyright law remains unsettled. "Whether this is a violation under copyright law may depend on different factors including the question of whether digitisation is done solely for the purpose of AI training or whether the files had moved it for other purposes also," Scaria said. "If it is done solely for the purpose of training, it should fall under the fair dealing exception under the copyright law," he added, citing the recent *OpenAI vs. AAO* decision.

The fair dealing exception, outlined in Section 52 of the Copyright Act of 1957, is a copyright provision allowing the limited use of protected material without the owner's permission for specific purposes such as private study, research, criticism, review, and news reporting.

Scaria made the case for training uses, saying that as non-expressive uses, which are not prohibited under copyright law, they could help advance research and innovation. "Any copyright-related matters that copyright owners have could be addressed by making AI developers liable when there is substantial disavowal to outputs. This may force AI developers to opt for license agreements with copyright holders," he said.

Scaria, however, argued that copyright law alone may not resolve the concerns of authors and publishers. "Many copyright holders have worries and concerns about the use of their works," he said, adding that "we should also explore solutions outside copyright law", including mandatory labelling of AI-generated content and funds to support authors and artists affected by large-scale AI adoption.

- **Key Terms and Explanations**
- **Large Language Models (LLMs):** Advanced artificial intelligence algorithms trained on massive text datasets to recognize, summarize, translate, predict, and generate human-like text based on statistical relationships between words.
  - *Example:* A model analyzing millions of sentences learns that the word "climate" is statistically likely to be followed by "change" or "policy."
- **Destructive vs. Non-Destructive Book Scanning:**
  - **Destructive Scanning:** The physical process of cutting off the spine of a printed book to feed loose pages rapidly through high-speed automated scanners. The book is permanently destroyed in exchange for rapid, high-resolution digital imaging.
  - **Non-Destructive Scanning:** The use of specialized overhead cameras, V-shaped cradles, and delicate mechanical arms (or human manual turning) to digitize books without damaging their binding or physical structure.
  - *Example:* Rare manuscripts in archives undergo non-destructive scanning, whereas modern paperbacks bought in bulk for dataset creation are often destructively scanned.
- **Pre-AI Knowledge vs. Synthetic Data Pollution:**
  - **Pre-AI Knowledge:** Text, literature, and scholarly work produced by human authors prior to the widespread availability of generative AI (generally before 2022). It is prized for original syntax, reasoning, and factual coherence.
  - **Synthetic Data Pollution (Model Collapse):** The degradation in quality that occurs when AI models are trained on text that was itself generated by previous AI models, leading to recursive errors, hallucinations, and stylistic monotony.
  - *Example:* Training an AI on human-written history books yields rich nuances, while training it on AI-generated blogs leads to repetitive, low-quality outputs over successive generations.
- **Fair Dealing (Section 52, Indian Copyright Act, 1957):** A statutory doctrine under Indian law that permits limited use of copyrighted material without the copyright owner's explicit permission, restricted to specific statutory purposes like private research, criticism, review, or news reporting.
  - *Example:* A university student photocopying a chapter of a textbook for personal study falls under fair dealing, but a company digitizing thousands of commercial books to build a subscription-based software product tests its legal boundaries.
- **Non-Expressive Use Defense:** A legal argument positing that ingesting copyrighted text into an AI model is not copyright infringement because the AI reads the text merely to extract non-expressive data—such as grammar, word frequency, and structural patterns—rather than copying or re-publishing the author's creative literary expression.
- **Shadow Libraries and Data Intermediaries:** Third-party brokers, digital repositories, or intermediaries that source, scan, or compile physical and digital books on a commercial scale, often masking the identity of the end buyer (such as tech developers) from authors and traditional booksellers.



- **Main Arguments and Substantive Parts**
- **The Data Scarcity Bottleneck and Demand for Pure Human Text:**
  - Generative AI models require vast volumes of textual data to improve reasoning capability and factual accuracy.
  - Web scraping public websites has reached a threshold of diminishing returns due to widespread "synthetic data pollution"—where online text is increasingly polluted by AI-generated content.
  - Physical books published prior to the AI expansion represent pristine, curated, and grammatically complex human knowledge. Consequently, technology companies are turning to mass physical book acquisition to build high-quality training datasets.
- **The Emergence of Destructive Scanning as an Industrial Standard:**
  - Non-destructive scanning is time-intensive and labor-heavy, making it suitable for cultural preservation but inefficient for commercial AI dataset development.
  - Developers utilize destructive scanning—slicing off book spines to pass pages through automated high-speed scanners—to convert physical books into digital text at scale.
  - This creates a paradox where physical culture is destroyed to construct virtual intellectual infrastructure.
- **The Physical-to-Digital Ownership Paradox:**
  - Under the long-standing "doctrine of first sale," purchasing a physical book grants the buyer legal ownership of that specific tangible object, allowing them to resell, lend, or physically destroy it.
  - However, purchasing a physical copy does not grant the digital copyright license required to reproduce, digitize, or transform that work into a machine-readable format for commercial product training.
  - The use of third-party intermediaries conceals the ultimate commercial application from booksellers and publishers, bypassing traditional licensing channels.
- **Legal Uncertainty Surrounding Non-Expressive Use and Fair Dealing:**
  - Legal frameworks worldwide are divided on whether ingestion of copyrighted text for machine learning constitutes copyright infringement or permissible fair use/dealing.
  - Proponents argue that machine training is "non-expressive" because the AI ingests computational relationships rather than reproducing verbatim pages, encouraging innovation without directly copying the work.
  - Rights-holders contend that using entire books to train commercial systems creates direct market substitutes, devaluing human authorship without providing attribution or compensation.
- **Beyond Copyright: The Need for Structural Market Interventions:**
  - Legal scholars argue that relying solely on copyright litigation is insufficient to address creator displacement and market imbalance.
  - Proposals emphasize structural economic mechanisms, such as mandatory transparency labels for AI content, collective licensing frameworks, and training-use levies to fund human creative ecosystems.



- **Historical Evolution of the Issue**
  - **Pre-Digital Statutory Roots (1950s–1990s):**
    - India enacted the Copyright Act of 1957, following standard international norms (such as the Berne Convention), focusing primarily on physical reproduction, print piracy, and unauthorized performance rights.
    - Copyright law during this period treated books as complete, physical cultural artifacts, with fair dealing provisions designed for physical libraries, academic research, and personal study.
  - **The Early Digital Era and Mass Digitization (Late 1990s–2000s):**
    - The advent of the internet brought digital copyright amendments and early digital rights management (DRM) standards.
    - The mid-2000s witnessed the Google Books Project, which digitized millions of library books to build a searchable digital index.
    - This sparked significant litigation (*Authors Guild v. Google* in the US), where courts eventually ruled that snippet displays and text indexing constituted transformative fair use, establishing an early legal basis for digital processing of printed works.
  - **The Archival Phase and Web Scraping Era (2010s):**
    - Non-profit institutions like the Internet Archive introduced non-destructive digital scanners (such as the Scribe system) to preserve rare, fragile, or out-of-print texts without damaging the originals.
    - Early machine learning models relied primarily on public web scraping (such as Wikipedia, digital news sites, and open web crawls) due to the abundance of free digital text, deferring direct engagement with physical book publishers.
  - **The Generative AI Boom and Data Scarcity Crisis (Post-2022):**
    - The rapid expansion of Large Language Models exposed the limitations of unstructured web data, which suffered from syntax noise, bias, and increasingly, AI-generated synthetic text.
    - To train reliable frontier models, tech firms sought structured, pre-AI human writing, leading to commercial demand for physical books.
    - Because publishers restricted digital enterprise access, companies turned to intermediaries to purchase physical books in bulk and apply industrial destructive scanning, shifting the legal debate from digital indexing to physical-to-digital extraction.



# AI DATA HUNGER: PHYSICAL BOOKS VS. LLM TRAINING - A COMPREHENSIVE ANALYSIS FOR UPSC CSE PREPARATION

## Physical to Digital Methods

PRE-AI PURE HUMAN THOUGHT IS THE PRIZED TRAINING DATA.



**Non-Destructive Scanning**  
Preservation Focus,  
Ideal for Rare Books.



**Destructive Scanning**  
Volume Focus, Sliced  
Spines, Loose Pages.

PRE-AI PURE HUMAN THOUGHT IS THE TRAINING DATA.

## Multidimensional Analysis



Pile of a culture,  
**Social**



**INDIAN COPYRIGHT  
ACT SECTION 52**



**International**  
Cross-border data  
flows & international  
treaties



**Political**



**Ethical**  
Conflicting &  
arrows



**Economic**  
AI and downs of  
coin; and coins for  
author income

## UPSC CSE Syllabus Linkage Chart

| Paper | GS-2                      | GS-3                             | GS-4                 |
|-------|---------------------------|----------------------------------|----------------------|
| GS-1  | • Governance,<br>• Policy | • S&T, IPR<br>• Economy          | Technology<br>Ethics |
| GS-2  | • Governance,<br>• Policy | • S&T, IPR<br>• Economy          | Technology<br>Ethics |
| GS-3  | • Poverty<br>• Culture    | • Technology<br>Ethics<br>Option |                      |

## Way Forward: Key Reforms

- Statutory Clarification on AI Training Use
- Collective Licensing Frameworks
- Adopt Non-Destructive Ingestion Standards
- Mandatory Data Transparency and Provenance





• LEGAL

## How SC's gender guide differs from the 2023 version

Vineet Bhalia

New Delhi, August 5

TRIAL COURT judges must actively prevent the secondary traumatisation of sexual assault survivors, control aggressive cross-examinations and develop an "Emotional Quotient" to handle cases involving crimes against women. These are among the key recommendations laid out in a new Supreme Court report published Monday, aimed at bringing gender sensitivity to the Indian judiciary.

The report, 'Judgments and Gender: Sensitivity and compassion in writing judgments', has been drafted by an expert panel headed by retired Supreme Court judge Justice Aniruddha Bose. This marks a shift from a 2023 handbook the top court had published, which focused on helping judges identify and avoid patriarchal language.

### *"Compassionate court practices"*

The new report addresses the trauma that a victim faces in the criminal justice system. It notes that judges require an "Emotional Quotient" to supplement their "Intelligence Quotient" when discharging judicial functions.

The report highlights how survivors are routinely met with insensitive remarks from police and authorities. Such remarks, it notes, traumatise them and deter them from seeking justice.

### WHAT TO AVOID

- Instead of writing that a crime 'destroys the very soul of a helpless woman', judges are advised to write that the crime 'caused severe trauma to the survivor'.
- The report asks judges to refrain from using religious or cultural references, and focus strictly on legal rights.

To combat this, the report recommends "compassionate court practices". It urges judges to use the Bharatiya Sakshya Adhiniyam's provisions that bar defence lawyers from asking indecent or annoying questions. This is particularly relevant to questions about a survivor's sexual history, which the report reiterates is immaterial to a rape trial.

The report advocates treating witnesses as "guests" invited to help the court, rather than going through "long waits and poor treatment in court". It also recommends pre-trial counselling for victims to alleviate anxiety and that trials for sexual offences be held in private, closed-door proceedings to protect the survivor's privacy.

### *Shift in language*

Both the new report and the 2023 handbook contain glossaries of terms to avoid, but their focus areas are different. While the 2023 handbook, issued under then Chief Justice of India (CJI) D.Y. Chandrachud, was designed to replace colloquial or archaic words with neutral legal terms, the 2026 report targets the moralistic terms recurring in trial court judgments. After analysing 125 trial court verdicts, the Justice Bose-led committee curated a list of problematic phrases to avoid.

### *Why a new report*

The arc of the new report can be traced back to a March 2025 judgment of the Allahabad High Court, in which the court ruled that acts such as grabbing a woman's breasts and loosening her pyjama string constituted only a "preparation" to commit rape, rather than an "attempt" to rape. The Supreme Court took suo motu cognisance, setting it aside in February 2026. During the hearings, CJI Surya Kant scrutinised the 2023 handbook's utility, calling it "too Harvard-oriented", suggesting it was too elite or theoretical for the Indian context. The court had directed the National Judicial Academy, where Justice Bose serves as director, to form a committee of domain experts to frame practical training guidelines.





## • Key Terms and Explanations

- **Secondary Traumatization:** The psychological and emotional distress inflicted upon crime survivors by the institutional processes of the legal system itself. This occurs through aggressive cross-examination, insensitive judicial questioning, or public exposure of personal history.
    - *Example:* A survivor of sexual assault being repeatedly asked in open court to demonstrate physical actions or describe personal trauma in explicit detail without procedural safeguards.
  - **Emotional Quotient (EQ) in Judicial Practice:** The capacity of a judicial officer to recognize, process, and manage emotional context and trauma during courtroom proceedings, complementing technical legal knowledge (IQ).
    - *Example:* A trial judge noticing a witness exhibiting severe distress, pausing court proceedings, offering a brief recess, and ensuring cross-examination proceeds without intimidation.
  - **Compassionate Court Practices:** Procedural norms designed to prioritize victim dignity, psychological comfort, and safety without compromising trial fairness.
    - *Example:* Scheduling proceedings to minimize long waiting times for survivors, providing pre-trial counseling, and treating witnesses as invited contributors to justice rather than burdened entities.
  - **In-Camera Proceedings:** Court hearings conducted in private before the judge, essential court staff, and litigating parties, excluding the general public and press to protect survivor privacy and prevent public humiliation.
    - *Example:* Holding a trial involving sensitive personal crimes behind closed doors to create a secure environment for testimony.
  - **Moralistic Jurisprudence:** An outdated judicial approach where verdicts, sentencing, or observations rely on subjective societal notions of morality, chastity, or "modesty" rather than strictly objective statutory evidence and constitutional principles.
    - *Example:* Describing a victim as "a woman of loose character" or claiming an offence "destroys the very soul of a woman," rather than recording that the act "caused severe physical and psychological trauma."
  - **Preparation vs. Attempt (Criminal Jurisprudence):** A fundamental legal distinction in criminal law. *Preparation* consists of devising or arranging the means necessary for committing a crime, while an *Attempt* is a direct movement toward execution that would result in the completed crime unless interrupted.
    - *Example:* Purchasing a weapon is preparation; aiming and pulling the trigger (even if the weapon misfires) constitutes an attempt.
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- **Main Arguments and Substantive Foundations**

- Substantive judicial reform requires moving beyond theoretical guidelines toward operational changes in courtroom procedures and judgment writing.

- **The Shift from Theoretical Guidance to Trial Court Operations**

- Initial efforts at judicial gender sensitization focused primarily on identifying gender tropes and substituting archaic terminology with neutral language. However, abstract academic guidelines often failed to address the practical pressures faced by subordinate trial courts. Effective reform demands a shift toward actionable training that alters how lower court judges manage daily trials, interact with witnesses, and draft verdicts.

- **Trauma-Informed Judicial Administration**

- The legal system must balance technical legal proficiency (IQ) with institutional empathy (EQ). Survivors of sexual and gender-based violence frequently endure administrative hostility from police and court machinery, causing high drop-out rates in litigation and witness suppression.

- **Witness Dignity:** Courts must treat witnesses as essential contributors to the justice system, reducing unnecessary trial delays and eliminating hostile courtroom environments.
- **Statutory Protections:** Trial judges must actively enforce procedural safeguards, such as those embedded within the *Bharatiya Sakshya Adhiniyam* (BSA), which explicitly bar defense counsel from asking irrelevant, indecent, or annoying questions regarding a survivor's sexual history.

- **Eliminating Moralistic Language in Judgment Writing**

- Judgments must strictly reflect objective legal analysis rather than emotional or moral rhetoric.
- **Neutral Language:** Phrases such as "destroying the virtue of a helpless woman" perpetuate patriarchal notions that a survivor's moral worth is tied to physical purity.
- **Objective Recordkeeping:** Courts are required to describe offences in precise legal terms—focusing on physical harm, psychological trauma, and statutory violations—while discarding religious, cultural, or patriarchal references.

- **Correcting Misapplications of Criminal Thresholds**

- Judicial higher-ups must actively correct lower court errors that misinterpret the threshold between "preparation" and "attempt" in sexual offences. Classifying overt acts of sexual violence as mere "preparation" undermines the severity of the crime and weakens deterrence. Supreme Court intervention ensures uniform application of the law across all tiers of the judiciary.



- **Historical Evolution of the Issue**
  - **Pre-Independence to Late 20th Century:**
    - Criminal law inherited colonial frameworks centered on protecting a woman's "modesty" rather than guaranteeing individual bodily autonomy.
    - Evidentiary rules routinely permitted character assassination. Section 155(4) of the Indian Evidence Act allowed a victim's general immoral character to be cited to challenge her credibility in rape trials.
  - **The 1979 Watershed Moment (Mathura Rape Case):**
    - The Supreme Court's acquittal of accused police officers in *Tukaram v. State of Maharashtra (1979)* based on passive submission led to widespread legal criticism.
    - This sparked the Criminal Law (Amendment) Act of 1983, introducing Section 114A to establish a presumption of absence of consent in specific custodial rape prosecutions and restricting public identification of victims.
  - **Procedural Reforms and Judicial Safety Protocols (1990s–2000s):**
    - *Vishaka v. State of Rajasthan (1997)* recognized gender equality and dignity as non-negotiable constitutional guarantees under Article 21.
    - *Sakshi v. Union of India (2004)* mandated trial court protections during cross-examination, recommending screen barriers and preventing direct confrontation between survivors and the accused.
  - **Justice Verma Committee and Statutory Overhaul (2013):**
    - Following the 2012 Delhi gang-rape incident, the Justice Verma Committee recommended systemic changes in criminal law.
    - The Criminal Law (Amendment) Act, 2013 expanded definitions of sexual offences, criminalized stalking and voyeurism, strictly prohibited character evidence, and introduced mandatory in-camera trials.
  - **Language Reforms and Subordinate Judiciary Focus (2023–Present):**
    - The Supreme Court issued the 2023 *Handbook on Combating Gender Stereotypes* to eliminate gender-biased language from legal discourse.
    - Recent directives have turned attention toward the trial courts, tasking judicial academies with delivering practical, simulation-based training to ensure courtroom practices align with statutory protections under the *Bharatiya Sakshya Adhiniyam*.





AXIA IAS ACADEMY PRESENTS:

## GENDER-SENSITIVE GUIDELINES FOR TRIAL COURTS - A COMPREHENSIVE ANALYSIS

Fostering Compassionate and Ethical Adjudication



### TRAUMA-INFORMED JUSTICE & EQ



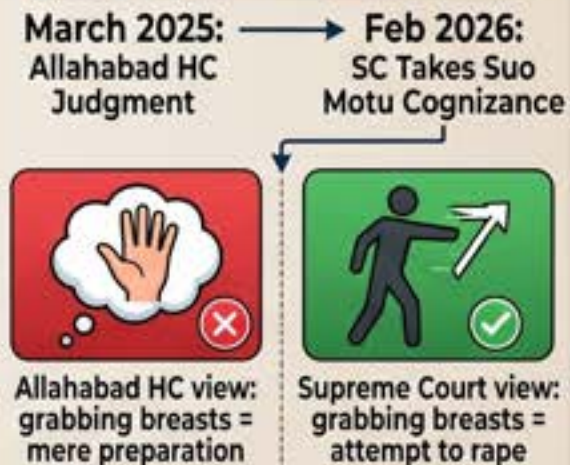
### COMPASSIONATE COURT PRACTICES



### SHIFT IN LANGUAGE (2023 vs. 2026)



### WHY A NEW REPORT? (Key Trial Precedent)





# Misri urges Sri Lankan govt. to conduct provincial elections

**Meera Srinivasan**  
COLOMBO

Foreign Secretary Vikram Misri on Wednesday urged the Sri Lankan leadership to hold the long-delayed elections to the Provincial Councils "at the earliest" and to "fully implement" constitutional provisions to meet the aspirations of the Tamil people, according to the Ministry of External Affairs (MEA).

Issued following Mr. Misri's day-long visit to Colombo, the Ministry's statement further highlighted bilateral discussions on Indian assistance to Sri Lanka's recovery from Cyclone Ditwah, collaborations in the energy sector, and possible upgrade of the trade agreement.

The two sides discussed modalities for the faster implementation of India-backed initiatives, including the Unique Digital Identity project, development of Trincomalee as an energy hub, and the rehabilitation and modernisation of



Foreign Secretary Vikram Misri with Sri Lanka President Anura Kumara Dissanayake in Colombo on Wednesday. @INDIAINSL/X

Kankesanthurai harbour in Jaffna.

A media statement from President Anura Kumara Dissanayake's office said the discussions focused on "further strengthening cooperation". However, it made no mention of any discussion of the provincial elections, revealing an apparent difference in the two sides' priorities in messaging. President Dissanayake's office said he sought India's support and

"fullest cooperation" in combating drug trafficking, and underscored the importance of regional cooperation in addressing the challenges posed by climate change.

The reference in New Delhi's statement to the provincial elections draws attention at a time when a recently formed common platform, representing Sri Lanka's Tamil-speaking ethnic minorities, has been pushing for the same.

- **Key Terms and Explanations**
  - **13th Amendment to the Sri Lankan Constitution (13A):** An amendment enacted in 1987 following the signing of the Indo-Sri Lanka Accord. It mandated the devolution of power to nine provinces and made Tamil an official language alongside Sinhala.
    - *Example:* Similar to the distribution of subjects under the Seventh Schedule of the Indian Constitution, 13A created Provincial Lists to grant local governance autonomy to Tamil-majority regions in the North and East.
  - **Provincial Councils (PCs):** Sub-national elected bodies established under the 13th Amendment designed to decentralize administrative and legislative authority.
    - *Example:* Functionally analogous to State Legislative Assemblies (Vidhan Sabhas) in India, intended to address regional governance demands locally.
  - **Trincomalee Energy Hub:** A joint strategic infrastructure venture aimed at redeveloping the historic WWII-era oil tank farms in Trincomalee, establishing renewable energy parks, and creating a deep-water port logistics center.
  - **Kankesanthurai (KST) Harbour:** A strategic commercial port located in the Jaffna Peninsula of Northern Sri Lanka. Its rehabilitation, funded via Indian Line of Credit (LoC), reconnects maritime trade across the Palk Strait to Southern India.
  - **Sri Lanka Unique Digital Identity (SL-UDI) Project:** A bilateral technology transfer initiative wherein India provides technical and financial assistance to build Sri Lanka's biometrics-based national identity stack.
    - *Example:* Modeled directly on India's *Aadhaar* architecture to streamline public service delivery and financial inclusion.
- **Main Arguments and Substantive Parts**
  - **Imperative of Grassroots Political Devolution:** India consistently maintains that permanent peace, national reconciliation, and stability in Sri Lanka are contingent upon satisfying the democratic aspirations of the Tamil minority through the early conduct of Provincial Council elections and full implementation of constitutional guarantees.
  - **Strategic Economic Interdependency as an Anchor:** New Delhi prioritizes tangible, high-impact developmental infrastructure—including digital stacks (SL-UDI), port modernizations (KST Harbour), and energy grid connectivity (Trincomalee)—to create deeply integrated economic supply chains between both nations.
  - **Divergence in Diplomatic Framing:** While Indian diplomatic engagements firmly foreground Tamil political rights alongside developmental aid, Colombo frequently highlights economic stabilization, climate security, and counter-narcotics cooperation, reflecting sensitive domestic political considerations regarding Tamil devolution.
  - **Cooperation in Non-Traditional Security Domains:** Assistance during natural disasters (e.g., Cyclone Ditwah relief), joint anti-narcotics operations, and shared climate resilience strategies serve as indispensable soft-power instruments that build regional goodwill and maintain maritime domain awareness in the Indian Ocean Region (IOR).



- **Historical Evolution of the Issue**

- **Post-Independence Strain (1948–1986):** Institutionalized disenfranchisement of Indian-origin plantation Tamils (via the Ceylon Citizenship Act of 1948) and language imposition (1956 Sinhala Only Act) triggered structural marginalization, civil unrest, and the emergence of militant Tamil nationalism.
- **Indo-Sri Lanka Accord & 13th Amendment (1987):** Prime Minister Rajiv Gandhi and President J.R. Jayewardene signed the landmark accord to halt the ethnic war. It established the Indian Peace Keeping Force (IPKF) deployment and embedded the 13th Amendment into Sri Lanka's constitution to devolve administrative powers.
- **War Phase and Devolution Frozen (1988–2009):** Armed conflict between the Sri Lankan military and the LTTE paralyzed provincial governance. The northern and eastern provinces remained militarized, and devolution was suspended indefinitely.
- **Post-Civil War Realities & Electoral Delays (2010–2018):** Following the military defeat of the LTTE in 2009, promises of "13A Plus" (devolution beyond constitutional mandates) remained unfulfilled. Provincial Council elections hit a legal stalemate in 2018 over proposed electoral system reforms, leaving provinces under bureaucratic rule by presidential-appointed governors.
- **Economic Crisis & Strategic Realignment (2022–Present):** Sri Lanka's catastrophic economic crash prompted India to extend over \$4 billion in financial and humanitarian aid. The political transition in Colombo brings new opportunities and challenges for reviving grassroots democracy while counterbalancing foreign footprints.

- **Way Forward**

- **Establish a Clear Election Roadmap:** Colombo should set a firm, time-bound legal framework to resolve delimitation bottlenecks and execute Provincial Council elections without delay.
- **Implement Phased Administrative Devolution:** Begin by fully decentralizing non-controversial subjects like health, education, agriculture, and local infrastructure, building administrative trust before addressing sensitive land and police powers.
- **Fast-Track Strategic Infrastructure Projects:** Accelerate the execution of the Trincomalee energy hub, KST port modernization, and the SL-UDI system to demonstrate tangible economic benefits for all Sri Lankan citizens.
- **Institutionalize Track-1.5 Dialogue Platforms:** Create multi-stakeholder dialogues involving Central Sri Lankan political leaders, Tamil provincial representatives, and Indian interlocutors to build domestic political consensus.
- **Expand Maritime and Humanitarian Frameworks:** Broaden institutional cooperation in anti-narcotics task forces, climate resilience, and joint search-and-rescue protocols across the Palk Strait.

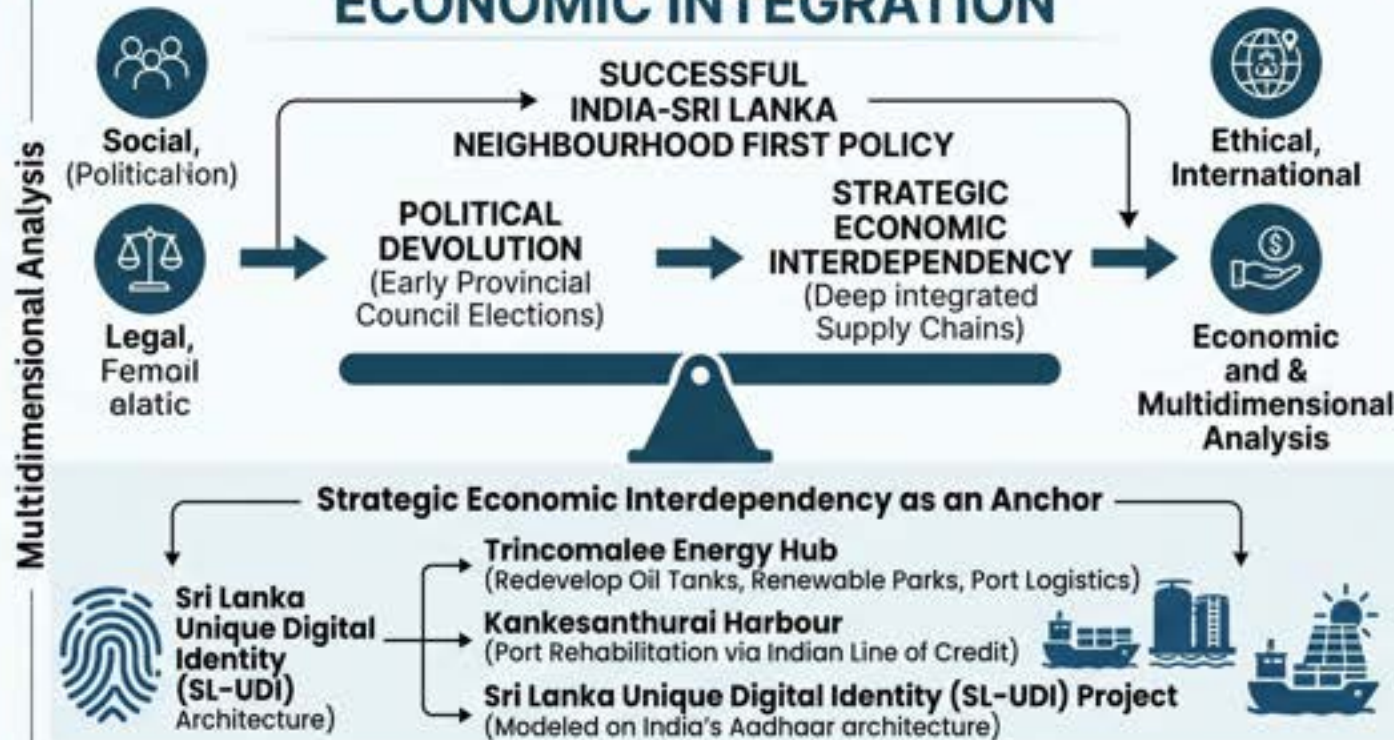
## HISTORICAL EVOLUTION

- Post-Independence Strain (1946) (1948-1986)
- Indo-Sri Lanka Accord & 13A (1987)
- War Phase & Devolution Frozen (1988-2009)
- Post-Civil War Realities (2010-28) (2010-2018)
- Economic Crisis & Strategic Realignment (2022-Present)

## NCERT CLASS LINKAGES

- Democratic Politics II-Ch 1
- Contemporary World Politics-Ch 5
- Politics in India-Ch 8

# BALANCING POLITICAL STABILIZATION & ECONOMIC INTEGRATION



## UPSC CSE SYLLABUS MAPPING MATRIX



## PREVIOUS YEARS' QUESTIONS (UPSC/APSC)

- 13th Amendment country question Country question For 2006,
- 13th Amendment sentence in human stenteraty question Country question)

## KEY TERMS & CHALLENGES

- 13th Amendment (13A)**  
13h Amendment rower council: eosording the ouncit of IndiaSri Lanka
- Provincial Councils (PCs)**  
Provincial Councils temiits to managosunntorsal education, politics (ror daneralisns)

## CHALLENGES

- Divergence in Diplomatic Framing**  
(Tamil Rights vs. Economic Stabilization)
- Non-Traditional Security Domain Cooperation**  
(Disaster relief, anti-narcotics, climate resilience)

## WAY FORWARD

- Election Roadmap
- Phased Devolution
- Fast-Track Projects
- Institutional Dialogue



# RBI has enough funds to pay for UPI use

The government has introduced a Bill in Parliament that will allow it to notify the kinds of transactions that can attract such a charge; However, an analysis by The Hindu has found that RBI itself has sufficient funds to pay for the platform's use without having to charge merchants or customers

**T.C.A. Sharad Raghavan**  
NEW DELHI

**R**eserve Bank of India Governor Sanjay Malhotra on Wednesday said that "someone will have to pay the cost" of UPI transactions, which are currently free for merchants and customers. The cost is currently being borne by banks and the National Payment Corporation of India.

Mr. Malhotra was responding to media queries in the context of recent moves by the government to pave the way for a charge to be levied on such transactions.

If implemented, certain merchants would have to pay banks for the use of the UPI platform, which experts say they would pass

on to customers.

An analysis by *The Hindu* has found that the RBI itself has more than enough funds to pay for the UPI platform's use, without involving any additional charge on merchants or customers.

This additional cost would amount to between 3-8.5% of what the central bank transferred to the Union government as its annual surplus.

## Surpluses double

Further, even with the volume of UPI transactions growing 425% over the last five years, the quantum of surpluses transferred by the RBI to the Union government has grown at more than double that rate.

"The costs have to be



The costs have to be paid by someone... we all want that this public infrastructure should continue to strengthen. Let's wait and watch

**SANJAY MALHOTRA,**  
RBI Governor

paid by someone," Mr. Malhotra said. "We all want that this public infrastructure should continue to strengthen. Let's wait and watch for further developments on this."

"The cost is already getting passed on," he added.

"It may not be directly on to the very user, but someone is paying the cost. This is what I meant when I said someone will have to pay the cost. What is important is that we continue

to invest and we continue to find the means, whether it is MDR or other things."

A provision in the Taxation and Other Laws (Amendment) Bill, 2026 introduced in Parliament by the government on Tuesday dilutes the earlier restrictions imposed on banks from imposing charges such as a Merchant Discount Rate (MDR) on UPI transactions.

Instead, it says that the government can notify the

kinds of transactions that can attract such a charge.

## Cost of running UPI

According to sources in the government, the proposal to allow banks to levy an MDR is currently limited to a small sub-set of merchants – those with an annual turnover of ₹1-1.5 crore – and to transactions above ₹2,000 in value.

However, the wording of the Bill provides an avenue for this charge to be levied on a wider set of transactions in the future.

According to banking industry officials, the UPI platform currently costs about ₹0.4-1 per transaction to operate and maintain. Official data shows that 24,161.69 crore UPI transactions were conducted in 2025-26. This would

peg the cost of running the platform at ₹9,664-24,161 crore per year.

The RBI earned approximately ₹4.3 lakh crore in 2025-26. Out of this, it transferred about ₹2.9 lakh crore to the Union government as surplus for 2025-26. The cost of running the UPI platform that year would have worked out to 3-8.5% of this amount.

RBI surplus transfers have grown from ₹30,307.45 crore in 2021-22 to about ₹2.9 lakh crore in 2025-26, a growth of 857%. Over this period, the volume of UPI transactions grew 425%.

This shows that, even with this rapid growth in UPI adoption, the RBI surpluses have grown more than enough to cover the cost of all UPI transactions.

- **Key Terms and Explanations**

- **Unified Payments Interface (UPI):** An instant, real-time payment system developed by the National Payments Corporation of India (NPCI). It facilitates inter-bank peer-to-peer (P2P) and person-to-merchant (P2M) transactions seamlessly via a mobile platform using a virtual payment address (VPA). *Example: Scanning a QR code at a local grocery store to transfer ₹50 directly from your bank account to the merchant's account without entering bank account numbers.*
- **Merchant Discount Rate (MDR):** The fee charged to a merchant by the payment processing bank for accepting digital payments. It is typically expressed as a percentage of the total transaction value and is split between the acquiring bank, the payment gateway, and the card/network issuer. *Example: If a consumer spends ₹1,000 using a credit card and the MDR is 1.5%, the merchant receives ₹985, while ₹15 is distributed among the financial intermediaries.*
- **Zero-MDR Regime:** A regulatory mandate introduced by the Indian government in January 2020 that prohibited banks and payment aggregators from charging any MDR on transactions processed via UPI and RuPay debit cards.
- **Digital Public Infrastructure (DPI):** Open, interoperable, and inclusive technological platforms—often likened to digital roads or bridges—built with public oversight to deliver essential services at national scale. The "India Stack" (comprising Aadhaar, UPI, and DigiLocker) represents the global blueprint for DPI.
- **RBI Surplus Transfer:** The annual profit generated by the Reserve Bank of India through its foreign exchange management, interest on government securities, and liquidity operations, which is transferred to the Central Government under Section 47 of the RBI Act, 1934, following guidelines established by the Bimal Jalan Committee.
- **National Payments Corporation of India (NPCI):** An umbrella organization created in 2008 as a joint initiative of the RBI and the Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, to operate retail payments and settlement systems across India.





- **Main Arguments and Substantive Parts**

- **Core Thesis**

- Sustaining India's digital payment ecosystem requires resolving a fundamental policy conflict: whether digital transaction infrastructure should be treated as a purely state-subsidized public good funded by central bank surpluses, or as a commercial service maintained through a targeted, tier-based Merchant Discount Rate (MDR).

- **Key Arguments for Reintroducing Charges (Selective MDR)**

- **Financial Sustainability of Banking Infrastructure:** Processing hundreds of billions of UPI transactions requires massive compute capacity, server redundancy, and advanced cybersecurity defenses. The cost of running and maintaining the platform ranges between ₹0.4 and ₹1.0 per transaction. Depriving banks and Payment Service Providers (PSPs) of processing revenues creates an unsustainable financial drag, leading to higher system downtime and server failures.
- **Addressing the Free-Rider Problem:** Large commercial entities and high-turnover enterprise merchants benefit significantly from digital sales, reduced cash handling, and instant settlement, yet pay zero fees. A tiered system targeting large businesses (e.g., annual turnover exceeding ₹1–1.5 crore or transactions above ₹2,000) ensures that high-value commercial beneficiaries contribute to network maintenance.
- **Spurring Innovation in Fintech:** Zero revenues disincentivize private investment in payment safety, cross-border integration, and merchant hardware. Reintroducing a calibrated fee structures revitalizes revenue models for payment technology startups.

- **Key Arguments for Absorbing Costs via Public/RBI Funds**

- **Surplus Capital Availability:** The central bank's annual surplus transfers to the Union Government have expanded significantly—growing over eight-fold in recent years to reach multi-lakh-crore levels. The annual operational cost of running the entire UPI network represents a small fraction (roughly 3% to 8.5%) of this transferred surplus, making public funding fiscally feasible.
- **Public Good Externalities:** Digital payment networks generate immense positive macroeconomic externalities, including the formalization of the shadow economy, broader tax compliance under GST, and reduced sovereign expenditure on physical cash printing, storage, and transport.
- **Risk of De-digitization:** Imposing charges on merchants creates a risk of cost pass-through to final retail consumers or, worse, drives smaller businesses back into cash transactions, undermining hard-won financial inclusion gains.

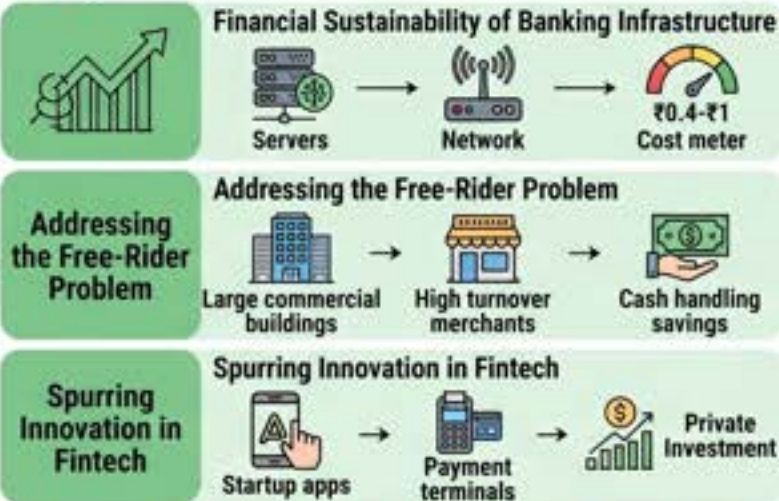
- **Historical Evolution of the Issue**
  - **Pre-2016 Era (Dominance of Cash & High-Cost Rails):** Retail payments were dominated by cash and card networks (Visa/Mastercard) bearing high MDRs (1.5% to 2%). Digital payment adoption remained confined to urban elites and formal enterprise sectors due to merchant reluctance to absorb card swipe fees.
  - **2016 (Launch of UPI & Structural Reset):** Launched by NPCI in April 2016, UPI transformed retail payments. Post-demonetization, adoption surged. However, processing banks continued to levy nominal MDR fees to recoup operational expenditures.
  - **2020 (Introduction of Zero-MDR Framework):** To accelerate cash-to-digital transformation and broaden tax bases, the Finance Act mandated a zero-MDR regime for UPI and RuPay starting January 1, 2020. The Union Government introduced budgetary support allocations to reimburse banks, but financial institutions consistently criticized these subsidies as insufficient to cover actual operational expenses.
  - **2022–2025 (Exponential Growth and Infrastructure Friction):** UPI transaction volumes expanded by over 400%, processing tens of billions of transactions annually. Banks faced mounting operational losses and severe network congestion. The central bank's annual surplus transfers to the government grew from around ₹30,000 crore to several lakh crores, sparking intense policy debate over using central bank surpluses to support digital infrastructure.
  - **2026 Onward (Legislative Transition to Tiered Frameworks):** Introduction of legislative amendments empowering the government to selectively notify categories of transactions that attract MDR. This marks a shift away from universal zero-tariff policies toward a structured, high-value merchant pricing model.
- **Way Forward**
  - **Establish a Tiered, Threshold-Based MDR Framework:** Maintain a permanent **Zero-MDR policy for small merchants** (turnover under ₹50 lakh) and micro-transactions (under ₹2,000) to protect financial inclusion gains. Apply a small, capped MDR fee for enterprise merchants and large commercial transactions.
  - **Institutionalize a Sovereign Digital Public Infrastructure Fund (DPIF):** Earmark a fixed percentage (e.g., 3% to 5%) of the RBI's annual surplus transfer specifically for a dedicated, legally bound Digital Infrastructure Support Fund. This fund can directly reimburse acquiring banks and NPCI for documented operational costs, protecting central government budgetary allocations.
  - **Promote Diversified Revenue Models for Fintechs:** Encourage banks and payment aggregators to move away from transaction-fee dependence by offering value-added financial services, such as embedded sachet credit, digital insurance distribution, and merchant analytics platforms.
  - **Strengthen Cybersecurity & System Redundancy:** Require a portion of payment revenues (whether from state funds or MDR) to be reinvested in cybersecurity defenses, AI-driven fraud detection, and multi-bank server redundancy to minimize transaction failures.
  - **Establish transparent regulatory oversight under the RBI:** Ensure the RBI and NPCI conduct periodic, independent cost audits of banking technology systems to determine the actual cost per transaction, preventing inflated MDR claims while maintaining system sustainability.



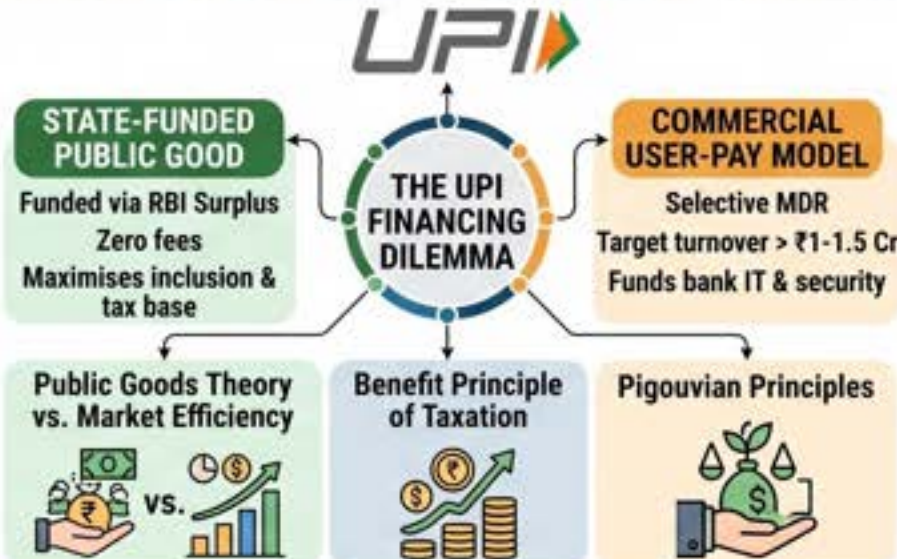


## THE UPI FINANCING DILEMMA: BALANCING PUBLIC GOOD AND COMMERCIAL SUSTAINABILITY

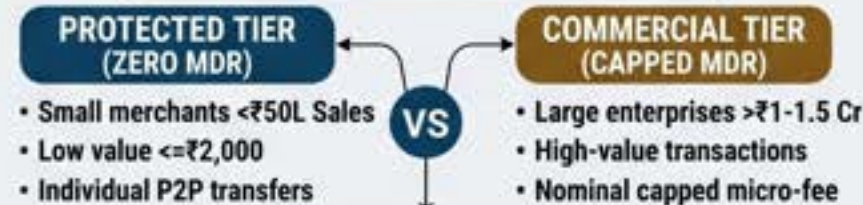
### Arguments for REINTRODUCING SELECTIVE MDR



### Arguments for ABSORBING COSTS (STATE/RBI FUNDS)



### PROPOSED MDR TIER STRUCTURE



### Other Proposals



### HISTORICAL EVOLUTION

| Pre-2016                                                                                 | 2016                                                                                 | 2020                                                                                                         | 2022-25                                                                                                       | 2026+                                                                                                      |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Impact of demonetisation (Pre Surplus)</li> </ul> | <ul style="list-style-type: none"> <li>Zero- MDR</li> <li>Zero-MDR on MDR</li> </ul> | <ul style="list-style-type: none"> <li>Selective MDR transfers</li> <li>Funds bank &amp; security</li> </ul> | <ul style="list-style-type: none"> <li>Funds the bank IT</li> <li>Conserves turnover &amp; revenue</li> </ul> | <ul style="list-style-type: none"> <li>Balanced economic development</li> <li>Reverge Zero-MDRs</li> </ul> |

### MULTIDIMENSIONAL ANALYSIS



### UPSC & APSC PYQs: FOCUS AREAS

- Impact of Zero-MDR on Banks
- Role of DPI in Inclusion
- RBI Surplus Transfer Debates
- Balanced Development
- Exmact of MDR Innovations
- R6% of DPI in Inclumens
- Democratics Debates
- Balanced Development



# 'Police modernisation scheme awaits Finance Ministry's nod'

Aaratrika Bhaumik  
NEW DELHI

The Union government informed the Supreme Court on Wednesday that a proposal seeking in-principle approval for an umbrella scheme for the modernisation of police forces across the country had been sent to the Department of Expenditure under the Union Ministry of Finance.

Additional Solicitor-General Rajkumar Bhaskar Thakare, appearing for the Centre, told a Bench of Justices Vikram Nath and Sandeep Mehta that the proposal was forwarded on July 8, 2026 and was currently under consideration.

The submission was made in a *suo motu* proceeding initiated in 2025 after the court took note of a media report highlighting non-functional CCTV cameras at police stations in Udaipur, Rajasthan. The court had subsequently sought compliance reports from the Centre, States,

**The Centre made the submission before the SC in a hearing on non-functional CCTV cameras at police stations**

and Union Territories while reviewing the implementation of its 2021 judgment in *Paramvir Singh Saini vs Baljit Singh*, which mandated the installation of CCTV cameras at key locations within police stations.

Earlier, the Bench had urged the Union government to consider requests from States for the release of funds to install CCTV cameras and establish a centralised monitoring dashboard covering police stations.

On Wednesday, Justice Mehta asked whether the proposed umbrella scheme would be confined to infrastructure or would also extend to the augmentation of human resources. Mr. Thakare informed

the Bench that the scheme was intended to cover the modernisation of the police force as a whole.

Describing the development as "significant progress", the Bench directed the Centre to place details of the proposal on record through an affidavit within two weeks, and posted the matter for further hearing on September 1.

The Bench was also informed that the Assistance to States and Union Territories for Modernisation of Police scheme, under which the Ministry of Home Affairs provides financial assistance for CCTV infrastructure at police stations, had been extended until March 31, 2027.

Senior advocate Siddhartha Dave, assisting the court as *amicus curiae*, expressed concern that some States were seeking funds for additional police vehicles instead of prioritising modern equipment and scientific methods of investigation.



- **Key Terms and Explanations**

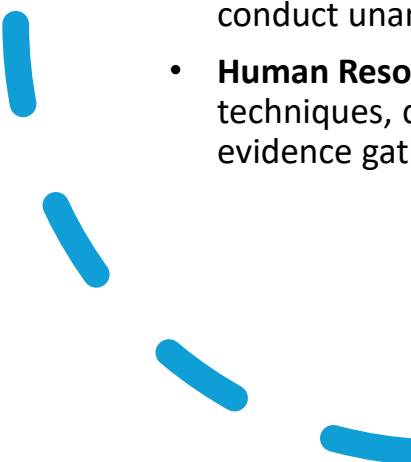
- **Modernisation of Police Forces (MPF) Scheme:** A centralized umbrella initiative designed to assist State Governments and Union Territories in upgrading law enforcement capabilities. The scheme focuses on replacing outdated equipment with modern weaponry, expanding mobility, integrating forensic infrastructure, strengthening cybercrime units, and automating police station records through digital networks like the Crime and Criminal Tracking Network & Systems (CCTNS).
  - *Example:* Upgrading a rural police station from manual paper registers to a networked digital database that immediately cross-checks suspect fingerprints with nationwide criminal records.
- **Paramvir Singh Saini Directives (2020/2021):** A landmark Supreme Court ruling that made it legally mandatory for all law enforcement agencies—including state police, the Central Bureau of Investigation (CBI), Enforcement Directorate (ED), and National Investigation Agency (NIA)—to install CCTV cameras with night vision and audio recording capabilities at all critical locations within police stations and interrogation spaces.
  - *Example:* Positioning tamper-proof, high-definition cameras inside interrogation rooms, corridors, and lockups to ensure every interaction between police personnel and detainees is recorded, thereby preventing custodial abuse.
- **Suo Motu Judicial Oversight:** The inherent constitutional power of higher courts (the Supreme Court and High Courts) to initiate legal proceedings on their own initiative without receiving a formal petition from an aggrieved party. This power is typically invoked when systemic human rights violations or administrative lapses are brought to light through news reports or public disclosures.
  - *Example:* The Supreme Court taking direct judicial notice of non-functional CCTV cameras in police stations across a state and issuing binding compliance demands to Union and State home ministries.
- **Amicus Curiae ("Friend of the Court"):** A neutral, experienced legal practitioner appointed by a court to offer expert assistance, independent facts, and objective analysis on complex statutory, constitutional, or technical issues involved in a case.
  - *Example:* A senior advocate appointed by the Supreme Court to independently audit how states utilize police modernization funds, ensuring funds are not diverted away from mandated safety tech.
- **Scientific Methods of Investigation:** Investigative practices grounded in forensic science, digital analytics, ballistic testing, and DNA profiling, rather than coercive physical interrogations.
  - *Example:* Securing a conviction by matching biological evidence gathered from a crime scene using specialized forensic tools, eliminating any dependence on verbal confessions obtained under physical custody.

- **Main Arguments and Substantive Parts**
- Law enforcement infrastructure in India faces a persistent structural disconnect between judicial mandates for institutional accountability and the administrative execution of police modernization. The core thesis centers on the premise that constitutional guarantees of life, liberty, and human dignity remain unfulfilled if police stations lack continuous, functioning oversight mechanisms and scientific investigative tools.
  - **Administrative Bottlenecks in Fund Approval and Release:** While policy decisions favor police modernization, financial execution encounters severe delays. Proposals for comprehensive umbrella schemes frequently linger in inter-ministerial review pipelines—such as the Department of Expenditure—creating operational lulls that leave police units across states under-equipped for long periods.
  - **Misprioritization of Financial Resources:** State governments often misallocate modernization funds toward routine capital acquisitions—like purchasing general transport vehicles—rather than investing in core accountability tools, forensic equipment, central digital monitoring dashboards, and scientific evidence-gathering technologies.
  - **Systemic Neglect of Technological Mandates:** Despite explicit Supreme Court rulings mandating continuous CCTV coverage with long-term video and audio storage, field implementation remains compromised. Widespread instances of non-functional cameras, unmonitored blind spots, and lack of central monitoring systems persist due to poor maintenance and administrative apathy.
  - **Primacy of Human Rights in Custodial Settings:** Continuous digital monitoring acts as a primary structural deterrent against custodial torture, illegal detention, and coercive third-degree methods. Accountability technologies safeguard both suspects against police excesses and police personnel against false accusations of misconduct.
  - **Need for Comprehensive Human Resource Modernization:** Physical infrastructure upgrades alone cannot reform law enforcement. True modernization requires structural investments in human capital—including continuous training in digital forensics, human rights sensitivity, mental wellness, and specialized investigative skills.
- **Historical Evolution of the Issue**
  - **Colonial Foundations (Police Act of 1861):** Formulated in the aftermath of the 1857 uprising, the original framework prioritized public control, regime security, and executive dominance over citizen-centric policing and human rights safeguards.
  - **Post-Independence Initiatives & The National Police Commission (1977–1981):** The NPC was the first major national body post-independence to comprehensively analyze police dysfunction. It recommended insulating law enforcement from political pressure, updating outdated equipment, and separating investigative functions from routine law-and-order duties.
  - **Launch of the Centrally Sponsored MPF Scheme (1969–1970):** Introduced to address the financial incapacity of states to equip their police forces. Over the decades, it evolved into an umbrella funding mechanism supporting mobility, communication networks, forensic laboratories, and infrastructure.
  - **Landmark Prakash Singh vs. Union of India Directives (2006):** The Supreme Court issued seven binding directions to transform the police from a "ruler's police" to a "people's police." Key directives included setting up State Security Commissions, establishing Police Complaints Authorities, fixing minimum tenures for operational officers, and separating investigation from routine law and order.
  - **The Paramvir Singh Saini Ruling (2020–2021):** The Supreme Court elevated physical police accountability by requiring state-of-the-art CCTV systems with night vision, audio recording, and continuous 18-month data retention across all police stations and central investigative agencies nationwide.
  - **Modern Phase & Legislative Reforms (2021–2027):** The extension of the MPF scheme, alongside the introduction of the Bharatiya Nagarik Suraksha Sanhita (BNSS), officially prioritizes mandatory audio-video recording of search and seizure operations, digital forensics, and integrated central monitoring dashboards.





- **Way Forward**

- **Streamlining Financial Approvals via Dedicated Corridors:** The Union Finance Ministry's Department of Expenditure should establish a single-window, priority-clearance mechanism for police modernization proposals. Financial clearances for security infrastructure and constitutional compliance projects must operate under strict time-bound deadlines to eliminate funding stalls.
  - **Purpose-Bound and Outcome-Linked Grant Allocations:** Central disbursements under the MPF scheme should be tied directly to measurable compliance metrics. Funding guidelines must mandate that a fixed minimum percentage of allocated grants be spent on core forensic tools, cyber-investigation infrastructure, and CCTV installation, preventing the diversion of capital into general-purpose vehicles or non-essential physical assets.
  - **Centralized Real-Time Digital Oversight Dashboards:** States must establish state-level digital command dashboards linked directly to State Legal Services Authorities (SLSA) and High Courts. These systems should automatically track camera uptime, identify non-functional hardware, and send real-time alerts when surveillance feeds drop.
  - **Strict Adherence to Judicial Directives and Storage Mandates:** Police departments must strictly follow the *Paramvir Singh Saini* mandate by deploying backup power systems (UPS) and secure cloud-based or offsite physical storage capable of retaining night-vision audio-video footage for at least 18 months.
  - **Operationalizing Independent Police Complaints Authorities:** State governments should empower independent Police Complaints Authorities (PCAs) at both state and district levels, led by retired judicial officers. These authorities should hold independent powers to conduct unannounced inspections of police stations, verify CCTV compliance, and investigate allegations of custodial misconduct.
  - **Human Resource Transformation and Scientific Training:** Modernization must prioritize training personnel in modern interrogation techniques, digital intelligence gathering, human rights standards, and stress management. Replacing coercive practices with scientific evidence gathering requires a cultural shift backed by continuous professional development.
- 



# COMPREHENSIVE ANALYSIS: POLICE MODERNISATION SCHEME AWAITING FINANCE MIN. NOD



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## KEY TERMS & EXPLANATIONS



### Modernisation of Police Forces (MPF) Scheme

Modernisation of Police forces and network, cogs network

### Paramvir Singh Saini Directives (2020/21)

Night vision and oridemes and domain audio



### Suo Motu Judicial Oversight

A judicial gavel-noned on coural judicial oversight



### Amicus Curiae ("Friend of the Court")

Knowledge or holding knowledge knowledge

### Scientific Methods of Investigation

A DNA double hethos, Investigates and ballistic tools



### Amicus Curiae

("Friend") of the Court") Iont moreoidor, an sosnigus simulatory endimpairations



### Scientific Methods of Investigation

Global human rights compliance, menmess max-moricoccoes and ballistic tools.



## MAIN ARGUMENTS & CORE THESIS



### Administrative Bottlenecks



### Misprioritization of Resources



### Systemic Neglect of Mandates



### Human Rights Primacy



### Human Resource Modernisation

## HISTORICAL EVOLUTION (1861-2027)



1861  
Police Act



1977-81  
National Police Commission



1969-70  
MPF Launch



2006  
Prakash Singh Directives



2020-21  
Paramvir Singh Saini Ruling



2021-27  
Extended MPF

## LOGICAL & PHILOSOPHICAL BASE



Social Contract Theory



Rule of Law



Reverse Panopticon



Human Dignity/Article 21



Evidentiary Truth

## WAY FORWARD: STRATEGIC ROADMAP FOR REFORM

1. Administrative  
Fast-Tracking  
(Single-Window  
Clearance)

2. Targeted &  
Purpose-Round  
Expenditures  
(Focus on CCTV &  
Forensic)

3. Judicial Mandate  
Enforcement  
(18-Month Storage  
Compliance)

4. Capacity & Human  
Resource Shift  
(Scientific & Ethics  
Training)

## MULTIDIMENSIONAL ANALYSIS



### SOCIAL

- Rebuild Trust
- Protect vulnerable



### LEGAL

- Statutory provision compliance



### ETHICAL

- Moral responsibility, integrity



### POLITICAL

- Federal Dynamics, political insulation



### INTERNATIONAL

- Global human rights compliance, collaboration



### ECONOMIC

- Fiscal optimization, secure growth

## LINKAGES (NCERTs & UPSC)

### Class 8

- Class 8, 11, 12 Book & Chapters
- Class 8, 11, 12 Book & Chapters

### Chapters

- Class 8, 11, 12 Book & Chapters
- Class 8, 11, 12 Bookest and Chapters

### GS Papers

- GS Papers 1, 2
- GS Papers 1
- GS Papers 1, 2
- GS Papers 1, 2, 3, 4

## PRELIMS PYQ PRACTICE (Example)

Ivo about list status, e.g. Inerucy to the status, or about status, or the Saini case? (options): In sconte is \_\_\_\_

- A. Options I
- B. Option III
- C. Options: III
- D. Options II

✓ Correct answer

PRELIMS PYQ EXAMPLE  
(CONCEPT REPRESENTATION)





A Canadian Nuclear Safety Commission member near the spent fuel pool at the Fukushima nuclear power plant, 2013. (CN/CSN) (CC BY-NC)

## ***‘Ghost particles’ can point way to spent nuclear fuel***

**Yasudewan, Mahamuth**

**I**n the high-stakes world of preventing governments from secretly developing atom bombs, the ability of inspectors to check what happens inside a reactor core – without stepping foot inside the highly radioactive structure – is a holy grail.

For many decades, International Atomic Energy Agency inspectors have used cameras and close inspections to ensure operators are not diverting spent nuclear fuel for illicit uses.

A new study in *Physical Review Letters* by researchers of the “Double Chooz” Collaboration in France has reported a breakthrough in this domain. The team has reported the first measurement of the signature of particles emitted by spent nuclear fuel, which a detector can detect even from a distance.

**For decades, cameras and close inspections were used to ensure operators were not diverting spent nuclear fuel for illicit uses**

These particles are called neutrinos. They are subatomic particles and are very, very light. They interact so weakly with matter that around 300 billion neutrinos pass through each one of your fingers every second and your body does not even notice.

The nuclear fuel inside a reactor produces antimatter neutrinos in similarly staggering quantities. But while scientists have tracked these emissions from active reactors for six decades, the low intensity stream of neutrinos that permeates after a reactor has shut down has remained elusive. This stream is produced by isotopes such as Pu-144 and Sm-146, which continue to decay in the partially burnt fuel within the core and in nearby spent fuel cooling pools for a long time.

Using a detector located 400 m from the Chooz B nuclear power plant in France, the Double Chooz team analysed 2.5 weeks of data. In this window, when both of the plant’s reactor cores were simultaneously offline, the detector recorded around 100 neutrino candidate events.

The researchers used statistical methods to confirm the signal was not a fluke. The data showed that 56% of the signal originated from the reactor cores and 44% came from the cooling pools.

The ability to measure the residual flux allows monitors to remotely verify the spent fuel inventory. If a rogue state clandestinely removes fuel assemblies from a cooling pool to extract plutonium – a key ingredient of nuclear weapons – the neutrino glow from that pool would diminish.

### **Future detectors**

Soviet scientists pioneered this way of using neutrinos in 1978. Now, the Double Chooz team has become the first to describe the energy levels of the neutrinos emitted by spent fuel at high precision. The unique pattern of these energy levels is the signature.

Scientists have also worked out a way to use neutrino detectors to estimate the plutonium content in a reactor core in real-time. This information can be used to check if operators are swapping fuel out prematurely – a common tactic to harvest weapons-grade plutonium.

In a 2019 study in *Nature Communications*, researchers in the U.S. also reasoned that compact and portable detectors of the future could help authorities discover small, undeclared facilities used to produce fissile materials. However, building such machines is still a significant challenge. Current detectors are large and stationary because they need to filter out cosmic rays, which are constantly streaming in from space.

One of the Double Chooz detectors itself weighed over 500 tonnes, with 300 tonnes of shielding alone.

- **Key Terms and Explanations**
  - **Antineutrinos ( $\bar{\nu}_e$ ):** Subatomic, fundamental particles belonging to the lepton family that act as the antimatter counterparts of neutrinos. Produced abundantly during beta decay in nuclear reactors, they possess near-zero mass, carry no electric charge, and interact extremely weakly with matter, earning them the moniker "ghost particles."
  - **Spent Nuclear Fuel (SNF):** Nuclear fuel assemblies that have been irradiated in a reactor core and removed after completing their operational cycle. Although no longer capable of sustaining a primary chain reaction for power generation, SNF remains highly radioactive and thermally hot.
  - **IAEA Safeguards & Additional Protocol:** A comprehensive system of technical verification measures implemented by the International Atomic Energy Agency (IAEA) to independently audit nuclear material and facilities. The goal is to ensure nuclear technology is restricted to peaceful applications and prevent the clandestine diversion of fissile material into nuclear weapons programs.
  - **Fissile Material Diversion & Premature Fuel Swapping:** The unauthorized removal of partially burnt reactor fuel before it reaches full burnup. Rogue operators execute early fuel swaps to extract high-purity Plutonium-239 (Pu-239) before it absorbs additional neutrons and transforms into Plutonium-240 (Pu-240), an isotope that complicates nuclear weapon design.
  - **Liquid Scintillator & Passive Shielding:** Detection systems that rely on specialized hydrocarbon liquids that emit tiny flashes of light (photons) when an antineutrino collides with a proton (via inverse beta decay). To prevent false readings, these detectors are wrapped in massive shielding layers made of lead, steel, or water to block ambient cosmic rays.
- **Main Arguments and Substantive Parts**
- **Non-Intrusive Verification as a Security Paradigm Shift**
  - Traditional nuclear safeguards depend heavily on intrusive physical inspections, mechanical seals, and video surveillance. These traditional methods remain vulnerable to host-nation non-cooperation, deliberate camera cutoffs, or denial of access during strategic standoffs. Remote antineutrino monitoring offers a non-intrusive, tamper-proof alternative that operates continuously from outside facility walls, ensuring objective oversight without relying on host permission.
- **Empirical Proof of Residual Neutrino Detection**
  - Recent experimental breakthroughs by particle physics collaborations (such as the Double Chooz experiment in France) have demonstrated that spent nuclear fuel continues to emit a measurable, low-intensity stream of antineutrinos.
    - **Isotopic Drivers:** This residual flux is driven by long-lived beta-decaying fission fragments within the spent fuel, specifically Praseodymium-144 (Pr-144) and Rhodium-106 (Rh-106).
    - **Signal Disaggregation:** Empirical data gathered over multi-week reactor shutdowns proved that high-precision detectors positioned 400 meters away could successfully separate signals: approximately 56% originating from the offline reactor core and 44% from the adjacent spent fuel cooling pools.
- **Real-Time Isotopic Tracking and Diversion Interception**
- Neutrino detectors measure the energy spectrum of incoming particles to determine the exact isotopic composition inside a reactor core or cooling pool in real time.
  - **Plutonium Inventory Estimation:** Because Uranium-235 (U-235) and Plutonium-239 (Pu-239) produce distinct antineutrino energy signatures, monitors can track the build-up of plutonium during operation.
  - **Detecting Clandestine Operations:** If a state secretly extracts fuel assemblies from a cooling pool to harvest weapons-grade material, the local antineutrino "glow" diminishes immediately, exposing the non-compliance without requiring physical entry into the facility.
- **Technical Challenges to Field Deployment**
  - **Massive Physical Footprint:** High-precision detectors currently require hundreds of tonnes of shielding (e.g., over 300 tonnes of lead and water) to filter out cosmic ray interference.
  - **Miniaturization Bottleneck:** Transitioning from stationary laboratory-scale structures to compact, portable units capable of discovering small, undeclared enrichment or reprocessing plants remains a major engineering challenge.



- **Historical Evolution of the Issue**

- **1957–1970 (Foundational Era of Global Safeguards):** The creation of the IAEA in 1957 and the entry into force of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1970 established the baseline for global nuclear oversight. Verification during this period relied almost entirely on manual material accountancy and periodic visual inspections.
- **1978 (Conceptual Inception of Neutrino Safeguards):** Soviet physicists first calculated and proposed that antineutrino emissions could be monitored outside a nuclear reactor to infer thermal power output and fuel composition in real time without interfering with plant operations.
- **1990s (Gaps Exposed and the Additional Protocol):** The discovery of clandestine, undeclared nuclear weapon programs in post-Gulf War Iraq highlighted the limitations of standard safeguards. In response, the IAEA introduced the 1997 Additional Protocol, authorizing broader surveillance methods and complementary monitoring technologies.
- **2000s–2010s (Near-Field Operational Proofs):** Projects like the SONGS experiment in the United States and the Nucifer project in France successfully demonstrated that compact antineutrino detectors placed within tens of meters of an active reactor core could track thermal power output and burnup with high accuracy.
- **Present Day (Remote Detection and Spent Fuel Verification):** Modern particle physics experiments, such as Double Chooz, extended this technology to distances of several hundred meters. By isolating the antineutrino signatures of spent fuel pools during reactor shutdowns, researchers solved the long-standing problem of non-intrusively monitoring offloaded fuel assemblies.

- **Way Forward**

- **Accelerate R&D in Detector Miniaturization:** Transition research from large, stationary physics experiments to compact, modular detectors. Developing advanced materials—such as gadolinium-doped water-Cherenkov systems or specialized liquid scintillators—can reduce shielding mass, enabling trailer-mounted units for rapid verification.
- **Formalize Neutrino Monitoring within IAEA Frameworks:** Gradually integrate remote antineutrino tracking into the IAEA's standard verification toolkit. Future facility design guidelines should incorporate dedicated underground detector bays built just outside the security perimeter of new reactor installations.
- **Promote Open-Source International Physics Collaboration:** Expand multilateral initiatives like CERN or the India-based Neutrino Observatory (INO) to democratize neutrino detection technology. Shared scientific frameworks ensure these tools are deployed transparently under international consensus rather than controlled by a few advanced nations.
- **Align System Capabilities with India's Nuclear Architecture:** As India expands its domestic nuclear energy footprint—including Advanced Heavy Water Reactors (AHWRs) and Prototype Fast Breeder Reactors (PFBRs)—indigenous antineutrino detection capabilities can help monitor plutonium inventory across closed fuel cycles, demonstrating world-class non-proliferation standards while protecting strategic assets.





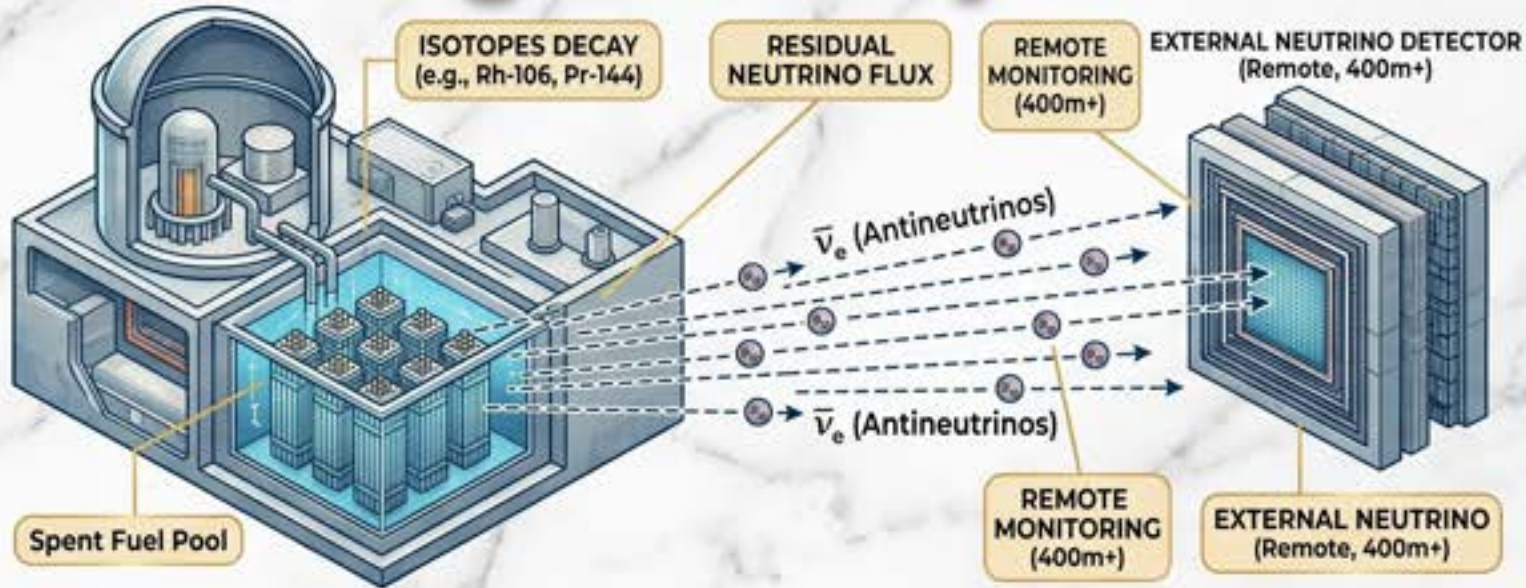
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# COMPREHENSIVE ANALYSIS: NEUTRINO Safeguards & Spent Nuclear Fuel

## KEY CONCEPTS: THE "GHOST PARTICLES"

- Subatomic, very light
- Interact Weakly with Matter
- U-235 vs Pu-239 signatures
- Plutonium  $\rightarrow$  Plutonium  
nuclear masses
- Passive, continuous  
monitoring



## SECURITY & NON-PROLIFERATION

- Remotely Verify Inventory
- Detect Clandestine Fuel  
Diversions
- Real-time Plutonium  
Tracking
- Exposing Rogue State  
Swapping

## MULTIDIMENSIONAL ANALYSIS



Political  
Government,  
Politics



Social  
Economy  
Materials



Ethical  
Economy and  
Environment



Economic  
Economy and  
Environment

## HISTORICAL EVOLUTION (Timeline)

- 1957-Present Key Milestones of the nuclear  
Power Plant
- 1957-Present Detect Clandestine Fuel Matter
- 1957-Present Key Spent Nuclear Fuel pool
- 1957-Present Key capture structures  
Nuclear Power Plant

## UPSC CSE RELEVANCE (GS PAPERS)

- GS1 NCERT Linkages  
Class 12 Physics: Nuclei, Beta Decay
- GS2 Class 12 Physics: Nuclei, Beta Decay  
Examples: carbon-14, Uranium-235
- GS3 Class 12 Physics: Nuclei, Beta Decay
- Essay NCERT Linkages  
Class 12 Physics: Nuclei, Beta Decay

## WAY FORWARD & CHALLENGES



Miniaturization  
Miniaturization Evolution



Portability  
Miniaturization Portability



Shielding Size  
Prevention, Shielding Size



# The road ahead for the Asiatic lion

Six decades of conservation have increased the Asiatic lion population from about 100-150 to over 1,000, with nearly half now living outside the protected area; however, the species remains confined to single forested landscape, while habitat fragmentation, disease threats continue to pose major conservation challenges

## FULL CONTEXT

Meena Venkataraman

**T**he only free-ranging population of the Asiatic lion today survives in and around the Gir National Park and Sanctuary. The semi-arid landscape of Gir extends into expansive agricultural fields and traditional grasslands, forming a checkered landscape matrix. Dispersing lions use these habitats as passages, stepping stones, and refuges as they navigate riverbeds and mountainous terrain, eventually establishing territories far from their source population.

Lions today occupy habitats as ecologically distinct as the rugged hills of Girnar, the forests of Mithiyala, the landscapes around Savarkundla-Liliya, and the sandy coastal tracts stretching across Saurashtra to the Bhavnagar coast. What is perhaps most remarkable is that, at their destinations, these lions are accommodated by the local people.

As is evident, the challenge of lion conservation in Gujarat rests not only on protecting Gir, but also on safeguarding the network of habitats and corridors through which lions disperse and establish new territories. Around 50 lions inhabit the coastal habitats of Jafarabad Taluka, linked to the larger lion population through Bharkot. Significantly, the Gujarat Forest Department's 2025 lion population estimation identifies this coastal sector as Satellite IV, one of nine recognised satellite lion populations in the State, while the Gir Management Plan explicitly designates the Bharkot area as a lion movement corridor. Together, these official documents recognise the area as both an important satellite habitat and a crucial landscape linkage for dispersing lions.

**A crucial corridor under pressure**  
It is against this backdrop that a recent proposal to divert approximately 75 hectares of reserved forest for limestone



An Asiatic lioness with four cubs at Gir Sanctuary on May 12, 2025. NIAV SONIA

mining has generated concern. The apprehension is that such a move would run counter to the long-standing legal and management framework established to protect lion habitats and movement corridors. If mining were permitted, habitat disruption could functionally disconnect this coastal subpopulation from the larger forest-linked source population and displace lions from portions of their habitat.

The proposed project would reportedly require the felling of nearly 5,000 mature trees and affect a landscape that local communities themselves do not wish to see mined. Human-lion conflict could also intensify. The larger question is whether the prime habitat of a nationally treasured species, a landscape showcasing one of India's greatest conservation recoveries, should be sacrificed for private profit.

Over the six decades since the declaration of the Gir Sanctuary, the lion population has grown from about 100-150 individuals to a healthy population of over 1,000 today. More admirable, however, is the fact that nearly half of them now reside outside the designated protected area. Lions have, over the years, shown remarkable recovery, expansion and resilience, sustained by a resourceful habitat and a rich prey base.

## The unfinished task

This success has been built through a transition from protected-area management to landscape-level conservation, supported by political will, capable administration, sustained funding and the goodwill of local communities. These have been the sturdy pillars of lion conservation.

However, the entire lion population remains confined to a single forested landscape. More puzzling has been the continued resistance to acknowledging the need for a second home for the lions. After years of downplaying the risk of disease in a geographically concentrated population, we received a jolt in 2018 when more than 20 lions succumbed to an outbreak of Canine Distemper Virus (CDV). The forest department responded with a series of immediate measures, but have we effectively applied the lessons learned from previous outbreaks?

Mortality is but a part of a natural demographic cycle. If we are to achieve long-term coexistence in shared spaces, we may even need to accommodate a degree of anthropogenic mortality. Yet the reports of lion deaths associated with babesiosis in May 2026, together with suggestions of possible CDV involvement, are worrying.

If disease exposes the vulnerability of

the population, land use decisions expose the vulnerability of the landscape that sustains it. These controversies raise a broader question: have the once-strong pillars of the State's conservation legacy begun to weaken? Are cracks emerging in the framework that has sustained lion conservation for decades? Historically, there was little room for negotiation where lions and their habitat were concerned. Indeed, Gir remains an important case study of how protected areas were progressively expanded around the original sanctuary. Hopefully, there will be no shift in the vision underpinning the law, its application, or administrative decision-making.

## Next chapter of recovery

Given the species' continuing conservation challenges, any ill-considered decision could yet turn the clock back to a far more precarious situation. The International Union for Conservation of Nature Red List tells an encouraging story: the Asiatic lion has moved from Critically Endangered to Endangered. Among the northern lion subpopulations, it is the only stable population exceeding 250 individuals and is therefore of immense global conservation significance. At the same time, the newer Green Status assessments remind us that recovery and restoration are not the same thing.

A species can recover substantially and still remain far from fully restored across its ecological and historical range. Under the Green Status framework, the lion remains largely depleted. While the lion has recovered from the brink, it remains far from fully restored across the landscape it once occupied.

The story of the Asiatic lion is one of sustained recovery achieved through six decades of unwavering conservation effort, and of the responsibility that comes with safeguarding those gains. Our goal is not merely to celebrate this legacy, but to sustain it.

*(Meena Venkataraman, PhD, is a wildlife biologist with over two decades of experience in mammalian ecology, with a particular focus on the Asiatic lion)*

## THE GIST

▼ Landscape-level conservation, backed by political will, capable administration, sustained funding and local community support, has been the foundation of the Asiatic lion's recovery.

▼ Protecting habitats and movement corridors, addressing disease risks and securing a second home for the species are critical to sustaining India's lion conservation legacy.

- **Key Terms and Explanations**

- **Asiatic Lion (*Panthera leo persica*):** A distinct subspecies of lion once distributed widely across Southwest Asia and Northern India, now confined exclusively to the Gir landscape of Gujarat. Unlike African lions, Asiatic lions possess a prominent longitudinal fold of skin running along their belly, a smaller mane, and slightly smaller overall body size.
- **Landscape-Level Conservation:** A holistic wildlife management approach that expands protection beyond rigid boundaries of isolated sanctuaries. It integrates human-dominated agricultural fields, river corridors, and satellite patches into a unified mosaic where wildlife can freely move, hunt, and reproduce.
- **Satellite Populations and Stepping Stones:** Dispersed clusters of wildlife living outside core protected forests. In Saurashtra, these include habitats like Girnar, Mitiyala, Savarkundla-Liliya, and the coastal Babarkot-Jafrabad tract, which serve as crucial stepping stones for dispersing sub-adult lions seeking new territories.
- **Habitat Fragmentation and Linear Infrastructure:** The breaking up of continuous forest landscapes into isolated pockets due to human activities like mining, roads, and agriculture. This restricts animal movement, increases inbreeding risks, and elevates human-wildlife conflict.
- **Epidemic Vulnerability (Canine Distemper Virus & Babesiosis):** Biological threats caused by viral (CDV) or tick-borne protozoan (*Babesia*) pathogens. When an entire global population of a species is concentrated in a single geographic pocket, a localized disease outbreak poses a catastrophic risk of total extinction.
- **IUCN Red List vs. Green Status Framework:**
  - *Red List:* Evaluates short-term extinction risk based on overall numbers and decline rate (e.g., Asiatic lions shifted from *Critically Endangered* to *Endangered*).
  - *Green Status:* Assesses long-term ecological restoration and functionality, measuring how well a species occupies its historical range and fulfills its ecological role (under which Asiatic lions remain *largely depleted*).

- **Main Arguments and Substantive Parts**

- **Remarkable Population Recovery:** Driven by over six decades of dedicated protection, administrative commitment, and public goodwill, the free-ranging Asiatic lion population has grown from a precarious 100–150 individuals to over 1,000.
- **Expansion into Human-Dominated Landscapes:** Nearly half of the current lion population resides outside designated Protected Areas (PAs). Lions now navigate agricultural fields, coastal tracts, and scrublands across Saurashtra, facilitated by remarkable social tolerance from local farming and pastoral communities.
- **Severe Vulnerability of Movement Corridors:** Dispersal pathways are coming under severe industrial pressure. A critical case is the proposed diversion of nearly 75 hectares of reserved forest for limestone mining in Jafrabad Taluka. This project threatens the Babarkot movement corridor—a designated passage connecting a satellite population of around 50 lions—and involves felling approximately 5,000 mature trees.
- **The Existential Risk of Single-Landscape Concentration:** Despite demographic growth, the species remains geographically concentrated in Saurashtra. The refusal to establish a secondary, geographically isolated habitat leaves the entire species exposed to catastrophic disease events, highlighted by the 2018 Canine Distemper Virus outbreak and subsequent Babesiosis infections.
- **Restoration vs. Mere Numerical Recovery:** While numerical expansion has improved the species' IUCN Red List classification, its ecological footprint remains severely restricted. True conservation success requires restoring ecological functionality across historical ranges rather than relying solely on high density within a single region.



- **Historical Evolution of the Issue**
  - **Pre-Independence Era (Late 19th Century – 1940s):** Uncontrolled hunting, habitat conversion, and trophy shooting drastically reduced Asiatic lion numbers across Northern and Central India. By the turn of the 20th century, the species was pushed to the brink of extinction, with fewer than 20 to 50 individuals surviving in the Gir forests. Recognizing this crisis, the Nawabs of Junagadh instituted total hunting bans and early protection measures.
  - **Early Post-Independence & Legal Enshrining (1950s – 1970s):** The Indian government formalized protection efforts by establishing the Gir Wildlife Sanctuary in 1965 and declaring core areas as a National Park in 1975 under the Wildlife Protection Act, 1972. Population counts stabilized around 100 to 150 individuals.
  - **Saturation of Core PAs and Landscape Spillovers (1980s – 2000s):** As Gir reached its ecological carrying capacity, lions began dispersing into surrounding agricultural matrices, coastal scrublands, and satellite patches such as Mitiyala and Girnar. Management strategy shifted gradually from strict fortress conservation to landscape-level management.
  - **Judicial Directives and Translocation Debates (2010s):** In 2013, the Supreme Court of India ordered the translocation of a subset of lions to Kuno Wildlife Sanctuary in Madhya Pradesh to safeguard against single-site extinction risks. However, political resistance and administrative delays stalled the initiative, keeping the species confined to Gujarat.
  - **Modern Epidemic Threats and Infrastructure Conflicts (2018 – Present):** An outbreak of Canine Distemper Virus (CDV) in 2018 resulted in over 20 lion deaths, underlining biological risks. Continued disease occurrences, alongside growing industrial and mining pressures on coastal corridors like Babarkot, have reignited debates over habitat protection and long-term species survival.
- **Way Forward**
- **Establish a Geographically Separated Secondary Habitat:**
  - Execute long-standing scientific and judicial recommendations to establish a second home for the Asiatic lion (such as Kuno Wildlife Sanctuary or alternative suitable landscapes).
  - Creating a secondary, geographically distinct population provides a crucial insurance policy against single-site extinction caused by epidemic diseases like Canine Distemper Virus or Babesiosis.
- **Legal Recognition and Protection of Biological Corridors:**
  - Formally declare vital movement passages—such as the Babarkot-Jafrabad coastal tract—as Eco-Sensitive Zones (ESZ) or Conservation Reserves under the Wildlife Protection Act.
  - Reject forest diversions for destructive land uses like limestone mining within key movement corridors, ensuring sub-populations remain connected to the core Gir source population.
- **Strengthened Wildlife Health and Epidemiological Infrastructure:**
  - Establish specialized wildlife veterinary and epidemiological units across Saurashtra to conduct routine viral and protozoan screening among lions, stray domestic animals, and cattle.
  - Implement systematic vaccination drives for domestic dogs and livestock around protected area buffers to prevent disease spillovers into wild populations.



# THE ROAD AHEAD FOR THE ASIATIC LION: CONSERVATION & CHALLENGES

A Detailed UPSC CSE/APSC Analysis

## A CRUCIAL JOURNEY (Timeline & Terms)

### Glossary

-  Asiatic Lion (*Panthera leo persica*)
-  Landscape-Level Conservation
-  Satellite Populations & Stepping Stones
-  Habitat Fragmentation
-  Epidemic Vulnerability (CDV & Babesiosis)
-  IUCN Red List (Endangered) vs. Green Status (Largely Depleted)

Pre-Independence  
(Hunting, Near-Extinction)

Early Post-Independence  
(Sanctuary 1965, WPA 1972, PA 1975)

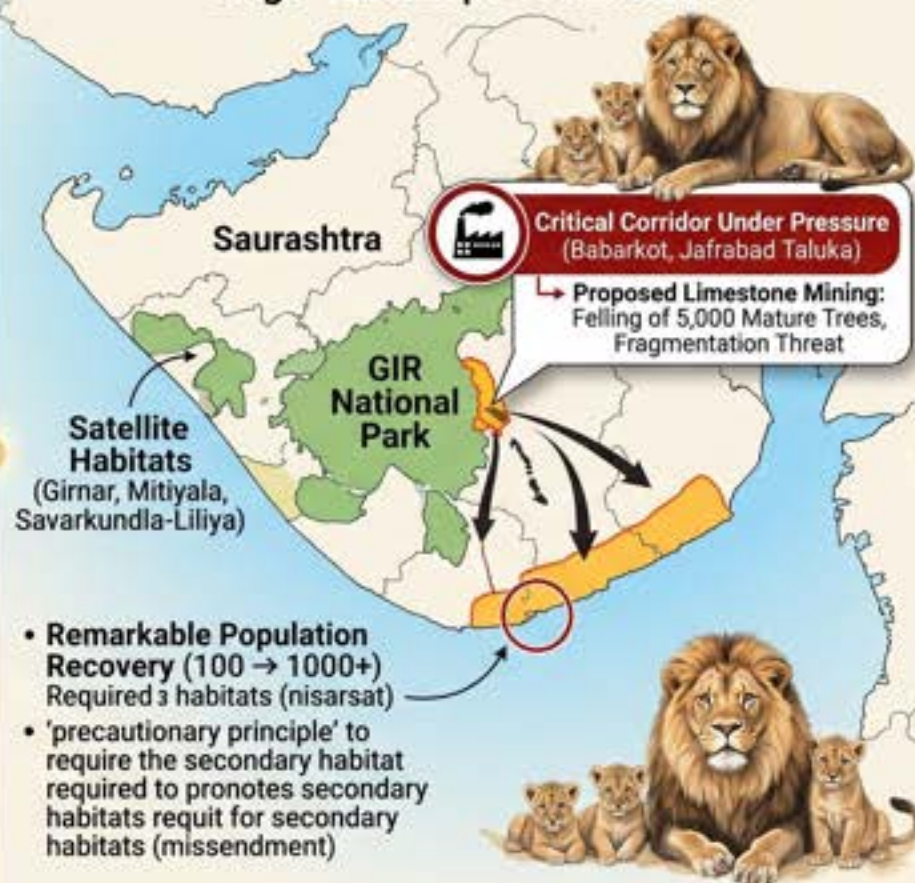
1980s–2000s  
(Spillovers into Satellite Landscapes)

2010s  
(Judicial Translocation Order)

2018–Present  
(Modern Epidemics, Industrial Conflicts)



## THE UNFINISHED TASK: Single-Landscape Concentration



## UPSC CSE LINKAGES & DIMENSIONS

### Key Syllabus & NCERT Citations

GS Paper 1: Flora & Fauna  
GS Paper 2: Governance & Policies  
GS Paper 3: Biodiversity, Environment (WPA, EIA)  
GS Paper 4: Environmental Ethics

### NCERT Citations:

Class 8 Geography Ch. 2: Wildlife Resources  
Class 10 Geography Ch. 2: Forest Resources  
Class 11 Political Theory Ch. 8: Development  
Class 11 Political Theory Ch. 8: Development  
Class 12 Biology Ch. 15: Biodiversity

- All previous questions of all previous questions

| UPSC Prelims        | APSC |
|---------------------|------|
| UPSC Prelims        | APSC |
| UPSC Prelims        | APSC |
| UPSC Prelims        | APSC |
| UPSC Prelims        | APSC |
| UPSC Prelims        | APSC |
| UPSC Prelims/ Mains | APSC |
| APSC                | APSC |
| APSC                | APSC |
| APSC                | APSC |
| APSC                | APSC |

### Multidimensional Analysis

-  **Social**  
Human tolerance for human tolerance
-  **Political**  
Political will and political will
-  **Legal**  
Legal frameworks for underpreSSIONAL prisons
-  **Ethical**  
Intergenerational equity on cocise sarammiats
-  **International**  
Economic modification and ecovorsement
-  **Economic**  
Economic trade-offs of economic trade-offs

## WAY FORWARD: STRATEGIC POLICY REFORMS

1. Create Secondary Habitat (Execute long-standing orders, like Kuno)
2. Legal Recognition of Biological Corridors (Declare Babarkot-Jafraabad an ESZ)
3. Enhance Disease Surveillance & Animal Health Infrastructure
4. Foster Inclusive Coexistence Models with Community Participation
5. Rigorous EIAs for all Infrastructure Projects in Key Habitats



# Why is the Indian Statistical Institute Bill controversial?

What changes does the Bill propose to the governance of the ISI?

T.C.A. Sharad Raghavan

## The story so far:

**T**he government has tabled a new Bill in Parliament, called the Indian Statistical Institute Bill, 2026, which will replace its approximately 67-year-old predecessor enacted in 1959. While seemingly innocuous, several provisions of the Bill have become contentious, with many faculty members of the Indian Statistical Institute (ISI) and MPs protesting against it.

## What is the ISI?

In the 1920s, India's greatest statistician P.C. Mahalanobis set up the Statistical Laboratory in the Presidency College in Kolkata. On December 17, 1933, he founded the Indian Statistical Institute as a "learned society" housed in the Statistical Laboratory. The Institute was registered on April 28, 1932, as a non-profit distributing learned society

under the Societies Registration Act of 1860 and is now registered under the West Bengal Societies Registration Act of 1962, amended in 1964. The ISI quickly became India's premier statistical organisation. It was declared an Institution of National Importance through the Indian Statistical Institute Act, 1959.

## What does the Bill seek to change?

At the most basic level, the new Bill seeks to bring ISI's governance structure on par with that of other Institutions of National Importance, such as the Indian Institutes of Management (IIMs) and the Indian Institutes of Technology (IITs).

According to the government, in the IITs and IIMs, compact empowered bodies such as the Board of Governors and executives such as Directors take decisions impacting both the day-to-day functioning and long-term policies of the organisations. However, ISI continues to follow the governance model of a society,

in which significant control is exercised by a large General Body of members of the society. A key outcome of this structure is that any amendment to the regulations can only be carried out with the approval of the General Body.

The government's contention is that since the regulations are prescriptive, even small reforms require the approval of the General Body.

Therefore, the new Bill is aimed at incorporating ISI into a statutory body corporate, strengthening its legal status and providing a "more robust and contemporary governance framework".

## What will the governance model be?

The new Bill provides for the creation of a compact Board of Governors that will serve as the principal policy-making executive body of the ISI and will be accountable to the government. It also provides for the creation of an Academic Council as the principal academic body.

The Board of Governors will consist of

11 members. The Board will be headed by a Chairperson, who is supposed to be an eminent person "in the field of academia, industry, education, public policy, Statistical Sciences and allied sciences, or other fields" and will be nominated by the Visitor (the President of India) on the recommendation of the Centre.

The government will also nominate a government official not below the level of Joint Secretary to the Government of India. The government's representation will further include another joint secretary or additional secretary.

The Board will include four eminent persons in the field of statistical sciences and allied fields, to be nominated by the Chairperson, and four representatives of the Institute who will include two members of the Academic Council to be nominated by the Board.

The Registrar of ISI will serve as the Secretary of the Board.

## What is the controversy around the governance structure?

Ever since the draft Bill was made public last year, professors and officials of ISI have been protesting it. One main contention is that the new governance structure would wrest control of ISI from the people working there and place it in the hands of the Union government. The new structure does give the government direct or indirect control of eight out of the 11 members of the Board of Governors.

## Were stakeholders consulted?

The critics say that the Bill has been prepared without consultations with the ISI Society, faculty members, students, or other stakeholders.

The government has argued that as per the review framework in the existing ISI Act, four Review Committees (RCs) have examined the functioning and progress of ISI. The second, third and fourth RCs suggested the reduction in size of the ISI Council, the government said. Despite this, the size of the Council of ISI increased over this period and currently numbers 33 members.

The fourth RC also pointed to certain structural and legacy issues.

Following this, the government said a brainstorming session had been organised by the Ministry of Statistics and Programme Implementation on July 2, 2025, in collaboration with the ISI at the Jawaharlal Nehru Centre for Advanced Scientific Research in Bengaluru under the Chairpersonship of Dr. K. Radhakrishnan, the current Chairman of the ISI Governing Council. The aim was to "deliberate on pathways that can transform ISI into a world class centre of learning and research, as it completes 100 years in 2031".

The government said, as per the pre-legislative consultation policy, comments and suggestions from the public on the draft Bill were invited and the timelines were extended in line with the requests of various stakeholders.

- **Key Terms and Explanations**
  - **Institution of National Importance (INI):** A statutory status granted by an Act of Parliament to premier higher education and research institutions in India (such as IITs, NITs, AIIMS, and ISI). This designation provides direct central funding, degree-granting autonomy, and national strategic priority.
  - **Registered Society Governance vs. Statutory Corporate Governance:** Under a Registered Society model (governed by the Societies Registration Act), decision-making rests on a decentralized, democratic membership structure where major policy changes require General Body approval. Conversely, a Statutory Board model operates under a compact Board of Governors empowered directly by Parliament to make swift, executive-led decisions.
  - **Board of Governors (BoG):** A compact executive body established within statutory institutions to handle long-term policymaking, administrative supervision, financial allocation, and key appointments.
  - **Visitor (President of India):** The constitutional head serving as the ex-officio Visitor of central institutions of national importance. The Visitor holds statutory powers to appoint institutional leaders, conduct inquiries, and approve key regulations on the advice of the Union Government.
  - **Pre-Legislative Consultation Policy (PLCP):** A governance standard established in 2014 requiring Union ministries to publish draft bills in the public domain for at least 30 days to invite feedback from citizens and affected stakeholders prior to Cabinet approval.
- **Main Arguments and Substantive Parts**
  - **Core Thesis:** Transitioning autonomous research bodies from a decentralized, society-based governance structure to a compact statutory board model creates a fundamental structural tension between administrative efficiency and academic autonomy.
  - **Arguments in Favor of Governance Restructuring:**
    - **Streamlining Decision-Making:** Replacing a large 33-member council and a broad General Body with an 11-member Board of Governors eliminates procedural bottlenecks and accelerates policy execution.
    - **Institutional Standardization:** Harmonizing the administrative architecture of the Indian Statistical Institute with established Institutions of National Importance (like IITs and IIMs) creates regulatory uniformity across top-tier national institutes.
    - **Resolving Administrative Stagnation:** Addressing historical governance delays where routine administrative updates, structural reforms, and modern management practices were delayed by procedural constraints within the society framework.
  - **Counterarguments and Institutional Concerns:**
    - **Risk of Executive Overreach:** Concentrating power in an 11-member Board where the Union Government directly or indirectly controls up to 8 nominations risks compromising institutional independence and political neutrality.
    - **Erosion of Academic Self-Governance:** Shifting authority away from working faculty, peer researchers, and historical society members undermines the bottom-up, collegial culture essential for basic scientific research.
    - **Deficit in Stakeholder Consultation:** Concerns raised by faculty and alumni highlight a gap in transparent, pre-legislative consensus building prior to finalizing statutory overhauls.



- **Historical Evolution of the Issue**

- **1920s – Scientific Foundations:** Professor Prasanta Chandra Mahalanobis initiated pioneer statistical research within the Statistical Laboratory at Presidency College, Kolkata, laying the groundwork for India's empirical research infrastructure.
- **1931–1932 – Society Formation:** The Indian Statistical Institute (ISI) was officially founded on December 17, 1931, and formally registered on April 28, 1932, as a non-profit learned society under the Societies Registration Act, 1860.
- **1959 – Legislative Recognition:** Parliament enacted the Indian Statistical Institute Act, 1959, declaring ISI an Institution of National Importance, granting it degree-awarding powers while preserving its unique society-led internal governance.
- **1960s–2010s – Expansion and Structural Complexity:** The institute updated its registration under the West Bengal Societies Registration Act, 1961 (amended 1964). Over decades, expanding academic divisions enlarged the ISI Council to 33 members, creating complex governance workflows.
- **2010s–2020s – Review Committee Recommendations:** Multiple statutory Review Committees (2nd, 3rd, and 4th RCs) appointed by the Union Government evaluated ISI's growth, consistently recommending a reduction in council size and modernization of administrative mechanisms.
- **2025–2026 – Statutory Reform Push:** Ministry deliberations and pre-legislative sessions culminated in the proposal of the Indian Statistical Institute Bill, 2026, aimed at replacing the 1959 Act with a modern corporate-style Board of Governors model.

- **Way Forward**

- **Balanced Board Composition:** Rebalance the proposed Board of Governors to ensure equal weight between internal academic stakeholders (elected faculty/Academic Council representatives) and government-nominated experts.
- **Ring-Fencing Academic Autonomy:** Explicitly define the Academic Council as the final authority over research, academic programs, and faculty appointments, restricting the Board of Governors strictly to administrative and financial oversight.
- **Institutionalized Stakeholder Engagement:** Establish a permanent, transparent consultation channel involving faculty, researchers, and alumni before implementing structural governance changes.
- **Adopting an Arm's-Length Governance Model:** Model statutory oversight on independent public trust frameworks, ensuring robust fiscal accountability while protecting scientific and statistical work from executive interference.





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## KEY TERMS & CONCEPTS



**Institution of National Importance (INI)**



**Registered Society vs. Statutory Governance vs. Board of Governors (BoG)**



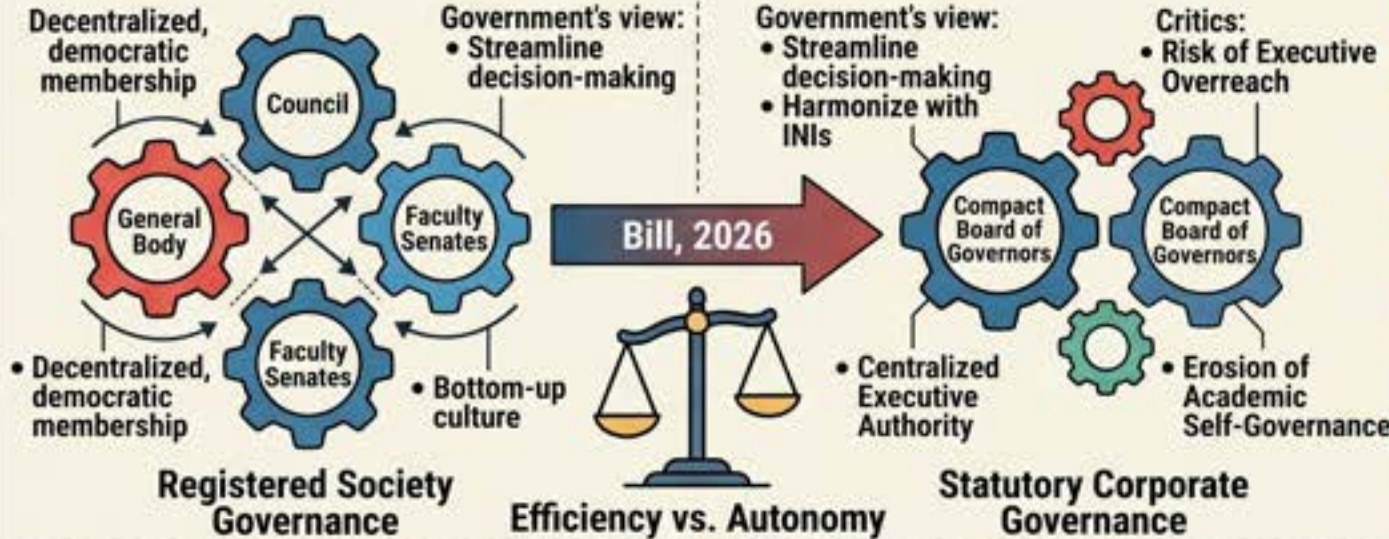
**Visitor (President of India)**



**Pre-Legislative Consultation Policy (PLCP)**



## WHY IS THE INDIAN STATISTICAL INSTITUTE BILL CONTROVERSIAL? (A COMPREHENSIVE ANALYSIS)



## MULTIDIMENSIONAL ANALYSIS



## LINKAGES WITH NCERT & UPSC SYLLABUS

### NCERT

Class 11 Pol Sci - Institutional Design

Class 12 Pol Sci - Planned Development

Class 11 Econ - Human Capital

### UPSC CSE

GS Paper 2 (Polity/ Governance: Statutory bodies, PLCP)  
GS Paper 3 (Economy/S&T: Data infrastructure, economic planning)  
GS Paper 4 (Ethics: Institutional Ethics Essay, Optionals)

## HISTORICAL EVOLUTION OF ISI



## WAY FORWARD & POLICY RECOMMENDATIONS





# New Hormuz route agreed, to be managed jointly with Oman: Iran

The geographical coordinates of the route envisaged by the two countries have been agreed upon, and a joint statement, containing the main considerations and points of agreement, is in the final drafting stage, says Tehran's Foreign Ministry

**Agence France-Presse**  
TEHRAN

**I**ran and Oman have agreed to a route for ships transiting the Strait of Hormuz and are putting the final touches on arrangements for jointly managing the passage, Tehran's Foreign Ministry said on Wednesday.

Iran has seized *de facto* control of the strait, a strategic waterway for the global energy trade, since the U.S. and Israel launched their war against the country on February 28.

U.S. President Donald Trump has repeatedly insisted Tehran is keen to do a deal to reopen the route



Motorists drive past a large billboard pledging revenge against Donald Trump along Jomhuri Street in central Tehran. AFP

to shipping, but Iran denies this and says it will instead make arrangements with its neighbour across the strait, Oman.

"The geographical coor-

dinates of the route envisaged by the two sides have been agreed upon and, if certain third parties do not obstruct the process, the joint statement of the two

countries, containing the main considerations and points of agreement, is also in the final review and drafting stage," spokesperson Esmail Baqaei said, according to state news agency IRNA.

According to the report, Mr. Baqaei told presspersons that talks with Oman were moving forward, but that even if an understanding was reached, it would not mean that the strait had become safe for all passing vessels.

"The factors making the Strait of Hormuz insecure still exist on the part of the United States, particularly the naval blockade and other aggressive and threa-

tening actions against Iran and its interests," he said.

Mr. Trump had said Tuesday a deal with Iran to reopen Hormuz could happen "tomorrow or the next day," telling reporters in California that negotiators "had a very good day".

"The strait is going to be open very soon, or they're going to get hit very hard – and then the strait's going to be open," Mr. Trump said in an interview with Fox News.

Secretary of State Marco Rubio said Tuesday that the United States was involved in negotiations between Oman and Iran on increasing traffic through the Strait of Hormuz.

- **Key Terms and Explanations**
  - **Strait of Hormuz:** A narrow, strategic maritime passage connecting the Persian Gulf with the Gulf of Oman and the Arabian Sea. Bordered by Iran to the north and Oman/UAE to the south, it is widely considered the world's most critical oil transit chokepoint. *Example:* A major portion of petroleum consumed in Asia and Western nations moves through this narrow channel daily.
  - **Strategic Chokepoint:** A geographical feature on land or sea—such as a narrow strait or canal—that significantly restricts movement, creating a bottleneck for trade or military operations. *Example:* The Strait of Malacca, Suez Canal, and Strait of Hormuz serve as global maritime chokepoints where traffic congestion or military blockade can halt international trade.
  - **Transit Passage vs. Innocent Passage (UNCLOS):**
    - **Transit Passage:** Under Article 38 of the United Nations Convention on the Law of the Sea (UNCLOS), all ships and aircraft enjoy the freedom of navigation solely for continuous and expeditious transit through international straits.
    - **Innocent Passage:** Under Article 17, ships of all states enjoy passage through a coastal state's territorial sea as long as it is not prejudicial to the peace, good order, or security of the coastal state.
  - **Littoral State:** A sovereign nation that borders a sea, ocean, or strategic waterbody. In the context of the Hormuz passage, Iran and Oman are the primary littoral states holding territorial sea claims across the strait.
  - **De Facto Maritime Control:** Practical, physical oversight or authority exercised over maritime routes without formal consensus, multilateral treaty backing, or international recognition.
  - **Strategic Petroleum Reserves (SPR):** Emergency stockpiles of crude oil maintained by nations to mitigate severe supply disruptions caused by geopolitics, natural disasters, or foreign blockades.
- **Main Arguments and Substantive Parts**
  - **Shift Toward Bilateral Co-Management of Critical Maritime Passages:** The agreement between Iran and Oman to establish coordinated shipping routes represents a strategic attempt by littoral states to assert localized control over vital maritime corridors. By establishing direct operational rules, coastal states aim to reclaim control from external naval actors.
  - **Challenge to Hegemonic Maritime Order:** The development of independent, sovereign-led transit routes serves as a direct challenge to unilateral blockades and power projection by Western naval forces. It highlights a growing rift between regional coastal sovereignty and foreign freedom of navigation operations.
  - **Residual Volatility Despite Local Agreements:** Even when littoral nations agree on navigational coordinates, global maritime risk does not automatically dissipate. Third-party naval blockades, asymmetric warfare, marine mine threats, and military retaliations continue to keep transit high-risk and unstable.
  - **Centrality of Omani Neutrality:** Oman's historical role as a diplomatic mediator in West Asia enables it to act as a bridge between hardline regional powers and Western nations, preventing total maritime paralysis through quiet bilateral negotiation.
  - **Vulnerability of Net Energy Importers:** Disruptions or localized controls over maritime chokepoints directly expose energy-dependent nations like India to severe supply-chain shocks, soaring freight charges, and inflationary pressures.



- **Historical Evolution of the Issue**
  - **Pre-1979 Era (Imperial Iran and Joint Delimitation):** Under the Shah, Iran acted as a Western-backed security guarantor in the Persian Gulf. In 1974, Iran and Oman signed a continental shelf agreement, establishing mutual maritime boundaries and joint responsibility for monitoring shipping traffic through the Strait of Hormuz.
  - **1980–1988 (The Tanker War):** During the Iran-Iraq War, both belligerents targeted commercial oil tankers in the Persian Gulf to cripple each other's economy. This forced international powers, led by the US Navy under Operation Earnest Will (1987), to reflag and escort merchant ships through the Strait.
  - **1982 UNCLOS Framework:** The codification of UNCLOS III introduced the legal concept of "Transit Passage" through international straits. Iran signed the convention but did not ratify it, maintaining that non-parties to UNCLOS cannot claim transit passage rights through its territorial waters.
  - **2018–2019 (Maximum Pressure and Maritime Friction):** Following the US withdrawal from the Joint Comprehensive Plan of Action (JCPOA), tensions spiked with attacks on foreign tankers, seizure of commercial vessels, and the establishment of the US-led International Maritime Security Construct (IMSC).
  - **Present Phase (Regional Assertiveness and Corridor Re-alignment):** Amid heightened military confrontations, littoral states are pursuing direct bilateral arrangements to manage maritime transit, signaling a transition toward regionalized maritime architectures.
- **Way Forward**
  - **Comprehensive Maritime Domain Awareness (MDA):** India must enhance real-time surveillance over the Western Indian Ocean by strengthening partnerships with regional navies and deploying coastal radars and reconnaissance craft.
  - **Expansion of Strategic Petroleum Reserves (SPR):** To shield against sudden trade stoppages through Hormuz, India should expand its Phase II SPR program, increasing strategic underground storage capacity beyond its current limits.
  - **Diversification of Energy Sources and Routes:**
    - *Overland Bypass Pipelines:* Encourage investments in bypass pipelines that carry oil outside the Strait of Hormuz, such as Abu Dhabi's Habshan-Fujairah pipeline and Saudi Arabia's East-West pipeline to the Red Sea.
    - *Geographic Diversification:* Expand crude imports from non-Gulf suppliers, including Africa, Latin America, and North America.
  - **Strengthening Naval Escort Mechanisms:** Maintain proactive operational deployments like the Indian Navy's *Operation Sankalp* to escort Indian-flagged vessels through volatile waterways during crises.
  - **Support for Inclusive Maritime Governance:** Advocate for a rules-based order under UNCLOS while encouraging inclusive security forums in West Asia. These forums should bring littoral states together to prevent unilateral route closures.



# ADVANCED ANALYTICAL STUDY: WEST ASIA MARITIME DYNAMICS (STRAIT OF HORMUZ)

## NEW JOINT ROUTE & COMPREHENSIVE GLOBAL ANALYSIS FOR UPSC CSE PREPARATION

### GEOPOLITICAL HOTSPOT: STRAIT OF HORMUZ



### THEORETICAL FOUNDATIONS & HISTORICAL EVOLUTION

#### PHILOSOPHY



Realism



Mare  
Liberum



Mare  
Clausum

#### TIMELINE



### MULTIDIMENSIONAL IMPACT (UPSC FOCUS)

#### SOCIAL



- Safety
- Livelihoods
- Remittance Flows

#### POLITICAL



- Regional Powers
- Superpower Friction
- India Strategic Autonomy

#### LEGAL



- Interpretation of Passage
- Legality of Blockades

#### ETHICAL



- Energy Poverty vs. Weaponization
- Environmental Ethics

#### INTERNATIONAL



- Global Energy Security
- Great Power Interests

#### ECONOMIC



- Volatility
- Shipping Costs
- Insurance Surcharges

### CURRICULUM LINKAGES, WAY FORWARD & PYQS

#### NCERT CHAPTER LINKAGES



NCERT Chapter 1  
UPSC Syllabus &  
UPSC Syllabus Map actions

#### UPSC SYLLABUS MAP



#### WAY FORWARD

1. Enhanced Maritime Domain Awareness (MDA) with satellites
2. SPR (Strategic Petroleum Reserves) Expansion
3. Diversification of Energy Sources (pipelines map hint)
4. Inclusive Maritime Governance (diplomats)



**PYQs  
HINT**

2023 - GS2  
2021 - GS3  
2021 - GS3  
2023 - GS3  
2023 - GS2





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