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# PATRIOTIC IAS

## DAILY CURRENT AFFAIRS

### THE HINDU NEWSPAPER

#### 07 APRIL 2026

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PCS Special:

07 April

07A

Vlasic is international ambassador for TCS World 10K

व्लासिक TCS वर्ल्ड 10K की अंतरराष्ट्रीय एंबेसडर बनीं

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## Vlasic is international ambassador for TCS World 10K

**TCS Sports Bureau**  
BENGALURU

Double Olympic medallist Blanka Vlasic will feature as the international event ambassador for the Tata Consultancy Services World 10K Bengaluru 2026, it was announced on Monday.

High jumper Vlasic won silver at Beijing 2008 and followed it up with a bronze at Rio 2016. She also claimed two gold medals at the World Championships (2007 and 2009).

Her personal best of 2.08m, achieved in 2009, is the third-highest clearance in women's high jump history.

"Being associated with an event that brings thousands of people together



Vlasic.

through running is truly inspiring and energising. Running is a sport that keeps us physically active and mentally strong, and it continues to play a vital role in shaping the athletics community," said Vlasic.

- She also claimed two **gold medals at the World Championships (2007 and 2009)**.  
उन्होंने **विश्व चैंपियनशिप (2007 और 2009)** में दो स्वर्ण पदक भी जीते।

### TCS World 10K

- **TCS World 10K** is an international **10-kilometre road running race** held annually in **Bengaluru**.
- It is one of India's **most prestigious road races**, attracting both **elite global athletes** and amateur runners.
- **Key Features**
- Organized since **2008**
- Sponsored by **Tata Consultancy Services**
- Recognized as a **World Athletics Gold Label Road Race** (highest category)
- Participation categories:
  - Elite race
  - Open 10K
  - Senior citizens run
  - Champions with disability

## GS Paper 1: History,

### TOPICS COVERED

07 April 2026

**07A** **Misery alone awaits misers**  
**कंजूसों के लिए केवल दुःख ही प्रतीक्षा करता है**

## TIRUKKURAL

- **Tirukkural** is one of the greatest classical works of **Tamil literature**, composed by the poet-saint **Tiruvalluvar**.
- It is a universal ethical text, often called the "**Tamil Veda**" due to its timeless moral teachings.
- It is **believed to have been written around 1st century BCE to 5th century CE** (exact date debated).
- **Tiruvalluvar** was a renowned **Tamil philosopher, poet, and social thinker**
- His life details are not clearly known, but he is believed to have lived in **Tamil Nadu**
- He is **respected across religions and communities for his universal teachings on ethics and morality**
- Total **1330 couplets (Kurals)**
- Divided into **133 chapters** (10 couplets each)
- Organized into **3 main sections**:
  - **Aram (Virtue)**: Deals with **moral values, righteousness, and ethical conduct**



- **Porul (Wealth):** Focuses on **politics, governance, economy, and social life**
- **Inbam (Love):** Discusses **human emotions and love**

## GS Paper 1: Society

### TOPICS COVERED

07 April 2026

07A	<b>Faint cry in wilderness led rescuers to 'missing' trekker</b> जंगल में धीमी पुकार ने बचाव दल को 'लापता' ट्रेकर तक पहुंचाया
07A	<b>A disturbing step for rights, dignity and mental health</b> अधिकारों, गरिमा और मानसिक स्वास्थ्य के लिए एक चिंताजनक कदम
07A	<b>From myths to language: examining the renaming of Kerala</b> मिथकों से भाषा तक: केरल के नाम बदलने की समीक्षा

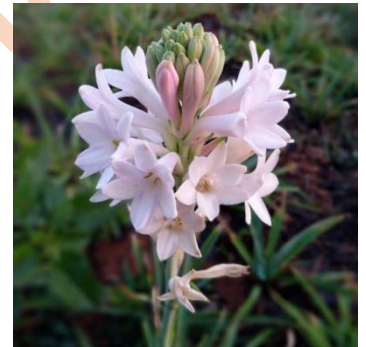
### Problem of plenty



Market overflow: Unsold stock of tuberoses being dumped at the Koyambedu wholesale market in Chennai on Monday. Heavy arrivals of the flower from Nagari in Andhra Pradesh has led to the waste. S. VELANKANNI/BJP

Market overflow: Unsold stock of tuberoses being dumped at the Koyambedu wholesale market in Chennai on Monday. Heavy arrivals of the flower from Nagari in Andhra Pradesh has led to the waste.

### Tuberose (*Polianthes tuberosa*):



- **Tuberose (*Polianthes tuberosa*)**

**tuberosa**) is a perennial flowering plant belonging to the **Asparagaceae** family.

- It is widely cultivated for its **highly fragrant white flowers**, used in perfumes, garlands, and ornamental purposes.
- Though native to **Mexico**, tuberose has become an important **commercial floriculture crop in tropical and subtropical regions**, especially in **India**.

### Geographical Distribution

- Native to **Central America (Mexico)**
- Cultivated in **India, China, Egypt, Morocco, France, and South Africa**
- **Distribution in India:**
  - **West Bengal (largest producer)**
  - **Tamil Nadu**
  - **Karnataka**
  - **Andhra Pradesh**
  - **Maharashtra**
  - **Uttar Pradesh**
- India is one of the **leading producers of loose flowers** including tuberose in Asia.





## Faint cry in wilderness led rescuers to 'missing' trekker

GS I: Society  
The Hindu Bureau  
MYSURU

A faint human cry echoing through the dense forests of Tadiandamol in Kodagu district in response to shouts by members of a search team comprising tribals provided the first breakthrough in locating missing Kerala trekker Sharanya on Sunday.

Around 3 p.m., Ayyappa, one of the five-member team (also comprising Subramani, Raju, Manikanta, and Mani) from the Adiya tribal community, climbed onto a rock and repeatedly called out her name. In response, they heard a faint cry from deep within the wilderness – a crucial indication that the trekker was alive four days after she went missing.

Encouraged by repeated



Trekker Sharanya with her rescuers.

responses to their calls, the group moved swiftly in the direction of the sound.

"We rushed through the rugged terrain, crossing hills and streams for nearly two kilometres before finally reaching her," said Mr. Ayyappa, a daily wager at a coffee estate. He was part of the team that located 36-year-old Sharanya, a Kerala native who had

gone missing during a trek to Tadiandamol on April 2.

**An unexplored route**  
The Adiya tribals, hailing from Paisari in Kodagu, had joined the search operation for the first time on Sunday. "After Forest Department personnel, who had been searching alongside us, called off their operation in the afternoon, we chose to continue on our own," Mr. Ayyappa told *The Hindu*.

Armed with sickles, the group chose a route they use once a year to collect honey from the forest. However, the location where Sharanya had taken refuge was in an area they had never ventured into. "When we finally found her, she was standing under a tree, holding an empty water bottle," he said.

## 07A. Faint cry in wilderness led rescuers to 'missing' trekker जंगल में धीमी पुकार ने बचाव दल को 'लापता' ट्रेकर तक पहुंचाया

A faint human cry echoing through the dense forests of **Tadiandamol in Kodagu district** in response to shouts by members of a search team comprising tribals provided the first breakthrough in locating missing Kerala trekker **Sharanya** on Sunday.

**कोडागु जिले के तडियांडामोल के घने जंगलों में आदिवासी खोज दल की पुकार के जवाब में गूजती एक हल्की मानवीय आवाज ने रविवार को लापता केरल की ट्रेकर शारन्या को खोजने में पहली सफलता दिलाई।**

The **Adiya tribals**, hailing from **Paisari in Kodagu**, had joined the search operation for the first time on Sunday.

**अडिया जनजाति**, जो कोडागु के **पैसारी** से हैं, ने रविवार को पहली बार खोज अभियान में भाग लिया।

- "After **Forest Department** personnel, who had been searching alongside us, called off their operation in the afternoon, we chose to continue on our own," Mr. **Ayyappa** told *The Hindu*.  
"जब **वन विभाग** के कर्मचारी, जो हमारे साथ खोज कर रहे थे, ने दोपहर में अपना अभियान बंद कर दिया, तो हमने खुद ही जारी रखने का निर्णय लिया," **अय्यप्पा** ने द हिंदू को बताया।
- **Armed with sickles, the group chose a route they use once a year to collect honey from the forest.**  
हंसियों से लैस होकर, समूह ने वह रास्ता चुना जिसका उपयोग वे साल में एक बार जंगल से शहद इकट्ठा करने के लिए करते हैं।

### ADIYA (ADIYAN) TRIBE

- The **Adiya (Adiyan) tribe** is a **Scheduled Tribe community** primarily found in the state of **Kerala**.
- They are one of the **most marginalized tribal groups**, historically associated with **bonded labour (slavery-like conditions)**.
- The term "**Adiyan**" literally means "**slave**" or "**servant**", reflecting their historical social position.
- Concentrated mainly in:
  - **Wayanad district (largest population)**
  - Parts of **Kannur and Malappuram districts**
- Settled in **forest fringes and rural agricultural areas**
- During pre-independence period:
  - Adiyas were subjected to **bonded labour under landlords (Jenmis)**
  - They had **very limited rights and mobility**
- Traditionally engaged in:



- Agricultural labour
- Plantation work

To mark World Health Day on April 7, a set of articles on the Editorial and Opinion pages that highlights key health issues

## A disturbing step for rights, dignity and mental health

SS In Society

MOE

**T**he Transgender Persons (Protection of Rights) Amendment Bill, 2026 has caused deep confusion, perplexity, and, over the past two weeks since its introduction, apprehension and fear. In trying to make sense of both the intent and the possible implications of the amendment, these days have raised more questions than they have provided satisfactory answers. At the core is the question, "Who owns my gender and therefore my gender identity?"

For the majority of men and women who happen to be cisgender, life hardly ever brings us to a point where we are faced with this as a question. There is no 'evaluation' that we need to undergo. Whether it is a form at a hospital, clinic, bank, or workplace, we claim our gender ourselves by ticking a box. We simply state our gender, not expecting anyone to question the obvious. However, for gender diverse and transgender individuals, this is what is proposed henceforth. This violates the foundational principles of dignity, autonomy and mental well-being.

### From progression to regression

In 2014, the Supreme Court of India delivered a historic judgment in *NALSA vs Union of India*, recognising transgender persons as a legitimate gender identity. It was a watershed moment for jurisprudence, public policy and governance because it rested on a simple and powerful principle: gender identity is self-identified. Just as any individual declares themselves a man or a woman without external verification, transgender persons, too, were reaffirmed as the final and only authority on their gender identity. This principle is rooted not only in human dignity and autonomy but also in constitutional morality under Articles 14 (Equality before Law), 15 (non-discrimination), 19 (Freedom of Expression) and 21 (Right to Life and Personal Liberty).

In 2019, Parliament passed the Transgender Persons (Protection of Rights) Act. While parts of it were criticised by the community, it remained aligned with *NALSA* on the cornerstone issue of self-identification. Indeed, it acknowledged the community's long history of discrimination and exclusion, and sought to prohibit discrimination, ensure access to education and health care, extend welfare measures such as housing, skill development and employment support. These welfare schemes, in our minds, as allies and health-care practitioners, represented an attempt to build an enabling framework rather than a restrictive one.

Much of the work being done at both the health-care training and education levels, as a result of the 2019 Act, requires sensitisation drives to ensure that curricula and training for health care and allied professions are sensitive to gender-affirming practices, and to make welfare schemes more widely known and implementable. In these six years, all stakeholders had just about started to align themselves with the global



**Dr. Kavita Arora**

Senior psychiatrist with over 25 years of clinical practice and lived-experience expertise, Founding Cohort member of India Mental Health Alliance (IMHA), Co-Founder of Children First, and adviser and trainer in gender-affirming mental health practices across several Indian institutions

The Transgender Amendment Bill threatens welfare access and instils fear and humiliation for an already vulnerable population

standards that the 2014 judgement and the 2019 Act both validated.

The amendment to the 2019 Act – which was notified in the Gazette on March 30, 2026 – fundamentally reverses the *NALSA* judgment. It replaces self-identification with medical and bureaucratic gatekeeping, redefining who is 'allowed' to call themselves transgender. Under this amendment, a transgender person must appear before a medical board; undergo an assessment to 'prove' their gender identity; wait while the board forwards its recommendation to the District Magistrate, and obtain a certificate declaring them transgender.

There is no medical or evaluative biomarker for gender identity. No external knowledge or proof of any sort can determine the deeply held and personally felt experience of one's gender identity. There would have been no need for trans individuals to "come out" "at all if that had been the case."

This is the accepted truth in medicine and health care across the globe.

Therefore, it is perplexing that the Amendment talks about determining and validating someone's gender through a process in which the answer to the question "what is my gender?" has to be given by complete strangers.

This raises many issues that seem to present challenges at many levels.

Medical boards – many of which do not exist at the district level – are already overburdened even for urgent health-care needs.

In the absence of criteria, as well as time and process, it is likely that boards may fall back on arbitrary, invasive or abusive examinations, including the possibility of genital inspection. This stems arguably from the traditional way of "assigning" gender at birth by looking at the genitals of a newborn child by a doctor or another adult. This is far from what we know to be the understanding of gender identity for gender diverse and trans individuals.

Extrapolating this method to an adult and making it mandatory is in direct and complete violation of dignity, privacy and bodily autonomy. I cannot imagine any circumstance that would make me wish to approach this premise for myself as an adult cisgender woman. The very thought of such a scrutiny by a board of strangers, would probably create anticipatory mental distress and make me actively avoid approaching such a premise.

Instead of improving welfare access, the amendment will likely shrink it, deter individuals from approaching the state, and reintroduce fear and humiliation into an already vulnerable population.

### Mental health fallout, crisis in the making

The transgender community already faces extreme vulnerability. Data show that 99% of transgender persons have faced social rejection; 52% have faced harassment or violence in

educational spaces; 57% of trans women report experiencing physical or sexual violence at least once, and transgender adolescents have suicide attempt rates estimated between 13% and 50%, far above the national average.

Against this backdrop, introducing additional layers of suspicion, verification and scrutiny is not just insensitive. It is unsafe. As a mental-health practitioner and an ally for the trans community, I am deeply concerned.

Not just prospective; what is concerning is the uncertainty for thousands of transgender individuals currently enrolled in health-care services, whose access may now be questioned or invalidated in the face of the ambiguity about supporting the gender exploration and gender journey of an individual. This is not merely a procedural shift; it has the potential of developing rapidly into a public mental-health emergency.

The amendment introduces a clause that criminalises 'undue influence' in helping someone identify as transgender, with penalties

up to 15 years of imprisonment. For mental-health practitioners, psychologists, lawyers and educators, this creates an unprecedented ethical and legal risk. In many families, gender-identity journeys create tension or disagreement. Community-based organisations, trans-affirmative mental health practitioners and services are frequently accused of 'encouraging'

adolescents simply for acknowledging their lived reality. Under this amendment, such allegations could become criminal charges.

This will discourage health-care practitioners from providing essential, evidence-based care; challenge community-based organisations to remain as allies, and push transgender persons away from formal health care and heighten mental distress that will likely remain unsupported.

Additionally, the amendment collapses distinctions between transgender, intersex and hijra identities, erasing cultural, social and biological differences. Trans men remain nearly invisible in the framework, further marginalising them.

### An appeal for reflection and action

The current amendment risks undoing a decade of progress across law, governance, health systems and institutional practice. If misuse has occurred – even if limited to the 0.01% that the government suggests – the solution lies in audits, verification protocols and administrative strengthening – not in policing gender identity or forcing medicalisation.

To uphold constitutional values, protect mental health, and ensure administrative feasibility, this amendment must be reconsidered. We owe each individual in India the assurance that governance frameworks do not deepen fear, stigma, or exclusion for any community.



## 07A. A disturbing step for rights, dignity and mental health अधिकारों, गरिमा और मानसिक स्वास्थ्य के लिए एक चिंताजनक कदम

Transgender Persons (Protection of Rights) Amendment Bill, 2026  
ट्रांसजेंडर व्यक्तियों (अधिकारों का संरक्षण) संशोधन विधेयक, 2026

- At the core is the question, "Who owns my gender and therefore my gender identity?"  
मुख्य प्रश्न यह है, "मेरे लिंग और मेरी लैंगिक पहचान का स्वामित्व किसके पास है?"
- This violates the foundational principles of dignity, autonomy and mental well-being.  
यह गरिमा, स्वायत्तता और मानसिक कल्याण के मूल सिद्धांतों का उल्लंघन करता है।



## From progression to regression प्रगति से प्रतिगमन तक

- In **2014**, the Supreme Court of India delivered a historic judgment in **NALSA vs Union of India**, recognising transgender persons as a legitimate gender identity.  
**2014** में सर्वोच्च न्यायालय ने **NALSA बनाम भारत संघ** में ऐतिहासिक निर्णय देते हुए ट्रांसजेंडर व्यक्तियों को **वैध लैंगिक पहचान** के रूप में मान्यता दी।
- It was a watershed moment for jurisprudence, public policy and governance because it rested on a simple and powerful principle: **gender identity is self-identified**.  
यह निर्णय **न्यायशास्त्र, सार्वजनिक नीति और शासन** के लिए ऐतिहासिक था क्योंकि इसका आधार एक सरल सिद्धांत था: **लैंगिक पहचान स्वयं निर्धारित होती है**।
- This principle is rooted not only in human dignity and autonomy but also in constitutional morality under **Articles 14, 15, 19 and 21**.  
यह सिद्धांत **मानव गरिमा और स्वायत्तता** के साथ-साथ **संवैधानिक नैतिकता (अनुच्छेद 14, 15, 19, 21)** में निहित है।
- In **2019**, Parliament passed the **Transgender Persons (Protection of Rights) Act**.  
**2019** में संसद ने ट्रांसजेंडर व्यक्तियों (अधिकारों का संरक्षण) अधिनियम पारित किया।
- While parts of it were criticised by the community, it remained aligned with NALSA on the cornerstone issue of self-identification.  
हालांकि इसके कुछ हिस्सों की आलोचना हुई, फिर भी यह **स्व-पहचान के सिद्धांत** पर NALSA के अनुरूप रहा।
- The amendment to the **2019 Act** — which was notified in the Gazette on **March 30, 2026** — fundamentally reverses the NALSA judgment.  
**2019 अधिनियम** में संशोधन, जो **30 मार्च 2026** को राजपत्र में अधिसूचित हुआ, NALSA के निर्णय को मूल रूप से उलट देता है।
- It replaces self-identification with medical and bureaucratic gatekeeping, redefining who is 'allowed' to call themselves transgender.  
यह **स्व-पहचान** को हटाकर **चिकित्सकीय और प्रशासनिक नियंत्रण** लागू करता है और तय करता है कि कौन स्वयं को ट्रांसजेंडर कह सकता है।
- Under this amendment, a transgender person must appear before a medical board; undergo an assessment to 'prove' their gender identity; wait while the board forwards its recommendation to the District Magistrate, and obtain a certificate declaring them transgender.  
इस संशोधन के तहत, एक ट्रांसजेंडर व्यक्ति को **मेडिकल बोर्ड के सामने उपस्थित होना**, अपनी पहचान साबित करने के लिए **मूल्यांकन से गुजरना**, फिर **जिला मजिस्ट्रेट** की स्वीकृति के बाद प्रमाणपत्र प्राप्त करना अनिवार्य होगा।

## Medical determination of gender identity issues लैंगिक पहचान के चिकित्सकीय निर्धारण से जुड़े मुद्दे

- Medical boards — many of which do not exist at the district level — are already overburdened even for urgent health-care needs.  
**मेडिकल बोर्ड**, जो कई जिलों में मौजूद भी नहीं हैं, पहले से ही **स्वास्थ्य सेवाओं के दबाव** में हैं।
- In the absence of criteria, as well as time and process, it is likely that boards may fall back on arbitrary, invasive or abusive examinations, including the possibility of genital inspection.  
मानदंड, समय और प्रक्रिया के अभाव में, बोर्ड **मनमाने, आक्रामक या अपमानजनक परीक्षणों** का सहारा ले सकते हैं, जिनमें **जननांग जांच** भी शामिल हो सकती है।
- Data show that **99%** of transgender persons have faced social rejection; **52%** have faced harassment or violence in educational spaces; **57%** of trans women report experiencing physical or sexual violence at least once, and transgender adolescents have suicide attempt rates estimated between **13% and 50%**, far above the national average.  
आंकड़े बताते हैं कि **99%** ट्रांसजेंडर व्यक्तियों ने सामाजिक अस्वीकृति झेली है; **52%** ने शिक्षा संस्थानों में उत्पीड़न या हिंसा का सामना किया; **57%** ट्रांस महिलाओं ने शारीरिक या यौन हिंसा का अनुभव किया है, और किशोरों में आत्महत्या के प्रयास की दर **13% से 50%** के बीच है।
- The amendment introduces a clause that criminalises 'undue influence' in helping someone identify as transgender, with penalties up to **15 years of imprisonment**.



यह संशोधन एक ऐसा प्रावधान लाता है जो किसी को ट्रांसजेंडर पहचान अपनाने में मदद करने को 'अनुचित प्रभाव' मानते हुए अपराध घोषित करता है, जिसमें 15 वर्ष तक की सजा हो सकती है।

- If misuse has occurred — even if limited to the 0.01% that the government suggests — the solution lies in audits, verification protocols and administrative strengthening — not in policing gender identity or forcing medicalisation.

यदि दुरुपयोग हुआ है — भले ही वह 0.01% ही क्यों न हो — समाधान जांच, सत्यापन और प्रशासनिक सुधार में है, न कि लैंगिक पहचान पर नियंत्रण या विकित्सकीयकरण में।

# From myths to language: examining the renaming of Kerala

The Union Government's recent approval of the proposal to rename Kerala as Keralam prompts a re-examination of the term's historicity, including its founding legend, the context of the United Kerala Movement, and arguments for the linguistic purity of 'Keralam'

CS I Society

Sarath Pillai

The all-party support for changing the name of Kerala to Keralam and the Union Government's recent approval of the proposal raises questions about the historicity of the term Kerala. The historical difference between the terms is ambiguous at best. From a linguistic perspective, both Kerala and Keralam refer to a place/land. Hermann Gundert's Malayalam dictionary (1872) mentions both Kerala and Keralam while defining the term "keram" (coconut tree). One common definition of both terms is also "the land of coconut trees." Gundert takes a traditional view of Keralam as the land that lies between Gokarnam and Kanyakumari and mentions the legendary text "Keralolpatti" (The Origin of Kerala). The founding legend of Kerala is associated with Sage Parasurama (an incarnation of Vishnu) who slew 21 generations of Kshatriyas and flung the blood-strained axe to the ocean, carving out a strip of coastal land called Kerala or Keralam (according to mythology). The history of the origins of Kerala has attracted historical scrutiny even as it is hard to determine its historical veracity. It is likely that at least some portions of the text are of latter-day origins and a response to the European ascendance on the Malabar coast. The historicity of the text is less important than how it has been received and what place it occupies in the historical, temporal, and spatial imagination of the Malayalis.

The entanglement of myth and legend with history is not specific to Keralolpatti or any such legendary texts. What is important, however, are words and terms that encapsulate Malayalis' interaction with history and legends of Kerala. Could one say that the word "Keralam" has more historicity and cultural essence than the term "Kerala"? If yes, where do we trace that historicity and essence from? Is it going to be another set of texts or myths or legends that some consider to be more

authentic and true representation of the history and culture of the region?

## The historical context

Despite the founding legends of Kerala, if one looks at the modern history of the region from the 18th century to the 1950s, the region was a collection of native states, with the dominant ones being the states of Travancore and Cochin. Travancore was not a linguistically homogenous state; a considerable section of its population in the southern districts spoke Tamil who were also dominant in the administrative and commercial sectors of the state. The resurgent Malayali nationalism of the 19th and 20th century Travancore was rooted more in language and culture than in territorial identity. This linguistic sense of Malayali-ness was in turn instrumentalised to seek government offices and keep the growing significance of Tamils in Travancore at bay. Tamil Brahmins (sometimes called as Pattars) were seen as inferior to Malayali Brahmins (Namboodiris) and as foreigners in the state.

Is it possible to trace the existence of a territorial identity shaped by the imaginations around Kerala or Keralam among the inhabitants of the princely states of Travancore or Cochin in the 18th or early 19th century? If so, what conceptions of state and sovereignty could such an imagination engender in the 19th century? Arguably, we know very little about the potential of a Kerala state from the 19th century history of these states. However, when we come to the first half of the 20th century, the rising anti-Tamil and anti-British sentiments on the one hand and the growing influence of nationalism and communism on the other enabled conditions for cross-territorial affinities in newfound ways. Travancore, a pre-eminent princely state with significant strides in economic and social spheres and led by a Tamil Dewan, C. P. Ramaswamy Aiyar, had a fraught relationship with the United

Kerala (Aikya Kerala) Movement. Part of the reason for this was the volatile constitutional debates at the all-India level that left the future of the princely states undecided. As late as June 1947, the legal position of the states was sound, and it was generally believed that they would be able to retain independence in some form. Travancore's hallowed tradition of independence from both domestic and foreign powers (its Dewan claimed the state was neither conquered by the Mughals nor by the Europeans) was seen as a guarantee for its future existence as an independent country or a federal unit as opposed to Cochin or the poor British district of Malabar (part of Madras Province). Many factions of Travancore leaders, including the leaders of the Revolutionary Democratic Party (a communist party), at one time or the other were open to the idea of an independent Travancore. By the mid-1940s, United Kerala Movement had become a major political force in what is now Kerala. Kerala Varma, the aging ruler of Cochin, declared himself to be the patron of the movement much to the dismay of Travancore who imagined a separate existence from Cochin.

## An identity based on language

Did the distinction between Kerala and Keralam matter to the leaders of the United Kerala Movement? If one examines the historical sources and nomenclature of the time, we see a preponderance of the term Kerala. The term Aikya Kerala itself has Kerala (Aikya Keralam was also a popular term) in it as did many publications of the time. Part of the reason why this distinction would have mattered the least is because Kerala was to be primarily an identity based on language rather than territory. That is, there was no pre-defined land of Kerala or Keralam that lent legitimacy to the demand for a united Kerala. Rather, Kerala was to be constituted by the people who spoke Malayalam on the western coast of India. This conception of Kerala

did not fully align with the legend of Kerala's origin either, for southern tip of India, Kanyakumari, which was seen as part of Kerala in the founding myth, was no longer seen as a viable unit of Kerala by the 1950s due to the preponderance of Tamil speakers in that region. Moreover, if the distinction between the terms were of such importance, it should have had an impact in the naming of Kerala in 1956.

As Kerala or Keralam was not conceived as a pre-defined land of antiquity for the Malayalis in the 1940s and 1950s and that the historical and cultural distinction between the terms are not at times clear, the recent proposal for name change forces us to revisit the history of language, culture, territory, and state-formation in Kerala. Is Kerala an Anglophone term as opposed to Keralam, a properly Dravidian term? If so, how does one explain the fact that founding myths and legends of Kerala also uses the word Kerala indiscriminately and interchangeably with Keralam? Even if scholars come out in aid of the cultural and linguistic purity of the term Keralam, how do we account for the historical and conceptual repertoire of English language in a highly literate State like Kerala? How foreign is English language in a State where it existed as a medium of instruction and administrative language for many decades even before independence.

The fact that founding myths and texts lend equal legitimacy to Kerala (as seen in Keralolpatti, or terms like Keraliyan and Keralaputra, the latter used in Ashokan edicts) one the one hand, and that the political discourses and mobilisation that led to the formation of the State (which was indeed led by Malayalis) did not hinge so much on this distinction makes it all the more imperative for us to understand how history and historical forgetting are important in equal measure for claiming new regional identity.

(Sarath Pillai is an Assistant Professor of Modern South Asian History at the University of Calgary, Canada.)

## 07A. From myths to language: examining the renaming of Kerala मिथकों से भाषा तक: केरल के नाम बदलने की समीक्षा

Kerala vs Keralam: historicity and identity  
केरल बनाम केरलम: ऐतिहासिकता और पहचान





- One common definition is “**the land of coconut trees.**”  
दोनों का एक सामान्य अर्थ है “नारियल के पेड़ों की भूमि”।
- **Gundert defines Keralam as the land between Gokarnam and Kanyakumari.**  
गुंडर्ट के अनुसार केरलम गोकर्णम से कन्याकुमारी तक फैली भूमि है।
- **He also mentions the legendary text “Keralolpatti” (The Origin of Kerala).**  
उन्होंने “केरोलोपत्ति” (केरल की उत्पत्ति) का भी उल्लेख किया।

## Mythological origins पौराणिक उत्पत्ति

- The founding legend is associated with **Sage Parasurama, an incarnation of Visnu.**  
स्थापना कथा परशुराम ऋषि, जो विष्णु के अवतार हैं, से जुड़ी है।
- **He slew 21 generations of Kshatriyas and threw his axe into the ocean.**  
उन्होंने 21 पीढ़ियों के क्षत्रियों का वध किया और कुल्हाड़ी समुद्र में फेंकी।
- This act is said to have created the coastal land called **Kerala/Keralam.**  
इससे तटीय भूमि केरल/केरलम बनी मानी जाती है।
- The historical accuracy of this legend is **uncertain.**  
इस कथा की ऐतिहासिक सत्यता संदिग्ध है।
- From the **18th century to the 1950s**, the region consisted of **princely states.**  
**18वीं सदी से 1950 के दशक** तक यह क्षेत्र देशी रियासतों में विभाजित था।
- The dominant states were **Travancore and Cochin.**  
मुख्य रियासतें त्रावणकोर और कोचीन थीं।
- Travancore was not **linguistically homogenous.**  
त्रावणकोर भाषाई रूप से एकरूप नहीं था।
- A large section spoke **Tamil** and dominated administration and commerce.  
काफी लोग तमिल भाषा बोलते थे और प्रशासन व व्यापार में प्रभावी थे।
- Malayali nationalism in the **19th and 20th century** was rooted in **language and culture.**  
**19वीं-20वीं सदी** का मलयाली राष्ट्रवाद भाषा और संस्कृति पर आधारित था।
- This identity was used to counter the influence of **Tamils in Travancore.**  
इस पहचान का उपयोग तमिल प्रभाव को कम करने के लिए हुआ।
- **Tamil Brahmins (Pattars) were seen as inferior to Namboodiris.**  
तमिल ब्राह्मण (पट्टार) को नंबूदरी से निम्न माना गया।
- They were also viewed as **foreigners in the state.**  
उन्हें राज्य में विदेशी माना जाता था।
- Travancore, led by **C. P. Ramaswamy Aiyar**, had tensions with the **Aikya Kerala Movement.**  
**सी.पी. रामास्वामी अय्यर** के नेतृत्व में त्रावणकोर का ऐक्य केरल आंदोलन से टकराव था।
- Even leaders of the **Revolutionary Democratic Party (communist)** were open to it.  
**क्रांतिकारी लोकतांत्रिक पार्टी (कम्युनिस्ट)** के नेता भी इसके लिए तैयार थे।
- By the **mid-1940s**, the **United Kerala Movement** became a major political force.  
**1940 के दशक के मध्य** तक **संयुक्त केरल आंदोलन** प्रमुख राजनीतिक शक्ति बन गया।
- **Kerala Varma**, ruler of Cochin, declared himself patron of the movement.  
**केरल वर्मा (कोचीन के शासक)** ने स्वयं को इस आंदोलन का संरक्षक घोषित किया।
- This displeased Travancore, which wanted a **separate existence.**  
इससे त्रावणकोर असंतुष्ट हुआ, जो **अलग अस्तित्व** चाहता था।
- **Kanyakumari**, once part of the mythic Kerala, was excluded due to **Tamil-speaking population.**  
**कन्याकुमारी**, जो मिथक में शामिल थी, तमिल भाषियों के कारण अलग हो गई।
- If the distinction was important, it should have influenced the naming in **1956.**  
यदि यह अंतर महत्वपूर्ण होता, तो **1956** में नामकरण पर असर पड़ता।
- Kerala/Keralam was not conceived as a **fixed ancient land** in the 1940s–50s.  
**1940-50 के दशक** में केरल/केरलम को एक **स्थिर प्राचीन भूमि** नहीं माना गया।



## GS Paper 1: Geography

TOPICS COVERED

07 April 2026

07A Israel hits key petrochemical terminal in Iran's South Pars  
इज़राइल ने ईरान के साउथ पार्स में प्रमुख पेट्रोकेमिकल टर्मिनल पर हमला किया

# Israel hits key petrochemical terminal in Iran's South Pars

GS I: Geography  
A Mapping  
JERUSALEM

Israel Defence Minister Israel Katz announced on Monday that Israel had conducted a "powerful strike" on Iran's largest petrochemical complex, with the operator saying it was assessing the damage from the attacks.

The complex in the Pars region services Iran's South Pars natural gas field — the largest known gas reserve in the world — which it shares with Qatar, and which Israel had previously hit last month.

The military "just carried out a powerful strike

**Israel and the U.S. also carried out a wave of attacks on Iran, killing more than 25 people**

on Iran's largest petrochemical facility, located in Asaluyeh — a central target responsible for about 50% of the country's petrochemical production", Mr. Katz said in a statement.

Israel carried out a similar strike on the Mahshahr Petrochemical Special Zone in the southwestern Khuzestan province on Saturday, a local Iranian official said.

"At this point, the two facilities, which together account for roughly 85% of Iran's petrochemical exports, have been taken out of operation and are no longer functioning," Mr. Katz said, calling it "a severe economic blow".

Prime Minister Benjamin Netanyahu said that Israel was "systematically eliminating the Revolutionary Guards' money machine".

Israel and the U.S. also carried out a wave of attacks on Iran, killing more than 25 people on Monday. Iran responded with missile fire on Israel and its Gulf Arab neighbours.

powerful strike on Iran's largest petrochemical facility, located in **Asaluyeh** — a central target responsible for about **50% of the country's petrochemical production**", Mr. Katz said in a statement.

सैन्य बलों ने "अभी-अभी ईरान की सबसे बड़ी पेट्रोकेमिकल सुविधा, **असालुयेह** में स्थित, पर एक शक्तिशाली हमला किया है — जो देश के लगभग **50% पेट्रोकेमिकल उत्पादन** के लिए जिम्मेदार है," श्री कैटज़ ने बयान में कहा।

- Israel carried out a similar strike on the **Mahshahr Petrochemical Special Zone in the southwestern Khuzestan province** on Saturday, a local Iranian official said.  
एक स्थानीय ईरानी अधिकारी ने कहा कि इज़राइल ने शनिवार को दक्षिण-पश्चिमी **खुज़ेस्तान प्रांत** में स्थित **महशहर पेट्रोकेमिकल स्पेशल ज़ोन** पर भी इसी तरह का हमला किया।
- "At this point, the **two facilities, which together account for roughly 85% of Iran's petrochemical exports, have been taken out of operation and are no longer functioning**," Mr. Katz said, calling it "a **severe economic blow**".

"इस समय, ये दोनों सुविधाएं, जो मिलकर ईरान के लगभग **85% पेट्रोकेमिकल निर्यात** के लिए जिम्मेदार हैं, संचालन से बाहर हो चुकी हैं और अब कार्य नहीं कर रही हैं," श्री कैटज़ ने इसे "**गंभीर आर्थिक झटका**" बताया।

## GS Paper II: Polity,

TOPICS COVERED

07 April 2026

07A EC issues directive on political ads in newspapers  
चुनाव आयोग ने समाचार पत्रों में राजनीतिक विज्ञापनों पर निर्देश जारी किया

07A Sharad Pawar among 19 new Rajya Sabha members sworn in  
शरद पवार सहित 19 नए राज्यसभा सदस्यों ने शपथ ली

07A RS Chairman, LS Speaker reject Opposition notice seeking CEC's removal  
राज्यसभा सभापति और लोकसभा अध्यक्ष ने CEC को हटाने की मांग वाले विपक्ष के नोटिस को खारिज किया



## EC issues directive on political ads in newspapers

GS II: Polity

The Hindu Bureau

NEW DELHI

Ahead of the upcoming Assembly elections, the Election Commission (EC) on Monday said that no political party, candidate, organisation, or individual should publish any political advertisement in newspapers on the day of polling or a day prior to voting unless the content has been pre-certified by the Media Certification and Monitoring Committee (MCMC) at the State or district level. Kerala, Tamil Nadu, West Bengal, Assam, and Puducherry will go to the polls in April, while byelections will be held in six States.

Individuals or contesting candidates can apply for certification with District MCMC. All registered political parties headquartered in a State or a Union Territory can apply for certification with the State-level MCMC, the EC said.

Applicants seeking pre-certification for advertisements in print media must apply to the MCMC no later than two days prior to the proposed date of publication. The MCMCs shall also keep a strict vigil on suspected cases of paid news in the media and take suitable action, the EC said.

## 07A. EC issues directive on political ads in newspapers चुनाव आयोग ने समाचार पत्रों में राजनीतिक विज्ञापनों पर निर्देश जारी किया

- EC issues directive on political ads in newspapers. चुनाव आयोग ने समाचार पत्रों में राजनीतिक विज्ञापनों पर निर्देश जारी किया।
- Ahead of the upcoming **Assembly elections**, the **Election Commission (EC)** on Monday said that **no political party, candidate, organisation, or individual should publish any political advertisement in newspapers on the day of polling or a day prior to voting unless the content has been pre-certified by the Media Certification and Monitoring Committee (MCMC) at the State or district level.**

आगामी **विधानसभा चुनावों** से पहले, **चुनाव आयोग (EC)** ने सोमवार को कहा कि कोई भी राजनीतिक दल, उम्मीदवार, संगठन या व्यक्ति मतदान के दिन या उससे एक दिन पहले समाचार पत्रों में कोई राजनीतिक विज्ञापन प्रकाशित नहीं करेगा, जब तक कि उसे राज्य या जिला स्तर की **मीडिया प्रमाणन और निगरानी समिति (MCMC)** द्वारा पूर्व-प्रमाणित न किया गया हो।

- **Individuals or contesting candidates can apply for certification with District MCMC.**

व्यक्ति या चुनाव लड़ रहे उम्मीदवार **जिला MCMC** के पास प्रमाणन के लिए आवेदन कर सकते हैं।

- **All registered political parties headquartered in a State or a Union Territory can apply for certification with the State-level MCMC, the EC said.**

चुनाव आयोग ने कहा कि राज्य या केंद्र शासित प्रदेश में मुख्यालय रखने वाले सभी पंजीकृत राजनीतिक दल **राज्य स्तर के MCMC** के पास प्रमाणन के लिए आवेदन कर सकते हैं।

- **Applicants seeking pre-certification for advertisements in print media must apply to the MCMC no later than two days prior to the proposed date of publication.**

**प्रिंट मीडिया** में विज्ञापनों के लिए पूर्व-प्रमाणन चाहने वाले आवेदकों को प्रस्तावित प्रकाशन तिथि से कम से कम दो दिन पहले MCMC के पास आवेदन करना होगा।

- **The MCMCs shall also keep a strict vigil on suspected cases of paid news in the media and take suitable action, the EC said.**

चुनाव आयोग ने कहा कि MCMC को मीडिया में **पेड न्यूज़** के संदिग्ध मामलों पर कड़ी निगरानी रखनी चाहिए और उचित कार्रवाई करनी चाहिए।

## 07A. Sharad Pawar among 19 new Rajya Sabha members sworn in शरद पवार सहित 19 नए राज्यसभा सदस्यों ने शपथ ली

- Sharad Pawar among 19 new **Rajya Sabha members sworn in.** शरद पवार सहित 19 नए राज्यसभा सदस्यों ने शपथ ली।
- **The oath was administered by Rajya Sabha Chairman C.P. Radhakrishnan** in the presence of **Deputy Chairman Harivansh and Parliamentary Affairs Minister Kiren Rijju.** शपथ राज्यसभा के सभापति सी.पी. राधाकृष्णन ने उपसभापति हरिवंश और संसदीय कार्य मंत्री किरें रिजजू की उपस्थिति में दिलाई।
- **The oath was taken in multiple languages — Marathi, Hindi, Tamil, English, Bangla and Odia.** शपथ कई भाषाओं में ली गई — मराठी, हिंदी, तमिल, अंग्रेजी, बंगाली और ओडिया।

## Sharad Pawar among 19 new Rajya Sabha members sworn in

GS II: Polity  
The Hindu Bureau  
NEW DELHI

NCP(SP) leader Sharad Pawar and Union Minister Ramdas Athawale were among 19 newly elected members who took oath in the Rajya Sabha on Monday.

The oath was administered by Rajya Sabha Chairman C.P. Radhakrishnan in the presence of Deputy Chairman Harivansh and Parliamentary Affairs Minister Kiren Rijju. Floor leaders of various parties were also present during the ceremony.

The members were a mix of those who won re-nomination and first-timers among the 19 who took oath. DMK leader Tiruchi Siva who entered the Rajya Sabha in 2000 will be beginning his fifth term.

The new members include five from Maharashtra, six from Tamil Nadu, five from West Bengal and



Sharad Pawar

three from Odisha. The oath was taken in multiple languages — Marathi, Hindi, Tamil, English, Bangla and Odia.

Maya Chintaman Inwate of the BJP's Maharashtra unit was the first to take oath, followed by Mr. Pawar, who entered the House in a wheelchair. This is Mr. Pawar's third term. Ramrao Sakharan Wadkute (BJP), Jyoti Nag-nath Waghmare (Shiv Sena) and Mr. Athawale (RPIA) also took oath as members from Maharashtra.



# RS Chairman, LS Speaker reject Opposition notice seeking CEC's removal

GS II: Polity  
Sobhana K. Nair  
NEW DELHI

Rajya Sabha Chairman C. P. Radhakrishnan and Lok Sabha Speaker Om Birla have rejected a notice submitted by 193 Opposition MPs across both Houses seeking the removal of Chief Election Commissioner (CEC) Gyanesh Kumar. No specific reasons were cited for the rejection.

The notice, submitted on March 12, was signed by 63 Rajya Sabha members and 130 Lok Sabha members. The 10-page document accused the CEC of being "subservient" to the executive and alleged the "deliberate abuse of power

**The notice was signed by 63 Rajya Sabha members and 130 Lok Sabha members**

and position of a constitutional office", among other charges.

While there was no mention of the notice from the Chair of either House during the ongoing Budget Session, the Secretaries-General of both Houses issued bulletins on Monday stating that after a "careful and objective assessment of all relevant aspects and issues involved", the notice had not been admitted. The Chairs cited Section 3

of the Judges (Inquiry) Act, 1968. Section 3 empowers the Speaker and the Rajya Sabha Chair, after "due consultation" and "consideration of available material," to either admit or refuse such a motion.

Reacting to the bulletins, Trinamool's floor leader in the Rajya Sabha, Derek O'Brien, pointed to the absence of any definitive reason for rejecting the notices. "BJP keeps mocking our great Parliament. SHAME," he wrote on X.

Congress leader Jairam Ramesh told *The Hindu*, "We know what happened to the last Chairman of the Rajya Sabha who accepted a petition moved by Opposition MPs."

## 07A. RS Chairman, LS Speaker reject Opposition notice seeking CEC's removal

राज्यसभा सभापति और लोकसभा अध्यक्ष ने CEC को हटाने की मांग वाले विपक्ष के नोटिस को खारिज किया

• RS Chairman, LS Speaker reject Opposition notice seeking CEC's removal.

राज्यसभा सभापति और लोकसभा अध्यक्ष ने CEC को हटाने की मांग वाले विपक्ष के नोटिस को खारिज किया।

• No specific reasons were cited for the rejection.

खारिज करने के लिए कोई विशेष कारण नहीं बताए गए।

• The notice, submitted on **March 12**, was signed by **63 Rajya Sabha members** and **130 Lok Sabha members**.

यह नोटिस **12 मार्च** को प्रस्तुत किया गया था, जिस पर **63 राज्यसभा सदस्यों** और **130 लोकसभा सदस्यों** ने हस्ताक्षर किए थे।

- The 10-page document accused the **CEC** of being "subservient" to the executive and alleged the "deliberate abuse of power and position of a constitutional office", among other charges. 10 पृष्ठों के इस दस्तावेज में **CEC** पर कार्यपालिका के प्रति "आज्ञाकारी" होने और "संवैधानिक पद की शक्ति और स्थिति के जानबूझकर दुरुपयोग" सहित अन्य आरोप लगाए गए।
- While there was no mention of the notice from the Chair of either House during the ongoing **Budget Session**, the Secretaries-General of both Houses issued bulletins on Monday stating that after a "careful and objective assessment of all relevant aspects and issues involved", the notice had not been admitted. हालांकि चल रहे **बजट सत्र** के दौरान दोनों सदनों के पीठासीन अधिकारियों द्वारा इस नोटिस का कोई उल्लेख नहीं किया गया, लेकिन दोनों सदनों के महासचिवों ने सोमवार को बुलेटिन जारी कर कहा कि "सभी संबंधित पहलुओं और मुद्दों के सावधानीपूर्वक और निष्पक्ष मूल्यांकन" के बाद इस नोटिस को स्वीकार नहीं किया गया।
- The Chairs cited **Section 3 of the Judges (Inquiry) Act, 1968**. पीठासीन अधिकारियों ने **जज (जांच) अधिनियम, 1968 की धारा 3** का हवाला दिया।
- **Section 3 empowers the Speaker and the Rajya Sabha Chair, after "due consultation" and "consideration of available material," to either admit or refuse such a motion.** धारा 3 स्वीकार और राज्यसभा के सभापति को "उचित परामर्श" और "उपलब्ध सामग्री के विचार" के बाद ऐसे प्रस्ताव को स्वीकार या अस्वीकार करने का अधिकार देती है।
- Reacting to the bulletins, **Trinamool's floor leader in the Rajya Sabha, Derek O'Brien**, pointed to the **absence of any definitive reason for rejecting the notices**. बुलेटिन पर प्रतिक्रिया देते हुए **राज्यसभा में तृणमूल के फ्लोर लीडर डेरेक ओ'ब्रायन** ने नोटिस खारिज करने के लिए किसी ठोस कारण को अनुपस्थिति की ओर इशारा किया।

## GS Paper II: Governance,

### TOPICS COVERED

07 April 2026

**07A Role of independent directors vital: SEBI**  
स्वतंत्र निदेशकों की भूमिका महत्वपूर्ण: SEBI

**07A CSR initiatives must focus on high-impact projects: experts**  
सीएसआर पहलों को उच्च प्रभाव वाले प्रोजेक्ट्स पर ध्यान देना चाहिए: विशेषज्ञ



# Role of independent directors vital: SEBI

CS II: Governance

The Hindu Bureau  
MUMBAI

Independence does not translate into action in Indian corporates' perspective, said Tuhin Kanta Pandey, Chairman, SEBI.

He underscored the importance of independent directors in ensuring ethical conduct of firms saying 'conversation must now move beyond who sits on the board to how effectively they are able to contribute once they are there.'

"Independent directors are there not only for compliance and pointing fin-

gers at the management but also for supporting and finding solutions through accountability. They need to bear this responsibility in mind," he said at an event here. Also, there was need to fill skill gaps in independent directors.

Mr. Pandey also listed steps to boost transparency in corporate governance. The comments assume significance in light of the abrupt resignation of Atanu Chakraborty as chairperson of HDFC Bank reportedly on account of major corporate governance slippages.

हैं, बल्कि जवाबदेही के माध्यम से समर्थन देने और समाधान खोजने के लिए भी हैं।

- Mr. Pandey also listed steps to boost transparency in corporate governance. श्री पांडे ने कॉर्पोरेट गवर्नेंस में पारदर्शिता बढ़ाने के लिए कदम भी बताए।
- The comments assume significance in light of the abrupt resignation of Atanu Chakraborty as chairperson of HDFC Bank reportedly on account of major corporate governance slippages.

ये टिप्पणियां HDFC Bank के चेयरपर्सन अतनु चक्रवर्ती के अचानक इस्तीफे के संदर्भ में महत्वपूर्ण हैं, जो कथित रूप से बड़े कॉर्पोरेट गवर्नेंस चूकों के कारण हुआ।

## 07A. Role of independent directors vital: SEBI स्वतंत्र निदेशकों की भूमिका महत्वपूर्ण: SEBI

Independence does not translate into action in Indian corporates' perspective, said Tuhin Kanta Pandey, Chairman, SEBI.

भारतीय कॉर्पोरेट परिप्रेक्ष्य में स्वतंत्रता कार्रवाई में परिवर्तित नहीं होती, ऐसा SEBI के अध्यक्ष तुहिन कांता पांडे ने कहा।

- He underscored the importance of independent directors in ensuring ethical conduct of firms saying "conversation must now move beyond who sits on the board to how effectively they are able to contribute once they are there."

उन्होंने कंपनियों के नैतिक आचरण को सुनिश्चित करने में स्वतंत्र निदेशकों के महत्व पर जोर देते हुए कहा, "अब बातचीत इस बात से आगे बढ़नी चाहिए कि बोर्ड में कौन बैठता है, और इस पर ध्यान देना चाहिए कि वे वहां होने के बाद कितनी प्रभावी तरीके से योगदान दे पाते हैं।"

- "Independent directors are there not only for compliance and pointing fingers at the management but also for supporting and finding solutions through accountability.

"स्वतंत्र निदेशक केवल अनुपालन और प्रबंधन पर उंगली उठाने के लिए ही नहीं

# CSR initiatives must focus on high-impact projects: experts

CS II: Governance

Geetha Srimathi  
CHENNAI

Corporate Social Responsibility initiatives must move beyond compliance-driven spending and focus on high-impact projects that address pressing social challenges, experts said at a session at The Hindu Deep Tech Summit 2026.

The panel titled "The New Philanthropy: CSR as a Catalyst for Inclusive Deep Tech Ecosystems" brought together Kumar Anurag Pratap, VP, Digital Inclusion & Sustainability Leader and CSR Head; Sanjay Sampath, CEO, Green Curve Consulting; Aditi Gaitonde, Manager - People Experience (CSR Lead), EPAM; Balakumar Thangavelu, Head, CSR, Cognizant; and Radhika Ramesh, COO, Villgro. The session was moderated by Rohit Batra, Vice President



(From left) Kumar Anurag Pratap, VP, Digital Inclusion & Sustainability Leader, CSR Head; Sanjay Sampath, CEO, Green Curve Consulting; Aditi Gaitonde, Manager - People Experience (CSR Lead), EPAM; Balakumar Thangavelu, Head CSR, Cognizant; Radhika Ramesh, COO, Villgro and Rohit Batra, Vice President (Head) Commercial Projects, IHFC on Monday. S.R. RAGHUNATHAN

(Head), Commercial Projects with corporate partners. Mr. Pratap likened CSR partnerships to relationships that evolve through dialogue and shared purpose rather than immediate financial transactions, and that once such a connection is established, support is more likely to follow organically.

**'Shared purpose'**  
CSR cannot be approached as a purely transactional exercise focused only on funding, Mr. Pratap said, arguing that organisations seeking support must instead build meaningful,

long-term relationships with corporate partners. Mr. Pratap likened CSR partnerships to relationships that evolve through dialogue and shared purpose rather than immediate financial transactions, and that once such a connection is established, support is more likely to follow organically.

On the question of funding for research and development, Mr. Sampath said commonly cited figures, such as CSR spending on R&D being around 1%, may not be entirely accurate.

Informal estimates from industry discussions suggest the amount could be significantly higher, but there is a lack of rigorous,

publicly available studies to substantiate these claims, he said.

Ms. Ramesh said that investments in incubators and social impact organisations should be viewed as R&D within the CSR ecosystem. "Funding that goes to incubators and impact-focused NGOs is, in many ways, R&D," she said. She noted that such solutions are tested in real-world settings through pilot projects, with CSR funding helping to "de-risk" them and assess their impact, scalability and viability.

Responding to a question on whether CSR is being used innovatively or remains limited to low-risk, high-visibility projects, Mr. Thangavelu, said the sector cannot be viewed uniformly. "It is difficult to generalise," he said, noting that some companies treat CSR as a "checklist activi-

ty", while others use it for branding. At the same time, he said, organisations where philanthropy is culturally embedded are more likely to back innovation and long-term solutions. R&D projects.

On shifting mindsets within the CSR ecosystem, Ms. Gaitonde said organisations need to first understand the perspectives of both start-ups and CSR decision-makers. "Try and understand where they're coming from," she said, suggesting that start-ups engage more closely with incubators, including those at institutions such as IITs and IIMs, to better navigate the ecosystem.

She urged organisations to identify what drives CSR partners. "Find your hook," she said, noting that aligning with a company's priorities can help initiate partnerships.

## 07A. CSR initiatives must focus on high-impact projects: experts

सीएसआर पहलों को उच्च प्रभाव वाले प्रोजेक्ट्स पर ध्यान देना चाहिए: विशेषज्ञ



- CSR cannot be approached as a purely **transactional exercise** focused only on funding, Mr. Pratap said, arguing that **organisations seeking support must instead build meaningful, long-term relationships with corporate partners.**  
श्री प्रताप ने कहा कि CSR को केवल फंडिंग पर आधारित **लेन-देन गतिविधि** के रूप में नहीं देखा जाना चाहिए, बल्कि समर्थन चाहने वाले संगठनों को कॉर्पोरेट भागीदारों के साथ सार्थक और दीर्घकालिक संबंध बनाने चाहिए।
- Mr. Pratap likened **CSR partnerships to relationships that evolve through dialogue and shared purpose rather than immediate financial transactions, and that once such a connection is established, support is more likely to follow organically.**  
श्री प्रताप ने CSR साझेदारियों की तुलना ऐसे संबंधों से की जो संवाद और **साझा उद्देश्य** के माध्यम से विकसित होते हैं, न कि तत्काल वित्तीय लेन-देन से, और एक बार ऐसा संबंध स्थापित हो जाए तो समर्थन स्वाभाविक रूप से मिलने लगता है।
- Ms. Ramesh said that **investments in incubators and social impact organisations should be viewed as R&D within the CSR ecosystem.**  
सुश्री रमेश ने कहा कि **इन्क्यूबेटर और सामाजिक प्रभाव संगठनों** में निवेश को CSR पारिस्थितिकी तंत्र के भीतर R&D के रूप में देखा जाना चाहिए।
- **“Funding that goes to incubators and impact-focused NGOs is, in many ways, R&D,”** she said.  
उन्होंने कहा, “इन्क्यूबेटर्स और प्रभाव-केंद्रित NGOs को दिया जाने वाला फंड कई मायनों में R&D ही है।”
- **“It is difficult to generalise,”** he said, noting that some companies treat CSR as a **checklist activity, while others use it for branding.**  
उन्होंने कहा, “सामान्यीकरण करना कठिन है,” यह बताते हुए कि कुछ कंपनियां CSR को **चेकलिस्ट गतिविधि** मानती हैं, जबकि अन्य इसे ब्रांडिंग के लिए उपयोग करती हैं।
- At the same time, he said, **organisations where philanthropy is culturally embedded are more likely to back innovation and long-term solutions.**  
साथ ही उन्होंने कहा कि जिन संगठनों में परोपकार की संस्कृति होती है, वे नवाचार और दीर्घकालिक समाधानों का समर्थन करने की अधिक संभावना रखते हैं।
- On shifting mindsets within the CSR ecosystem, Ms. Gaitonde said **organisations need to first understand the perspectives of both start-ups and CSR decision-makers.**  
CSR पारिस्थितिकी तंत्र में सोच बदलने पर, सुश्री गैटोंडे ने कहा कि संगठनों को पहले **स्टार्टअप्स** और CSR निर्णयकर्ताओं दोनों के दृष्टिकोण को समझना होगा।

## GS Paper III: Economy,

### TOPICS COVERED

07 April 2026

07A No stay on Adani's JAL buy, NCLAT to decide pronto: SC  
अडानी के JAL अधिग्रहण पर रोक नहीं, NCLAT जल्द फैसला करेगा: सुप्रीम कोर्ट

## No stay on Adani's JAL buy, NCLAT to decide pronto: SC

GS III: Economy  
Press Trust of India  
NEW DELHI

The Supreme Court declined to stay the implementation of the Adani group's ₹14,535-crore bid to buy debt-ridden Jaiprakash Associates Ltd. (JAL), but restrained the firm's monitoring committee from taking any 'major policy decisions' without prior nod of the National Company Law Appellate Tribunal (NCLAT).

A Bench of Chief Justice Surya Kant and Justice Joy-malya Bagchi asked mining giant Vedanta Ltd., which

**SC restrained firm's monitoring panel from taking 'major policy decisions' sans the NCLAT's nod**

is opposing the resolution plan and Adani Enterprises Ltd. to raise contentions and counter claims before the NCLAT which will start final hearing on April 10.

The SC asked the NCLAT to decide the plea and the counter petition expeditiously by hearing them on an 'out of turn basis' on the dispute over the acquisi-

tion of JAL by Adani group.

"In view of the fact the company appeals are now listed for final hearing at the NCLAT on April 10, we see no reason to interfere with the impugned order. However, having regard to the nature of the issue, we request the NCLAT to hear the appeal on an out-of-turn basis on the date fixed or immediately on the next working day if arguments do not conclude," SC said.

The NCLAT on March 24 declined interim stay over Vedanta's plea against orders passed by the NCLT okaying Adani Group's bid.

## 07A. No stay on Adani's JAL buy, NCLAT to decide pronto: SC अडानी के JAL अधिग्रहण पर रोक नहीं, NCLAT जल्द फैसला करेगा: सुप्रीम कोर्ट

• The Supreme Court declined to stay the implementation of the Adani group's ₹14,535-crore bid to buy debt-ridden Jaiprakash Associates Ltd. (JAL), but restrained the firm's monitoring committee from taking any 'major policy decisions' without prior nod of the National Company Law Appellate Tribunal (NCLAT).

सुप्रीम कोर्ट ने कर्ज में डूबी जयप्रकाश एसोसिएट्स लिमिटेड (JAL) को खरीदने के लिए अडानी समूह की ₹14,535 करोड़ की बोली पर रोक लगाने से इनकार कर दिया, लेकिन कंपनी की निगरानी समिति को राष्ट्रीय कंपनी



विधि अपीलीय अधिकरण (NCLAT) की पूर्व अनुमति के बिना कोई 'बड़ा नीतिगत निर्णय' लेने से रोका।

## National Company Law Appellate Tribunal (NCLAT)

- The National Company Law Appellate Tribunal (NCLAT) is a quasi-judicial body in India that hears appeals against the orders passed by the **National Company Law Tribunal (NCLT)**, **Insolvency and Bankruptcy Board of India (IBBI)**, and other **statutory authorities** as specified under various Acts.
- It plays a critical role in **corporate governance**, especially in **insolvency resolution**, **company disputes**, and **competition law** matters.
- The NCLAT was constituted under **Section 410 of the Companies Act, 2013**, and became operational from **1st June 2016**.

### Key Functions and Jurisdiction

- **Appellate Authority**
  - The NCLAT hears and decides appeals from the following bodies:
    - **National Company Law Tribunal (NCLT)** – under the **Companies Act, 2013**
    - **Insolvency and Bankruptcy Board of India (IBBI)** – under the **Insolvency and Bankruptcy Code (IBC), 2016**
    - **Competition Commission of India (CCI)** – under the **Competition Act, 2002**
    - **National Financial Reporting Authority (NFRA)** – under the **Companies Act, 2013**
- **Role in Insolvency:** Under the **Insolvency and Bankruptcy Code (IBC), 2016**, the NCLAT is the **primary appellate body** to hear grievances related to **insolvency resolution plans** and **liquidation processes** decided by the NCLT.
- **Role in Competition Law:** It hears appeals against orders passed by the **CCI**, providing **checks and balances** in cases of **anti-competitive practices** and **abuse of dominance**.
- **Role under Companies Act, 2013:** Hears appeals relating to disputes involving **shareholders**, **mismanagement**, **oppression**, **mergers**, and **demergers**.

### Structure and Composition

- **Chairperson** – Appointed by the Central Government in consultation with the Chief Justice of India.
- **Judicial Members and Technical Members** – The Tribunal includes a mix of **Judicial and Technical Members**, ensuring expertise in both legal and financial/corporate matters.
- **Benches** – NCLAT has **principal bench in New Delhi** and may have additional benches at other places as notified.

<b>GS Paper III: S&amp;T,</b>	
<b>TOPICS COVERED</b>	<b>07 April 2026</b>
<b>07A</b>	<b>Psychedelics are revealing how the brain builds the sense of self</b> मतिभ्रमकारी पदार्थ यह उजागर कर रहे हैं कि मस्तिष्क 'स्व' की भावना कैसे बनाता है
<b>07A</b>	<b>Reinforcing the case for a One Health approach</b> वन हेल्थ दृष्टिकोण के पक्ष को मजबूत करना
<b>07A</b>	<b>Standing for medical science, together with AIIMS</b> AIIMS के साथ मिलकर चिकित्सा विज्ञान के लिए खड़ा होना



<b>07A</b>	<b>What TB reveals about India's urban health system</b> <b>भारत की शहरी स्वास्थ्य प्रणाली के बारे में टीबी क्या उजागर करता है</b>
<b>07A</b>	<b>Are students ready for CBSE's AI push?</b> <b>क्या छात्र CBSE के AI प्रयास के लिए तैयार हैं?</b>
<b>07A</b>	<b>Understanding India's internet censorship regime</b> <b>भारत की इंटरनेट सेंसरशिप व्यवस्था को समझना</b>
<b>07A</b>	<b>'Govt.'s semiconductor mission will promote research'</b> <b>'सरकार का सेमीकंडक्टर मिशन अनुसंधान को बढ़ावा देगा'</b>
<b>07A</b>	<b>'Govt. to create deep-tech infrastructure with industry'</b> <b>'सरकार उद्योग के साथ मिलकर डीप-टेक इंफ्रास्ट्रक्चर बनाएगी'</b>
<b>07A</b>	<b>Artemis II breaks Apollo 13's record as humans travel farther into space</b> <b>आर्टेमिस II ने अपोलो 13 का रिकॉर्ड तोड़ा, मानव अंतरिक्ष में और दूर तक पहुंचे</b>

## Psychedelics are revealing how the brain builds the sense of self

Psychedelics can temporarily 'loosen' the brain patterns that support the feeling of a 'me' allowing researchers to watch that system reorganise itself in real time: the emerging evidence points less to transcendence than to flexibility: a reminder that the experience of self is dynamic, not fixed

**RESEARCHERS' TAKEAWAYS**

Airiban Makhsoushfar

Many people have reported moments when the sense of being a distinct self 'loosens', among astronauts, it is called the overview effect while deep-sea explorers report a similar shift sometimes called the underview effect. Both involve sudden changes in perspective in which the usual boundary of 'me' briefly softens, as if the vastness they encounter is mirrored inwardly and the distance between self and world is momentarily absent.

This dissolution often translates into shared experiences of oneness and interconnectedness with the outside world.

The 19th century Indian teacher Ramana Maharshi treated this instability not as an anomaly but as a doorway to examine directly. Continuing a long philosophical tradition, he invited people to look for the 'I' in their own experiences – in the body, sensations, and thoughts – and notice that more or less fully captures the true nature of the self.

Such inquiry explores experience from the inside, a subjective first-person view. Modern science, by contrast, examines the brain processes that accompany experience from the outside, making these inner shifts harder to access directly.

Only recently, however, has a new experimental tool offered a way to observe what happens in the brain as the sense of self begins to shift. Psychedelics can temporarily 'loosen' the brain patterns that support the feeling of a 'me', allowing researchers to watch that system reorganise itself in real time.

**The brain in action**  
To study what happens when the sense of self weakens, an international team of researchers turned to a fast-acting psychedelic compound called N,N-dimethyltryptamine (DMT) in a laboratory study with 27 volunteers. DMT produces a brief and intense shift in awareness that often includes a loss of the usual feeling of being a separate 'me'.

In the experiment, published in the *Journal of Neuroscience* on January 14, volunteers received DMT while researchers recorded their brain activity using electroencephalography (EEG) to track rhythmic electrical patterns across the scalp.

In normal conditions, one of the brain's dominant rhythms is the alpha wave – a slow oscillation linked to inward focus. This rhythm helps regulate internally focused processing.

Importantly, this rhythm is the self itself but one neural signature associated with how the brain maintains a coherent sense of self over time.

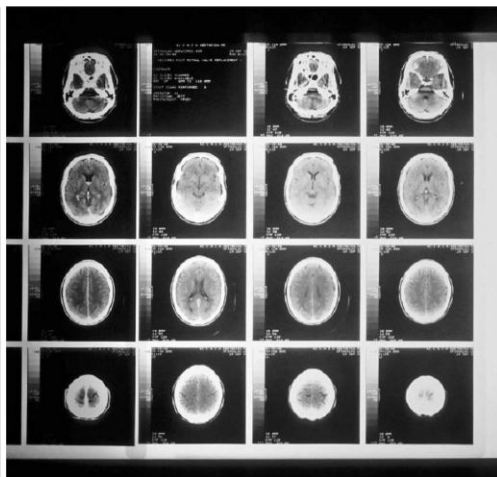
During the DMT experience, that pattern began to loosen. Alpha rhythms weakened and lost coordination. Overall brain activity also shifted away from its usual organisation. And the more this rhythm weakened, the more strongly participants reported losing their ordinary sense of self.

The findings suggest that specific brain processes are involved in maintaining aspects of the felt sense of self. When neural patterns associated with maintaining a stable sense of 'me' loosen, the organisation of that experience can temporarily shift.

Neuroscientists describe the waking brain as operating in a delicate balance between structure and flexibility. This regime is sometimes called 'criticality'. In this state, brain networks are organised enough to remain coherent while still adapting to new information. Under the influence of DMT, that balance shifted towards a quieter, less coordinated mode. As the organising rhythm weakened, the brain activity associated with maintaining a coherent self-model also shifted.

But what shifts in these experiments is not something transcendental, like the philosophical traditions of India and China. Dan Zahavi, professor of phenomenology at the University of Copenhagen, cautioned that the self is not a single thing that can simply be dissolved. It involves multiple layers, he explained, including bodily awareness, lived experience, and personal narrative, "and altering how those layers are organised is not the same as erasing identity". Neuroscience, in this view, is observing temporary changes in how the self is structured rather than its elimination.

At a more practical level, Jeff Greenberg, professor of psychology at the University of Arizona noted that a stable sense of self plays an important role in everyday functioning, including



A head view taken by a computer-assisted tomographic scanner. (BBC)

supporting emotional regulation, planning, and continuity. Brief disruptions can be informative, he added, but they should not be mistaken for a lasting loss of identity.

**Self, mortality, emotional acceptance**  
If a brief disruption of the brain's self-model reveals how the feeling of 'me' really is, the question naturally arises whether that insight changes how we face impermanence or the transient nature of the world.

Psychologists who've shown that reminders of death can influence the way we behave, in part because the sense of self is a continuous, bounded self and acts as a psychological anchor, keeping change and mortality at a distance.

In a study published recently in *Psychopharmacology*, researchers asked whether repeated ego-shifting might reshape how people relate to death by comparing 54 long-term ayahuasca users, each with at least nine lifetime uses and averaging around fifty uses, to 53 people who had never taken psychedelics.

Participants completed psychological measures assessing death anxiety, avoidance, and emotional attitudes towards impermanence.

The ayahuasca group reported less fear and anxiety about death, were less likely to avoid thinking about it, and were more comfortable with the idea of impermanence. The researchers found that this pattern was best explained by what they called "acceptance of impermanence", an emotional ability to step open to change – rather than relating, personally or generally, to mindfulness.

Yair Dolev-Zimmerman, research director at the University of Haifa, Israel, and lead author of the study, said this was striking because popular narratives often assume psychedelic experiences reduce fear of death by changing one's beliefs.

Instead, he explained, the data pointed to a different mechanism: not adopting a comforting metaphysical story but developing "a more flexible emotional relationship to uncertainty, dissolution, and loss". The emotional acceptance of change rather than belief or personality best explained the difference between the groups.

To clarify what that kind of acceptance impermanence, fear, he explained, could diminish in defensive ways like distraction or overcompensation. The data also reflected a deeper shift in how a person related to loss and change in everyday life. "Fear can quiet down without

embodied self is represented. Ordinarily, he explained, the brain models the self as a stable object that must be protected, especially when confronted with mortality. Meditation repeatedly exposes practitioners to experience as an unfolding process, sensations arise and pass, agency fluctuates, and the sense of being a fixed someone loosens.

In this context, death is processed less as a catastrophic contraction and more as another expression of change, allowing the brain to encounter existential cases without automatically reinforcing defensive boundaries.

**A common pattern**  
None of these results implies that ego dissolution is inherently beneficial or that altering the sense of self is a universal remedy for existential distress. Dr. Dolev-Zimmerman cautioned that not all disruptions of self-experience operate at the same level.

Acute psychedelic states may reshape concepts and emotions whereas deeply rooted perceptual defenses – including those tied to mortality – likely require sustained training and repeated evidence for the brain to revise them. The studies also rely on different methods, populations, and interpretations, so they can't establish straightforward cause-effect claims.

What the findings do point to, however, is a clearer view of how the brain might construct its sense of self. Moments when that sense loosens – whether in orbit, in meditation or under carefully studied conditions – reveal what feels like a first boundary to actively maintained and can shift.

The emerging evidence points less to transcendence than to flexibility: a reminder that the experience of self is dynamic, not fixed.

In that light, as Dr. Dolev-Zimmerman put it, acceptance of impermanence is less about adopting a belief than "developing an emotional stance toward change – the capacity to remain open to endings without reflexively turning away. The idea echoes a long-standing contemplative insight – known in Buddhist thought as *anicca* – for instance – a doctrine asserting that all conditioned existence, physical and mental, is in a constant state of flux, arising and passing away.

Modern neuroscience doesn't quite measure up to the idea, yet. But it does suggest that learning, whether through experience or training, to hold that 'me' a little more lightly may change how the mind responds to temporariness. (Source: *Nature* | <https://www.nature.com/articles/s41586-025-05111-1> | generated by training and science communicator from New Delhi.

Dr. Dolev-Zimmerman interpreted this shift as reflecting a change in how the

## 07A. Psychedelics are revealing how the brain builds the sense of self

मतिभ्रमकारी पदार्थ यह उजागर कर रहे हैं कि मस्तिष्क 'स्व' की भावना कैसे बनाता है

Moments when the sense of being a distinct self 'loosens' ऐसे क्षण जब एक अलग 'स्व' होने का अनुभव 'ढीला' पड़ जाता है

- Many people have reported moments when the sense of being a distinct self 'loosens'. कई लोगों ने ऐसे क्षणों की रिपोर्ट की है जब एक अलग स्व होने का अनुभव 'ढीला' पड़ जाता है।

- Among astronauts, it is called the **overview effect** while deep-sea explorers report a similar shift sometimes called the **underview effect**.

अंतरिक्ष यात्रियों के बीच इसे **समग्र दृष्टि प्रभाव** कहा जाता है, जबकि गहरे समुद्र के खोजकर्ता इसी तरह के बदलाव को **अधो-दृष्टि प्रभाव** कहते हैं।

- Both involve sudden changes in perspective in which the usual boundary of 'me' briefly softens, as if the vastness they encounter is mirrored inwardly and the distance between self and world is momentarily absent.

दोनों में दृष्टिकोण में अचानक बदलाव होता है जिसमें 'मैं' की सामान्य सीमा थोड़ी देर के लिए नरम हो जाती है, मानो वे जिस विशालता का अनुभव करते हैं वह भीतर परिलक्षित हो रही हो और **स्व और दुनिया के बीच दूरी** क्षणिक रूप से समाप्त हो जाती है।

- This dissolution often translates into shared experiences of **oneness and interconnectedness with the outside world**. यह विघटन अक्सर बाहरी दुनिया के साथ **एकता और**



परस्पर जुड़ाव के साझा अनुभव में बदल जाता है।

### Ramana Maharshi and inquiry into self रामण महर्षि और स्व की खोज

- The 19th century Indian teacher Ramana Maharshi treated this instability not as an anomaly but as something to examine directly.  
19वीं सदी के भारतीय शिक्षक रामण महर्षि ने इस अस्थिरता को असामान्यता नहीं बल्कि सीधे जांचने योग्य चीज माना।
- Continuing a long philosophical tradition, he invited people to look for the 'I' in their own experiences — in the body, sensations, and thoughts — and notice that none of them fully captures the true nature of the self.  
एक लंबी दार्शनिक परंपरा को जारी रखते हुए, उन्होंने लोगों को अपने अनुभवों — शरीर, संवेदनाओं और विचारों — में 'मैं' को खोजने के लिए प्रेरित किया और यह देखने के लिए कहा कि इनमें से कोई भी स्व के वास्तविक स्वरूप को पूरी तरह नहीं पकड़ता।
- Such inquiry explores experience from the inside, a subjective, first-person view.  
इस प्रकार की खोज अनुभव को भीतर से, एक व्यक्तिपरक, प्रथम-पुरुष दृष्टिकोण से देखती है।
- Modern science, by contrast, examines the brain processes that accompany experience from the outside, making these inner shifts harder to access directly.  
इसके विपरीत, आधुनिक विज्ञान अनुभव के साथ जुड़े मस्तिष्क प्रक्रियाओं का बाहरी दृष्टिकोण से अध्ययन करता है, जिससे इन आंतरिक बदलावों तक सीधे पहुंचना कठिन हो जाता है।

### Psychedelics as experimental tool साइकेडेलिक्स एक प्रयोगात्मक उपकरण के रूप में

- Only recently, however, has a new experimental tool offered a way to observe what happens in the brain as the sense of self begins to shift.  
हाल ही में, एक नए प्रयोगात्मक उपकरण ने यह देखने का तरीका प्रदान किया है कि जब स्व का अनुभव बदलना शुरू होता है तो मस्तिष्क में क्या होता है।
- Psychedelics can temporarily 'loosen' the brain patterns that support the feeling of a 'me', allowing researchers to watch that system reorganise itself in real time.  
साइकेडेलिक्स मस्तिष्क के उन पैटर्न्स को अस्थायी रूप से 'ढीला' कर सकते हैं जो 'मैं' की भावना को बनाए रखते हैं, जिससे शोधकर्ता उस प्रणाली को वास्तविक समय में पुनर्गठित होते देख सकते हैं।

### The brain in action मस्तिष्क की कार्यप्रणाली

- To study what happens when the sense of self weakens, an international team of researchers turned to a fast-acting psychedelic compound called N, N-Dimethyltryptamine (DMT) in a laboratory study with 27 volunteers.  
यह अध्ययन करने के लिए कि जब स्व का अनुभव कमजोर होता है तो क्या होता है, एक अंतरराष्ट्रीय शोध टीम ने एक तेज-प्रभावी साइकेडेलिक यौगिक डाइमिथाइलट्रिप्टामीन का प्रयोग किया, जिसमें 27 स्वयंसेवक शामिल थे।
- DMT produces a brief and intense shift in awareness that often includes a loss of the usual feeling of being a separate 'me'.  
यह चेतना में एक संक्षिप्त और तीव्र बदलाव उत्पन्न करता है जिसमें अक्सर अलग 'मैं' होने की सामान्य भावना खो जाती है।
- In the experiment, published in The Journal of Neuroscience on January 14, volunteers received DMT while researchers recorded their brain activity using electroencephalography (EEG) to track rhythmic electrical patterns across the scalp.  
इस प्रयोग में, जो 14 जनवरी को एक वैज्ञानिक पत्रिका में प्रकाशित हुआ, स्वयंसेवकों को यह पदार्थ दिया गया जबकि शोधकर्ताओं ने मस्तिष्क विद्युत लेखन तकनीक के माध्यम से उनकी मस्तिष्क गतिविधि रिकॉर्ड की।
- In normal conditions, one of the brain's dominant rhythms is the alpha wave — a slow oscillation linked to inward focus.



सामान्य परिस्थितियों में, मस्तिष्क की प्रमुख लयों में से एक **अल्फा तरंग** होती है — जो आंतरिक ध्यान से जुड़ी धीमी तरंग है।

- **This rhythm helps regulate internally focused processing.**  
यह लय **आंतरिक रूप से केंद्रित प्रक्रियाओं** को नियंत्रित करने में मदद करती है।
- **Importantly, this rhythm is not the self itself but one neural signature associated with how the brain maintains a coherent sense of self over time.**  
महत्वपूर्ण रूप से, यह लय स्वयं 'स्व' नहीं है बल्कि एक **तंत्रिका संकेत** है जो यह दर्शाता है कि मस्तिष्क समय के साथ एक स्थिर स्व-अनुभव को कैसे बनाए रखता है।
- **During the DMT experience, that pattern began to loosen.**  
इस अनुभव के दौरान यह पैटर्न ढीला पड़ने लगा।
- **Alpha rhythms weakened and lost coordination.**  
**अल्फा तरंगों** कमजोर हो गईं और उनका समन्वय टूट गया।
- **Neuroscientists describe the waking brain as operating in a delicate balance between structure and flexibility.**  
तंत्रिका वैज्ञानिक जाग्रत मस्तिष्क को **संरचना और लचीलेपन** के बीच एक **नाजुक संतुलन** में कार्यरत बताते हैं।
- **This regime is sometimes called criticality.**  
इस अवस्था को कभी-कभी **क्रिटिकलिटी** कहा जाता है।
- **In this state, brain networks are organised enough to remain coherent while still adapting to new information.**  
इस अवस्था में मस्तिष्क के नेटवर्क इतने संगठित होते हैं कि वे **सुसंगत** बने रहते हैं और साथ ही नई जानकारी के अनुसार **अनुकूलन** करते हैं।
- To clarify what that kind of acceptance entailed, **M. Samir Hossein**, a psychiatrist and thanatologist, noted that **fearing death less was not the same as accepting impermanence.**  
इस प्रकार की स्वीकृति को स्पष्ट करने के लिए, **एम. समीर हुसैन**, जो एक मनोचिकित्सक और मृत्यु-अध्ययन विशेषज्ञ हैं, ने कहा कि मृत्यु से कम डरना, **अनित्यता को स्वीकार करना** नहीं है।
- **Fear, he explained, could diminish in defensive ways like distraction or reinterpretation whereas acceptance reflected a deeper shift in how a person related to loss and change in everyday life.**  
उन्होंने समझाया कि भय **ध्यान भटकाने या पुनर्व्याख्या** जैसे रक्षात्मक तरीकों से कम हो सकता है, जबकि स्वीकृति यह दर्शाती है कि व्यक्ति अपने दैनिक जीवन में **हानि और परिवर्तन से कैसे जुड़ता है**, इसमें गहरा बदलाव आता है।
- **"Fear can quiet down without disappearing but acceptance reorganises how we live with impermanence."**  
"भय बिना पूरी तरह समाप्त हुए शांत हो सकता है, लेकिन स्वीकृति यह बदल देती है कि हम **अनित्यता के साथ कैसे जीते हैं।"**



# Reinforcing the case for a One Health approach

Global health risks demand a One Health approach grounded in coordination and scientific collaboration to strengthen pandemic preparedness and response



Ramya Kannan

**W**hen the 1995 film *Outbreak*, starring the inimitable Dustin Hoffman, was released to audiences worldwide, it seemed like surreal science fiction, pitched at the very edge of the realm of possibility. The pacy film profiled the desperate race to contain an imaginary zoonotic virus, *Motaba*, that jumped to humans as a result of anthropogenic activity – deforestation and trade in wild animals – spreading across nations like a forest fire.

The movie, though dramatic, served as a prescient illustration of a crisis that was to visit the world, nearly a quarter of a century later: the COVID-19 pandemic.

Interestingly, the film also stood out for its early portrayal of the core principles of One Health – long before the term was even coined. Since then, though, One Health, which draws on the interconnectedness between humans, animals and the environment, has emerged as a key concept gaining traction among nations, though practical implementation has progressed at a nearly glacial pace.

#### From fiction to reality

This year's World Health Day message – "Together for health. Stand with science" – underlines the essentiality of adopting a One Health

approach to protect animals, the environment, and humans. It also highlights the critical role of scientific collaboration and the use of evidence in crafting policy. As *Outbreak* outlines cinematically, there is a permanent state of conflict between different departments, arms of the government, and even nations, that come in the way of working synchronously to better tackle health crises.

As John S. Mackenzie and Martyn Jeggo indicated in their 2019 editorial in *Tropical Medicine and Infectious Diseases*, the term 'One Health' was first officially used in 2003-2004, associated with the emergence of severe acute respiratory syndrome. With the spread of avian influenza H5N1, it gained ground. A significant contributor was the 'Manhattan Principles', derived at a 2004 Wildlife Conservation Society meeting, which recognised the link between human and animal health and the threats diseases pose to food supplies and economies.

The authors explained: "It has become increasingly clear over the past three decades that the majority of novel, emergent zoonotic infectious diseases originate in animals and that the principal drivers of their emergence are associated with human activities, including changes in ecosystems and land use, intensification of agriculture,



**Swift action:** Post-COVID, the Indian government fast-tracked collaborative positions to address future crises. K. MURALI KUMAR

urbanisation, and international travel and trade."

Today, international wisdom acknowledges that a pathogen unknown to mankind can suddenly emerge, wreak havoc on populations, and threaten the stability of the world faster than one can say 'One Health'.

According to the One Health Commission: "One Health is an integrated, unifying approach that aims to sustainably balance and optimise the health of people, animals and ecosystems." The approach it advocates involves mobilising multiple sectors, disciplines and communities to foster well-being and tackle threats to health and ecosystems.

The COVID-19 pandemic, in some senses, was the fulcrum that convinced even reluctant nations

of the world to invest in One Health, demonstrating visibly what the lack of coordination; and on the other hand, seamless coordination can do. It was the collective sharing of SARS-CoV-2 genetic data and the study of human genetic factors in COVID-19 susceptibility that drove the international vaccine development effort. The WHO Pandemic Agreement, adopted on May 20, 2025, is a legally binding international treaty aimed at enhancing global prevention, preparedness, and response to future pandemics. It focuses on equity, establishing a Pathogen Access and Benefit-Sharing system to ensure rapid pathogen data sharing and equitable access to vaccines and treatments.

Internationally, One Health is led by the Quadripartite collabora-

tion – including WHO, FAO, the United Nations Environment Programme, and the World Organisation for Animal Health. In October 2022, they launched the One Health Joint Plan of Action.

Post-COVID, the Indian government fast-tracked collaborative positions to address future crises. It mobilised the National One Health Mission as a collaborative initiative designed to integrate human, animal, and environmental health sectors. It awedly aims to enhance pandemic preparedness, disease surveillance, and zoonotic disease control.

With increasing evidence emerging of stressors from climate change and how these affect the natural ways of the world, it has become clear that addressing the effects of extreme climate events is essential. While several national initiatives exist to drive India ahead on this path, continuous monitoring, evaluation, and interim mitigation programmes are urgently needed.

In this context, some State-led initiatives present inspired examples for replication. These include Odisha's pioneering Climate Budget to track climate-resilient development expenditures, Kerala's participatory carbon-neutral plan

in Meenagandi, and Tamil Nadu's Green Climate Company and Cool Roof Project in Chennai.

#### Coordinated solutions

The One Health Summit in Lyon, France, currently under way, in time for World Health Day, will focus on the main factors contributing to infectious and non-communicable diseases, such as zoonotic reservoirs, vectors, antimicrobial resistance (AMR), sustainable food systems, and exposure to pollution. It hopes to foster international and interdisciplinary dialogues about global challenges, particularly with reference to co-operation, propose solutions to strengthen health systems, and rethink global institutional fra-

networks that will align with One Health goals. Welcoming increasing political consensus on One Health, WHO Director-General Tedros Adhanom Ghebreyesus said in 2023: "A One Health approach makes public health sense, economic sense and common sense." Indeed, the only thing that makes sense in an increasingly interconnected world is an approach that recognises and acts on these connections.



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## 07A. Reinforcing the case for a One Health approach वन हेल्थ दृष्टिकोण के पक्ष को मजबूत करना

### From fiction to One Health reality

#### काल्पनिक कथा से वन हेल्थ की वास्तविकता तक

- Since then, though, **One Health, which draws on the interconnectedness between humans, animals and the environment, has emerged as a key concept gaining traction among nations, though practical implementation has progressed at a nearly glacial pace.**

तब से वन हेल्थ, जो मानव, पशु और पर्यावरण के आपसी संबंध पर आधारित है, एक महत्वपूर्ण अवधारणा बन गई है, हालांकि इसका कार्यान्वयन बहुत धीमा रहा है।

### From fiction to reality

#### कल्पना से वास्तविकता तक

- This year's **World Health Day** message — "Together for health. Stand with science" — underlines the essentiality of adopting a **One Health approach** to protect animals, the environment, and humans.

इस वर्ष के **विश्व स्वास्थ्य दिवस** का संदेश — "Together for health. Stand with science" — वन हेल्थ दृष्टिकोण की आवश्यकता को दर्शाता है।

- It also highlights the critical role of scientific collaboration and the use of evidence in crafting policy.

यह वैज्ञानिक सहयोग और साक्ष्य आधारित नीति निर्माण के महत्व को भी रेखांकित करता है।



# Standing for medical science, together with AIIMS

Democratising world-class healthcare by expanding medical education, correcting regional imbalances, and ensuring accessible, affordable, and equitable care for all Indians



**M. Srinivas**  
Director of All India Institute of Medical Sciences, Delhi

For over a billion Indians, world-class healthcare is no longer a distant dream centred in New Delhi; it is now a reality closer to their homes. Over the past decade, the Government of India has pursued a coherent strategy to make healthcare accessible, affordable, and consistent for every Indian, irrespective of where they live. This transformation marks a shift from a model in which medical excellence, the beacon of hope, was concentrated in one city to one in which it is distributed across every region, working as a unified national system.

**Medical education**  
The journey toward equitable healthcare begins with the creators of care – our doctors. India has witnessed a rapid expansion in medical education infrastructure to meet the needs of the country. Since 2014, MBBS seats across India have surged from around 50,000 to approximately 1,20,000. Similarly, postgraduate

seats have expanded from around 30,000 to roughly 80,000. By significantly increasing the number of medical colleges and specialty seats, the government has ensured a steady pipeline of healthcare professionals.

The instrument of this structural transformation is the Pradhan Mantri Swasthya Suraksha Yojana (PMSSY). Launched with the explicit mandate of correcting regional imbalances in tertiary healthcare, PMSSY has gained unprecedented momentum since 2014. Of the 22 AIIMS approved under the scheme, the majority were sanctioned and operationalised in the last decade.

The strategy was clear: establish institutions of the highest national standing in regions that needed them most. These are not mere satellite campuses; each is an Institute of National Importance (INI), mandated to deliver tertiary clinical care, education, and research, the trinity mission of AIIMS.

The impact on patient care has



By significantly increasing the number of medical colleges and specialty seats, the government has ensured a steady pipeline of healthcare professionals. GETTY IMAGES

been staggering. In the last few years alone, the new AIIMS have collectively treated crores of outpatients and millions of inpatients. AIIMS New Delhi, the first AIIMS, recorded approximately 50 lakh OPD consultations in a single year. Services that once required patients to travel hundreds of kilometres are now available locally. This has led to a substantial reduction in Out-of-Pocket Expenditure (OOPE), preventing millions of fa-

milies from falling into poverty due to catastrophic health costs. The AIIMS expansion sits within a broader architecture of reform. While AIIMS ensures the availability of care, Ayushman Bharat PM-JAY guarantees affordability by providing financial protection to over 55 crore citizens. Complementing this is the Ayushman Bharat Digital Health Mission (ABDM). The new AIIMS institutions have consistently topped the

charts for the highest ABHA (Ayushman Bharat Health Account) registrations and have utilised the “Scan and Share” facility to reduce wait times, ensuring that patients’ health records follow them seamlessly across the country.

The evolution of these institutes is supported by a unique “hand-holding” model. AIIMS New Delhi, as the “Mother AIIMS,” has played a pivotal role in mentoring new institutions, supporting them in establishment, recruitment, teaching, learning, and fostering research collaboration. This ensures that the “AIIMS Brand” of excellence is maintained and the “AIIMS work culture” is propagated.

This collaboration reached a milestone in January 2026, when directors and deans from all operational AIIMS gathered at AIIMS New Delhi to sign a Memorandum of Understanding establishing the Pan-AIIMS Research Consortium.

This framework formalises joint clinical trials and shared patient data focused on India’s specific epidemiological priorities, cancer, metabolic disorders and the integration of AI in medicine.

**Government commitment**  
With an allocation of around ₹11,000 crore for PMSSY in the Union Budget 2026-27, the commitment to health remains steadfast. The Government of India is not merely expanding services; it is democratising tertiary medical services. This is what equitable healthcare looks like in practice – a system where the

quality of care is determined by clinical need, not by a patient’s geographical location or income. AIIMS New Delhi, supported by the government’s annual budget of around ₹5,500 crore, continues the legacy of the trinity mission: patient care, medical education, and medical research.



## 07A. Standing for medical science, together with AIIMS

### AIIMS के साथ मिलकर चिकित्सा विज्ञान के लिए खड़ा होना

- Since 2014, MBBS seats across India have surged from around 50,000 to approximately 1,20,000.
- 2014 के बाद MBBS सीटें 50,000 से बढ़कर लगभग 1,20,000 हो गई हैं।
- Similarly, postgraduate seats have expanded from around 30,000 to roughly 80,000. पोस्टग्रेजुएट सीटें 30,000 से बढ़कर लगभग 80,000 हो गई हैं।
- The instrument of this structural transformation is the **Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)**. इस परिवर्तन का प्रमुख साधन **प्रधानमंत्री स्वास्थ्य सुरक्षा योजना (PMSSY)** है।
- Of the 22 AIIMS approved under the scheme, the majority were sanctioned and operationalised in the last decade. इस योजना के तहत स्वीकृत 22 एम्स में से अधिकांश पिछले दशक में शुरू हुए।
- While AIIMS ensures the availability of care, **Ayushman Bharat PMJAY guarantees affordability by providing financial protection to over 55 crore citizens**. जहाँ एम्स **स्वास्थ्य सेवाएँ उपलब्ध** कराता है, वहीं **आयुष्मान भारत पीएमजेवाई 55 करोड़ नागरिकों को आर्थिक सुरक्षा** देता है।
- Complementing this is the **Ayushman Bharat Digital Health Mission (ABDM)**. इसके साथ **आयुष्मान भारत डिजिटल हेल्थ मिशन (ABDM)** भी जुड़ा हुआ है।
- The new AIIMS institutions have consistently topped the charts for the highest **ABHA (Ayushman Bharat Health Account) registrations** and have utilised the “Scan and Share” facility to reduce wait times, ensuring that patients’ health records follow them seamlessly across the country. नए एम्स संस्थानों ने **ABHA पंजीकरण** में शीर्ष स्थान प्राप्त किया है और “**Scan and Share**” सुविधा से **प्रतीक्षा समय कम** किया है।
- With an allocation of around ₹11,000 crore for PMSSY in the **Union Budget 2026-27**, the commitment to health remains steadfast. **2026-27 के बजट** में PMSSY के लिए लगभग **₹11,000 करोड़** का प्रावधान किया गया है।



# What TB reveals about India's urban health system

Tuberculosis shows how gaps in India's urban health systems, combined with socio-economic disenfranchisement and migration, continue to exclude the vulnerable from timely care



**Aruna Bhattacharya**  
Medical anthropologist and public health expert specialising in urban health systems, based in Bengaluru

**T**uberculosis rarely appears overnight. It develops slowly at the intersection of impoverishment, precarious livelihoods, and fragile health systems. Each case tells a larger story – not just about infection, but about the conditions in which people live and the systems meant to protect them. On World Health Day, TB serves as a stark reminder that if “Health for All” is to mean anything, it must include those whose health risks are produced by the way our cities’ systems are built and governed.

Nearly 35% of the population now lives in urban areas, and cities continue to expand as people arrive in search of work, education, and opportunity.

**Urban risks**  
Urban India is often assumed to have better healthcare infrastructure than rural areas. Yet cities also concentrate risk. Overcrowded housing, poorly ventilated workplaces, long working hours, pollution, informal employment and weak social support systems

create conditions that drive poor health outcomes. For infectious diseases such as tuberculosis, these are not peripheral concerns – they are central.

India continues to bear the largest burden of tuberculosis globally, accounting for nearly one-fourth of the world's TB cases. In India, where exposure is common, infection alone does not necessarily lead to disease. For most people, the immune system contains it. Disease develops when vulnerabilities converge: malnutrition, overcrowding, physically demanding work, untreated co-morbidities and delayed access to care.

TB can therefore be read as a proxy indicator of how well health and social systems function.

**Missed opportunities**  
TB unfolds through a series of missed opportunities. Early symptoms often go unrecognised or untreated. Delays in diagnosis and interruptions in treatment increase the risk of transmission, severe illness, and drug resistance. Each stage represents a point where effective public health systems could intervene. Where nutrition support, social protection, adequate housing, and accessible primary healthcare are in place, TB is more likely to be detected early and treated successfully. Conversely, rising TB incidence, treatment interruptions and multi-drug-resistant TB often point to deeper failures in surveillance, follow-up, pharmaceutical regulation, and the broader systems that sustain health.



**Health crisis:** India continues to bear the largest burden of tuberculosis globally, accounting for nearly one-fourth of the world's TB cases. FILE PHOTO

TB can no longer be framed only as a disease of the poor; it is increasingly an urban public health challenge. In a pathways study of multi-drug-resistant TB patients in Mumbai (Bhattacharya et al., 2019), people often navigated complex and prolonged care-seeking journeys, moving between multiple providers before receiving the correct diagnosis and treatment. Delays, fragmented care and financial burdens not only worsened outcomes but also prolonged transmission within households and communities.

These are not isolated stories. Urban primary healthcare remains fragmented and unevenly distributed. While the National TB Elimination Programme provides diagnosis and treatment through designated centres, a large proportion of urban residents seek care from private providers. Data integration between public and private sectors remains incomplete, making continuity of care difficult.

Migration adds another layer of exclusion. Migrants frequently change residences, move between worksites, or travel back to their home. Many lack documentation linked to their current residence or stable access to social protection. This can disrupt treatment, delay care, and make follow-up difficult.

The geography of services also matters. Informal settlements, peri-urban industrial zones, and construction clusters often remain underserved by accessible primary healthcare, reliable transport, and essential public services.

This is where the language of health as a right becomes critical. If health is indeed a right, access to care cannot depend on whether a person has address proof, speaks the dominant language, or is settled enough to fit neatly into administrative categories. The promise of “Health for All” cannot be realised through systems designed primarily for stable, documented, and visible populations.

TB, then, is more than a disease to be controlled. It is a diagnostic tool for the health of our systems. If India is serious about building healthier cities, healthcare must be portable, primary care strengthened, and disease control programmes integrated with neighbourhood-level services.

Ending TB will require building urban systems that make health possible – when ‘health for all’ starts not only when people fall sick, but for those not visible to policy and for those whose labour sustains the city while their health remains marginal to its planning.



## 07A. What TB reveals about India's urban health system

भारत की शहरी स्वास्थ्य प्रणाली के बारे में टीबी क्या उजागर करता है

### Tuberculosis and urban health realities

क्षय रोग और शहरी स्वास्थ्य की वास्तविकताएँ

- For infectious diseases such as tuberculosis, these are not peripheral concerns — they are central.  
TB जैसी बीमारियों के लिए ये मुख्य कारण हैं।
- India continues to bear the largest burden of tuberculosis globally, accounting for nearly one-fourth of the world's TB cases.  
भारत विश्व के TB मामलों का लगभग एक-चौथाई हिस्सा वहन करता है।
- Disease develops when vulnerabilities converge: malnutrition, overcrowding, physically demanding work, untreated co-morbidities and delayed access to care.  
बीमारी तब होती है जब कुपोषण, भीड़भाड़, कठिन काम और इलाज में देरी साथ आते हैं।
- TB can therefore be read as a proxy indicator of how well health and social systems function.  
इसलिए TB स्वास्थ्य और सामाजिक प्रणाली की स्थिति का संकेतक है।



# Are students ready for CBSE's AI push?

The CBSE curriculum on Computational Thinking and AI aims to build foundational computational skills. However, concerns remain over the extent of students' grade-appropriate cognitive abilities, which are prerequisites for all subjects. A child who cannot read at grade level is likely to face challenges with AI learning too

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## EXPLAINER

Aasif Iqbal J.

### The story so far:

On April 1, 2026, Union Education Minister Dharmendra Pradhan launched a new CBSE curriculum on Computational Thinking and Artificial Intelligence for students from Classes 3 to 8.

### How does the curriculum build AI knowledge among children?

For Classes 3 to 5, there is no AI content. The focus is entirely on Computational Thinking (CT): pattern recognition, decomposition, abstract thinking, and algorithmic reasoning. These skills are not taught as a separate subject. They are embedded into subjects such as Mathematics and The World Around Us (TWAU), through worksheets and activity-based resource books. Fifty hours are allocated annually.

AI enters in Class 6. Students are introduced to foundational AI literacy alongside advanced CT skills. By Class 8, the curriculum covers the AI project lifecycle, data fairness, and real-world applications. One hundred hours are allocated annually for Classes 6 to 8. Throughout, the curriculum avoids dependence on any specific platform or device. Unplugged learning is built-in for schools with limited infrastructure.

### How does the curriculum intend to achieve its goal?

The initiative is designed to develop foundational computational thinking skills: logical reasoning, problem-solving, and pattern recognition. It will familiarise students with the role of artificial intelligence in everyday life, starting from the 2026-27 academic session.

The curriculum document states that learning standards for AI are integrated into Mathematics, Science, Language, and Social Sciences in the lower classes. CT is



**Classroom goals:** The learning outcomes for Classes 3 to 5 include: solving puzzles and daily-life problems through visual representations and analysing given information. GETTY IMAGES

not a standalone subject sitting beside language. It is designed to be delivered through language. The resource book for Classes 3 to 5 consists of additional questions and activities embedded into existing textbook chapters. Every puzzle, pattern exercise, and decomposition task is mediated through text that a child must read, interpret, and respond to in writing.

The learning outcomes for Classes 3 to 5 include: solving puzzles and daily-life problems through visual representations, interpreting texts, and analysing given information. The assessments for this stage include written tests involving CT questions and puzzles, group activities, and teacher observation journals.

### Are our students prepared for it?

Meaningful learning is based on LSRW – Listening, Speaking, Reading, Writing. These are not soft skills. They are the cognitive infrastructure through which a student processes information, builds understanding, and communicates

thought. Every subject sits on top of this foundation. So does Computational Thinking and AI.

The CT curriculum for Classes 3 to 5 is, at its core, a literacy instrument. A child who cannot read at grade level will not experience it as a thinking exercise. They may experience it as a reading barrier.

The Annual Status of Education Report 2024 (ASER), published by Pratham, surveys children across rural India. More than half of Class 5 children in government schools cannot read a Class 2-level text. The ASER reading task has remained unchanged since 2006: can a child read a simple story written for a seven-year-old? After five years of schooling, more than half of Class 5 children cannot clear that bar.

It can be argued that the domain of CBSE is largely urban, and private school students will not have too many problems. But the PARAKH Rashtriya Sarvekshan 2024, the Ministry of Education's own national assessment goes

against that. The survey covered nearly 23 lakh students across approximately 88,000 schools, including government, aided, and private schools. At Grade 3 level, urban and suburban students in private schools fared poorly compared to their rural counterparts. Students in State government schools scored higher in both Language and Mathematics. The students walking into CBSE classrooms this academic year are not exempt from this crisis. They are in the middle of it.

### What are the challenges?

The CT curriculum's aims state that it seeks to develop cognitive capacities: logical thinking, critical thinking, and analytical reasoning. These depend on comprehension as a prerequisite. Abstract reasoning cannot be developed in a child who cannot understand the text presenting the reasoning task.

At Class 6, for instance, CT assessments move to project presentations, reflective journals, and written assignments. Teachers are expected to create rubrics to evaluate student performance. This is where AI concepts are also introduced for the first time. A child who spent Classes 3 to 5 struggling to read the CT resource book will arrive at Class 6 without the computational thinking foundations those years were supposed to build. The pipeline breaks quietly, and it breaks early. We will discover the failure at Class 6, the same way we discovered the reading failure through ASER: through data.

The curriculum document also notes that from Class 6 onwards, evaluations will focus on project presentations and assigned tasks. Each of these requires a level of written and oral articulation that is built on years of strong LSRW practice. Without that practice, the assessments become a test of literacy deficits rather than computational thinking ability.

(Aasif Iqbal J. is an author, educator, and former COO of ianneo EduTech Private Limited. He has served for 15 years in the technology and education sector. Views expressed are personal.)

## THE GIST

On April 1, Union Education Minister Dharmendra Pradhan launched a new CBSE curriculum on Computational Thinking and AI for students from Classes 3 to 8.

For Classes 3 to 5, the skills are embedded into existing subjects. From Class 6 onwards, students are introduced to foundational AI and advanced CT skills. By Class 8, the curriculum covers the AI project lifecycle, data fairness, and real-world applications.

## 07A. Are students ready for CBSE's AI push?

### क्या छात्र CBSE के AI प्रयास के लिए तैयार हैं?

- On April 1, 2026, Union Education Minister Dharmendra Pradhan launched a new CBSE curriculum on Computational Thinking and Artificial Intelligence for students from Classes 3 to 8.

1 अप्रैल 2026 को केंद्रीय शिक्षा मंत्री धर्मेंद्र प्रधान ने कक्षा 3 से 8 के लिए कम्प्यूटेशनल थिंकिंग और आर्टिफिशियल इंटेलिजेंस पाठ्यक्रम शुरू किया।

### How does the curriculum build AI knowledge among children?

यह पाठ्यक्रम बच्चों में एआई ज्ञान कैसे विकसित करता है?

- For Classes 3 to 5, there is no AI content. कक्षा 3 से 5 में कोई एआई सामग्री नहीं है।
- The focus is entirely on Computational Thinking (CT): pattern recognition, decomposition, abstract thinking, and algorithmic reasoning. पूरा ध्यान कम्प्यूटेशनल थिंकिंग (CT) पर है: पैटर्न पहचान, विखंडन, अमूर्त सोच और एल्गोरिदमिक तर्क।
- These skills are not taught as a separate subject. ये कौशल अलग विषय के रूप में नहीं पढ़ाए जाते।
- They are embedded into subjects such as Mathematics and The World Around Us (TWAU), through worksheets and activity-based resource books. इन्हें गणित और The World Around Us (TWAU) जैसे विषयों में वर्कशीट और गतिविधियों के माध्यम से शामिल किया गया है।
- Fifty hours are allocated annually. प्रति वर्ष 50 घंटे निर्धारित किए गए हैं।



- AI enters in **Class 6**.  
**कक्षा 6** से एआई की शुरुआत होती है।
- Students are introduced to foundational AI literacy alongside advanced CT skills.  
छात्रों को एआई की बुनियादी समझ और उन्नत CT कौशल सिखाए जाते हैं।
- By **Class 8**, the curriculum covers the AI project lifecycle, data fairness, and real-world applications.  
**कक्षा 8** तक पाठ्यक्रम में एआई प्रोजेक्ट जीवनचक्र, डेटा निष्पक्षता और वास्तविक जीवन उपयोग शामिल होते हैं।
- One hundred hours** are allocated annually for **Classes 6 to 8**.  
कक्षा 6 से 8 के लिए प्रति वर्ष **100 घंटे** निर्धारित हैं।
- Throughout, the curriculum avoids dependence on any specific platform or device.  
पाठ्यक्रम किसी विशेष डिवाइस या प्लेटफॉर्म पर निर्भर नहीं है।
- Unplugged learning is built-in for schools with limited infrastructure.  
कम संसाधन वाले स्कूलों के लिए **अनप्लग्ड लर्निंग** शामिल है।
- The resource book for **Classes 3 to 5** consists of additional questions and activities embedded into existing textbook chapters.  
कक्षा 3 से 5 की पुस्तक में अतिरिक्त **प्रश्न और गतिविधियाँ** शामिल हैं।
- Every puzzle, pattern exercise, and decomposition task is mediated through text that a child must read, interpret, and respond to in writing.  
हर गतिविधि में छात्र को **पढ़ना, समझना और लिखना** होता है।
- The learning outcomes for **Classes 3 to 5** include: solving puzzles and daily-life problems through visual representations, interpreting texts, and analysing given information.  
कक्षा 3 से 5 में छात्र **पहेलियाँ हल करना, पाठ समझना और विश्लेषण करना** सीखते हैं।
- The assessments for this stage include written tests involving CT questions and puzzles, group activities, and teacher observation journals.  
मूल्यांकन में **लिखित परीक्षा, समूह गतिविधियाँ और शिक्षक अवलोकन** शामिल हैं।

### Are our students prepared for it? क्या हमारे छात्र इसके लिए तैयार हैं?

- Meaningful learning is based on **LSRW — Listening, Speaking, Reading, Writing**.  
सार्थक शिक्षा **LSRW — सुनना, बोलना, पढ़ना, लिखना** पर आधारित है।
- These are not soft skills.  
ये केवल **सॉफ्ट स्किल्स** नहीं हैं।
- So does **Computational Thinking and AI**.  
**कम्प्यूटेशनल थिंकिंग और एआई** भी इसी पर आधारित हैं।
- The **CT curriculum for Classes 3 to 5** is, at its core, a **literacy instrument**.  
कक्षा 3 से 5 का **CT पाठ्यक्रम** मूल रूप से एक **साक्षरता उपकरण** है।
- A child who cannot read at grade level will not experience it as a thinking exercise.  
जो बच्चा अपनी कक्षा के स्तर पर **पढ़ नहीं सकता**, वह इसे सोचने का अभ्यास नहीं समझेगा।
- More than half of **Class 5 children in government schools** cannot read a **Class 2-level text**.  
सरकारी स्कूलों के **कक्षा 5** के आधे से अधिक बच्चे **कक्षा 2 स्तर का पाठ** नहीं पढ़ सकते।
- But the **PARAKH Rashtriya Sarvekshan 2024**, the Ministry of Education's own national assessment goes against that.  
लेकिन **PARAKH राष्ट्रीय सर्वेक्षण 2024** (शिक्षा मंत्रालय का आकलन) इससे विपरीत दिखाता है।
- The survey covered nearly **23 lakh students** across approximately **88,000 schools**, including government, aided, and private schools.  
इस सर्वेक्षण में लगभग **23 लाख छात्र** और **88,000 स्कूल** शामिल थे।
- At **Grade 3 level**, urban and suburban students in private schools fared poorly compared to their rural counterparts.  
**कक्षा 3** में शहरी और निजी स्कूलों के छात्र ग्रामीण छात्रों से **कम प्रदर्शन** करते पाए गए।
- Students in **State government schools** scored higher in both **Language and Mathematics**.  
**राज्य सरकारी स्कूलों** के छात्रों ने **भाषा और गणित** दोनों में बेहतर अंक प्राप्त किए।



# Understanding India's internet censorship regime

An internet user's experience in India depends on the ISP, which determines their access to content

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Karan Saini

The experience an Internet user has in India is closely tied to the Internet Service Provider (ISP) they choose. Perceived differences are not limited only to pricing and quality of service, but also to how much of the Internet a user can access, which changes from one ISP to another. This is because ISPs in India – much like everywhere else – block websites in response to government and court orders. However, implementation is not uniform across ISPs, and blocklists vary widely.

Sections 69A and 79 of the Information Technology Act, 2000, empower the government to issue blocking orders to ISPs and intermediaries. The licensing agreement for ISPs explicitly requires that they “block Internet sites [...] as identified and directed by the Licensor.” ISPs are confidentially bound to the blocking

orders they receive and implement.

## Protocols and implementation

The Internet is made up of protocols like the Hypertext Transfer Protocol (HTTP), Transport Layer Security (TLS), and Domain Name System (DNS) among others. When an ISP receives a blocking order, it is free to implement it through any or all of these protocols. DNS is the first layer a user interacts with when trying to access a website and is responsible for translating names like example.com to addresses that browsers can understand. When an ISP wants to block a domain at the DNS layer, it configures its servers to return a false answer. This technique is called DNS poisoning. A user's request for example.com doesn't end up at the actual address for the website, but to whatever address the ISP has pointed it to instead. Most Indian ISPs rely primarily on DNS

blocking as it is cheap to implement and requires no deep packet inspection.

## What the data shows

To understand the scale of website blocking in India, I queried the DNS servers of six major and regional ISPs to test the censorship of 294 million domains. These tests were carried out over many months in 2025. The study quantifies what previous qualitative research on Internet censorship in India has shown. Despite receiving the same blocking orders, not all ISPs block the same websites.

Out of the total 43,083 blocked domain names found by the study, only 1,44 were blocked by all six ISPs. This is caveatd by the fact that some of the ISPs surveyed may be using other protocols to block these domains, which the study does not cover. What is clear however is that at least on the DNS layer, domains are

treated inconsistently based on the category of content they host. Piracy, peer-to-peer file sharing, pornography and gambling websites make up the majority of what is blocked, yet blocks are not consistently enforced across ISPs. For domains hosting terrorism and militancy content, blocking consistency across ISPs goes up dramatically. Perfect consensus can be seen in certain sensitive cases, such as the blocking of China's Weibo.com or the website of Srinagar-based publication The Kashmir Walla, showing that some orders are treated more seriously than others. Along with this, almost all ISPs appear to engage in arbitrary blocking in some form.

While highlighting only some notable blocks, the study shows the haphazard way in which both regional and national ISPs are currently implementing blocking orders. In the absence of a standardised framework or guidelines, ISPs are left to their own devices, resulting in an inconsistent blocking landscape.

Inconsistency is not the only problem however. The regime is needlessly opaque. An ideal system would see disclosure of blocked domains from the source, with exceptions only for sensitive matters such as those concerning national security and websites hosting child sexual abuse material.

(Karan Saini is an independent security researcher from New Delhi.)

## THE GIST

ISPs in India block websites in response to government and court orders. However, implementation is not uniform across ISPs, and blocklists vary widely.

For domains hosting terrorism and militancy content, blocking is more consistent across ISPs, with near consensus in certain sensitive cases. At the same time, almost all ISPs appear to engage in some form of arbitrary blocking.

## 07A. Understanding India's internet censorship regime

### भारत की इंटरनेट सेंसरशिप व्यवस्था को समझना

- The experience an Internet user has in India is closely tied to the **Internet Service Provider (ISP)** they choose.  
भारत में इंटरनेट उपयोगकर्ता का अनुभव उसके चुने हुए **इंटरनेट सेवा प्रदाता (ISP)** से जुड़ा होता है।
- Perceived differences are not limited only to **pricing and quality of service**, but also to how much of the Internet a user can access.  
अंतर केवल **कीमत और सेवा गुणवत्ता** तक सीमित नहीं है, बल्कि इस बात पर भी निर्भर है कि उपयोगकर्ता कितना इंटरनेट एक्सेस कर सकता है।
- This changes from one ISP to another.  
यह एक ISP से दूसरे ISP में बदलता रहता है।
- This is because ISPs in India block websites in response to **government and court orders**.  
क्योंकि भारत में ISP **सरकारी और न्यायालय के आदेशों** के अनुसार वेबसाइटों को ब्लॉक करते हैं।
- However, implementation is not uniform across ISPs, and **blocklists vary widely**.  
लेकिन कार्यान्वयन समान नहीं है और **ब्लॉकलिस्ट अलग-अलग होती हैं**।

## Legal provisions and framework

### कानूनी प्रावधान और ढांचा

- Sections 69A and 79 of the Information Technology Act, 2000** empower the government to **issue blocking orders**.  
**आईटी अधिनियम, 2000 की धारा 69A और 79** सरकार को ब्लॉकिंग आदेश जारी करने का अधिकार देती हैं।
- The licensing agreement requires ISPs to “**block Internet sites [...] as directed by the Licensor.**”  
लाइसेंस समझौता ISP को निर्देश देता है कि वे **निर्दिष्ट वेबसाइटों को ब्लॉक करें**।
- ISPs are **confidentially bound** to the blocking orders they receive.  
ISP इन आदेशों के प्रति **गोपनीय रूप से बाध्य** होते हैं।

## Protocols and implementation

### प्रोटोकॉल और कार्यान्वयन

- The **Internet is made up of protocols like HTTP, TLS, and DNS**.  
इंटरनेट **HTTP, TLS और DNS** जैसे प्रोटोकॉल से बना है।



- **ISPs can implement blocking through any of these protocols.**  
ISP इन प्रोटोकॉल के माध्यम से ब्लॉकिंग लागू कर सकते हैं।
- **DNS is the first layer a user interacts with while accessing a website.**  
**DNS** वह पहला स्तर है जिससे उपयोगकर्ता वेबसाइट एक्सेस करते समय संपर्क करता है।
- **DNS translates domain names into machine-readable addresses.**  
DNS डोमेन नामों को **मशीन-पठनीय पते** में बदलता है।
- **When blocking at DNS layer, ISPs return a false answer, called DNS poisoning.**  
DNS स्तर पर ब्लॉकिंग में ISP **गलत उत्तर देते हैं**, जिसे **DNS poisoning** कहा जाता है।
- **The request is redirected to a different address instead of the actual website.**  
अनुरोध वास्तविक वेबसाइट के बजाय किसी अन्य पते पर भेज दिया जाता है।
- **Most Indian ISPs rely on DNS blocking as it is cheap and simple.**  
अधिकांश भारतीय ISP **DNS ब्लॉकिंग** का उपयोग करते हैं क्योंकि यह **सस्ता और आसान** है।

### What the data shows डेटा क्या दर्शाता है

- The study tested **294 million domains** across six ISPs in **2025**.  
अध्ययन में **2025** में छह ISP पर **294 मिलियन डोमेन** का परीक्षण किया गया।
- Out of **43,083 blocked domains**, only **1,414** were blocked by all six ISPs.  
**43,083 ब्लॉक डोमेन** में से केवल **1,414** सभी ISP द्वारा ब्लॉक किए गए।
- This shows inconsistency even when ISPs receive the same orders.  
यह दर्शाता है कि समान आदेश मिलने पर भी **असंगति** है।
- Some ISPs may use other protocols not covered in the study.  
कुछ ISP अन्य प्रोटोकॉल का उपयोग कर सकते हैं जो अध्ययन में शामिल नहीं थे।
- **Domains are treated differently based on content category.**  
डोमेन को उनकी **सामग्री श्रेणी** के आधार पर अलग-अलग तरीके से ब्लॉक किया जाता है।
- Most blocked domains include **piracy, peer-to-peer sharing, pornography, and gambling.**  
अधिकांश ब्लॉक डोमेन **पायरेसी, P2P शेयरिंग, पोर्नोग्राफी और जुआ** से जुड़े हैं।
- Blocking of **terrorism and militancy content** is more consistent.  
**आतंकवाद और उग्रवाद** से जुड़े कंटेंट पर ब्लॉकिंग अधिक सुसंगत है।
- Perfect consensus exists in sensitive cases like **Weibo.com** and **The Kashmir Walla**.  
संवेदनशील मामलों में जैसे **Weibo.com** और **The Kashmir Walla** पर पूर्ण सहमति दिखती है।
- Almost all ISPs engage in some form of **arbitrary blocking**.  
लगभग सभी ISP किसी न किसी रूप में **मनमानी ब्लॉकिंग** करते हैं।

## 'Govt.'s semiconductor mission will promote research'

Though India accounts for nearly 20% of the world's semiconductor design engineers, it doesn't have its own design firms, says Amitesh Kumar Sinha, Additional Secretary, Electronics and IT Ministry, at the *The Hindu* Deep Tech Summit; the India Semiconductor Mission 2.0 will expand beyond the first phase to include research and development, equipment manufacturing and skilling, he adds

GS III: S&T  
Sahana Mira S.  
CHENNAI

The Union government has undertaken various measures, including a policy push, to promote deep tech in India, said Amitesh Kumar Sinha, Additional Secretary, Ministry of Electronics and Information Technology (MeitY), and CEO of the India Semiconductor Mission, in Chennai on Monday.

He was addressing the audience during the inaugural ceremony of *The Hindu* Deep Tech Summit 2026 hosted by The Hindu Group, in association with the SRM Institute of Science and Technology (SRMIST).

"Semiconductors form an industry with many verticals. Though India accounts for nearly 20% of the world's design engi-



(From right) Amitesh Kumar Sinha, Additional Secretary, Union Ministry of Electronics and IT; S. Ponnusamy, Registrar, SRM; L.V. Navaneeth, CEO, The Hindu Group; Paneerselvam Madanagopal, CEO, MeitY Startup Hub; B. Govindarajan, CEO, Royal Enfield India; and C. Muthamizhchevan, Vice-Chancellor, SRM Institute of Science and Technology, at the summit on Monday. R. RAGU

neers, we don't have our own design companies, which is a challenge. The India Semiconductor Mission has a few verticals to address, and we started with design, manufacturing, and packaging," Mr.

Sinha said. "To further deepen this conversation, we are now working towards developing a complete ecosystem under the India Semiconductor Mission 2.0. This will expand beyond the first phase to

include materials, research and development, chemicals, gases, equipment manufacturing, and skilling," he added.

L.V. Navaneeth, CEO, The Hindu Group, said deep tech is no longer con-



limited to laboratories and research papers.

He said it is shaping economies, redefining industries, and influencing the way people live, work and think. "From semiconductors and artificial intelligence to advanced materials and space technologies, the next decade belongs to those who can engineer the future, not just imagine it," he added.

C. Muthamizhchevan, Vice-Chancellor, SRMIST, said that universities have been sending out talented

graduates but not always solutions. He said that the functioning of universities needs to be shaped from an academia perspective.

#### 'Bridge the gap'

"A deep tech summit like this will eventually bridge the gap between intellectual potential on campuses and the expected impactful solutions for the global challenges. The questions we need to ask is, 'Are we really equipping our students on how to build, what to think? Do we have sufficient infrastructure for

laboratories for students and faculty to explore beyond what is prescribed in the curriculum and are we opening up to industries?" he said.

Panneerselvam Madanagopal, CEO, MeitY Startup Hub, which operates under the Ministry, said that the need for industry-academia collaboration is extremely critical.

"Mentoring, market access, and money are the support that we provide at MeitY Startup Hub. But the challenge today in India is we have a lot of me-too start-ups. We need to look for fundamentally strong companies which are worthy of investment, solving real problems, and driving change in the ecosystem," he added.

B. Govindarajan, CEO of Royal Enfield India, spoke about the role of deep tech in the automobile industry.

He also said that there was immense opportunity for micro, small and medium enterprises (MSMEs) too, with about six crore MSMEs performing well in India. "For the young minds who are into research and innovation, funding is not a challenge - both Indian industries and the government are ready to support ideas that solve real-world problems," he said.

The industry partner for the event is Madras Management Association, The Knowledge partners are IHFC:Technology Innovation Hub of IIT Delhi; Ivy Club-Chennai; Sathguru Catalysing Success; 2C Stem Steering Technology Management; BIRAC, BioNest; Niti Aayog Atal Innovation Mission; and DPIT \*startupindia. The Ecosystem partner is Startup Singam.



## 07A. 'Govt.'s semiconductor mission will promote research' 'सरकार का सेमीकंडक्टर मिशन अनुसंधान को बढ़ावा देगा'

- Though India accounts for nearly **20% of the world's semiconductor design engineers**.  
भारत दुनिया के लगभग **20% सेमीकंडक्टर डिजाइन इंजीनियरों** का योगदान देता है
- Though India accounts for nearly **20% of the world's design engineers**, we don't have our own design companies, which is a challenge.  
हालांकि भारत दुनिया के लगभग 20% डिजाइन इंजीनियरों का योगदान देता है, लेकिन हमारे पास अपनी डिजाइन कंपनियां नहीं हैं, जो एक चुनौती है।
- The India Semiconductor Mission has a few verticals to address, and we started with design, manufacturing, and packaging," Mr. Sinha said.  
**इंडिया सेमीकंडक्टर मिशन** के तहत कई क्षेत्रों को संबोधित करना है, और हमने डिजाइन, निर्माण और पैकेजिंग से शुरुआत की," श्री सिन्हा ने कहा।
- "To further deepen this conversation, we are now working towards developing a complete ecosystem under the **India Semiconductor Mission 2.0**.  
"इस बातचीत को और गहरा करने के लिए, हम अब **इंडिया सेमीकंडक्टर मिशन 2.0** के तहत एक पूर्ण इकोसिस्टम विकसित करने की दिशा में काम कर रहे हैं।
- This will expand beyond the first phase to include materials, research and development, chemicals, gases, equipment manufacturing, and skilling," he added.  
यह पहले चरण से आगे बढ़कर सामग्री, अनुसंधान एवं विकास, रसायन, गैस, उपकरण निर्माण और कौशल विकास को शामिल करेगा," उन्होंने कहा।
- He also said that there was immense opportunity for **MSMEs**, with about **six crore MSMEs performing well in India**.  
उन्होंने कहा कि भारत में लगभग **छह करोड़ MSMEs** के साथ **MSME** क्षेत्र के लिए भी अपार अवसर हैं।
- "For the young minds who are into research and innovation, funding is not a challenge – both Indian industries and the government are ready to support ideas that solve real-world problems," he said.  
"जो युवा अनुसंधान और नवाचार में लगे हैं, उनके लिए फंडिंग कोई समस्या नहीं है – भारतीय उद्योग और सरकार दोनों वास्तविक समस्याओं को हल करने वाले विचारों का समर्थन करने के लिए तैयार हैं," उन्होंने कहा।

## 'Govt. to create deep-tech infrastructure with industry'

**GS III: S&T**  
**The Hindu Bureau**  
CHENNAI

Offering a glimpse into the India Semiconductor Mission (ISM) 2.0, Amitesh Kumar Sinha, Additional Secretary at the Ministry of Electronics and Information Technology and CEO of the India Semiconductor Mission, on Monday said the government was working to support the establishment of facilities for chemicals, gases, materials, and equipment manufacturing in India.

"ISM 2.0 is totally focussed on these verticals," Mr. Sinha stated during a fireside chat, "From Assembly to Electronics Excellence: India's Semiconductor Ambitions", at the two-day Deep Tech Summit 2026 organised by The Hindu Group in association with the SRM Institute of Science and Technology (SRMIST)



**Future course:** Amitesh Kumar Sinha, Additional Secretary, Ministry of Electronics and Information Technology, in conversation with Aroon Deep, Principal Correspondent, *The Hindu*. R. RAGU

in Chennai.

Observing that setting up semiconductor manufacturing is not an easy task, Mr. Sinha, in conversation with Aroon Deep, Principal Correspondent at *The Hindu*, said the industry has multiple ingredients and every ingredient has a very precise implementation process or engineering process that is required to set that up.

Flagging certain challenges faced by companies, he said the companies are overcoming those problems with the support of the government which fully understands that ecosystem has a very important role.

Equipment, technology partners, and supply chain partners are important, he pointed out. "We are trying to support setting up of a

**Deep tech is very capital intensive and needs a lot of infrastructure, says the Semiconductor Mission CEO**

facility for chemicals, gases, materials, and equipment manufacturing in India. So, the next leg of ISM 2.0 will focus entirely on these verticals."

Observing that other three verticals of design, manufacturing, and packaging will continue, Mr. Sinha said: "Besides, these kinds of ecosystem development efforts will start. Parallely, we will also start working on specific technology development oriented R&D."

Skilling will be a thrust area going forward, he underlined.

Replying to a query, Mr. Sinha said the govern-

ment's role was to create opportunities and to provide infrastructure and also underlined the importance of industry's participation. "We all know that deep tech is very capital intensive and it needs a lot of infrastructure in terms of lab facility, testing facilities and many more. The government will create that along with the industry," he said. So, the industry which is looking for a real-time solution to integrate in their product lines or to solve some problems that they are facing, is also a very important partner in all this, he added.

**Attracting talent**

"The industry and government will have to create a platform where the academia and industry researchers, innovators can come together," stated the senior IAS officer. Once it is esta-

blished as a centre of excellence, it will start attracting talent from everywhere. And that is when it becomes an organisation where deep tech kind of solutions will be generated and then it will continue the journey," Mr. Sinha said.

On the need for the industry to do six sigma manufacturing in terms of quality control and build indigenous design, the official said: "Electronics is basically very, very focused towards reliability. And once your systems are reliable, then your market access will further increase. In semiconductor chips, yield is a parameter." Six sigma was a symbol indicating that one has to control their process, he said. "You have to optimise that process. You have to analyse the defect lines and then improve it to near to perfection level."

## 07A. 'Govt. to create deep-tech infrastructure with industry' 'सरकार उद्योग के साथ मिलकर डीप-टेक इंफ्रास्ट्रक्चर बनाएगी'



- **Under India Semiconductor Mission (ISM) 2.0**, the government was working to support the establishment of facilities for **chemicals, gases, materials, and equipment manufacturing** in India.  
इंडिया सेमीकंडक्टर मिशन (ISM) 2.0 की झलक देते हुए, **अमितेश कुमार सिन्हा**, अतिरिक्त सचिव, इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी मंत्रालय और CEO, इंडिया सेमीकंडक्टर मिशन ने सोमवार को कहा कि सरकार भारत में **रसायन, गैस, सामग्री और उपकरण निर्माण** के लिए सुविधाएं स्थापित करने का समर्थन कर रही है।
- "ISM 2.0 is totally focussed on these verticals,"
- "We are trying to support the setting up of a facility for **chemicals, gases, materials, and equipment manufacturing** in India.  
"हम भारत में **रसायन, गैस, सामग्री और उपकरण निर्माण** के लिए सुविधाएं स्थापित करने का समर्थन कर रहे हैं।
- Observing that the other three verticals of **design, manufacturing, and packaging** will continue.
- Parallely, we will also start working on specific **technology development oriented R&D.**" साथ ही, हम विशेष **प्रौद्योगिकी विकास आधारित अनुसंधान एवं विकास (R&D)** पर भी काम शुरू करेंगे।"
- **Skilling** will be a thrust area going forward, he underlined.  
उन्होंने जोर दिया कि आगे **कौशल विकास** एक प्रमुख क्षेत्र होगा।

## HOUSTON

### Artemis II breaks Apollo 13's record as humans travel farther into space



**GS III: S&T** AFP  
The four astronauts embarking on NASA's lunar flyby became on Monday the humans to travel furthest from our planet, as they get set to view areas of the moon never before seen by the naked eye. The Artemis II team surpassed the distance record of 400,171 kilometres set by Apollo 13 in 1970. AFP

### 07A. Artemis II breaks Apollo 13's record as humans travel farther into space आर्टेमिस II ने अपोलो 13 का रिकॉर्ड तोड़ा, मानव अंतरिक्ष में और दूर तक पहुंचे

- Artemis II breaks Apollo 13's record as humans travel farther into space.  
आर्टेमिस II ने अपोलो 13 का रिकॉर्ड तोड़ा, मानव अंतरिक्ष में और दूर तक पहुंचे।
- The four astronauts embarking on **NASA's lunar flyby** became on Monday the humans to travel furthest from our planet, as they get set to view areas of the moon never before seen by the naked eye.  
नासा के **लूनर फ्लाईबाय** पर निकले चार अंतरिक्ष यात्री सोमवार को पृथ्वी से सबसे दूर यात्रा करने वाले मानव बन गए, क्योंकि वे चंद्रमा के उन क्षेत्रों को देखने जा रहे हैं जिन्हें पहले कभी नंगी आंखों से नहीं देखा गया।
- The **Artemis II** team surpassed the distance record of **400,171 kilometres** set by **Apollo 13** in 1970.

आर्टेमिस II टीम ने 1970 में अपोलो 13 द्वारा स्थापित 400,171 किलोमीटर की दूरी के रिकॉर्ड को पार कर लिया।

<b>GS Paper III: Environment,</b>	
<b>TOPICS COVERED</b>	<b>07 April 2026</b>
<b>07A</b>	<b>518 of 697 lakes in J&amp;K either vanished or shrunk: CAG</b> <b>जम्मू-कश्मीर में 697 में से 518 झीलें या तो गायब हो गईं या सिकुड़ गईं: CAG</b>
<b>07A</b>	<b>Arrest the grief Livelihood issues are at the heart of illegal sand mining in central India</b> <b>दुख को रोकें आजीविका के मुद्दे मध्य भारत में अवैध रेत खनन के केंद्र में हैं</b>
<b>07A</b>	<b>Climate change as a public health emergency</b> <b>जलवायु परिवर्तन एक सार्वजनिक स्वास्थ्य आपातकाल के रूप में</b>



**Blubber bawl**



Members of Chile's National Fisheries and Aquaculture Service (Sernapesca) collect samples to determine the cause of death of a juvenile humpback whale stranded on Cucao beach in Chiloe Island. REUTERS

Members of Chile's National Fisheries and Aquaculture Service (Sernapesca) collect samples to determine the cause of death of a juvenile humpback whale stranded on Cucao beach in Chiloe Island.

## 518 of 697 lakes in J&K either vanished or shrunk: CAG

**GS III: Environment**

**Peerzada Ashiq**  
SRINAGAR

A whopping 518 lakes, constituting 74%, have either disappeared or shrunk in Jammu and Kashmir, according to the latest report of the Comptroller and Auditor General of India on Conservation and Management of Lakes for the period up to March 2022. Consequently, it has degraded ecosystem and climate insecurity.

The report highlighted that 315 lakes, 45% of the total 697 lakes in J&K that constitute a water area of 1,537.07 hectares, have disappeared. "These lakes included 80 lakes (25%) falling under the jurisdiction of the Forest Department and 235 lakes (75%) falling under the jurisdiction of Revenue Department and Agriculture Department," it said.

The water area of 203



The CAG report highlighted that 315 lakes in J&K that constitute a water area of 1,537.07 hectares have disappeared. FILE PHOTO

lakes (29% of 697 lakes) had decreased by 1,314.19 hectares. The report suggested that water in 63 lakes has disappeared by "more than or equal to 50%". "Thus, there is a potential greater risk of extinction of these lakes," it added.

Meanwhile, the water area of 150 lakes (22%) has increased by 538.22 hectares. "The water area of 14,535.76 hectares in 29 lakes (4% of 697 lakes) had

remained static," the report pointed out.

**Cause of floods**

The CAG report suggested that the shrinkage of lake area was one of the causes for massive floods in J&K in September 2014, "as lakes are natural flood balancing reservoirs and defence for the flood regulating system".

It highlighted that four administrative departments and the Forest De-

partment did not have lake generic management programmes. As such they failed to check growing anthropogenic pressures around lakes, resulting in loss and decrease in open water area and increase in aquatic vegetation. "This adversely affected the ecosystem of the lakes," it said.

It further pointed out that failure to formulate conservation and management programmes and to undertake lake generic management activities by the district administrations concerned and the Forest Department in respect of 44 lakes resulted in anthropogenic pressures, generated by human activities including construction works. "These anthropogenic pressures led to land use changes in these lakes," it added.

According to the report, the J&K Ecology, Environment & Remote Sensing

Department, had "failed to carry out a detailed survey of 697 lakes". "Hence physical, chemical and biological dynamics of lakes were not available for preparing development plans for these lakes," it said.

Besides, 255 lakes, under the jurisdiction of the Forest Department, "had no comprehensive conservation and management programme". "Although high altitude lakes in protected areas are free from anthropogenic pressures, they may be facing problems of siltation and issues relating to water sources. As such, they also require conservation and management efforts," it suggested.

The J&K government has conservation and management programmes for only six lakes, which include Dal, Wular, Hokersar, Manasbal, Surinsar and Mansar lakes.

### 07A. 518 of 697 lakes in J&K either vanished or shrunk: CAG

### जम्मू-कश्मीर में 697 में से 518 झीलें या तो गायब हो गईं या सिकुड़ गईं: CAG

- A whopping 518 lakes, constituting 74%, have either disappeared or shrunk in Jammu and Kashmir, according to the latest report of the Comptroller and Auditor General of India on Conservation and Management of Lakes for the period up to March 2022. जम्मू-कश्मीर में कुल 518 झीलें, जो 74% हैं, या तो गायब हो गई हैं या सिकुड़ गई हैं, यह जानकारी भारत के नियंत्रक एवं महालेखा परीक्षक की मार्च 2022 तक की अवधि की झील संरक्षण एवं प्रबंधन रिपोर्ट में दी गई है।
- "These lakes included 80 lakes (25%) falling under the jurisdiction of the Forest Department and 235 lakes (75%) falling under the jurisdiction of Revenue Department and Agriculture Department," it said. "इन झीलों में से 80 झीलें (25%) वन विभाग के अधिकार क्षेत्र में थीं और 235 झीलें (75%) राजस्व विभाग और कृषि विभाग के अधिकार क्षेत्र में थीं," रिपोर्ट में कहा गया।



- The water area of **203 lakes (29% of 697 lakes)** had decreased by **1,314.19 hectares**. **203 झीलों (697 झीलों का 29%)** का जल क्षेत्र **1,314.19 हेक्टेयर** तक कम हो गया है।
- The report suggested that water in **63 lakes** has disappeared by “more than or equal to **50%**”. रिपोर्ट के अनुसार **63 झीलों** में पानी “**50% या उससे अधिक**” तक समाप्त हो गया है।
- “Thus, there is a potential greater risk of **extinction** of these lakes,” it added. “इस प्रकार इन झीलों के **विलुप्त होने** का अधिक खतरा है,” रिपोर्ट में जोड़ा गया।
- **Meanwhile, the water area of 150 lakes (22%) has increased by 538.22 hectares.** इस बीच **150 झीलों (22%)** का जल क्षेत्र **538.22 हेक्टेयर** बढ़ा है।
- The CAG report suggested that the shrinkage of lake area was one of the causes for massive **floods in J&K in September 2014**, “as lakes are natural flood balancing reservoirs and defence for the flood regulating system”.

GS III: Environment

## Arrest the grief

Livelihood issues are at the heart of illegal sand mining in central India

**T**he National Chambal Gharial Sanctuary in central India protects a lotic ecosystem across an area straddling three States. Its existence is crucial for the critically endangered gharial, the red-crowned roofed turtle and the endangered Ganges river dolphin. All three species depend on sand to survive, especially the river's sandbars and sandbanks. Yet, organised crime and state paralysis have been stealing away just that sand, prompting the Supreme Court of India to call the local sand-mining mafia “modern dacoits”. The mafia erupted to meet the demand for sand during North India's construction boom, and has been able to exploit gaps in jurisdiction among the three States – Rajasthan, Madhya Pradesh, and Uttar Pradesh – despite the Court and the National Green Tribunal (NGT) banning the activity. State governments have also abetted this ploy by passing the buck on acting against the mafia. Between 2017 and 2024, tractor trolleys laden with illegally mined sand mowed down forest guards and police officers while miners also shot at police during raids. The police reported that miners had also begun using local villagers to track the movement of patrol vehicles using mobile apps and GPS. By 2023, reports indicated that mining syndicates in the Gwalior-Chambal region were using semi-automatic weapons, often outgunning the local forest departments.

Frustrated with having failed to staunch the bleeding, Madhya Pradesh and Rajasthan attempted to legalise sand mining in certain districts inside the sanctuary. Madhya Pradesh submitted proposals for limited mining in two districts but resistance from the NGT stalled its plans, and the State subsequently withdrew them. Rajasthan followed with a similar proposal in March this year only for the Court to block it. Traditional agriculture is difficult in the Chambal ravines, leaving many young men to turn to mining sand for a living. The mafia recruits them as foot soldiers, leaving forest officials to face ‘public anger’ when they militate against the mafia. The Court took *suo motu* cognisance of Rajasthan's measure, with Justice Sandeep Mehta, last week, ‘reminding’ the State of the National Security Act and the State-specific Goonda Act. The Court's frustration is understandable. But given the recent troubled history of green governance, where it has played regulator, there is merit in the Court disciplining the regulator rather than replacing it. The lesson from Chambal's violent history is that force alone cannot quiet an economy feeding on grievance. Sweeping crackdowns will deepen local resentment and entrench the same social cover that sustains the syndicates. Lasting change will come only from restoring lawful livelihoods and credible, even-handed enforcement.

प्रवाहमान पारिस्थितिकी तंत्र की रक्षा करता है। इसका अस्तित्व गंभीर रूप से संकटग्रस्त घड़ियाल, लाल मुकुट कछुआ और लुप्तप्राय गंगा डॉल्फिन के लिए अत्यंत महत्वपूर्ण है।

defence for the flood regulating system”.

CAG रिपोर्ट के अनुसार झीलों के क्षेत्र में कमी सितंबर 2014 में जम्मू-कश्मीर में आई भीषण बाढ़ के कारणों में से एक थी, “क्योंकि झीलों प्राकृतिक बाढ़ संतुलन जलाशय और बाढ़ नियंत्रण प्रणाली की रक्षा करती हैं।”

- It highlighted that four administrative departments and the Forest Department did not have generic management programmes. इसमें बताया गया कि चार प्रशासनिक विभागों और वन विभाग के पास झीलों के लिए सामान्य प्रबंधन कार्यक्रम नहीं थे।

- As such they failed to check growing anthropogenic pressures around lakes, resulting in loss and decrease in open water area and increase in aquatic vegetation.

इस कारण वे झीलों के आसपास बढ़ते मानवजनित दबावों को नियंत्रित करने में विफल रहे, जिससे खुले जल क्षेत्र में कमी और जलीय वनस्पति में वृद्धि हुई।

- “This adversely affected the **ecosystem** of the lakes,” it said. “इससे झीलों के पारिस्थितिकी तंत्र पर प्रतिकूल प्रभाव पड़ा,” रिपोर्ट में कहा गया।

- “Although high altitude lakes in protected areas are free from anthropogenic pressures, they may be facing problems of **siltation** and issues relating to water sources.

“हालांकि संरक्षित क्षेत्रों की उच्च ऊंचाई वाली झीलों मानवजनित दबाव से मुक्त हैं, लेकिन वे गाद जमाव और जल स्रोतों से संबंधित समस्याओं का सामना कर रही हो सकती हैं।

- As such, they also require conservation and management efforts,” it suggested.

इसलिए उन्हें भी संरक्षण और प्रबंधन प्रयासों की आवश्यकता है,” रिपोर्ट में सुझाव दिया गया।

- The **J&K government** has conservation and management programmes for only **six lakes**, which include **Dal, Wular, Hokersar, Manasbal, Surinsar and Mansar lakes**.

जम्मू-कश्मीर सरकार के पास केवल छह झीलों के लिए संरक्षण और प्रबंधन कार्यक्रम हैं, जिनमें डाल, वुलर, होकर्सर, मानसबल, सुरिनसर और मंसार झीलों शामिल हैं।

### 07A. Arrest the grief Livelihood issues are at the heart of illegal sand mining in central India

दुख को रोकेँ आजीविका के मुद्दे मध्य भारत में अवैध रेत खनन के केंद्र में हैं

- The **National Chambal Gharial Sanctuary** in central India protects a lotic ecosystem across an area straddling three States. Its existence is crucial for the **critically endangered gharial, the red-crowned roofed turtle and the endangered Ganges river dolphin**.

मध्य भारत में स्थित राष्ट्रीय चंबल घड़ियाल अभयारण्य तीन राज्यों में फैले एक



- All three species depend on sand to survive, especially the river's sandbars and sandbanks. ये तीनों प्रजातियाँ जीवित रहने के लिए रेत, विशेष रूप से नदी के रेतीले तटों और द्वीपों पर निर्भर हैं।
- Traditional agriculture is difficult in the Chambal ravines, leaving many young men to turn to mining sand for a living. चंबल के बीहड़ों में पारंपरिक खेती कठिन है, जिससे कई युवा जीविका के लिए बालू खनन की ओर मुड़ जाते हैं।

## Climate change as a public health emergency

GS III: Environment

When we talk about climate change, the conversation almost always veers toward rising sea levels or extreme weather events. Some may even talk about the economic disruption that these natural disasters can and do cause. However, few, if any, touch upon another dimension of climate change: the broad-spectrum medical crisis that changing planetary patterns can trigger, as climate change intensifies every disease we already know and opens the door to those we have yet to face.

Nowhere is this more visible than in India. Increasingly frequent and severe waterlogging due to excess rain in cities such as Mumbai is creating ideal conditions for waterborne infections including cholera, typhoid, hepatitis A and leptospirosis. Recurrent waterlogging overwhelms sanitation infrastructure, contaminates clean water supplies, and leaves urban populations exposed to serious illnesses.

Conversely, drought-prone regions are facing worsening water scarcity, forcing communities to rely on unsafe water sources, thereby increasing the burden of diarrhoeal diseases as well as chronic dehydration.

### Expanding disease risk

Meanwhile, shifting seasonal patterns are driving a rise in infections, allergies and vector-borne diseases, as changing temperatures and rainfall cycles disrupt established trends and prolong pollen seasons. Disease windows are expanding, and their geographic reach is steadily widening, quietly accelerating climate-driven spread. Communities with no prior exposure lack immunity, while health-care systems in these regions remain underprepared to respond at scale. One major example of this is the exponential growth of mosquito-borne diseases, as rising temperatures have made previously inhospitable regions suitable for this insect. The impact on dengue patterns is already measurable in Delhi-NCR. The number of cases traditionally peaked in September but now peaks in



**Dr. Naresh Trehan**

Chairman and Managing Director, Medanta

November, as warmer and rainier conditions sustain mosquito populations for longer periods.

Malaria, once largely confined to endemic pockets of the Gangetic Plains and the warm, humid regions of central India, is now being reported in cooler areas such as Himachal Pradesh, where it historically had minimal presence.

### Climate change threats

Climate change also triggers rising air pollution. As summers become increasingly hotter, greater reliance on air conditioning drives higher energy use and greenhouse gas emissions. These emissions contain elevated levels of PM<sub>2.5</sub> – microscopic pollutants that penetrate deep into the lungs and bloodstream – exerting widespread effects across multiple organs in the body, particularly the lungs, heart and kidneys.

Fine particulate matter penetrates deep into the lungs, causing inflammation, reduced lung function, and exacerbating respiratory conditions such as asthma and chronic obstructive pulmonary disease.

These particulates can also damage blood vessels, accelerate atherosclerosis, and increase the risk of hypertension, heart attack and stroke. The kidneys are equally vulnerable, and chronic exposure can impair kidney function, reduce filtration efficiency, and contribute to the progression of chronic kidney disease.

Greenhouse gases also trap more heat in the atmosphere, creating a feedback loop that amplifies the very crisis we are trying to manage through air conditioners and other cooling appliances. This heat stress forces the heart to work harder to regulate the body's temperature, increasing strain on the cardiovascular system. This can trigger complications such as hypertension, heart attack, and stroke. These conditions disproportionately affect people

without adequate shelter, such as manual labourers who spend long hours working outdoors in extreme conditions.

Parts of the country, such as Odisha, Telangana, and Vidarbha, are reporting a rising number of heat-stroke-related deaths. In addition, rising night-time temperatures in urban pockets such as Delhi-NCR and Mumbai are eliminating the critical recovery window that the human body relies on to cool down after prolonged daytime heat exposure.

Infant health outcomes are also increasingly at risk – exposure to extreme heat and air pollution has been linked to preterm births and low birth weight among newborns.

### Impact on food security

The health consequences of climate change also extend into food systems and nutrition. Extreme weather events and unseasonal rain disrupt crop cycles and reduce agricultural productivity, contributing to food shortages. The declining nutritional quality of food crops, combined with rising prices, further compounds the crisis, creating a hidden burden of micronutrient deficiencies and chronic malnutrition, especially among children.

Rising temperatures can also cause a decline in milk production, as cattle affected by heat stress compromise infant and child nutrition. These cascading effects on food security translate directly into weakened immunity and greater vulnerability to disease particularly among children and the elderly.

The warnings have existed for decades, but were largely overlooked. Climate change is no longer a distant threat – for public health in India, it is already a present reality. It is a multifaceted challenge. Treating it as purely environmental overlooks its profound human cost. Recognising it as a medical emergency is the first step toward responding with urgency.



India faces growing health crises from climate change impacts

### 07A. Climate change as a public health emergency

#### जलवायु परिवर्तन एक सार्वजनिक स्वास्थ्य आपातकाल के रूप में

- Increasingly frequent and severe waterlogging due to excess rain in cities such as Mumbai is creating ideal conditions for waterborne infections including **cholera, typhoid, hepatitis A and leptospirosis**.

मुंबई जैसे शहरों में अधिक वर्षा के कारण बार-बार होने वाला जलभराव हैजा, टाइफाइड, हेपेटाइटिस A और लेप्टोस्पायरोसिस जैसी जलजनित बीमारियों के लिए अनुकूल स्थिति बना रहा है।

- Recurrent waterlogging overwhelms sanitation infrastructure, contaminates clean water supplies, and leaves urban populations exposed to serious illnesses.

बार-बार जलभराव स्वच्छता व्यवस्था को प्रभावित करता है, साफ पानी को दूषित करता है और लोगों को गंभीर बीमारियों के संपर्क में लाता है।

- Conversely, drought-prone regions are facing worsening water scarcity, forcing communities to rely on unsafe water sources, thereby increasing the burden of diarrhoeal diseases as well as chronic dehydration.

इसके विपरीत, सूखा प्रभावित क्षेत्रों में पानी की कमी बढ़ रही है, जिससे लोग असुरक्षित जल स्रोतों पर निर्भर हो रहे हैं और दस्त रोग तथा दीर्घकालिक निर्जलीकरण बढ़ रहा है।



## Expanding disease risk बढ़ता हुआ रोग जोखिम

- Meanwhile, shifting seasonal patterns are driving a rise in infections, allergies and vector-borne diseases, as changing temperatures and rainfall cycles disrupt established trends and prolong pollen seasons.  
मौसमी बदलाव **संक्रमण, एलर्जी और वाहक जनित रोगों** में वृद्धि कर रहे हैं क्योंकि तापमान और वर्षा चक्र में बदलाव से पारंपरिक पैटर्न प्रभावित हो रहे हैं।
- **Fine particulate matter penetrates deep into the lungs, causing inflammation, reduced lung function, and exacerbating respiratory conditions such as asthma and chronic obstructive pulmonary disease.**  
ये सूक्ष्म कण फेफड़ों में जाकर **सूजन, फेफड़ों की क्षमता में कमी** और **अस्थमा तथा अन्य श्वसन रोगों** को बढ़ाते हैं।
- **These particulates can also damage blood vessels, accelerate atherosclerosis, and increase the risk of hypertension, heart attack and stroke.**  
ये कण रक्त वाहिकाओं को नुकसान पहुंचाकर **एथेरोस्क्लेरोसिस, उच्च रक्तचाप, हार्ट अटैक और स्ट्रोक** का जोखिम बढ़ाते हैं।
- **The kidneys are equally vulnerable, and chronic exposure can impair kidney function, reduce filtration efficiency, and contribute to the progression of chronic kidney disease.**  
गुर्दे भी प्रभावित होते हैं और लंबे समय तक संपर्क से **गुर्दा कार्यक्षमता में कमी** और **दीर्घकालिक किडनी रोग** बढ़ सकता है।
- **Greenhouse gases also trap more heat in the atmosphere, creating a feedback loop that amplifies the very crisis we are trying to manage through air conditioners and other cooling appliances.**  
ग्रीनहाउस गैसों वातावरण में अधिक गर्मी को फँसाती हैं, जिससे एक **फीडबैक चक्र** बनता है जो संकट को और बढ़ाता है।
- This heat stress forces the heart to work harder to regulate the body's temperature, increasing strain on the **cardiovascular system.**  
यह **हीट स्ट्रेस** हृदय पर दबाव डालता है और शरीर के तापमान को नियंत्रित करने के लिए उसे अधिक काम करना पड़ता है।
- This can trigger complications such as hypertension, heart attack, and stroke.  
इससे **उच्च रक्तचाप, हार्ट अटैक और स्ट्रोक** जैसी समस्याएँ उत्पन्न हो सकती हैं।

## DAILY CURRENT AFFAIRS(GS Paper IV and Essay)

### TOPICS COVERED

07 April 2026

**07A** **Nine policemen are sentenced to death in T.N. custodial murder case**  
**तमिलनाडु हिरासत हत्या मामले में नौ पुलिसकर्मियों को मौत की सजा**

## Nine policemen are sentenced to death in T.N. custodial murder case

**The Hindu Bureau**  
MADURAI

A trial court in Tamil Nadu on Monday awarded death penalty to nine policemen found guilty of custodial torture and murder of a trader and his son during the COVID-19 lockdown at Sattankulam in Thoothukudi district.

The custodial torture meted out to P. Jayaraj (58) and his son J. Benicks (31), who were detained at the Sattankulam police station on the mere charge of violating COVID-19 lockdown norms and keeping their mobile phone sales and service showroom open in June 2020, had shaken civil society and also became a

political issue.

On March 23, Madurai First Additional District and Sessions Judge G. Muthukumar held that all the nine policemen prosecuted by the CBI in the case were guilty.

**'Act of vengeance'**

The judge awarded death sentence to the then Sattankulam inspector S. Sridhar; sub-inspectors P. Raghu Ganesh and K. Balakrishnan; head constables S. Murugan and A. Saamidurai; and constables M. Muthuraj, S. Chelladurai, X. Thomas Francis, and S. Veilumuthu. Special sub-inspector Pauldurai was also an accused. But he died during trial af

ter contracting COVID-19.

The judge said the act of the police personnel was unacceptable. "Where there was power, there should be responsibility. Jayaraj and Benicks were unarmoured and were tortured at regular intervals all through the night at the police station," the judge said. Jayaraj was tortured following an altercation with the police personnel, while Benicks was tortured for intervening. They had no previous antecedents and it was an act of vengeance and instilled fear among the public.

The judge said the Madurai Bench of the Madras High Court had monitored the case and if not for that,



The accused policemen being produced before the First Additional District and Sessions Court in Madurai on Monday. G. MOORTHY

the case would have been buried. "The police personnel were mentally sound and well educated. They were drawing government salaries. Those who

should protect and safeguard the public acted in such a manner. It was a case of the fence eating the crop," he said.

It was an attack on hu-

man rights, the judge said, adding the custodial deaths were a social evil.

"Mere life sentence was not sufficient. The judgment should serve as a deterrent and should prevent recurrence," the judge said, and awarded the maximum sentence on the convicts. He said all of them were equally involved in the brutal attack on Jayaraj and Benicks. The judge also imposed a total fine of over ₹1 crore on the convicts. The judge found the police personnel guilty of murder and other offences under the Indian Penal Code.

The Tamil Nadu government, in its report, submitted that custodial deaths

cannot be tolerated and the Central government had sought maximum punishment for the convicts.

**Criminal conspiracy**

The CBI said the investigation revealed that Jayaraj was picked from his shop on June 19, 2020, and lodged at the Sattankulam police station in pursuance of a criminal conspiracy hatched by the police personnel. On information, Benicks rushed to the police station to inquire about the arrest of his father. He objected to his father being beaten up.

Following an altercation, the two were wrongfully confined at the police station and beaten up to

"teach them a lesson on how to behave with the police".

The CBI said Jayaraj and Benicks were subjected to brutal torture by the police personnel knowing that it was sufficient to cause their death. During the investigation, it was revealed the traders had not violated the COVID-19 lockdown rules, a charge on which the police had detained them.

The traders were made to clean the blood from their wounds. The next morning, a sanitary worker was made to clean the blood to destroy evidence. A false case was registered against the two, the CBI added.



## 07A. Nine policemen are sentenced to death in T.N. custodial murder case तमिलनाडु हिरासत हत्या मामले में नौ पुलिसकर्मियों को मौत की सजा

- Nine policemen are sentenced to death in T.N. custodial murder case.  
तमिलनाडु हिरासत हत्या मामले में नौ पुलिसकर्मियों को मौत की सजा दी गई।
- A trial court in Tamil Nadu on Monday awarded death penalty to nine policemen found guilty of custodial torture and murder of a trader and his son during the COVID-19 lockdown at Sattankulam in Thoothukudi district.  
तमिलनाडु की एक ट्रायल कोर्ट ने सोमवार को थूथुकुडी जिले के सत्तानकुलम में COVID-19 लॉकडाउन के दौरान एक व्यापारी और उसके बेटे की हिरासत में यातना और हत्या के दोषी पाए गए नौ पुलिसकर्मियों को मौत की सजा सुनाई।
- The custodial torture meted out to **P. Jayaraj (58) and his son J. Benicks (31)**, who were detained at the Sattankulam police station on the mere charge of violating COVID-19 lockdown norms and keeping their mobile phone sales and service showroom open in June 2020, had shaken civil society and also became a political issue.  
**पी. जयराराज (58)** और उनके बेटे **जे. बेनिक्स (31)** को दी गई हिरासत यातना, जिन्हें जून 2020 में COVID-19 लॉकडाउन नियमों के उल्लंघन और मोबाइल फोन की दुकान खुली रखने के मामूली आरोप में सत्तानकुलम पुलिस स्टेशन में हिरासत में लिया गया था, ने नागरिक समाज को झकझोर दिया और यह एक राजनीतिक मुद्दा भी बन गया।
- On March 23, Madurai First Additional District and Sessions Judge **G. Muthukumar** held that all the nine policemen prosecuted by the **CBI** in the case were guilty.  
23 मार्च को मदुरै प्रथम अतिरिक्त जिला एवं सत्र न्यायाधीश **जी. मुथुकुमारन** ने कहा कि इस मामले में **CBI** द्वारा अभियोजित सभी नौ पुलिसकर्मी दोषी हैं।

### ‘Act of vengeance’ ‘प्रतिशोध का कार्य’

- The judge awarded death sentence to the then Sattankulam inspector **S. Sridhar**; sub-inspectors **P. Raghu Ganesh** and **K. Balakrishnan**; head constables **S. Murugan** and **A. Saamidurai**; and constables **M. Muthuraj**, **S. Chelladurai**, **X. Thomas Francis**, and **S. Veilumuthu**.  
न्यायाधीश ने तत्कालीन सत्तानकुलम निरीक्षक **एस. श्रीधर**, उप-निरीक्षक **पी. रघु गणेश** और **के. बालकृष्णन**, हेड कांस्टेबल **एस. मुरुगन** और **ए. सामीदुरई**, तथा कांस्टेबल **एम. मुथुराज**, **एस. चेल्लादुरई**, **एक्स. थॉमस फ्रांसिस** और **एस. वेलुमुथु** को मौत की सजा सुनाई।
- Special sub-inspector **Pauldurai** was also an accused.  
विशेष उप-निरीक्षक **पॉलदुरई** भी एक आरोपी था।
- But he died during trial after contracting COVID-19.  
लेकिन मुकदमे के दौरान COVID-19 से संक्रमित होने के बाद उसकी मृत्यु हो गई।
- The judge said the act of the police personnel was unacceptable.  
न्यायाधीश ने कहा कि पुलिसकर्मियों का यह कार्य अस्वीकार्य था।
- “Where there was power, there should be responsibility.  
“जहां शक्ति होती है, वहां जिम्मेदारी भी होनी चाहिए।
- Jayaraj and Benicks were unarmed and were tortured at regular intervals all through the night at the police station,” the judge said.  
जयराराज और बेनिक्स निहत्थे थे और उन्हें पूरी रात पुलिस स्टेशन में नियमित अंतराल पर प्रताड़ित किया गया,” न्यायाधीश ने कहा।
- Jayaraj was tortured following an altercation with the police personnel, while Benicks was tortured for intervening.  
जयराराज को पुलिसकर्मियों के साथ विवाद के बाद प्रताड़ित किया गया, जबकि बेनिक्स को हस्तक्षेप करने के लिए प्रताड़ित किया गया।
- They had no previous antecedents and it was an act of vengeance and instilled fear among the public.  
उनका कोई आपराधिक इतिहास नहीं था और यह प्रतिशोध का कार्य था जिसने जनता में भय पैदा किया।
- The judge said the Madurai Bench of the Madras High Court had monitored the case and if not for that, the case would have been buried.



न्यायाधीश ने कहा कि मद्रास उच्च न्यायालय की मदुरै पीठ ने इस मामले की निगरानी की और यदि ऐसा नहीं होता तो यह मामला दबा दिया जाता।

- “The police personnel were mentally sound and well educated.  
“पुलिसकर्मी मानसिक रूप से स्वस्थ और शिक्षित थे।
- They were drawing government salaries.  
वे सरकारी वेतन प्राप्त कर रहे थे।
- Those who should protect and safeguard the public acted in such a manner.  
जो जनता की रक्षा और सुरक्षा करने वाले थे, उन्होंने इस प्रकार का व्यवहार किया।
- It was a case of the fence eating the crop,” he said.  
यह बाड़ द्वारा फसल खाने का मामला था,” उन्होंने कहा।
- It was an attack on **human rights**, the judge said, adding the custodial deaths were a social evil.  
न्यायाधीश ने कहा कि यह **मानवाधिकारों** पर हमला था और हिरासत में मौतें एक सामाजिक बुराई हैं।
- “Mere life sentence was not sufficient.  
“सिर्फ आजीवन कारावास पर्याप्त नहीं था।
- The judgment should serve as a deterrent and should prevent recurrence,” the judge said, and awarded the maximum sentence on the convicts.  
यह निर्णय निवारक के रूप में काम करना चाहिए और पुनरावृत्ति को रोकना चाहिए,” न्यायाधीश ने कहा और दोषियों को अधिकतम सजा दी।
- He said all of them were equally involved in the brutal attack on Jayaraj and Benicks.  
उन्होंने कहा कि सभी जयरज और बेनिक्स पर हुए क्रूर हमले में समान रूप से शामिल थे।
- The judge also imposed a total fine of over ₹1 crore on the convicts.  
न्यायाधीश ने दोषियों पर कुल ₹1 करोड़ से अधिक का जुर्माना भी लगाया।
- The judge found the police personnel guilty of murder and other offences under the **Indian Penal Code**.  
न्यायाधीश ने पुलिसकर्मियों को **भारतीय दंड संहिता** के तहत हत्या और अन्य अपराधों का दोषी पाया।
- The Tamil Nadu government, in its report, submitted that custodial deaths cannot be tolerated and the Central government had sought maximum punishment for the convicts.  
तमिलनाडु सरकार ने अपनी रिपोर्ट में कहा कि हिरासत में मौतों को बर्दाश्त नहीं किया जा सकता और केंद्र सरकार ने दोषियों के लिए अधिकतम सजा की मांग की थी।

## Criminal conspiracy आपराधिक साजिश

- The CBI said the investigation revealed that Jayaraj was picked from his shop on June 19, 2020, and lodged at the Sattankulam police station in pursuance of a criminal conspiracy hatched by the police personnel.  
CBI ने कहा कि जांच में खुलासा हुआ कि जयरज को 19 जून 2020 को उसकी दुकान से उठाया गया और पुलिसकर्मियों द्वारा रची गई आपराधिक साजिश के तहत सतानकुलम पुलिस स्टेशन में रखा गया।
- On information, Benicks rushed to the police station to inquire about the arrest of his father.  
सूचना मिलने पर बेनिक्स अपने पिता की गिरफ्तारी के बारे में पूछताछ करने के लिए पुलिस स्टेशन पहुंचा।
- He objected to his father being beaten up.  
उसने अपने पिता की पिटाई का विरोध किया।
- Following an altercation, the two were wrongfully confined at the police station and beaten up to “teach them a lesson on how to behave with the police”.  
विवाद के बाद दोनों को गलत तरीके से पुलिस स्टेशन में बंद कर दिया गया और “पुलिस के साथ कैसे व्यवहार करना है, यह सिखाने के लिए” पीटा गया।
- The CBI said Jayaraj and Benicks were subjected to brutal torture by the police personnel knowing that it was sufficient to cause their death.  
CBI ने कहा कि जयरज और बेनिक्स को पुलिसकर्मियों द्वारा क्रूर यातना दी गई, यह जानते हुए कि यह उनकी मृत्यु के लिए पर्याप्त है।
- During the investigation, it was revealed the traders had not violated the COVID-19 lockdown rules, a charge on which the police had detained them.  
जांच के दौरान यह सामने आया कि व्यापारियों ने COVID-19 लॉकडाउन नियमों का उल्लंघन नहीं किया था, जिस आरोप में पुलिस ने उन्हें हिरासत में लिया था।



- The traders were made to clean the blood from their wounds.  
व्यापारियों को अपने घावों से खून साफ करने के लिए मजबूर किया गया।
- The next morning, a sanitary worker was made to clean the blood to destroy evidence.  
अगली सुबह एक सफाई कर्मचारी से सबूत मिटाने के लिए खून साफ कराया गया।
- A false case was registered against the two, the CBI added.  
CBI ने बताया कि दोनों के खिलाफ झूठा मामला दर्ज किया गया।

### RAREST OF RARE DOCTRINE

- The “**Rarest of Rare**” doctrine is a judicial principle used by the Supreme Court of India to decide when the **death penalty** should be awarded.
- It ensures that capital punishment is given only in **exceptional and extreme cases**, not as a routine punishment.
- This doctrine balances **justice for victims** and **protection of human rights**.

#### Bachan Singh v. State of Punjab

- Decided in **1980**, this is the landmark case where the doctrine was established.
- The Supreme Court upheld the **constitutional validity of the death penalty** under Indian law.
- However, it imposed a strict limitation:
- Death penalty should be awarded only in the “**rarest of rare cases**”.

#### Meaning of “Rarest of Rare”

- The Court did not give a rigid definition.
- Instead, it laid down guiding principles:
- **When can death penalty be given?**
- When the crime is extremely **brutal, grotesque, diabolical or shocking**
- When it **shocks the collective conscience of society**
- When **life imprisonment is insufficient**

#### Machhi Singh v. State of Punjab

- The Supreme Court further clarified the doctrine in **1983**
- It provided categories to identify such cases:

#### Categories of Rarest of Rare Cases

- **Manner of Commission:** Extremely brutal or inhuman killing
- **Motive of Crime:** For example: murder for greed, revenge, or extreme cruelty
- **Magnitude of Crime:** Multiple murders or mass killings
- **Victim of Crime:** Child, woman, or vulnerable person
- **Social Impact:** Crime that shocks society deeply