



**AXIA**  
**IAS ACADEMY**  
RISE ABOVE THE REST

# AXIA IAS ACADEMY



DAILY NEWS ANALYSIS



MARCH 18



CONSISTENT COMPREHENSIVE  
AND CREDIBLE



UNIQUE AND BEST IN  
QUALITY



# AXIA

## IAS ACADEMY

RISE ABOVE THE REST

**UPSC CSE CLASSES - PRELIMS + MAINS + INTERVIEW GUIDANCE**

- **EXPERT FACULTY & MENTORSHIP**
- **COMPREHENSIVE STUDY MATERIAL**
- **REGULAR TEST SERIES & EVALUATION**
- **CURRENT AFFAIRS & ANSWER WRITING FOCUS**
- **SMALL BATCH SIZES FOR PERSONAL ATTENTION**

**[axiaiasacademy.com](http://axiaiasacademy.com)**

**+91 6002-417488**

# West Asia conflict takes a toll on medical tourism industry in India

**The Hindu Bureau**  
CHENNAI

India's state-of-the-art healthcare at affordable prices has attracted patients from across the world over the last few decades, but the travel disruptions caused by the ongoing conflict in West Asia are creating new challenges, both for patients unable to fly to India to avail treatment and for the medical tourism industry which is facing the slowdown of a significant market.

At Delhi's Fortis Healthcare, for instance, there has been a drop in the number of patients coming from West Asia, according to the group's chief operating officer Anil Vinayak. Since the conflict broke out, there has been a decline of more than 30% in international footfall across all Fortis hospitals,

he noted. This is especially significant in light of the fact that West Asia is a large contributor, amounting to nearly a third of all international business at Fortis, Mr. Vinayak said.

During the initial days of the conflict, the impact was minimal, as several patients had already travelled to India. Gradually, however, the numbers have dipped significantly. "If we compare the last 10 days of February with the first 10 days of March, the footfall of patients from the Middle East has dropped by 75%," he said.

Aashish Chaudhry, managing director of Aakash Healthcare in Delhi, pointed out that airspace restrictions, flight rerouting, and rising travel uncertainties are directly influencing patient mobility, both for those seeking treatment in India and for Indian patients who traditionally tra-

velled to destinations such as Dubai and other regional hubs for specialised care.

## South India less hit

The disruptions have been relatively less in southern India. Chennai's Apollo Proton Cancer Centre (APCC), for instance, sees a significant footfall of overseas patients. "We get patients from SAARC nations, Europe, Middle East, and from a good number of African nations. Patients from West Asian countries account for a fair share. Among them, Oman and the UAE account for the highest share," says Karan Puri, chief executive officer, Apollo Speciality Hospitals, Teynampet, and APCC, Taramani, Chennai.

Mr. Puri said that while there has not been much of an impact yet, as overseas patient flow has remained the same, if the situation



Patients from Oman and the UAE make up the highest share of those visiting from West Asia for treatment in India. FILE PHOTO

turns from bad to worse, then there might be a dip. "We do get a decent number of patients for bone marrow transplantation from Oman. We haven't seen any issues yet," Mr. Puri said.

In Hyderabad too, patient numbers are down, but not by much. Sameer Agrawal, deputy general manager for international business at Apollo Hospi-

tals, said there has been a marginal decline of about 2% to 3% in the number of patients arriving from West Asia as part of its overall international patient volume. "However, this has been mitigated partly due to direct connectivity to Hyderabad via Ethiopian airlines, which is still functioning and no tickets getting cancelled. The patients who travel with

Emirates and Qatar are definitely affected," he said.

Mohammed Farouk, chief operating officer of Rela Hospital in Chennai, said that there has been very minimal and short-term disruptions. "Take Oman for instance. The government funds patients starting with their travel, treatment, and accommodation. A few of them were supposed to arrive when the war broke out. After this, the Oman government rescheduled their flights to another date in March," he said.

Rela Hospital receives international patients from Bangladesh, Sri Lanka, West Asia and Africa. Most of the overseas patients seek high-end cancer care and organ transplants at the hospital, he added. "Patients from Oman are streaming through, and business has not been affected too much. The elec-

tive treatments were minimally affected but are slowly coming up. It is the ease of travel that has been affected but we do not anticipate a long-term issue at this point in time," Mr. Farouk said.

## Flight disruptions

For patients, flight cancellations and restrictions have created havoc. There are currently no flights from Iraq at all, Mr. Vinayak noted. Flights from the rest of West Asia have also declined sharply due to air space issues. "Although there is no direct flight-related issue with Africa or other parts of the world, flight costs have surged and patients are fearful to travel currently," he said.

For the current month, the overall revenue impact on international medical tourism may be about 15% to 20%, Mr. Vinayak said.

However, a more significant impact may be seen in the coming months due to the decline in new patient arrivals from several key source countries, he added.

Mr. Agarwal noted that patient footfall typically declines during the month of Ramzan, thereby masking the full extent of the impact.

In the short term, there may be logistical challenges, but Dr. Chaudhry pointed out that there is also a simultaneous shift in preference. Many patients who would earlier transit through or seek treatment in West Asian medical hubs are now evaluating India as a stable, accessible, and clinically advanced alternative, he said.

*(With inputs from Bindu Shajan Perappadan in Delhi, Siddharth Kumar Singh in Hyderabad, and Serena Josephine M. in Chennai)*

### Key Terms and Explanations

- **Medical Tourism (Heal in India):** A sector where people travel across international borders to receive medical, dental, or surgical care. India is a hub due to its "triple-A" advantage: **Affordability, Accessibility, and Advanced technology.**
- **Secondary/Tertiary Healthcare:** Specialized consultative care, usually on referral from primary or secondary medical personnel (e.g., oncology, organ transplants, or neurosurgery).
- **SAARC (South Asian Association for Regional Cooperation):** A regional intergovernmental organization. Patients from member states like Bangladesh and Afghanistan form a massive chunk of India's medical footfall.
- **Elective Treatments:** Medical procedures that are scheduled in advance because they do not involve a medical emergency (e.g., knee replacements, cosmetic surgery). These are the first to be dropped during conflicts.
- **Airspace Restrictions:** The closure or limitation of "flight paths" over conflict zones, forcing airlines to take longer, more expensive routes (rerouting).

### Main Arguments and Substantive Parts

The core thesis posits that while India is a global healthcare magnet, its medical tourism sector is highly sensitive to **geopolitical "shocks"** in source regions.

- **The Conflict Impact:** Geopolitical tensions in West Asia have led to a 30% to 75% drop in patient footfall from the region in certain North Indian hospital chains.
- **Logistical Barriers:** The primary deterrent isn't a lack of desire for treatment, but the physical inability to travel due to flight cancellations (e.g., Iraq) and prohibitive costs caused by fuel surcharges and rerouting.
- **Regional Variation in Resilience:**
  - \* **North India:** High impact due to heavy reliance on Middle Eastern and Central Asian markets.
  - **South India:** Lower impact due to a more diversified patient base (Africa, SE Asia) and better direct connectivity via neutral carriers (e.g., Ethiopian Airlines).
- **The "Ramzan" Factor:** A crucial nuance is that patient flow from the Middle East naturally dips during holy months, which might temporarily mask the full economic severity of the conflict.
- **The Silver Lining:** Paradoxically, instability in West Asian hubs (like Dubai) might eventually push international patients to view India as a "stable" alternative for long-term care.

- **Historical Evolution of the Issue**
  - **Pre-Independence & Early Post-Independence:** Healthcare was skeletal; the wealthy traveled *out* of India (mostly to the UK) for treatment.
  - **1980s-90s:** The rise of private corporate hospitals (e.g., Apollo, Fortis) began to reverse the trend.
  - **2000s (The Boom):** The government recognized "Medical Tourism" as a key foreign exchange earner. The introduction of the **Medical Visa (M-Visa)** simplified the process.
  - **Post-2014 (Policy Push):** The "Heal in India" initiative was launched to position the country as a global wellness hub, integrating Ayurveda with Allopathy.
  - **Present Day:** India ranks 10th in the Medical Tourism Index (MTI). However, the Ukraine-Russia war and now the West Asia conflict have exposed the industry's dependence on global stability.
- 
- **Previous Years' Questions (PYQs)**
  - **UPSC Mains 2015 (GS 2):** "Public health infrastructure has as much implications for national security as it has for the economy."
  - **UPSC Mains 2023 (GS 3):** Discuss the role of the service sector in India's economic growth.
  - **UPSC Mains 2017 (GS 2):** "The phrase 'Heal in India' can be the next big thing after 'Make in India'. Comment."

# Global Shocks, Local Impact: India's Medical Tourism & the West Asia Crisis

India is a global 'Heal in India' hub due to its high-quality, low-cost tertiary care. However, the West Asia conflict has exposed the sector's vulnerability to external shocks, leading to flight cancellations and a sharp decline in international patient footfall.



## THE GEOPOLITICAL SHOCK: IMPACT & VULNERABILITIES

### 30% to 75% DROP in Patient Footfall

Conflict-driven instability has decimated arrivals from Iraq and other West Asian source markets.

#### The Logistical 'Butterfly Effect'



Conflict zone



Airspace Closures force flight rerouting



Higher Costs



Canceled Elective Procedures

#### Regional Resilience Variation



North India faces high impact



South India remains stable via diversified African markets.

## BUILDING RESILIENCE: THE STRATEGIC WAY FORWARD



### Aggressive Market Diversification

Expanding outreach to Africa, CIS, and SE Asia reduces over-dependence on West Asia.



### Institutionalizing G2G Agreements

Emulating the "Oman Model" ensures stable, government-sponsored patient flows despite private travel disruptions.



### Digital Health Bridges

Tele-medicine and e-Medical Visas maintain patient-doctor links when physical travel is restricted.



**Affordability:** Costs are approximately 1/10th of US/UK medical prices.



**Accessibility:** Simplified e-Medical Visas and specialized 'AYUSH Visas' for wellness.



**Advanced Tech:** World-class tertiary care in oncology, transplants, and cardiac surgery.

### India's "Triple-A" Advantage in Medical Value Travel (MVT)

# 'Pakistan's bombing of Kabul rehab centre a barbaric act'

India responds to escalation in the ongoing conflict between Pakistan and Afghanistan after the Taliban administration revealed that the bombing led to the death of 400 people at the facility

**Kallol Bhattacharjee**  
NEW DELHI

India on Tuesday "unequivocally" condemned Pakistan's bombing of Omid Drug Addiction Treatment Hospital in Afghanistan's capital Kabul on the night of March 16, terming it "barbaric" and "unconscionable".

The remarks from the official spokesperson of the Ministry of External Affairs (MEA) came hours after the bombing that marked an escalation in the ongoing conflict between Pakistan and the Taliban-ruled Afghanistan.

The Taliban administration in Kabul had described the attack on the drug rehabilitation centre as a violation of Afghan airspace and revealed that the bombing led to the death of around 400 individuals who were seeking treatment in the facility.

"This heinous act of aggression by Pakistan is also a blatant assault on Afghanistan's sovereignty and a direct threat to regional peace and stability. It reflects Pakistan's persistent pattern of reckless beha-



viour and its repeated attempts to externalise internal failures through increasingly desperate acts of violence beyond its borders," said Randhir Jaiswal, official spokesperson of the Ministry of External Affairs.

## Former military base

The Omid Drug Addiction Treatment Hospital is a former U.S. military base that has been converted into a drug addiction treatment centre for Afghanistan's drug addicts. The base was taken over by the Taliban and converted into a rudimentary care centre after the end of the Ashraf

Ghani government in August 2021.

According to Khaama Press of Afghanistan, the Pakistan Air Force has continued bombing across Afghanistan over the past two days and apart from the Omid Drug Addiction Treatment Hospital in Kabul, it has also bombed targets in Nangarhar province, including Achin, Shinwari districts and the Jalalabad airport.

Zabihullah Mujahid, spokesman of the Taliban administration, said, "Pakistani military regime has once again violated Afghanistan's airspace and target-

ed a drug rehabilitation hospital in Kabul, resulting in the death and injury of addicts who were undergoing treatment."

Responding to the incident, which marks the largest number of civilian deaths in a single airstrike since the conflict flared up last year between the two sides, Mr. Jaiswal said: "India unequivocally condemns Pakistan's barbaric airstrike on the Omid Addiction Treatment Hospital in Kabul on the night of March 16. This is a cowardly and unconscionable act of violence that has claimed the lives of a large number of civilians in a facility which can by no means be justified as a military target."

Congress chief Mallikarjun Kharge expressed condolences for "Afghan brothers and sisters", saying, "We condemn such acts against humanity in the strongest possible terms. Such barbarism must be strongly rejected globally."

Pakistan has claimed that the hospital was serving as an arms and ammunition depot.



- **Key Terms and Explanations**

- **Sovereignty:** The supreme authority of a state to govern itself without external interference. In this context, Pakistan's airstrike is viewed as a violation of Afghanistan's territorial integrity.

- **Non-Refoulement/Civilian Immunity:** A principle in International Humanitarian Law (IHL) that prohibits targeting non-combatants and civilian infrastructure (like hospitals).

- **Externalizing Internal Failures:** A diplomatic term suggesting that a country initiates foreign conflict to distract its domestic population from internal economic or political crises.

- **Asymmetric Warfare:** Conflict where the parties have significantly different military capabilities or tactics (e.g., a state military vs. a de-facto insurgent-led government).

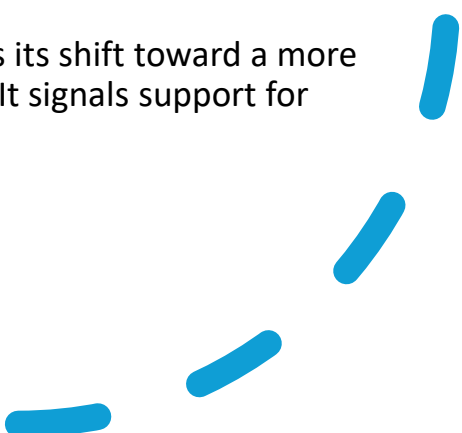
- **Main Arguments and Substantive Parts**

- **The Humanitarian Crisis:** The core of the issue is the death of approximately 400 individuals in a rehabilitation facility. This highlights the vulnerability of "soft targets" in cross-border skirmishes.

- **Violation of International Law:** The Afghan administration and India have categorized the act as a breach of airspace and a "barbaric" assault on a civilian medical facility.

- **Pakistan's Justification:** Pakistan contends the hospital was used as an "arms and ammunition depot," attempting to frame the strike as a counter-terrorism measure rather than a deliberate attack on addicts.

- **India's Strategic Posture:** India's "unequivocal" condemnation reflects its shift toward a more vocal role in Afghan affairs, despite not officially recognizing the Taliban. It signals support for the Afghan people and regional stability.



---

- **Historical Evolution of the Issue**

- **The Durand Line Dispute:** Historically, Afghanistan has never formally accepted the 1893 Durand Line as the international border, leading to decades of friction.
- **Strategic Depth (1980s–2021):** Pakistan historically sought "strategic depth" in Afghanistan by supporting various factions to ensure a pro-Islamabad government.
- **Post-August 2021:** After the Taliban takeover, the expected "brotherly" relationship soured. Issues like the Tehrik-i-Taliban Pakistan (TTP) operating from Afghan soil became a flashpoint.
- **2023–2026 Escalation:** Frequent border closures, deportation of Afghan refugees from Pakistan, and tit-for-tat airstrikes have replaced the previous era of covert cooperation.

- **Previous Years' UPSC Questions (Relevant)**

- **2023 (GS 2):** "The focus of India's foreign policy has shifted from 'Non-Alignment' to 'Multi-alignment' in the wake of the changing global order. Discuss."
- **2021 (GS 2):** "The USA is facing an existential threat in the form of China, that is much more challenging than the erstwhile Soviet Union. Explain." (Context: Impact of US withdrawal from Afghanistan).
- **2013 (GS 3):** "The political instability in Pakistan has direct implications for India's internal security. Evaluate."

# Case Study: The 2026 Kabul Airstrike & India's Regional Response



## March 16–17, 2026 Airstrike:

While Pakistan claimed it was a militant arms depot, the Taliban and India condemned the "barbaric" loss of life, sparking debate on sovereignty and ethics of cross-border force.



## LEGAL & ETHICAL DIMENSIONS

## INDIA'S DIPLOMATIC & STRATEGIC STANCE



### Violation of Territorial Integrity

Unconsented cross-border force breaches UN Charter Article 2(4) regarding a state's supreme authority.



### Failure of Distinction & Proportionality

IHL mandates distinguishing civilians from combatants; 400 deaths make military gain legally "excessive".



### Protected Civilian Objects

Hospitals and rehab centers enjoy special protection unless proven to be active military assets.



### Projection of Moral Diplomacy

India used "humanitarian vocabulary" to defend Afghan sovereignty and criticize irresponsible military behavior.



### Countering "Externalization of Failure"

India accused Pakistan of diverting domestic political crises through external military aggression.



### Regional Stability Risk

Unilateral strikes fuel radicalization and revenge cycles, undermining long-term South Asian security.

UPSC Aspirant Cheat Sheet: Key Analytical Linkages



### UPSC GS Paper II

India and its neighborhood; effect of policies on India's interests.



### UPSC GS Paper III

Cross-border terrorism, border management, and non-state actors.



### UPSC GS Paper IV

Ethics in International Relations; Just War Theory and human dignity.

# 'Both govt., people have to be flexible regarding demands'

Ladakh climate activist Sonam Wangchuk seeks a judicial closure of his case, says 'linguistic misunderstandings' may have been one of the reasons for his detention for 170 days under NSA

**Vijaita Singh**  
NEW DELHI

In his first remarks after being released from jail, climate activist Sonam Wangchuk on Tuesday said he would like a judicial closure of his case and "linguistic misunderstandings" may have been one of the reasons for his detention under the National Security Act (NSA) for 170 days.

Mr. Wangchuk was released on Saturday from Jodhpur Central Jail after the Union Home Ministry revoked the NSA order using administrative powers rarely exercised.

He hoped that the Supreme Court would also record its judgment, despite the revocation, "so that it guides future executives and policymakers on how to use and especially how not to use such laws (NSA)".

Following violence in Leh city on September 24, 2025, which left four peo-



Sonam Wangchuk addresses a press conference at Lodhi Estate in New Delhi on Tuesday. SHASHI SHEKHAR KASHYAP

ple dead during a protest demanding Statehood and inclusion of Ladakh under the Sixth Schedule of the Constitution, Mr. Wangchuk was detained under the NSA, a law under which an individual can be detained without a trial for a year. His wife, Gitanjali J. Angmo, challenged the detention in the top court, and Mr. Wangchuk was released on March 14, days before the court was expected to give its verdict.

Mr. Wangchuk told *The*

*Hindu* that the Union government did not keep any condition for his release, and even if they did, he was prepared to spend 12-24 months in jail.

## 'Struggle will continue'

Asked about the criticism from some sections that labelled him "anti-national", he said, "My movement was not for myself. It was to preserve the culture and environment of Ladakh. If they do not honour that, then our struggle will

continue."

He alleged he was "bundled and thrown into jail" and was not allowed communication with his family and legal team for almost a week. He credited his wife Ms. Angmo, and his legal team, led by Congress leader Vivek Tankha, for putting up a "spirited fight".

Mr. Wangchuk said both the government and people have to be flexible regarding demands. "Talks are a give-and-take process; both sides have to be flexible and considerate," he said, adding that prolonged delays would hamper meaningful conversation.

"I never wanted to do agitations; (I) was forced to protest. We don't want to (protest). We should join hands and set an example," he added.

Talking about the reasons behind his detention, he said, "Linguistic misunderstandings led to the grounds of detention."

- **Key Terms and Explanations**

- **Sixth Schedule:** Contained in Article 244 of the Constitution, it provides for the administration of tribal areas in Assam, Meghalaya, Tripura, and Mizoram. It creates Autonomous District Councils (ADCs) with legislative, judicial, and administrative powers.

- *Example:* An ADC can make laws on land forest management and inheritance to protect indigenous culture.

- **National Security Act (NSA), 1980:** A preventive detention law that allows the government to detain a person for up to 12 months without a formal charge or trial if they are deemed a threat to national security or public order.

- **Preventive Detention:** Action taken on grounds of suspicion that the person is likely to commit a prejudicial act. Unlike punitive detention, it is not a punishment for a past crime but a "precautionary" measure.

- **Statehood:** The demand for a Union Territory (UT) to be converted into a full-fledged State, granting it an elected Legislative Assembly and greater autonomy from Central control.

- **Judicial Closure:** A legal term referring to a final judgment by a court that resolves a dispute, ensuring that the legal questions raised (like the validity of an arrest) are answered even if the person is released.

- **Main Arguments and Substantive Parts**

- **The Necessity of Legal Precedent:** Wangchuk argues that even though he is free, the Supreme Court should rule on the merits of his detention. The core thesis is that administrative "revocation" of the NSA should not be used to bypass judicial scrutiny of whether the law was misused.

- **The "Linguistic Misunderstanding" Defense:** A significant point is the claim that detention was based on misinterpretations of language/intent. This suggests that high-stakes security laws are sometimes applied due to a lack of cultural or linguistic nuance by the executive.

- **Flexibility in Dialogue:** The activist posits that both the Union Government and the people of Ladakh must move away from rigid stances. This implies a "middle path" approach—balancing Ladakh's need for autonomy with the Centre's concerns regarding the strategic sensitivity of a border region.

- **Civil Disobedience vs. National Security:** The article contrasts the activist's view of "struggle for culture" against the State's classification of certain protests as "anti-national" or threats to public order.



- **Historical Evolution of the Issue**
  - **Pre-2019:** Ladakh was a part of the State of Jammu and Kashmir. Residents often complained of "political step-motherly treatment" from the leadership in Srinagar.
  - **August 2019:** The Jammu and Kashmir Reorganisation Act was passed. Ladakh was carved out as a Union Territory without a legislature. While initially celebrated in Leh, it led to fears of "dispossession" of land and jobs.
  - **2020-2023:** Formation of the **Leh Apex Body (LAB)** and **Kargil Democratic Alliance (KDA)**. Their "Four-Point Agenda" emerged: Statehood, Sixth Schedule status, job reservation for locals, and separate Parliamentary seats for Leh and Kargil.
  - **2024-2025:** Intensification of protests, climate fasts by Wangchuk, and eventually, the imposition of the NSA following unrest in Leh, leading to the current legal and political standoff.
- 
- **Previous Years' Questions (PYQs)**
  - **Mains (2023, GS2):** "The Sixth Schedule of the Indian Constitution has failed to achieve its objectives of tribal autonomy." Critically examine.
  - **Mains (2017, GS2):** "Preventive detention is a necessary evil." Discuss in the context of the protection of fundamental rights.
  - **Prelims (2020):** Which Schedule of the Constitution of India can be applied to protect the interests of the tribal people?

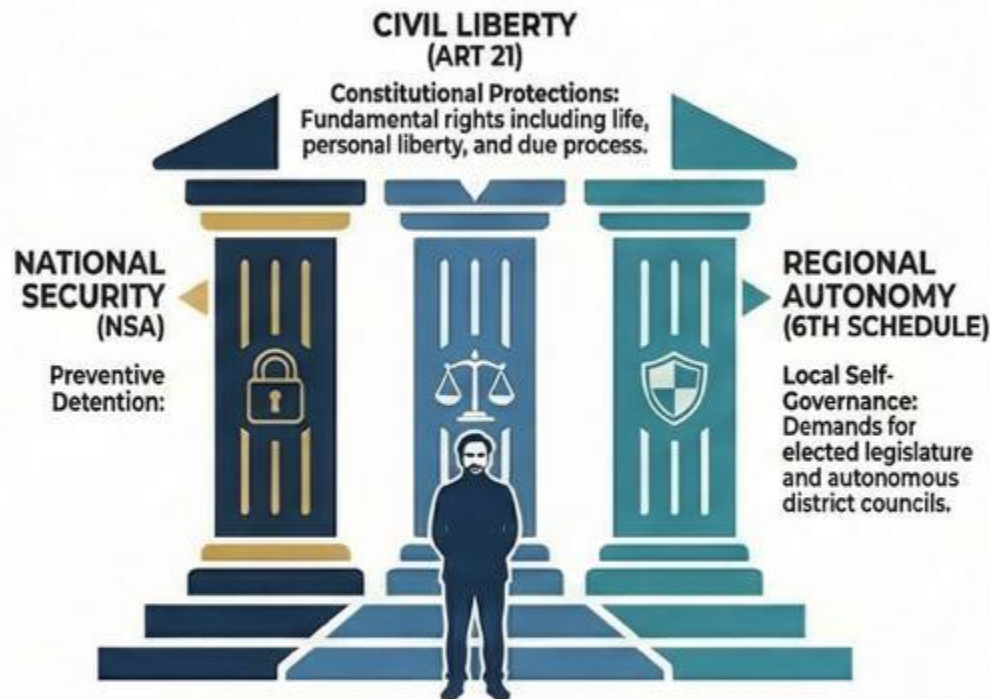
# LADAKH'S CONSTITUTIONAL CRISIS: BALANCING SECURITY, LIBERTY, AND IDENTITY

Since 2019, Ladakh's transition to a Union Territory without a legislature has sparked a movement for autonomy. The detention of activist Sonam Wangchuk under the NSA highlights the tension between security imperatives in a sensitive border region and citizen's constitutional rights.

## THE LADAKH 'FOUR-POINT AGENDA'



## THREE PILLARS OF CONFLICT



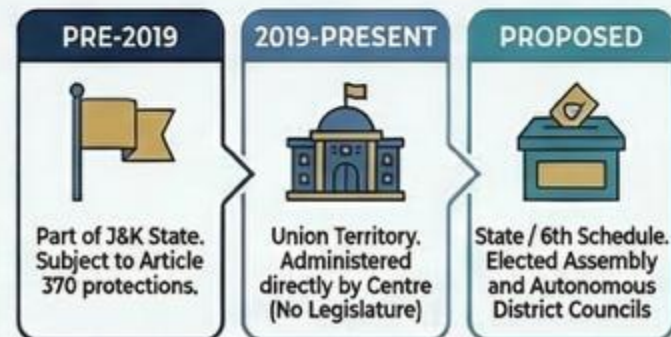
## PROCESS OF DETENTION TO RELEASE



## THE LEGAL & SECURITY DILEMMA



## LADAKH'S POLITICAL STATUS TRANSITIONS



# SC allows 12 weeks' paid leave to all new adoptive mothers

**Krishnadas Rajagopal**  
NEW DELHI

The Supreme Court, in a judgment on Tuesday, declared the protection of maternity leave for working women as a basic human right while urging the Union government to legally recognise paternity leave as a social security benefit, noting that parenthood is not a solitary function performed by one parent alone.

The judgment came in a challenge to provisions in the Maternity Benefit Act, which was replaced by the Code of Social Security in November 2025, which dictated that only mothers who legally adopt a child below the age of three months were entitled to seek maternity benefit of 12 weeks.

## 'Lengthy process'

The petition filed by Hamnaanandini Nanduri, represented by advocate Bani Dikshit, argued that the provision under challenge, Section 60(4) of the 2020 Code, unjustly deprived a mother adopting a child of three months or above of



their physical and emotional well-being. Besides, the petitioner successfully argued that the process of legal adoption usually took over three months to complete, rendering the provision completely otiose.

Justice Pardiwala, authoring the judgment for a Bench comprising Justice R. Mahadevan, observed that an adoptive mother had the same rights and obligations towards the child as the natural mother. In fact, in a case of adoption, the emotional bond with the child has to be consciously nurtured through time, presence and sustained caregiving.

The court held adoption as an "expression of reproductive autonomy".

"The concept of maternity benefit acknowledges

the ability of a woman to exercise her reproductive choices without fear of losing her employment, more particularly, the economic security. Thus, it ensures that motherhood does not become a factor for exclusion at the workplace," Justice Pardiwala observed in the judgment, concluding that the provision was unconstitutional and discriminatory.

The court pointed out that a mother, without maternity benefit, would be driven back to work, leaving the child with, probably an older sibling. "And if the older sibling happens to be a girl child, it would result in her being withdrawn from school, which reinforces the vicious cycle of gender inequality," Justice Pardiwala pointed out.

## On father's presence

Pressing the Union government to make specific legal provisions for paternity leave, the Supreme Court said a child should not be deprived of her father's presence and a new mother her partner's companionship in the early phase of caregiving.

- **Key Terms and Explanations**

- **Maternity Benefit:** A "bridge" payment and leave period that allows a woman to remain economically secure while fulfilling caregiving roles. *Example: A corporate employee receiving her full salary while staying home to bond with her newborn.*

- **Otiose:** A legal term meaning "serving no practical purpose" or "redundant." The court used this to describe the 3-month age limit for adopted children, as the legal process itself takes longer than 3 months.

- **Reproductive Autonomy:** The right of an individual to make their own choices regarding reproduction, including the decision to adopt. This is treated as an extension of the Right to Privacy (Article 21).

- **Code on Social Security (2020/2025):** A massive legislative overhaul that consolidated several labor laws, including the Maternity Benefit Act, to simplify compliance and extend benefits to more sectors.

- **Social Security Benefit:** A government-mandated or employer-funded program to provide financial aid to those with inadequate or no income due to circumstances like old age, disability, or parenthood.


- **Main Arguments and Substantive Parts**

- **Equality of Motherhood:** The court dismantled the hierarchy between biological and adoptive mothers. It argued that the "emotional bonding" in adoption requires just as much, if not more, presence and care.

- **The "Age of Child" Fallacy:** The previous law only benefited those adopting infants under three months old. The court noted that because Indian adoption procedures (CARA) are rigorous and lengthy, almost no mother could actually meet this 3-month window, making the right illusory.

- **Preventing the "Gender Inequality Cycle":** A crucial observation was made regarding the "older sibling." Without leave, a mother might pull an older daughter out of school to babysit the new arrival, thus perpetuating educational gaps for girls.

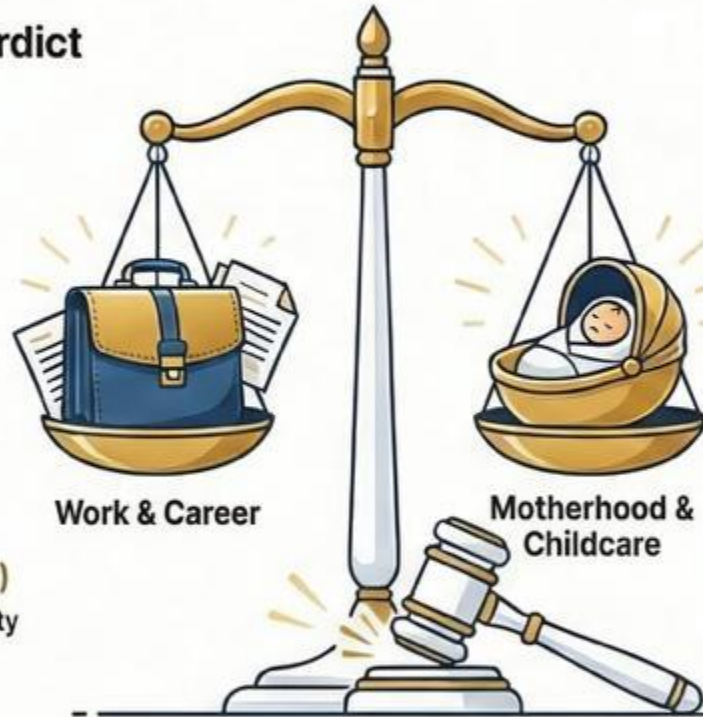
- **Paternity as a Necessity:** The judgment moved beyond "women's issues" by urging the government to recognize paternity leave. It argued that the "solitary" burden of childcare on women is a social construct that needs to be broken by legal recognition of the father's role.

- 
- **Historical Evolution of the Issue**
  - **Pre-Independence:** Minimal protections; women often lost jobs upon pregnancy in the unorganized sector.
  - **1961 (Maternity Benefit Act):** The first major step providing 12 weeks of leave, primarily for the organized sector.
  - **2017 (Amendment):** A massive leap increasing leave from 12 to 26 weeks for biological mothers and introducing 12 weeks for "commissioning" (surrogacy) and adoptive mothers.
  - **2020-2025 (Code on Social Security):** Integration of maternity benefits into a broader social security net, though it retained the controversial "3-month age limit" for adoption.
  - **Present (SC Judgment):** Struck down the discriminatory age limit and expanded the scope to include paternity leave as a future legal goal.
- 
- **Previous Years' Questions (UPSC)**
  - **Mains (2019, GS2):** "Performance of welfare schemes that are implemented for vulnerable sections is not so effective due to absence of awareness and active involvement at all stages." (Relates to the awareness of maternity rights).
  - **Mains (2017, GS2):** "Examine the main provisions of the Maternity Benefit (Amendment) Act, 2017 and the challenges in its implementation."
  - **Mains (2020, GS1):** "How does patriarchy impact the position of a middle-class working woman in India?"

# Motherhood Beyond Biology: The Supreme Court's Landmark Judgment on Maternity & Paternity Rights

## 1 The Landmark Verdict & Legal Pillars

- Equality of Motherhood (Article 14)**  
 Struck down the "3-month age limit" for adoptive mothers.
- Reproductive Autonomy (Article 21)**  
 Adoption is now legally recognized as a protected extension of the Right to Privacy and Dignity.
- Directive Principles (Article 42)**  
 The judgment reinforces the State's duty to provide just and humane conditions for maternity relief.



## 2 Social & Economic Impact

- Breaking the Gender Inequality Cycle**  
 Prevents older girl siblings from being pulled out of school to perform unpaid childcare.
- Boosting Female Labor Force Participation (FLFP)**  
 Secured leave reduces the "motherhood penalty," helping women stay in the professional workforce.
- "Best Interests of the Child" Principle**  
 Prioritizes emotional bonding and stability for adopted children, regardless of their age.

## 3 The Future of Social Security

- Paternity Leave as a Necessity**  
 The SC urged the Union Government to recognize paternity leave as a statutory social security benefit.
- Shift to "Parental Support"**  
 Moves law toward gender-neutral caregiving, recognizing parenting as a joint responsibility.

### Comparison Graphic: Evolution of Maternity Rights in India



#### Before Judgment

1981 (Act): 12 weeks leave, primarily for biological mothers in the organized sector.

#### 2017 (Amended)

2017 (Amended): Leave increased to 26 weeks (biological) and 12 weeks (adoptive <3 months).

#### Present (SC Ruling)

Present (SC Ruling): Struck down age limits for adoption; judicial "nudge" for Paternity Leave.



# Cholesterol makes cells' nuclei squishy, helping melanoma spread

When cholesterol levels in the nuclear envelope were high, the nucleus became easier to deform; this is important because cancer cells often have to squeeze through tight gaps between other cells to spread and a squishier nucleus makes that squeezing easier, so the cancer can invade new tissues more successfully

D.P. Kasbekar

**M**elanoma is one of the most dangerous common skin cancers. It starts in melanocytes, the skin cells that make melanin, the pigment that gives skin its colour.

Cancer doesn't appear overnight. A normal cell becomes cancerous in steps, as its DNA and its gene-control systems pick up changes over time. These changes push the cell to do three things: divide too much, avoid being destroyed by the immune system, and spread into other parts of the body. This spread is called metastasis, and it is what makes many cancers deadly.

Researchers want to know which changes matter most because those changes can become targets for treatment.

## Becoming squishy

A recent study led by scientists at the U.S. National Institutes of Health reported an unexpected driver of cancer spread: cholesterol in the membrane around the cell nucleus. The nucleus is the cell's control room, where most of the DNA is stored. It's wrapped in a thin nuclear envelope, like a flexible shell.

The team found this pattern in melanoma and also in breast and prostate cancers. When cholesterol levels in the nuclear envelope were high, the nucleus became easier to deform. In other words, it became more squishy. This is important because cancer cells often have to squeeze through tight gaps between other cells to spread. A squishier nucleus makes that squeezing easier, so the cancer can invade new tissues more successfully.

High cholesterol did something else, too: it made the nuclear envelope more fragile. Fragile envelopes were more likely to tear in small, local spots. When a tear happens, the DNA inside can be exposed to forces that damage it. Damaged DNA can lead to new mutations, and some of those new mutations can make the cancer even more aggressive.

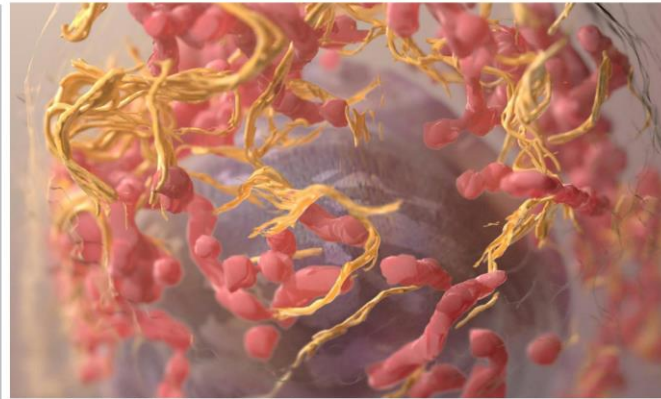
When the researchers lowered cholesterol levels in cancer cells, the cells became less invasive and less aggressive.

These findings also help explain an earlier observation: people with melanoma who were taking statins – drugs that lower cholesterol in the blood – seemed to show slower progression, on average, than people who were not.

## Too much LBR

A big question arose: how did the cancer cells raise cholesterol in the nuclear envelope?

The study pointed to a protein called the lamin B receptor (LBR). Think of LBR as a tool with two parts sitting in the inner nuclear membrane. One part helps attach DNA (packed with proteins) to the inner surface of the nucleus. The other part



3D structure of a melanoma cell derived by ion abrasion scanning electron microscopy. NC/UNSPFLASH

helps the cell make cholesterol.

In many melanoma samples, the researchers found that cells produced too much LBR. When LBR levels were high, the cellular cholesterol levels rose as well, and the nucleus became both more deformable and more fragile. When the team reduced the LBR levels, the nuclear envelope became tougher and less easily deformed.

Curiously, if the researchers used a version of LBR that couldn't do its cholesterol-making job, then boosting the LBR didn't produce the same fragile, squishy nucleus. This suggested the cholesterol-making function was central to the effect.

The team also tested what happened when they removed cholesterol directly from cell membranes: the nuclear membranes became much less fragile than in untreated cells. This fit the idea that cholesterol was changing the physical properties of the nuclear envelope.

## A treatment target

The researchers then asked a bigger question: could this process start early in cancer development? If high LBR and high cholesterol appear early, then repeated small tears in the nuclear envelope could increase DNA damage over time. More DNA damage could then raise the chances of new mutations, leading to the cancer becoming more malignant.

The team engineered melanoma cells in two versions: one set with normal LBR levels and the other where LBR had been silenced (i.e. which lacked LBR). They

**These findings also help explain an earlier observation: people with melanoma who were taking statins – drugs that lower cholesterol in the blood – seemed to show slower progression, on average, than people who were not**

injected these cells into mice. Tumours from the control cells showed more ruptured nuclear envelopes than tumours made from LBR-silenced cells. This supported the idea that LBR could help melanoma invade and spread in a living organism.

Finally, the researchers checked patient data in the real world. In one large melanoma dataset, called TCGA-SKCM, patients whose tumours showed higher LBR expression early tended to have worse outcomes. Put together, the evidence suggested that LBR could be a useful therapeutic target for slowing cancer metastasis. "The finding that LBR-mediated cholesterol production causes nuclear envelope fragility is intriguing in the context of cancer, as high cholesterol has been associated with tumour development and immune cell invasion in melanoma," the researchers wrote in their paper.

"Furthermore, epidemiological studies have shown that long-term statin use to decrease serum cholesterol is associated with decreased cancer progression and severity in many cancer subtypes, including melanoma."

"Increased cholesterol synthesis driven by upregulated LBR could serve as a metabolic enhancer," the authors continued, "increasing tumour cells' ability to proliferate and cope with nutrient-deprived conditions. Together, our findings suggest that LBR could be a prognostic indicator in early melanoma disease progression, and could serve as a drug target to prevent metastatic dissemination of melanoma, thereby improving prognosis for patient survival."

## Curiosity-driven

Scientists first discovered LBR's cholesterol-related role more than 25 years ago in research that had nothing to do with cancer. In the 1970s and 1980s, researchers studying fungi identified genes involved in making sterols – which are cholesterol-like molecules in fungi. In the 1990s, when scientists compared DNA sequences, they noticed that a human gene, LBR, resembled a sterol-making gene in fungi.

That raised a curious question: could the human gene replace the broken fungal gene? It could. That experiment was early evidence that LBR is an enzyme that processes sterol.

Years later, that basic biology link helped researchers connect LBR to nuclear cholesterol and the spread of cancer. It's a clean example of how "why does this work this way?" research can eventually matter to medicine, even when no one can predict the connection in advance.

(D.P. Kasbekar is a retired scientist. kasbekardp@yahoo.co.in)

## THE GIST

▼ A recent study led by scientists at the U.S. National Institutes of Health reported an unexpected driver of cancer spread: cholesterol in the membrane around the cell nucleus

▼ The team found this pattern in melanoma and also in breast and prostate cancers. When the researchers lowered cholesterol levels in cancer cells, the cells became less invasive and less aggressive

▼ The study pointed to a protein called the lamin B receptor (LBR). In many melanoma samples, the researchers found that cells produced too much LBR

- **Key Terms and Explanations**

- **Melanoma:** A potent form of skin cancer arising from **melanocytes** (pigment-producing cells). It is notorious for its high metastatic potential.
- **Metastasis:** The process by which cancer cells break away from the primary tumor, travel through the blood or lymphatic system, and form new tumors in distant organs.
- **Nuclear Envelope:** A double-membrane structure that encloses the cell's genetic material. In this context, its **fluidity** (regulated by cholesterol) determines how easily a cell can squeeze through tight spaces.
- **Lamin B Receptor (LBR):** A dual-function protein. It acts as a physical bridge (tethering chromatin to the nuclear membrane) and an enzyme (assisting in cholesterol synthesis).
- **Statins:** A class of lipid-lowering medications that inhibit the enzyme HMG-CoA reductase, commonly used to prevent cardiovascular disease.
- **Deformability:** The "squishiness" of the nucleus. A more deformable nucleus allows a cell to navigate the dense **Extracellular Matrix (ECM)** of the body.

- **Main Arguments and Substantive Parts**

- **The "Mechanical" Advantage:** The core thesis is that high cholesterol in the nuclear envelope acts as a physical lubricant. This allows the normally rigid nucleus to "squish," facilitating the migration of cancer cells through microscopic gaps.
- **Fragility and Mutation:** While "squishiness" helps movement, it also makes the nuclear membrane prone to rupturing. These ruptures expose DNA to cytoplasmic stress, leading to a "mutational burst" that makes the cancer more aggressive.
- **The LBR Connection:** The study identifies **LBR overexpression** as the culprit. LBR doesn't just hold the nucleus together; it actively produces the cholesterol that softens it.
- **Statin Correlation:** The findings provide a biological mechanism for why cancer patients on cholesterol-lowering drugs often see slower disease progression.

- **Historical Evolution of the Issue**

- **1970s–80s:** Research on fungi (yeast) identified genes responsible for sterol synthesis. At this stage, the research was purely "basic science" with no known link to human medicine.
- **1990s:** Genomic sequencing revealed that the human **LBR gene** was a homolog (ancestor-related) to these fungal genes.
- **Early 2000s:** Epidemiological data began suggesting that patients on statins had better cancer outcomes, but the "why" remained a mystery.
- **Present (2020s):** The shift toward **Mechanobiology**. Scientists are now linking metabolic pathways (cholesterol) to the physical movement of cells (metastasis).

- **Previous Years' Questions (PYQs)**

- **UPSC 2014 (GS-3):** "What are the areas of control of the 'Integrated Disease Surveillance Project' (IDSP) and what are its components?" (Thematic link: Non-communicable disease management).
- **UPSC 2021 (GS-3):** "Describe the various causes and the effects of faulty glycosylation in human body." (Thematic link: Biochemical errors leading to disease).
- **General Theme:** UPSC often asks about "Applied Biotechnology" and "Public Health Challenges."

# The Mechanobiology of Cancer: How “Squishy” Nuclei Drive Metastasis



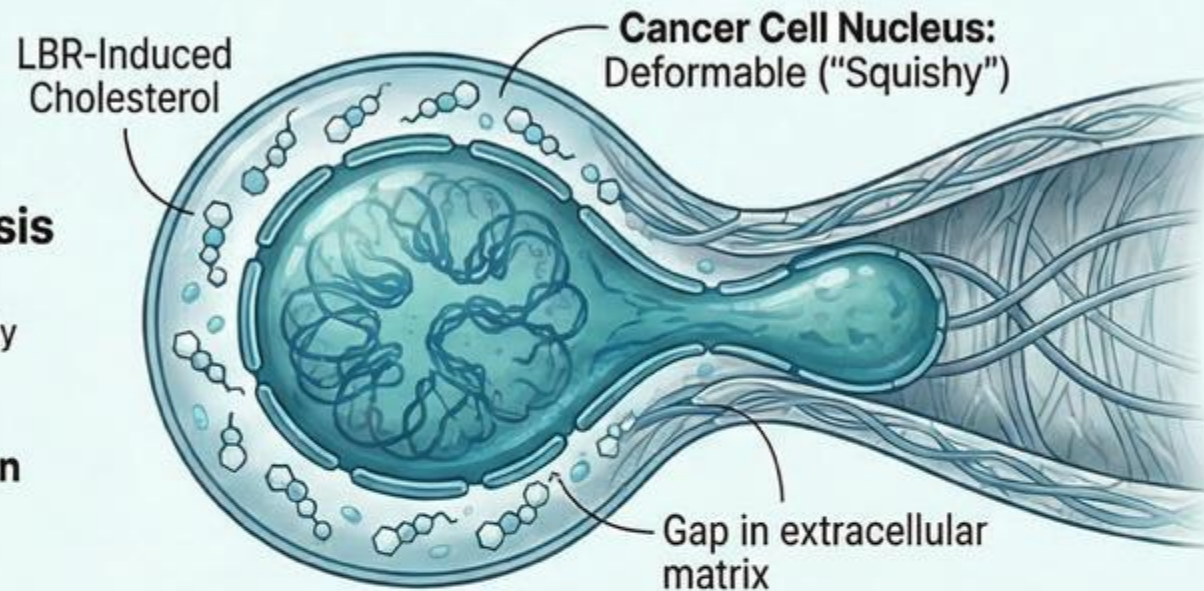
## The Biological Mechanism: From Metabolism to Metastasis

### The LBR-Cholesterol Connection

Overexpression of the LBR protein actively produces cholesterol, softening the normally rigid nuclear membrane.

### Enhanced Deformability & Migration

“Squishiness” allows cancer cells to navigate narrow gaps in the body’s extracellular matrix.



## The “Mutational Burst” Trade-off

Flexible nuclei rupture easily, exposing DNA to stress and driving aggressive new mutations.



## UPSC Strategic Linkages & Public Health (GS-3: Science & Tech Applications)

### Mechanobiology Focus

Highlights “Mechanobiology”—where physicists and biologists collaborate to study the physical forces of disease.



### Drug Repurposing (Statins)

Using affordable, off-patent cholesterol-lowering drugs to “harden” nuclei and prevent cancer spread.

### Epistemological Serendipity

1970s yeast research (basic science) unexpectedly provided the “why” for 21st-century cancer outcomes.

### Traditional vs. Modern Oncological Approaches for GS-3 Answer Writing

	Traditional Oncology	Modern Mechanobiology
<b>Primary Focus</b>	Genetic mutations & signaling	Biophysical forces & Metabolism
<b>Target</b>	DNA replication/Cell division	Nuclear integrity & Cholesterol
<b>Drug Strategy</b>	New high-cost molecules	Repurposed drugs like Statins

# On scientific collaborations in BRICS

BRICS functions as a collaborative force aimed at establishing a multipolar world system. Cooperation in science, technology and innovation has been a key agenda for the grouping and has expanded over the years to include socially relevant areas such as energy, water, health and the environment

## FULL CONTEXT

Krishna Ravi Srinivas  
Sneha Sinha

The BRICS grouping, comprising Brazil, Russia, India, China, and South Africa, is a globally significant collective defined by its substantial contributions to global GDP, scientific and technological capacity, natural resources, and total population. Since its formation, the group has evolved into a prominent international voice, representing countries that seek to challenge and provide an alternative to Western hegemony. BRICS functions as a collaborative force aimed at establishing a multipolar world system. While the group's positions on global finance and macro-economic issues are widely recognised, the depth of cooperation among member states regarding science, technology, and innovation (STI) remains less publicised.

At a time in which global scientific collaboration is increasingly dictated by geopolitical tensions, techno-nationalism, and strategic competition, often manifesting as sanctions and export controls, BRICS assumes a critical role in the global STI landscape. Through this platform, member nations coordinate their strategies, amplify their collective voice in global economic governance, and influence development finance through institutions like the New Development Bank.

These members are also vital contributors to global trade, energy production, and the supply of essential natural resources. The 2022 launch of BRICS+ signalled a move towards a more inclusive forum, fostering development and political cooperation across the Global South to reduce technological dependencies. This collaboration is now a concrete effort to build shared capacities through various framework programmes. The group's current membership has expanded to include Saudi Arabia, Egypt, the UAE, Ethiopia, Indonesia, and Iran.

**Cooperation in STI**  
Cooperation in STI has been a part of the BRICS agenda since its early years. It was formally recognised in 2011 and later consolidated in meetings between senior officials and the BRICS Ministers of Science, Technology, and Innovation. A pivotal 2015 memorandum of understanding established STI as a core strategic pillar, providing the necessary institutional framework and operational signals for collaborative research and capacity-building. This framework has since expanded the scope of cooperation, allowing members to leverage their complementary strengths to address shared development challenges and advance frontier sciences.

The first BRICS Action Plan for Innovation Cooperation (2017-2020) tasked the Science, Technology, Innovation, and Entrepreneurship Partnership (STIEP) Working Group with implementing various programmes. These initiatives focused on entrepreneurship networks, the role of youth and women in STI, and collaborations regarding technology transfer and business incubators. Over time, BRICS has moved from early joint research calls focused on fundamental science toward prioritising innovation and technology transfer.

These priorities are formally identified in annual ministerial declarations. The BRICS Ministers of Science, Technology,



**Summit dialogue:** World leaders partake in the 17th annual BRICS summit in Rio de Janeiro on July 6, 2025. AP

and Innovation meet once a year to approve and sign strategic documents. Within each member country, one or two lead agencies coordinate these activities, issue calls for proposals, and prepare project lists for approval during the respective country's presidency. For example, during India's chairmanship, the Council of Scientific and Industrial Research (CSIR) and the Department of Biotechnology (DBT) serve as the lead agencies.

A clear emphasis on innovation-driven and technology-enabled ecosystems is evident in recent summit themes and initiatives such as IBRICS and the BRICS Technology Transfer Centre (TTC). The TTC has made notable progress in creating policy frameworks and institutional links for cross-border technology commercialisation. However, despite this progress, large-scale commercialisation of these technologies remains limited.

The focus of BRICS joint research calls has transitioned from basic science and enabling technologies to include more socially relevant areas such as energy, water, health, and the environment. The COVID-19 pandemic accelerated this shift, placing a premium on public health, vaccine research, biosecurity, and digital health. Recent calls have integrated high-performance computing (HPC), advanced materials, information and communication technology (ICT), and space-related applications. Scientific collaboration has strengthened over time, with a growing focus on artificial intelligence and data-intensive science.

While working groups reflect these shared development priorities, their progress varies across different fields. Significant progress is visible in ICT and HPC, highlighted by the establishment of the BRICS Institute of Future Networks, as well as in space cooperation following a 2021 intergovernmental agreement. Conversely, areas that require heavy infrastructure or are more exploratory, such as mega-science projects and ocean or polar research, have developed slower.

The expansion of BRICS has positioned it as a more inclusive platform for knowledge exchange and collaborative research. The 2025 Declaration on AI, elevated artificial intelligence from a sub-theme, to a central pillar of multilateral governance. This declaration outlines a vision for AI governance that is

equitable, inclusive, and development-oriented, moving the partnership towards a strategic collaboration with direct economic and societal relevance. While the 2024-25 Action Plan focused on networking and thematic frameworks, subsequent plans aim to scale projects for greater impact, focusing on biotechnology, climate tech, industrial innovation, and AI.

Under India's 2026 Presidency, with the theme 'Building for Resilience, Innovation, Cooperation and Sustainability', the group is positioned to deepen its scientific partnerships. The goal is to leverage expanded membership to strengthen capacities and address challenges like digital divides, public health crises, and climate resilience. However, participation from new members remains uneven; among the most recent additions, only Egypt and Iran joined the call for proposals issued last December. Additionally, the China-BRICS Research Centre on New Quality Productive Forces was recently inaugurated in Beijing. This center serves as an international platform for academic exchange and technological research.

**Concerns and concerns**  
When compared to nations like South Korea, the National Innovation Systems (NIS) of BRICS countries exhibit various strengths and weaknesses. Specifically, gross domestic expenditure on research and development (GERD) is relatively lower across the group, with the exception of China. Research suggests that the gap between BRICS nations and South Korea is wide, and member countries excluding China have significant catching up to do according to various innovation indicators. With the expansion into BRICS+, the innovation systems of new members also require assessment and strengthening. This strengthening could be a priority for BRICS over the next decade, with the potential to eventually replicate these improvements across the broader Global South.

As noted by Stanford University visiting scholar Irina Dezhina, the heterogeneity of new members in terms of both economic development and scientific capacity makes it difficult to reconcile differing interests. Consequently, BRICS+ may need to focus on catalysing new 'paired links' between specific members. Comparisons to the European Union (EU)

suggest that BRICS could learn from the EU's wide variety of STI programs, as BRICS currently offers more limited options. Further, although competition for funding is intense, the total funding available remains modest.

Experts suggest that these programmes must reach a new qualitative level to effectively respond to major global challenges. Currently, however, research into STI cooperation among BRICS nations is limited, and the existing mechanism lacks a framework for regular study to provide data-driven inputs to member countries.

## A way forward

While BRICS countries have achieved significant collaboration, there are questions regarding whether the current framework is sufficient for future needs. A primary concern is the lack of a permanent mechanism to manage STI cooperation. The current system, where the lead role rotates annually with the presidency, is not ideally suited for long-term requirements. BRICS could potentially model a central mechanism after the EU's Horizon Program, establishing a Secretariat to manage funds, issue calls for proposals, monitor progress, and review outcomes.

Developing a few long-term Mega-science Projects could also foster deeper cooperation. The framework for STI cooperation should eventually expand beyond just funding science and technology projects; it should promote research into the governance of STI and the impact of emerging technologies on BRICS+ nations. This would facilitate greater coherence in international treaty negotiations and help build capacity for STI governance.

In conclusion, while STI cooperation within BRICS has progressed significantly since 2015 despite various constraints, there is substantial room for improvement. Making the framework more effective, agile, and credible will enhance the group's legitimacy in the global arena. As the chair of BRICS+ in 2026, India has the opportunity to lead this transition.

*(Krishna Ravi Srinivas is Adjunct Professor of Law, Director CoE in AI & Law, NALSAR University of Law, Hyderabad. Sneha Sinha is Consultant, Research and Information Systems for Developing Countries (RIS), New Delhi.)*

## THE GIST

BRICS has emerged as a key international voice on global finance and macro-economic issues. However, the cooperation among member states on science, technology, and innovation remains less publicised.

Scientific collaboration among BRICS nations has strengthened over time. Yet, areas that require heavy infrastructure or are more exploratory, such as mega-science projects and ocean or polar research, have developed slower.

While working groups reflect these shared development priorities, their progress varies across different fields. There are questions regarding whether the current framework is sufficient for future needs.



- **Key Terms and Explanations**

- **Multipolar World System:** A global order where power is distributed among several major states rather than dominated by one (unipolar) or two (bipolar) superpowers. BRICS views STI as a tool to achieve this balance.

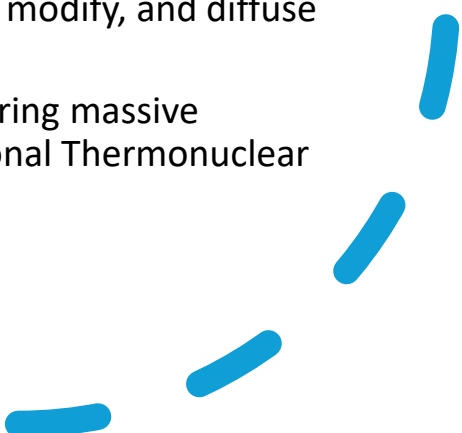
- **Techno-nationalism:** The linking of a nation's technological prowess directly to its national security and economic sovereignty, often leading to restricted sharing of tech (e.g., US-China chip wars).

- **New Quality Productive Forces:** A conceptual framework (often associated with Chinese economic policy) focusing on innovation-led growth that breaks away from traditional labor-intensive models, prioritizing high-tech, high-efficiency, and high-quality sectors.

- **GERD (Gross Domestic Expenditure on R&D):** The total amount a country spends on research and development. It is a critical indicator of a nation's "innovative health."

- **National Innovation System (NIS):** The network of institutions in the public and private sectors whose activities and interactions initiate, import, modify, and diffuse new technologies.

- **Mega-science Projects:** Large-scale scientific endeavors requiring massive investment and international cooperation, such as the International Thermonuclear Experimental Reactor (ITER) or Large Hadron Collider (LHC).



- **Main Arguments and Substantive Parts**

- The core thesis posits that while BRICS has successfully transitioned from a purely economic bloc to a strategic STI collaborator, it faces a "delivery gap" caused by institutional decentralization and heterogeneous member capacities.

- **Shift from Basic to Applied Science:** Collaboration has moved beyond theoretical research to socially relevant sectors like vaccine research (post-COVID), digital health, and climate tech.

- **The Inclusion vs. Efficiency Dilemma:** The expansion to BRICS+ (including Iran, UAE, Ethiopia, etc.) increases the group's global footprint but complicates the synchronization of STI policies due to varying levels of economic development.

- **Institutional Frameworks:** The establishment of the **BRICS Technology Transfer Centre (TTC)** and the **iBRICS** network are cited as evidence of a move toward commercializing research, though large-scale market success remains elusive.

- **AI as a New Pillar:** The **2025 Declaration on AI** marks a shift where Artificial Intelligence is no longer a sub-topic but a central theme for multilateral governance, challenging Western-led AI norms.



- **Historical Evolution of the Issue**

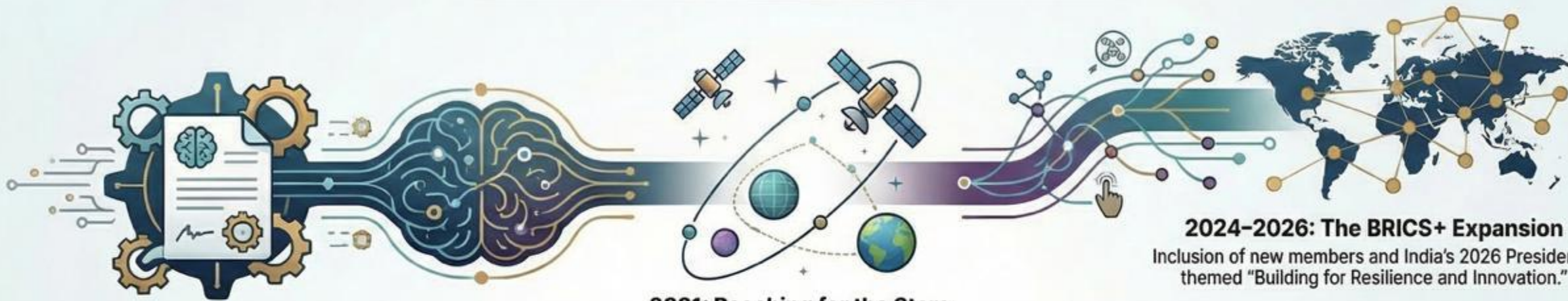
- **2009–2010 (Foundational Years):** Focus was primarily on the global financial architecture and macroeconomic stability post-2008 crisis.
- **2011 (Sanya Summit):** STI was formally recognized as a potential area of cooperation.
- **2015 (Moscow MoU):** A landmark Memorandum of Understanding on STI was signed, making it a "strategic pillar."
- **2017–2020 (Action Plan Phase):** The first Action Plan for Innovation Cooperation was launched, creating working groups for entrepreneurship and youth.
- **2021 (Space Agreement):** Member nations signed an agreement on cooperation in the BRICS Remote Sensing Satellite Constellation.
- **2024–2025 (The BRICS+ Era):** Expansion of the bloc and the elevation of AI and "New Quality Productive Forces" to the top of the agenda.

- **Previous Years' Questions (PYQs)**

- **Mains 2022 (GS-2):** "The newly revitalized BRICS believes in a multipolar world... discuss its challenges."
- **Mains 2014 (GS-2):** "The BRICS nations are characterized by diversity... what are the commonalities that hold them together?"
- **Mains 2017 (GS-3):** "Give an account of the growth and development of nuclear science and technology in India." (Context: Shared BRICS nuclear research).

# BRICS+ STI: The Strategic Evolution of a Knowledge Powerhouse

Illustrating the strategic transition from an economic bloc to a global scientific and technological alliance for multipolarity.



## 2015: The Strategic Foundation

Signing of the landmark MoU on Science, Technology, and Innovation, making STI a "Strategic Pillar."

## 2021: Reaching for the Stars

Member nations signed the Remote Sensing Satellite Constellation agreement for shared space-based data.

## 2024-2026: The BRICS+ Expansion

Inclusion of new members and India's 2026 Presidency themed "Building for Resilience and Innovation."

**Context:** Transitioning to achieve "Strategic Autonomy" and "Technological Sovereignty," allowing the Global South to solve unique challenges independent of Western-centric technology.

## Strategic Focus & Emerging Challenges

### AI as a Central Governance Pillar



The 2025 Declaration shifts AI from a sub-topic to a central theme for multilateral governance.

### Techno-nationalism & Sovereignty



Linking technological prowess to national security to avoid the "Black Box" dependency trap of Western tech.

### The "Delivery Gap" Challenge



Institutional fragmentation and the lack of a permanent secretariat hinder long-term scientific project continuity.

## The "Innovation Gap": R&D Investment & Focus



# Ministry of Planning, Niti Aayog get House panel rap for 'poor planning' of finances

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

The Parliamentary Standing Committee on Finance pulled up the Ministry of Planning for not "planning" its finances better. The committee found that despite spending less than half of the budget allocated to it, the Ministry was allocated ever-higher amounts over the past three financial years.

In its latest report tabled in the Lok Sabha on Tuesday, the committee called for "more realistic" planning and financial management by the Ministry. The government's nodal think-tank, the Niti Aayog, operates through the Ministry.

The committee also noted "flaws in planning" by Niti Aayog when it comes to its finances.

## **Under-utilisation**

"After overall scrutiny of estimates, allocations and utilisation of the budget grants during financial years under reference, the Committee are of the view that there has been continuous underutilisation of the earmarked funds by the Ministry of Planning," the Standing Committee's report said.

The committee noted that the Ministry sought ₹1,203.38 crore of funds for the upcoming financial year 2026-27, which is about 22% higher than the ₹1,006.06 crore as per the Budget Estimates (BE) for 2025-26.

"However, the Actuals for the FY 2023-24 were at ₹290.81 crore against a BE of ₹824.39 crore, which is around 35% of the BE," the committee noted. "Likewise, the Actuals for the FY 2024-25 were only ₹282.61 crore, against a BE of ₹837.26 crore i.e. just about 34% in percentage terms."

The committee noted that this situation seems to have improved in 2025-26 but also said that the actual utilisation amount is only slightly more than half the amount budgeted.

"With only a narrow window of two months remaining in the FY under reference, the Committee are not very optimistic," it added.

The committee said that

## **The committee called for a "more realistic" financial management by the Ministry**

despite this continuous under-utilisation, the BE of the Ministry grew 20% and 22%, respectively, in the preceding years.

"The Committee in their previous reports have time and again emphasised the need for more realistic planning and financial management for optimal use of available financial resources," the report said.

"The Committee therefore strongly recommend Ministry of Planning to ensure that 2026-27 budget is utilised effectively and to avoid any idling and blocking of funds in the non-responsive Heads."

"The Committee hope that the Ministry of Planning would be more fiscally prudent in assessment of their projected expenditure and targets in the future," it added.

## **Dismal implementation**

The committee said that its analysis of Niti Aayog's Quarterly Expenditure Plan (QEP) reveals a "persistent and significant" underutilisation. The data in the report shows that, in 2023-24 and 2024-25, actual spending was approximately 35% and 33% of the total BE, respectively.

"This indicates flaws in planning as there is dismal implementation of the plans on the ground," the Committee said. "While FY 2025-26 shows a positive trend with improved utilisation (56.46%), the surge in Q4 expenditure remains a concern."

It said that a projected spending of ₹139.17 crore in Q4 of 2025-26 "appears to be a disproportionate rush to exhaust funds", and also risks violating the Central government's 15% monthly spending cap.

"The Committee are of the firm view that there is need to adhere to strict Quarterly Expenditure Percentage norms and NITI Aayog should conduct internal reviews to synchronise administrative sanctions with the QEP," the report said.


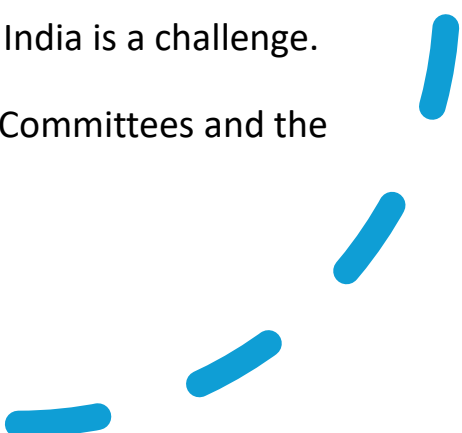


- **Key Terms and Explanations**

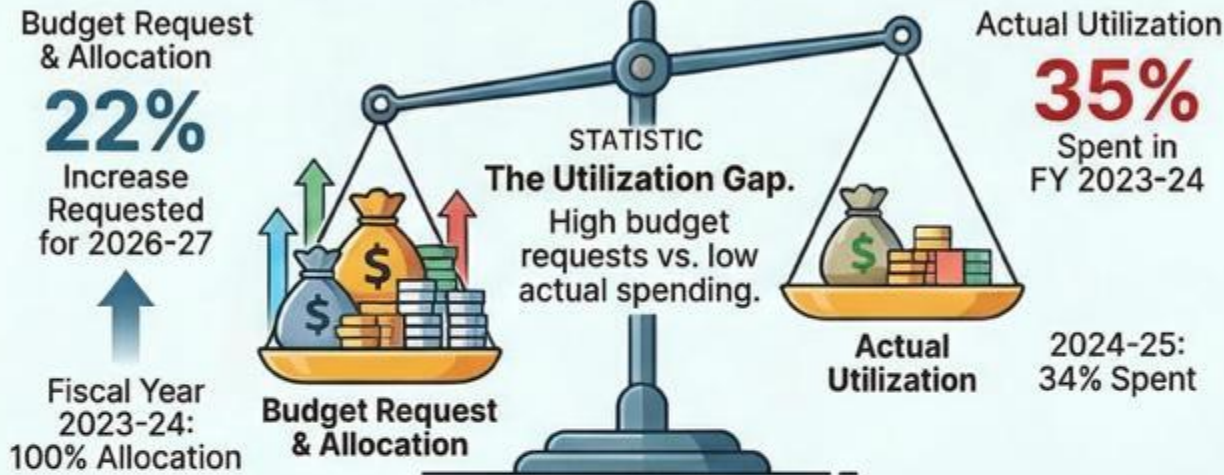
- **Parliamentary Standing Committee on Finance:** A department-related permanent committee of Parliament consisting of members from both Houses. It acts as a watchdog over the financial health and accountability of specific ministries.
- **NITI Aayog (National Institution for Transforming India):** The premier policy "Think Tank" of the Government of India, providing both directional and policy inputs. It replaced the Planning Commission in 2015.
- **Budget Estimates (BE):** The amount of money allocated to a ministry or department in the Union Budget for the upcoming financial year.
- **Actuals:** The real amount of money spent by the ministry after the conclusion of the financial year, often different from the initial estimate.
- **Quarterly Expenditure Plan (QEP):** A mechanism to ensure that spending is spread evenly throughout the year to avoid a "March Rush" (excessive spending at the end of the fiscal year).
- **Idling and Blocking of Funds:** A situation where money is allocated to a department but remains unspent. This is a "locked" resource that could have been used for other productive developmental projects.

- **Main Arguments and Substantive Parts**

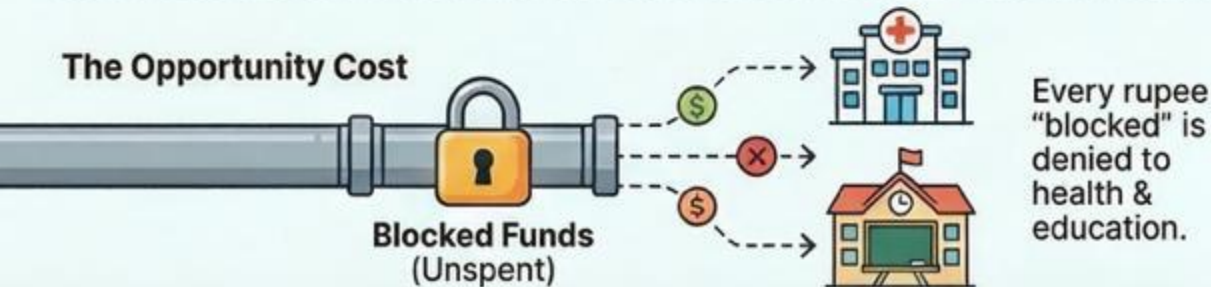
- The core issue revolves around **chronic fiscal under-performance** despite increasing budget requests.
- **The Paradox of Allocation vs. Utilization:** The Ministry consistently asks for more funds (a 22% increase for 2026-27) while failing to spend even half of its previous allocations. In FY 2023-24, utilization was a mere 35%.
- **Dismal Implementation:** The Committee argues that the gap between "Budget Estimates" and "Actuals" is not just a math error but evidence of poor planning on the ground.
- **The "March Rush" Concern:** There is a projected spike in spending for the final quarter (Q4) of 2025-26. The Committee warns this is a "disproportionate rush" to exhaust funds, which often leads to poor quality of expenditure and violates the 15% monthly spending cap rule.
- **Lack of Fiscal Prudence:** The Committee emphasizes that NITI Aayog, being the nation's premier planning body, should ideally be the gold standard for financial management, yet it shows "flaws in planning" within its own house.

- 
- **Historical Evolution of the Issue**
  - **Pre-Independence to 1950:** The concept of a planned economy took root with the National Planning Committee (1938) and later the Bombay Plan.
  - **1950–2014 (The Planning Commission Era):** The Planning Commission followed a top-down approach with Five-Year Plans. Financial scrutiny often focused on "Plan" vs. "Non-Plan" expenditure.
  - **2015 (Formation of NITI Aayog):** NITI Aayog was created to foster "Cooperative Federalism." Unlike the Planning Commission, it does not have the power to allocate funds to states; it is a think-tank.
  - **Present Day (Post-2020):** There has been an increasing shift toward "Outcome-based Budgeting." However, as seen in the recent report, the transition from being a policy designer to an efficient financial executor remains a challenge.
- 
- **Previous Years' Questions**
  - **UPSC Mains (2015):** "How is NITI Aayog different from the Planning Commission? Discuss its role in the development of India."
  - **UPSC Mains (2018):** "The Public Expenditure Management in India is a challenge. Comment."
  - **UPSC Prelims (2022):** Questions on the role of Parliamentary Committees and the nature of the Estimates Committee.
- 

## The Fiscal Paradox: Data & Deficiencies



### The Opportunity Cost



## The Path to Prudence: Solutions & Oversight



### Legislative Supremacy.

The **Parliamentary Standing Committee** acts as watchdog, ensuring Executive justifies every paisa.

### The Synchronization Model

Aligning sanctions with QEP to ensure steady fund flow.

**Administrative Sanctions**  
 (Project Permissions)



**Quarterly Expenditure Plan (QEP)**

**Steady Fund Flow**

### Real-time Accountability

Transitioning to "**Outcome-based Budgeting**" & digital tracking via **PFMS** (Public Financial Management System) to prevent "idling" of capital.



# Iran war's economic fallout may be worse than Ukraine

The world has largely adjusted to the Russia-Ukraine war. But the West Asian conflict's ramifications for India will extend beyond oil



HARISH DAMODARAN

ON FEBRUARY 24, 2022, when Russia began its war on Ukraine, the international prices of all three Fs — fuel, food and fertilisers — skyrocketed.

Brent crude prices soared to above \$100 per barrel and stayed at those levels till early August, with a peak monthly average of \$117.9 in June 2022. The United Nations Food and Agriculture Organisation's (FAO) food price index — having a base period value of 100 for 2014-16 — averaged 144.5 points in 2022 and scaled an all-time high of 160.2 points in March. Landed prices of imported di-ammonium phosphate (DAP) and muriate of potash fertilisers in India crossed \$950 and \$590 per tonne by July 2022, while that of intermediates and raw materials like phosphoric acid, ammonia and rock phosphate hit \$1,715, \$1,575 and \$300-plus per tonne respectively during that year.

## The impact then

The Russia-Ukraine war's impact was felt mainly on the merchandise trade account of India's external Balance of Payments (BoP). The trade deficit — the excess of imports over exports of goods — soared from \$102.2 billion in 2020-21 (April-March financial year) to \$189.5 billion in 2021-22 and \$265.3 billion in 2022-23.

The BoP's other components, however, weren't affected. The widening of the merchandise trade deficit was considerably offset by an increased surplus on the so-called invisibles account. The latter pertains to the global flows of services, people, data and ideas, as opposed to the "visible" trade in goods across national borders.

The accompanying table shows that India's net invisibles surplus went from \$126.1 billion in 2020-21 to \$150.7 billion in 2021-22 and \$198.2 billion in 2022-23.

This was largely courtesy of two items, software exports and private remittance transfers by Indian living and working abroad. The two together constituted over 55% of the gross invisibles receipts of \$465.8 billion in 2022-23 that, for the first time, even exceeded India's exports of goods valued at \$456.1 billion.

The higher invisibles surplus resulted in

## • Key components of India's Balance of Payments (ALL FIGURES IN \$ BILLION)

	2020-21	2021-22	2022-23	2023-24	2024-25	Apr-Dec 2025
<b>1. TRADE BALANCE</b>	<b>-102.15</b>	<b>-189.46</b>	<b>-265.29</b>	<b>-244.91</b>	<b>-286.95</b>	<b>-251.62</b>
a. Exports	296.3	429.16	456.07	441.44	442.08	333.37
b. Imports	398.45	618.62	721.36	686.35	729.03	584.99
<b>2. NET INVISIBLES</b>	<b>126.06</b>	<b>150.69</b>	<b>198.24</b>	<b>218.8</b>	<b>263.89</b>	<b>221.38</b>
a. Remittances	80.19	89.13	112.47	118.71	135.43	110.88
b. Software	100	122.09	146.77	160.33	180.63	150.35
<b>3. C.A.B.*</b>	<b>23.91</b>	<b>-38.77</b>	<b>-67.05</b>	<b>-26.11</b>	<b>-23.06</b>	<b>-30.24</b>
<b>4. CAPITAL FLOWS</b>	<b>63.37</b>	<b>86.27</b>	<b>57.92</b>	<b>89.81</b>	<b>18.03</b>	<b>-0.58</b>

\*CURRENT ACCOUNT BALANCE, BOTH REMITTANCES (PRIVATE TRANSFERS) AND EXPORTS OF SOFTWARE SERVICES ARE IN GROSS TERMS; CAPITAL FLOWS INCLUDES ERRORS & OMISSIONS. SOURCE: RESERVE BANK OF INDIA.



An LPG tanker arrives at Mundra Port on Monday. (PI)

## Pain point

If the war drags on, it could push West Asian economies into contraction and force large-scale return of Indian workers.

This would significantly dent India's invisibles account surpluses.

the country's overall current account transactions deficit being contained at just above \$67 billion. India, moreover, attracted capital inflows — basically foreign investment and external commercial borrowings — to the tune of \$579 billion in 2022-23, further softening the blow from the war.

In 2023-24, as global prices of the 3Fs eased, not only did India's merchandise trade deficit fall to \$244.9 billion. It was accompanied by a still higher invisibles surplus of \$218.8 billion, thereby shrinking the current account deficit to \$26.1 billion that could be comfortably financed by capital inflows. The latter, at \$89.8 billion in net terms, was the highest since the \$92.3 billion, \$92 billion and \$107.9 billion of 2017-18, 2012-13 and 2007-08 respectively.

## The situation now

In the US-Israel war against Iran, it is fuel, out of the 3Fs, that has borne the brunt of price surge.

Iran's effective closure of the Strait of Hormuz — the narrow maritime waterway

through which a fifth of the world's total petroleum liquids consumption equivalent and liquefied natural gas (LNG) trade passes — propelled Brent crude prices past the \$100 per barrel-mark this month.

The effect on fertilisers has been less, at least for India. The country's comfortable stocks of urea, DAP and complex fertilisers, besides the next *kharif* (monsoon) crop planting season being 2.5-3 months away, means no immediate crisis. But with more than 60% of India's imports of LNG (the basic feedstock for urea) and 80% of inputs such as sulphur and ammonia coming from West Asia, a prolonged war can have serious implications for India's agriculture and food security.

As for the third F, the FAO's food price index averaged 125.3 points in February 2026 — down from 126.6 points in February 2025 and way below the 2022 peaks following the outbreak of the Russia-Ukraine war.

India has also entered the present war with government stocks of rice and wheat at 99.7 million tonnes (mt) on February 1, an all-

time-high for this date and as against 83.8 mt a year ago. This wasn't the case in 2022, when India harvested a poor wheat crop — due to a sudden temperature spike in March just at the stage of grain-filling — on top of the supply disruptions from Russia-Ukraine.

Compared with then, the situation in food is better, more so as India is set for a bumper harvest of wheat, mustard, chickpea and other *rabi* (winter-spring) crops. Globally, too, the US Department of Agriculture has projected record production of wheat, rice, corn (maize), sorghum, soybean, rapeseed and palm oil for 2025-26.

Like with fertilisers, the problems in food would arise only if the war stretches to the point where farmers struggle to access sufficient nutrients for their ensuing crops.

## The real vulnerability for India

The Russia-Ukraine war's damage to India, as earlier noted, was primarily on the merchandise trade account of the BoP. The West Asia conflict's ramifications could extend beyond that, to even the invisibles account.

This war is being fought far closer home. According to the Ministry of External Affairs, there are nearly 8.9 million overseas Indians in the Gulf Cooperation Council countries alone: Bahrain (3.28 lakh), Kuwait (9.96 lakh), Oman (6.87 lakh), Qatar (8.37 lakh), Saudi Arabia (24.64 lakh) and UAE (35.69 lakh). Reserve Bank of India data shows that these six countries have a combined 37.9% share in the gross remittances of \$118.7 billion received by India in 2023-24.

If the war drags on, pushing the West Asian economies into contraction and forcing large-scale return of Indian workers, it would significantly dent India's invisibles account surpluses. That would, in turn, cause a ballooning of the current account deficit. And all this comes amid a slowdown in capital flows, which was already putting pressure on the rupee.

It can be seen from the table that net capital inflows to India plunged from \$89.8 billion in 2023-24 to \$18 billion in 2024-25, and turning negative for the first nine months of this fiscal. The drying up of capital flows is also borne out by foreign portfolio investors making net sales of \$18.9 billion in Indian equity markets last year and another \$9.4 billion so far in 2026.

The world, and India, have adjusted to the Russia-Ukraine conflict that continues to rage for four years and counting. Neither can afford the consequences of a similarly lengthy war in West Asia.

- **Key Terms and Explanations**

- **Balance of Payments (BoP):** A statistical statement that summarizes transactions between residents and non-residents during a period. It consists of the **Current Account** (trade in goods/services) and the **Capital Account** (foreign investment, loans).
- **Net Invisibles:** This refers to the secondary income and services part of the Current Account. It includes **Remittances** (money sent home by migrants) and **Software Services exports**. For India, this is usually a surplus that helps offset the trade deficit.
- **Trade Deficit:** When the value of a country's imports exceeds its exports. India typically runs a merchandise trade deficit due to high oil and electronic imports.
- **The Three Fs: Fuel, Food, and Fertilizers.** These are the primary commodities whose prices spike during global conflicts, directly impacting inflation and fiscal health.
- **Strait of Hormuz:** A narrow chokepoint between the Persian Gulf and the Gulf of Oman. About one-fifth of the world's total petroleum liquids pass through here.
- **Capital Flows:** The movement of money for the purpose of investment, trade, or business production. This includes Foreign Portfolio Investment (FPI) and Foreign Direct Investment (FDI).

- **Main Arguments and Substantive Parts**

- The core thesis is that while India "weathered" the Russia-Ukraine storm, a full-scale West Asian conflict involving Iran would be exponentially more damaging due to India's structural dependencies on the region.
- **The "Invisibles" Vulnerability:** Unlike the Ukraine war, which primarily hit the "Visible" (merchandise) account via oil prices, a West Asian war hits the "Invisibles." India relies on nearly 9 million workers in the GCC (Gulf Cooperation Council) for massive remittance inflows.
- **The Chokepoint Risk:** Iran's ability to close the **Strait of Hormuz** poses a greater threat to energy security than the disruption of Russian pipelines, as it cuts off the primary artery for LNG and crude for the entire Asian continent.
- **Agricultural Impact:** While India has high stocks of wheat and rice, it remains critically dependent on West Asia for **fertilizer inputs** (rock phosphate, ammonia, sulfur) and **LNG** (used to manufacture domestic urea).
- **Capital Flight:** Uncertainty leads to "Risk-off" sentiment, where foreign investors pull money out of emerging markets like India, putting downward pressure on the Rupee.



- **Historical Evolution of the Issue**

- **Pre-1991:** India followed a "Look West" policy mainly for energy. The 1990 Gulf War caused a massive BoP crisis because of a spike in oil prices and the cost of evacuating Indian citizens from Kuwait, leading to the 1991 Liberalization.

- **2000s–2010s:** India diversified its economy. Software exports and remittances from the Gulf became the "Twin Pillars" that stabilized India's Current Account.

- **2022 (Russia-Ukraine):** A test of resilience. India managed by importing discounted Russian oil, proving that it could navigate merchandise disruptions.

- **Present Day:** The shift toward a potential "Iran-Israel" or "West Asian" conflict represents a move from a *commodity price shock* to a *structural income shock* (loss of remittances).

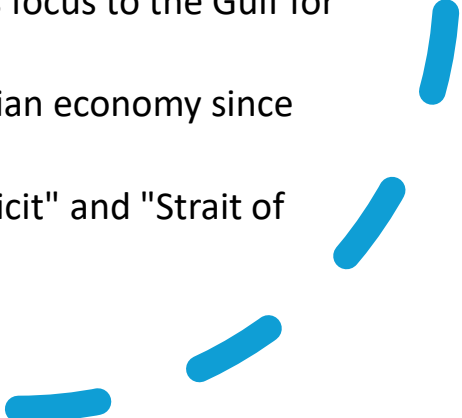
- **All Previous Years' UPSC Questions**

- **GS 3 (2022):** "The Russia-Ukraine war has asked serious questions about the energy security of the world. Comment."

- **GS 2 (2017):** "Indian Diaspora has a decisive role to play in the politics and economy of America and European Countries. Comment." (Note: Shift this focus to the Gulf for this context).

- **GS 3 (2013):** "Examine the impact of the BoP crisis on the Indian economy since 1991."

- **Prelims (2014/2022):** Questions on the "Current Account Deficit" and "Strait of Hormuz" geography.



# WEST ASIAN CONFLICT: A STRUCTURAL THREAT TO INDIA'S ECONOMIC STABILITY



## THE BALANCE OF PAYMENTS (BOP) VULNERABILITY FROM COMMODITY SHOCK TO STRUCTURAL INCOME SHOCK



Threat to India's Twin Pillars

### THE VULNERABLE 'INVISIBLES' CUSHION



Remittances from 8.9 million Gulf workers (38% of India's total) are vital shock absorbers.

### THE STRAIT OF HORMUZ CHOKEPOINT



One-fifth of global petroleum passes here; closure threatens India's primary energy artery.

## RUSSIA-UKRAINE VS. WEST ASIA IMPACT

### RUSSIA-UKRAINE IMPACT

### WEST ASIAN CONFLICT THREAT



PRIMARY ACCOUNT HIT: Merchandise (Visible) Trade

LOGISTICS RISK: Supply Chain Rerouting

LABOR IMPACT: Minimal

PRIMARY ACCOUNT HIT: Invisibles (Remittances/Services)

LOGISTICS RISK: Total Maritime Chokepoint (Hormuz)

LABOR IMPACT: High (Displacement of 9 Million Workers)



WAR IN WEST ASIA



FUEL SHORTAGE (LNG)



FERTILIZER SHORTAGE (Rock Phosphate/Urea)



FOOD INFLATION



### THE FERTILIZER-FOOD SECURITY NEXUS



India relies on West Asian LNG and rock phosphate to manufacture domestic urea.

### IMPORTED INFLATION & FISCAL STRESS



Energy spikes lead to wider trade deficits and a surging fertilizer subsidy bill.

### RISK-OFF SENTIMENT & CAPITAL FLIGHT



Global uncertainty causes foreign investors to pull money out, devaluing the Rupee.

# How the global energy shock threatens India's Goldilocks era

Siddharth Upasani

New Delhi, March 17

INDIA HAS always been dependent on the world's energy producers on account of it having to import a vast majority of its fuel needs. But the last half-a-decade, starting with Russia's invasion of Ukraine and the US and Israel's attacks on Iran and the subsequent closure of the Strait of Hormuz, has shown just how vulnerable the economy is.

The impact is already visible on the rupee, which has had to contend with weak foreign direct investment and portfolio outflows over the last one year. The Indian currency, which fell below 90- and 91-per-dollar in December, breached 92 earlier this month and ended at 92.38 on Tuesday, hovering close to its all-time low of 92.48. If crude oil prices remain elevated, even 100-per-dollar may not be far away.

According to a scenario analysis by QuantEco Research's economists, while the potential hit will be minuscule if oil averages around \$80 per barrel in 2026-27 (up from \$70 per barrel in 2025-26), the impact could become "non-linear and broad based" at higher levels: at \$100/barrel in 2026-27, the rupee could weaken to as much as 98.5-per-dollar, they found.

The Indian economy has posted impressive growth rates recently, both under the old and new GDP series, clocking in at 7.8% in the final three months of 2025. Inflation, too, has settled comfortably below the Reserve Bank of India's (RBI) 4% target, with inflation as per the updated Consumer Price Index (CPI) at 3.21% in February. However, this positive growth-inflation mix is now under threat.

"The Goldilocks narrative of strong growth and low inflation persists under the new GDP and CPI series, but is challenged by higher crude oil prices and fuel shortages," Nomura economists said last week.

## Shock to growth, inflation

After retreating from \$100/barrel-plus levels, global crude oil prices remain highly volatile and elevated. The average price of India's crude oil basket so far in March is \$108.23/bbl, up 57% from February. And while the US has granted India a 30-day waiver to buy Russian oil stuck at sea, this isn't seen as a "game changer" by Nomura.

Meanwhile, the gas shortage has already forced the government to prioritise certain sectors and hike the price of household cooking gas by Rs 60 per cylinder, among other measures. The cooking gas

## • What happens if crude price spikes?

A higher average crude oil price in 2026-27 will hurt growth, raise inflation, weaken the rupee, and widen the CAD

	FY26	FY27 pre-war	FY27 post-war		
Crude oil price assumption (\$/bbl)	70	70	80	90	100
GDP growth	7.6%	6.6-6.8%	6.5-6.7%	6.4-6.6%	6-6.2%
CPI inflation	2.1%	4.0%	4.2%	4.6%	5.1%
Current account balance (% of GDP)	-1.1%	-1.2%	-1.6%	-1.9%	-2.2%
Rupee's exchange rate (per USD)	91.5	93.0	95.5	97.0	98.5

Note: FY27 post war figures are statistical scenarios, not QuantEco Research forecasts; oil price assumption is FY27 average; bbl refers to barrel; Source: QuantEco Research

price hike by itself may push up inflation in March by 12-13 basis points (bps), according to Barclays; Nomura has already raised its forecast for average CPI inflation in 2026-27 by 70 bps to 4.5%.

The growth story is similar, with the RBI's projections pegging GDP growth (as per the old series) at 6.9-7% in the first two quarters of 2026-27, with risks "evenly balanced". Economists at ICICI Securities Primary

Dealership, however, have cut their forecast for next year by 50 bps to around 7% even if the acute supply disruptions are "largely resolved in a month". And if the conflict drags on longer and movement of energy via the Strait of Hormuz remains problematic, the resultant hit to global growth would be an additional headwind for India.

## Footing the bill

Some costs due to the West Asia war are already piling up, with the Finance Ministry having sought Parliamentary approval to spend another Rs 19,230 crore on fertiliser subsidy in 2025-26 itself. An Economic Stabilization Fund, with a corpus of Rs 1 lakh crore, is also being set up.

Then there is the cost of higher global crude oil prices, which have brought down the margins of domestic oil marketing companies (OMCs) close to four-year lows as these higher prices haven't been passed on to consumers at the pump. This will hurt their dividend to the Centre — and if the government decides to reduce the excise duty, tax collections will be hit. Either way, the carefully-constructed fiscal deficit and debt-to-GDP targets of 4.3% and 55.6% of GDP are at risk just a few weeks after the 2026-27 Budget was presented.

- **Key Terms and Explanations**

- **Goldilocks Era:** An economic state where growth is robust, but inflation is low, preventing the economy from "overheating" or falling into recession. It's the "just right" scenario for policymakers.
- **Crude Oil Basket:** A weighted average of various types of crude oil (primarily Oman/Dubai sour and Brent sweet) that reflects the actual mix of oil imported by Indian refineries.
- **Current Account Deficit (CAD):** The shortfall between a country's exports and its imports. Since India imports over 80% of its oil, a price spike widens this gap, putting pressure on foreign exchange reserves.
- **Basis Points (bps):** A standard unit of measure for interest rates and other percentages in finance. 100 bps= 1%.
- **Fiscal Deficit:** The gap between the government's total expenditure and its total revenue (excluding borrowings). High energy prices often force the government to increase subsidies, widening this deficit.
- **Oil Marketing Companies (OMCs):** Entities like IOCL, BPCL, and HPCL. When global prices rise but pump prices are kept stable to protect consumers, these companies face "under-recoveries" or lower margins.

- **Main Arguments and Substantive Parts**

- The core thesis posits that India's recent period of macroeconomic stability—characterized by 7%+ growth and manageable inflation—is under direct threat from volatile global energy markets.
- **The Price-Growth Inverse Relationship:** The analysis suggests a "non-linear" hit to the economy. While \$80/barrel is manageable, a jump to \$100/barrel triggers a disproportionate drop in GDP growth (projected to fall from 7.6% toward 6%).
- **Currency Vulnerability:** There is a direct correlation between oil prices and the Rupee's value. As oil prices rise, the demand for Dollars to pay for imports increases, depreciating the Rupee (potentially toward 98.5 per USD).
- **The Subsidy Burden:** To insulate the common man, the government often resorts to subsidies (e.g., the mentioned ₹19,230 crore for fertilizers). This diverts funds from capital expenditure (infrastructure) to revenue expenditure (subsidies).
- **Supply Chain Disruptions:** Beyond just price, the physical movement of energy through chokepoints like the **Strait of Hormuz** is a critical vulnerability.

- **Historical Evolution of the Issue**
- **Pre-1991:** India faced a severe Balance of Payments (BoP) crisis triggered largely by the Gulf War and spiking oil prices, leading to the LPG (Liberalization, Privatization, Globalization) reforms.
- **2000s Super-cycle:** Rapid growth led to high oil prices, managed through "Oil Bonds" by the then government—a practice that deferred the fiscal burden to future generations.
- **The Transition (2014-Present):** Shift toward deregulation of petrol and diesel prices to reduce the subsidy burden. However, the emergence of the Russia-Ukraine conflict and West Asian instability has reintroduced "administered pricing" tendencies to control inflation.

- **Previous Years' Questions (PYQs)**

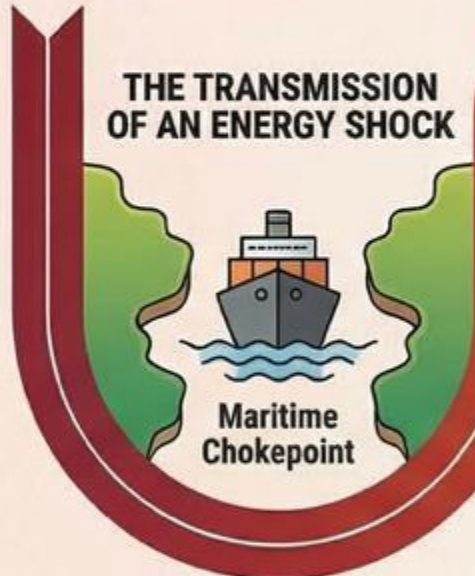
- **UPSC 2014 (GS-III):** "Enumerate the indirect taxes which have been subsumed in the Goods and Services Tax (GST) in India. Also, comment on the revenue implications of the GST... [including the exclusion of petroleum products]."
- **UPSC 2019 (GS-III):** "It is argued that the strategy of inclusive growth is intended to meet the objectives of inclusiveness and sustainability together. Explain." (Context: How energy inflation hurts inclusiveness).
- **UPSC 2021 (GS-III):** "Explain the basic differences between the elements of the Budget and the Economic Survey. How do global price shocks affect these projections?"

# The Oil Shock Ripple Effect: Threatening India's "Goldilocks" Economy



**India's "Goldilocks" Economy**  
High Growth, Low Inflation

Sweet spot threatened by global energy shocks.



**Step 1: The External Trigger**  
Geopolitical conflicts or maritime chokepoints cause sudden global crude price spikes.

## Step 2: THE TRIPLE WHAMMY IMPACT & BREAKING POINT



Impact is non-linear; crossing \$100/barrel can drop GDP growth from 7.5% toward 6% abruptly.

## THE FISCAL & STRATEGIC BURDEN

**DIVERSION OF CAPITAL: ₹19,230 CRORE**



Rising energy costs force the government to spend on fertilizer subsidies instead of infrastructure.

**TWIN DEFICIT CHALLENGE**



**STRATEGIC PETROLEUM RESERVES (SPR)**



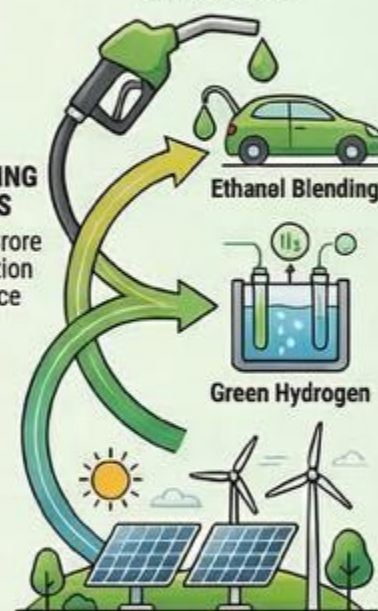
India must expand emergency storage from the current -9 days to 30-40 days.

## THE WAY FORWARD: ENERGY ATMANIRBHARTA



**INSTITUTIONALIZING FISCAL BUFFERS**  
Creating a ₹1 Lakh Crore Economic Stabilization Fund to absorb price shocks.

**STRUCTURAL DECOUPLING**



**STRUCTURAL DECOUPLING**  
Reducing "Oil Intensity" via Ethanol blending, Green Hydrogen, and accelerated Renewable Energy transition.

### Macro Indicator Comparison

	Goldilocks Seenario (\$70-\$80/bbl)	Crisis Seenario (≥\$100/bbl)
GDP Growth	Robust (7%+)	Sluggish (Towards 6%)
Inflation	Moderate/Targeted (4%)	High/Imported
Currency	Stable Rupee	Rapid Depreciation

# Why Transgender Protection (Amendment) Bill 2026 has attracted criticism

Anagha Jayakumar  
& Partha Sarathi Biswas  
New Delhi, Pune, March 17

A BILL introduced in Parliament last week seeks to make major changes to the Transgender Persons (Protection of Rights) Act, 2019, drawing criticism from transgender and LGBT+ groups across the country. The Transgender Protection (Amendment) Bill 2026 seeks to remove the right to gender self-identification, recognised by the Supreme Court in its landmark 2014 judgment, and introduce medical certification for identity recognition.

## Definition in the 2019 Act

The 2019 Act defined a transgender person as one whose gender does not match the gender assigned to that person at birth. These include —

- Trans men and trans women, regardless of their having undergone gender-affirming (officially sex reassignment) surgery, hormone therapy or other therapies

- Persons with intersex variations
- Genderqueer persons (interpreted as including non-binary identities)
- Persons with such sociocultural identities as *kinnar*, *hijra*, *aravani* and *jogta*

This definition differentiates between sex — which refers to one's biological status as male or female based on one's anatomy, chromosomes, and hormone prevalence — and gender, a construct that determines roles, behaviours and attributes that society deems acceptable for men and women. So one's 'gender identity', or a person's sense of self and their gender, may or may not correlate with the sex assigned at birth.

## What 2014 judgment entailed

In *NALSA v. Union of India* (2014), the Supreme Court recognised the transgender community as the "third gender" and affirmed equal applicability of fundamental rights under the Constitution to trans persons. It also affirmed the right to self-identify one's gender, meaning a person could thus identify as male, female or third gender.



A protest against the Bill in Bhubaneswar. PH

The court told the government to frame laws to ensure legal recognition to the transgender community as the third gender and take steps for their welfare.

In 2019, the Centre implemented the Transgender Persons (Protection of Rights) Act, which provided for the legal recognition of the community. In practice, this meant the inclusion of the third gender (other) in

all official forms, the formation of the Transgender Welfare Board, and a mechanism to distribute transgender identity cards. These cards allow trans persons to access various government welfare schemes. Around 32,420 such cards have been issued to date.

## Changes proposed in the Bill

**NARROWER DEFINITION:** The Bill calls the definition of a trans person under the 2019 Act "vague" and only recognises the subset of persons with sociocultural identities such as *kinnar* and *hijra*. It creates a new category describing any adult or child who has been compelled to assume a transgender identity through mutilation, emasculation, castration, amputation, or surgical, chemical, or hormonal procedure.

**REMOVAL OF SELF-IDENTIFICATION:** A key outcome of *NALSA v. Union of India* was captured in Section 4(2) of the 2019 Act, which enshrined the right to self-identify. The Bill says the Act was not intended to protect "each and every class of persons with various gender identities, self perceived

sex/gender identities or gender fluidities."

**MEDICAL BOARD:** Under the 2019 Act, a transgender person applied to the District Magistrate and received a certificate of identity, without any medical examination or clinical gate-keeping. The new Bill mandates the formation of a medical board led by a Chief or Deputy Chief Medical Officer, at the centre or state/UT level. The DM must now take the board's recommendations, as well as those of other medical experts where relevant, before issuing a certificate of identity.

**PUNISHMENT:** The Act authorised punishments from six months to two years of prison, plus a fine, for pushing a trans person into forced or bonded labour, denying access or right of passage to a public place, forcing a trans person to leave their place of residence, household or village; and for causing harm, injury, or endangerment.

The Bill adds four clauses, attracting at least five years rigorous imprisonment and a fine. Two of these pertain to kidnapping and injuring a person to force assumption of trans identity. The other two punish forcing

a person to present as transgender and engage in begging, servitude or bonded labour.

## Criticism of the Bill

Trans persons and activists say the amendment has taken away the right to individual self-determination of gender. Pune activist Kadambari Shaikh called this a violation of human rights. "Our identity should not need approval from others... Any change in the law must protect this right and support the freedom and dignity of transgender persons," she said.

Anil Ukarande, founder of Yutak, an LGBT+ organisation, said: "The amendment has talked about a medical board... For a trans person, this would be difficult, given the deep transphobia in society."

The new definition recognises only transgender persons from certain "sociocultural" backgrounds, which are "centres of power as well as exploitation", he added.

Partha Sarathi Biswas is a Pune-based journalist


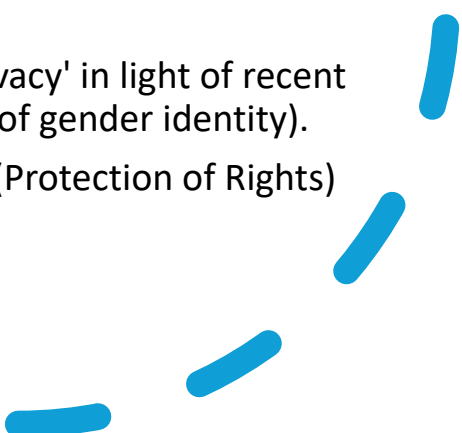
- **Key Terms and Explanations**

- **Gender Self-Identification:** The right of an individual to choose their gender identity without requiring medical or state certification.
- **NALSA Judgment (2014):** A landmark Supreme Court ruling that recognized transgender persons as the "third gender" and upheld their right to self-determine their gender identity.
- **Socio-cultural Identities:** Specific community-based identities in India, such as *Kinnar*, *Hijra*, *Aravani*, and *Jogta*, which have historical and traditional roots.
- **Gender Dysphoria:** The distress caused by a mismatch between a person's biological sex and their gender identity.
- **Clinical Gate-keeping:** A system where medical professionals or state officials decide whether an individual's gender identity is "valid" based on exams or psychological tests.

- **Main Arguments and Substantive Parts**

- The core debate centers on the transition from a **rights-based model** (self-identity) to a **medical-bureaucratic model** (certification).
- **Narrowing the Scope:** The 2019 Act was inclusive of all trans-masculine and trans-feminine individuals. The proposed amendment seeks to limit the definition primarily to those with specific "socio-cultural" identities (like *Kinnar* or *Hijra*), potentially excluding a large population of transgender people who do not belong to these traditional groups.
- **Mandatory Medical Boards:** The Bill proposes that a District Magistrate (DM) can only issue an identity certificate after a recommendation from a Medical Board. Activists argue this violates privacy and bodily autonomy.
- **Criminalization and Protection:** The Bill introduces stricter punishments (up to 5 years) for crimes like kidnapping or forcing transgender persons into bonded labor. While intended as protection, critics argue the bill simultaneously "criminalizes" the identity by making it harder to legally exist without state approval.



- 
- **Historical Evolution of the Issue**
  - **Pre-Independence:** Various indigenous gender-diverse communities existed but were marginalized under the **Criminal Tribes Act, 1871** by the British.
  - **2014 (NALSA v. Union of India):** The Supreme Court declared that "self-determination of gender is an integral part of personal liberty" under Article 21.
  - **2018 (Navtej Singh Johar Case):** Decriminalization of consensual same-sex acts (Section 377), further strengthening the right to intimacy and identity.
  - **2019 (Transgender Persons Act):** The first comprehensive law passed, though it was criticized for requiring a DM's certificate for "change in gender" after surgery.
  - **2026 (The Amendment Bill):** The current proposal that seeks to revert to medical certification and narrow the definition of who "qualifies" as transgender.
- 
- **Previous Years' Questions (PYQs)**
  - **UPSC Mains (GS 2, 2020):** "The concept of 'Third Gender' has been recognized by the Judiciary. Discuss the challenges faced by them in gaining social acceptance and constitutional rights."
  - **UPSC Mains (GS 2, 2017):** "Examine the scope of 'Right to Privacy' in light of recent Supreme Court judgments." (Relevant due to the privacy aspect of gender identity).
  - **UPSC Prelims (2019):** Question on the "Transgender Persons (Protection of Rights) Act."
- 

# The Transgender Rights Debate: Self-ID vs. State Certification (UPSC Essentials)

**Historical Evolution**

1871  
(Colonial Era)

2014  
NALSA  
Judgment

2019  
Act

2026  
Amendment Bill

## NALSA (2014)

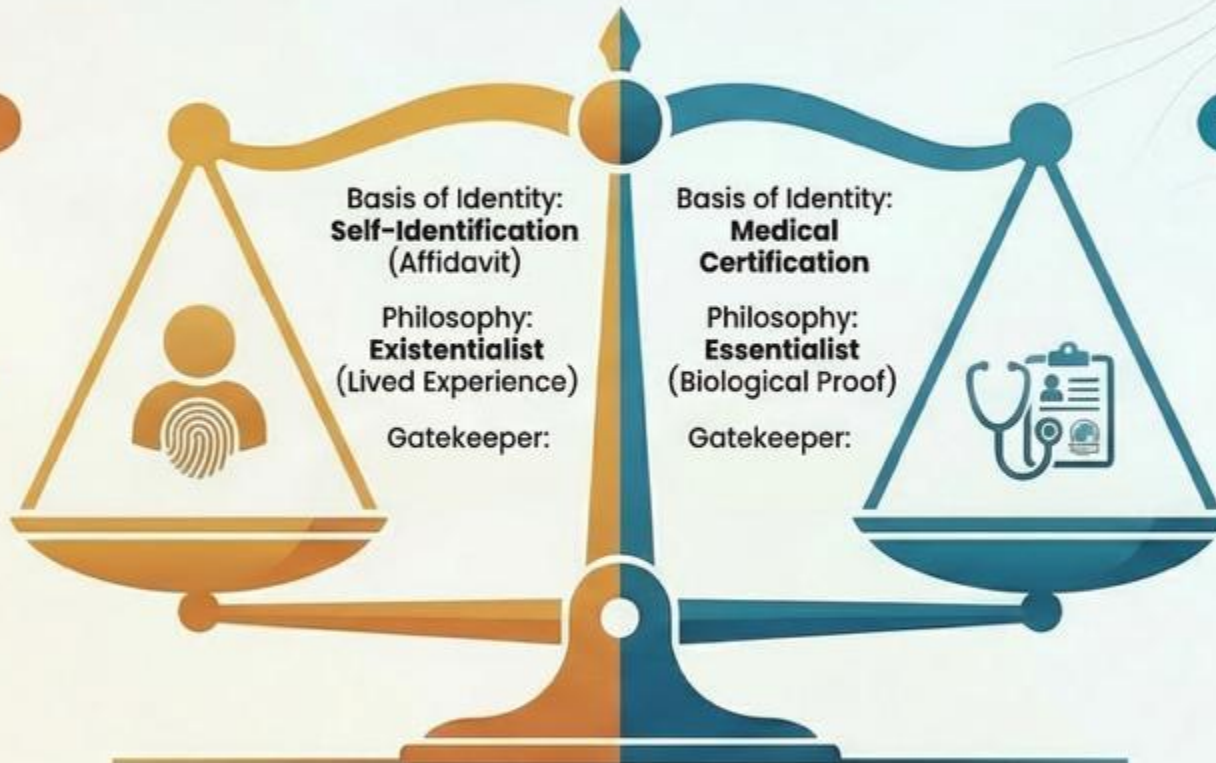
Constitutional Morality

Judiciary

### Rights-Based Model: Self-Identification

#### Rights-Based vs. Medical Model

2014 NALSA upheld self-determination



## 2026 Amendment Bill

State Paternalism

Legislative intent

### Medical-Bureaucratic Model: Certification

- **Narrowing the Definition**  
Prioritizes traditional socio-cultural identities; potentially excludes non-binary & urban trans individuals
- **Clinical Gate-keeping**  
Shifting power from individual to medical panels violates bodily autonomy & constitutional privacy

## UPSC Analysis: Challenges & Implications



### Implementation Hurdles

Specialized doctors are scarce in rural India, leading to certification backlogs and harassment.



### Risk of Judicial Review

The Bill faces high risks of being struck down for contradicting the NALSA mandate.



### Socio-Economic Exclusion

Restrictive IDs may prevent access to education, formal jobs, and government welfare schemes.



# AXIA

## IAS ACADEMY

RISE ABOVE THE REST



**UPSC CSE CLASSES - PRELIMS + MAINS + INTERVIEW GUIDANCE**

- EXPERT FACULTY & MENTORSHIP
- COMPREHENSIVE STUDY MATERIAL
- REGULAR TEST SERIES & EVALUATION
- CURRENT AFFAIRS & ANSWER WRITING FOCUS
- SMALL BATCH SIZES FOR PERSONAL ATTENTION

**[axiaiasacademy.com](http://axiaiasacademy.com)**

**+91 6002-417488**