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THE HINDU NEWSPAPER

30 JULY 2026

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PCS Special:	30 July
30J7	Russia puts Telegram's Durov on wanted list over terrorism charges रूस ने आतंकवाद के आरोपों में टेलीग्राम के ड्यूरोव को वांटेड सूची में डाला
30J7	Gulveer braves weather and competition to bag silver गुलवीर ने कठिन मौसम और कड़ी प्रतिस्पर्धा का सामना कर जीता रजत पदक
30J7	Six Indian pugilists march into seminoles छह भारतीय मुक्केबाज़ सेमीफ़ाइनल में पहुँचे
30J7	Harjinder — from the farms of Punjab to the Glasgow podium हरजिंदर — पंजाब के खेतों से ग्लासगो के पोज़ियम तक



Roaring appeal: Children in tiger costumes take part in an awareness campaign in Bengaluru on Wednesday as part of the International Tiger Day. India is home to the world's largest wild tiger population, accounting for nearly 70% of all wild tigers globally. A. HANU/ANSA

Roaring appeal: Children in tiger costumes take part in an awareness campaign in Bengaluru on Wednesday as part of the **International Tiger Day**. India is home to the world's largest wild tiger population, accounting for nearly 70% of all wild tigers globally.

INTERNATIONAL TIGER DAY (GLOBAL TIGER DAY)

- **International Tiger Day**, also known as **Global Tiger Day**, is observed every year on **29 July** to raise global awareness about tiger conservation and to promote efforts to protect wild tigers and their habitats.

History

- **Observed on:** 29 July every year.
- **Established:** 2010.
- **Origin:** Declared during the **Saint Petersburg Tiger Summit** held in **Russia** in **July 2010**.
- The summit brought together **13 Tiger Range Countries (TRCs)**, where leaders adopted the **Global Tiger Recovery Program (GTRP)**.
- The summit also launched the ambitious **TX2 Goal**, which aimed to **double the global wild tiger population by 2022** (the next Chinese Year of the Tiger), using the 2010 population as the baseline.

Tiger Range Countries (13)

The 13 Tiger Range Countries are:

- Bangladesh
- Bhutan
- Cambodia
- China
- India
- Indonesia
- Lao PDR (Laos)
- Malaysia
- Myanmar
- Nepal
- Russia
- Thailand
- Vietnam

Last Declared Tiger Reserve in India

- **Madhav Tiger Reserve**
- **State:** Madhya Pradesh

- **District:** Shivpuri
- **Declared:** March 2025
- **Status:** 58th Tiger Reserve of India
- **Constituent Protected Area:** Madhav National Park and surrounding forests.
- **Importance:** Strengthens the tiger landscape connecting Ranthambore, Kuno, and central Indian forests, improving habitat connectivity.

Last Declared National Park in India

- **Similipal National Park**
- **State:** Odisha
- **District:** Mayurbhanj
- **Declared:** 24 April 2025
- **Status:** 107th National Park of India (as per the Odisha Government notification; some official databases continued to list it as the 106th due to timing of updates). It forms the core of the Similipal Tiger Reserve and is globally renowned for its **wild melanistic (black) tigers**.

Russia puts Telegram's Durov on wanted list over terrorism charges



PCS Russia charged Pavel Durov, the founder, owner and CEO of the messaging app Telegram, with aiding terrorism and put him on an international wanted list, the country's main domestic security agency said on Wednesday. The charges against Mr. Durov came as Russian authorities restrict Telegram in the country. AP

30J7. Russia puts Telegram's Durov on wanted list over terrorism charges

रूस ने आतंकवाद के आरोपों में टेलीग्राम के ड्यूरोव को वांटेड सूची में डाला

- Russia charged **Pavel Durov**, the founder, owner and CEO of the messaging app **Telegram**, with aiding **terrorism** and put him on an international **wanted list**, the country's main domestic **security agency** said on Wednesday.

रूस ने मैसेजिंग ऐप टेलीग्राम (Telegram) के संस्थापक, स्वामी और मुख्य कार्यकारी अधिकारी (CEO) पावेल ड्यूरोव (Pavel Durov) पर आतंकवाद में सहायता करने का आरोप लगाया और उन्हें अंतरराष्ट्रीय वांटेड सूची में डाल दिया। यह जानकारी देश की प्रमुख घरेलू सुरक्षा एजेंसी ने बुधवार को दी।

- The charges against **Mr. Durov** came as **Russian authorities** restrict **Telegram** in the country.

श्री ड्यूरोव के विरुद्ध ये आरोप ऐसे समय में लगाए गए हैं, जब रूसी प्राधिकरण देश में टेलीग्राम पर प्रतिबंधात्मक कदम उठा रहे हैं।

PAVEL DUROV

- **Pavel Valeryevich Durov** is a Russian-born technology entrepreneur best known as the **founder and Chief Executive Officer (CEO)** of **Telegram**, one of the world's largest cloud-based messaging platforms.
- Before Telegram, he co-founded **Vkontakte (VK)**, Russia's largest **social networking website**, in **2006**.
- Due to disagreements with Russian authorities over censorship and user data, he left VK and eventually left Russia in **2014**.



Telegram



- Today, Durov is based in **Dubai, United Arab Emirates**, where Telegram's operations are headquartered.
- **Telegram** is a cloud-based instant messaging application **launched in August 2013** by **Pavel Durov and his brother Nikolai Durov**, who designed much of its technical architecture.

Telegram offers:

- Instant messaging.
- Voice and video calls.
- Group chats (supporting very large communities).
- Public and private channels.
- File sharing (including large files).
- Bots and Mini Apps.
- End-to-end encryption in **Secret Chats** (regular cloud chats are encrypted in transit and on Telegram's servers but are **not** end-to-end encrypted by default).

The platform has grown to **more than one billion monthly active users**, making it one of the world's largest messaging services.

Why is Telegram Popular?

Telegram has become popular because of:

- Strong emphasis on user privacy.
- Cloud synchronization across multiple devices.
- Large group and channel capacity.
- Fast message delivery.
- Extensive bot ecosystem.
- Open APIs for developers.

It is widely used by journalists, educators, businesses, governments, political groups and civil society organizations.

Challenges and Controversies

- Telegram's strong privacy features have also attracted scrutiny.
- Governments and law-enforcement agencies in several countries have argued that the platform can be used for illegal activities such as fraud, extremist propaganda, piracy and the distribution of unlawful content.
- In recent years, Telegram and Pavel Durov have faced legal and regulatory investigations in multiple jurisdictions over questions of platform moderation and compliance with national laws.

Gulveer braves weather and competition to bag silver

He becomes the first man from the India to win a medal in the 10,000m event in the Games' history, finishing with a timing of 27:49.78s; Australia's Robinson clinches gold (27:48.93s)

PCS
C'WEALTH GAMES

K. Keerthivasan
GLASGOW

While much of the spotlight was on India assuring itself of medals in the boxing ring at the Commonwealth Games here, a few kilometres away at the Scotstoun Stadium, a middle-distance runner from the country was quietly scripting history.

In challenging track conditions with heavy rain and sun making frequent appearances, Gulveer Singh won silver (27:49.78s) in the men's 10,000m on Tuesday to become the first Indian man to win a medal in the event in the Games' history.

Ky Robinson of Australia won gold in a time of 27:48.93 while David Mulroney of the Isle of Man bagged bronze in 27:50.28.

Gulveer was one of the favourites to bag a medal. Before the race, he was in the top three in season's best and his personal best of 27:00.22 (a National record) was at the top in the field.

Gulveer ran a tactical



Final push: Gulveer broke away from the pack with around 900m left, even as Australia's Robinson claimed gold. GETTY IMAGES

race, being among the leaders till the last before accelerating. He stayed in sixth position at the 8,000m mark with five more laps to go. With around 900m left, he broke out of the pack.

Gulveer, who has improved since joining hands with coach Scott Simmons

in the USA three years ago, brought out his best in a strong field that also included Daniel Ebenyo, the 2023 World championships silver medallist.

Ebenyo ended up sixth while the other Kenyans, Edwin Kurgat and Ishmael Kipkurgu finished fourth and 10th respectively.

Wrapping himself in the Indian tricolour, Gulveer was gasping for breath when he came to the mixed zone. "It was not easy to run in the conditions. I take this opportunity to thank my family, coaches and the Athletics Federation of India for their support," he said.

• Durov has generally argued that Telegram seeks to protect user privacy and freedom of expression while removing content that violates its policies.

30J7. Gulveer braves weather and competition to bag silver

गुलवीर ने कठिन मौसम और कड़ी प्रतिस्पर्धा का सामना कर जीता रजत पदक

• He became the first man from India to win a medal in the 10,000m event in the Games' history, finishing with a timing of 27:49.78s; Australia's Robinson clinches gold (27:48.93s).

वह खेलों के इतिहास में 10,000 मीटर स्पर्धा में पदक जीतने वाले भारत के पहले पुरुष बने, जिन्होंने 27:49.78 सेकंड के समय के साथ रजत पदक जीता; ऑस्ट्रेलिया के

रॉबिन्सन ने 27:48.93 सेकंड के समय के साथ स्वर्ण पदक जीता।

- Before the race, he was in the top three in season's best and his personal best of 27:00.22 (National record) was at the top in the field.

दौड़ से पहले वह सीज़न के सर्वश्रेष्ठ प्रदर्शन में शीर्ष तीन में थे और उनका 27:00.22 का व्यक्तिगत सर्वश्रेष्ठ प्रदर्शन (राष्ट्रीय रिकॉर्ड) इस प्रतियोगिता के सभी प्रतिभागियों में सबसे बेहतर था।

Harjinder — from the farms of Punjab to the Glasgow podium

K. Keerthivasan
GLASGOW

Harjinder Kaur's smile is truly infectious. After successfully completing her clean and jerk attempt, she genuflected to the crowd, waved her hands in acknowledgement and happily slow-jogged back to the coaches' area.

It was a special moment for the 29-year-old, who had improved on her bronze medal from the previous Commonwealth Games by clinching silver this time in the 69kg weightlifting competition of the Glasgow Games at the Scottish Event Campus here on Tuesday.

Stiff competition

Amidst stiff competition, Harjinder held her own and didn't wilt under pressure claiming the silver medal with a total lift of 227kg behind Charlotte Simoneau of Canada who lifted a total of 240kg to win the gold.

Charlotte, a two-time junior World champion in 2024 and 2025, was the show-stealer as the 21-year-old created a Games record in snatch (108kg), a Commonwealth and Games record in clean and jerk (132kg), and Games record in snatch (240kg).



Gritty effort: Harjinder's consistency earned her a silver medal.
GETTY IMAGES



For me to do well in weightlifting, my parents focused on my diet, shoes and kits, sacrificing a lot of things in the process.

But Harjinder was focused on the task at hand, not on reputations. She executed all six of her lifts — three in snatch and three in clean and jerk — with remarkable composure, not failing a single attempt.

On a stage where consistency was as valuable as strength, Harjinder did exactly what she had set out to do.

When Harjinder finally walked into the mixed

zone with 'Finnie', the Commonwealth Games mascot, in the hands and cameras flashing, her smile seemed brighter than ever.

There was a distinct glow about her, one that reflected not just the joy of winning silver but also the many sacrifices her parents had made to help her reach this stage.

On her day at the big arena, Harjinder didn't forget her family.

"My family played an important role. For me to do well in weightlifting, my parents focussed on my diet, shoes and kits, sacrificing a lot of things in the process. It was a bit of struggle and I used to help my father in farming at Mehas (Patiala district of Punjab)," she said.

30J7. Harjinder — from the farms of Punjab to the Glasgow podium

हरजिंदर — पंजाब के खेतों से ग्लासगो के पोटियम तक

• **Harjinder Kaur's clinching silver** this time in the **69kg weightlifting** competition of the **Glasgow Games** at the **Scottish Event Campus** here on Tuesday.

यह 29 वर्षीय खिलाड़ी के लिए एक विशेष क्षण था, जिन्होंने पिछले कॉमनवेल्थ गेम्स के कांस्य पदक के प्रदर्शन में सुधार करते हुए इस बार मंगलवार को स्कॉटिश इवेंट कैम्पस में आयोजित ग्लासगो गेम्स की 69 किलोग्राम भारोत्तोलन स्पर्धा में रजत पदक जीता।

Stiff competition

कड़ी प्रतिस्पर्धा

• **Amidst stiff competition**, **Harjinder** held her own and didn't wilt under pressure claiming the **silver medal** with a total lift of **227kg** behind **Charlotte Simoneau of Canada** who lifted a total of **240kg** to win the **gold**.

कड़ी प्रतिस्पर्धा के बीच हरजिंदर ने दबाव में आए बिना शानदार प्रदर्शन किया और कुल 227 किलोग्राम भार उठाकर रजत पदक जीता। उनसे आगे कनाडा की शार्लोट सिमोनो रहीं, जिन्होंने कुल 240 किलोग्राम भार उठाकर स्वर्ण पदक अपने नाम किया।

• **Charlotte**, a **two-time junior World champion** in **2024** and **2025**, was the show-stealer as the **21-year-old** created a **Games record** in **snatch (108kg)**, a **Commonwealth and Games record** in **clean and jerk (132kg)**, and **Games record** in **snatch (240kg)**.

शार्लोट, जो 2024 और 2025 की दो बार की जूनियर विश्व चैंपियन हैं, प्रतियोगिता की सबसे बड़ी आकर्षण रहीं। 21 वर्षीय खिलाड़ी ने स्नैच (108 किलोग्राम) में गेम्स रिकॉर्ड, क्लीन एंड जर्क (132 किलोग्राम) में कॉमनवेल्थ और गेम्स रिकॉर्ड, तथा कुल 240 किलोग्राम के साथ गेम्स रिकॉर्ड बनाया।

GS Paper 1: Geography	30 July 2026
TOPICS COVERED	
30J7	

Whitewater warriors



Ready for the grind: Teams from Karnataka taking part in a training session on kayaking on Iruvanjipuzha, a river in Kozhikode district of Kerala, on Wednesday. They will take part in the 12th edition of the Malabar River Festival scheduled to begin on Thursday. K. RAGESH

Ready for the grind: Teams from Karnataka taking part in a training session on kayaking on **Iruvanjipuzha**, a **river in Kozhikode district** of Kerala, on Wednesday. They will take part in the 12th edition of the Malabar River Festival scheduled to begin on Thursday.

GS Paper II: Polity	30 July 2026
TOPICS COVERED	



30J7 RS passes Bill to criminalise disrespect to Vande Mataram
राज्यसभा ने 'वंदे मातरम्' के अपमान को अपराध बनाने वाला विधेयक पारित किया

RS passes Bill to criminalise disrespect to Vande Mataram

TS II: Polity
NEW DELHI

The Rajya Sabha passed the Prevention of Insults to National Honour (Amendment) Bill, 2026 on Wednesday, in the absence of members from Opposition parties.

After raising slogans demanding an apology from Union Home Minister Amit Shah for last week's police action against protesting students, the Opposition walked out as **Union Minister of State for Social Jus-**

tice and Empowerment Ramdas Athawale started speaking about the Bill.

The Bill proposes to amend the Prevention of Insults to National Honour Act, 1971, and extend the punishment for acts of disrespect towards national symbols such as the National Flag, the Constitution, and the National Anthem, to acts causing obstruction in the singing of the National Song, *Vande Mataram*.

The Bill will now go to the Lok Sabha for its con-



Nityanand Rai

sideration and passage.

Replying to the brief discussion on the Bill, which largely saw the participation of NDA members, Minister of State for Home Af-

fairs Nityanand Rai said the Congress was engaging in appeasement politics by insulting *Vande Mataram* for many years.

"The *Vande Mataram* Bill is not merely an ordinary Bill, but represents India's soul, national awareness, and cultural heritage, and reminds us of the freedom struggle," Mr. Rai said, asking why the Congress opposed the Bill.

Vande Mataram was penned by Bankim Chandra Chatterjee in 1875, but only two stanzas were

adopted as the National Song, with Congress leader Jawaharlal Nehru making that decision in 1937, years before he became the country's first Prime Minister.

Penal provisions

"Don't know why a few people are opposed to *Vande Mataram*, or why Congress is particularly opposed to *Vande Mataram*," Mr. Rai said. "There has been a discussion about making penal provisions for disrespecting the national song

through this Bill. Opposing *Vande Mataram* means the Congress has been always working to disrespect the pride of this country by adopting a policy of appeasement."

The Aam Aadmi Party's Sanjay Singh said that his party believed that *Vande Mataram* and the National Anthem should not be insulted. The Bill was passed by voice vote. The House was adjourned after Mr. Harivansh allowed some members to place special mentions in the House.

30J7. RS passes Bill to criminalise disrespect to Vande Mataram

राज्यसभा ने 'वंदे मातरम्' के अपमान को अपराध बनाने वाला विधेयक पारित किया

- The **Rajya Sabha** passed the **Prevention of Insults to National Honour (Amendment) Bill, 2026** on **Wednesday**, in the absence of members from **Opposition parties**.
राज्यसभा ने बुधवार को राष्ट्रीय सम्मान के अपमान की रोकथाम (संशोधन) विधेयक, 2026 [Prevention of Insults to National Honour (Amendment) Bill, 2026] को विपक्षी दलों के सदस्यों की अनुपस्थिति में पारित कर दिया।
- The **Bill** proposes to amend the **Prevention of Insults to National Honour Act, 1971**, and extend the punishment for acts of disrespect towards **national symbols** such as the **National Flag**, the **Constitution**, and the **National Anthem**, to acts causing obstruction in the singing of the **National Song, Vande Mataram**.
यह विधेयक राष्ट्रीय सम्मान के अपमान की रोकथाम अधिनियम, 1971 (Prevention of Insults to National Honour Act, 1971) में संशोधन का प्रस्ताव करता है तथा राष्ट्रीय ध्वज, संविधान और राष्ट्रीय गान जैसे राष्ट्रीय प्रतीकों के अपमान पर लागू दंड को राष्ट्रीय गीत 'वंदे मातरम्' के गायन में बाधा उत्पन्न करने वाले कृत्यों तक विस्तारित करता है।
- Vande Mataram** was penned by **Bankim Chandra Chatterjee** in 1875, but only **two stanzas** were adopted as the **National Song**, with **Congress leader Jawaharlal Nehru** making that decision in **1937**, years before he became the country's **first Prime Minister**.
वंदे मातरम् की रचना बंकिम चंद्र चट्टोपाध्याय ने 1875 में की थी, किंतु इसके केवल दो अंतर्ग (Two Stanzas) को राष्ट्रीय गीत के रूप में स्वीकार किया गया। यह निर्णय 1937 में कांग्रेस नेता जवाहरलाल नेहरू द्वारा लिया गया था, जो देश के प्रथम प्रधानमंत्री बनने से कई वर्ष पहले की बात है।

VANDE MATARAM

- Vande Mataram** was composed by **Bankim Chandra Chattopadhyay (1838–1894)**.
- It was originally written in **Sanskritised Bengali**, with several Sanskrit words.
- The poem was composed around **1875–1876**, although some scholars place its completion slightly later.



- It was incorporated into Bankim Chandra's famous novel **Anandamath**, published in **1882**.
- In the novel, "Mother" symbolises both the **Motherland (India)** and the divine feminine power.

First Public Rendition

- The song was first sung publicly at the **1896 Session of the Indian National Congress** held in **Calcutta (Kolkata)**.
- It was sung by **Rabindranath Tagore**, who also composed one of its earliest musical settings.
- This marked the beginning of its national popularity.

Role in the Freedom Movement

- During the **Swadeshi Movement (1905)** against the **Partition of Bengal** by **Lord Curzon**, "**Vande Mataram**" became the rallying cry of Indian nationalists.
- Freedom fighters shouted "**Vande Mataram**" during protests, public meetings, processions and revolutionary activities.
- The slogan symbolised patriotism, sacrifice and resistance against British rule.
- Several revolutionary organisations adopted "Vande Mataram" as their motto.
- The British Government considered the slogan politically sensitive and, at various times, attempted to restrict or discourage its public use because of its association with the nationalist movement.

Constituent Assembly and National Song

- After Independence, there was extensive discussion regarding whether "**Vande Mataram**" or "**Jana Gana Mana**" should become the National Anthem.
- On **24 January 1950**, the **Constituent Assembly of India** adopted:
 - "**Jana Gana Mana**" as the **National Anthem**.
 - "**Vande Mataram**" as the **National Song**, recognising its historic role in India's freedom struggle.
- The first **two stanzas** of Vande Mataram were accorded equal respect because these verses are free from later religious imagery and were considered suitable for national use.

Why Only the First Two Stanzas?

- The complete poem contains **six stanzas**.
- The **first two stanzas** primarily praise the natural beauty, fertility and prosperity of India.
- The later stanzas invoke Hindu goddess forms such as **Durga, Lakshmi** and **Saraswati**.
- To ensure broad national acceptance in a religiously diverse country, only the first two stanzas are officially recognised for ceremonial purposes.

Language and Meaning

- The opening words are:
 - **Vande Mataram**



- Sujalam, Suphalam, Malayaja Shitalam

1937 Committee on Vande Mataram

- The **1937** episode is highly relevant for UPSC because it explains why **only the first two stanzas** of *Vande Mataram* came to be officially accepted.

Background

- During the **1930s**, some sections of the Muslim community expressed reservations about the later stanzas of *Vande Mataram*, arguing that they depicted the motherland in the form of Hindu goddesses such as **Durga**, making them unsuitable for use in official national functions in a religiously diverse country.
- The issue gained prominence after the **Indian National Congress** formed ministries in several provinces following the **1937 provincial elections** under the **Government of India Act, 1935**.

Congress Committee (1937)

- In **October 1937**, the **Indian National Congress** constituted a committee to examine the issue.
- The committee included prominent leaders such as:
 - **Jawaharlal Nehru**
 - **Maulana Abul Kalam Azad**
 - **Subhas Chandra Bose**
 - **Acharya Narendra Dev**
- The committee also sought the opinion of **Rabindranath Tagore**.

Recommendations

The committee concluded that:

- The **first two stanzas** of *Vande Mataram* are **purely patriotic**, celebrating the beauty and richness of the motherland.
- The **later stanzas**, which invoke Hindu deities such as **Durga**, **Lakshmi**, and **Saraswati**, could be objectionable to some communities if used in official national ceremonies.
- Therefore, **only the first two stanzas** should be sung at official functions.

GS Paper II: Governance		30 July 2026
TOPICS COVERED		
30J7	LS passes paper leak Bill amid Opposition protests लोकसभा ने विपक्ष के विरोध के बीच प्रश्नपत्र लीक विधेयक पारित किया	
30J7	Hiding the scissors कैंची को छिपाना	
30J7	FCRA Bill 2026, a threat to civil society organisation एफसीआरए विधेयक 2026 : नागरिक समाज संगठनों के लिए एक खतरा	

LS passes paper leak Bill amid Opposition protests

No shots were fired at students during the July 20 protest and 'utmost restraint was exercised' by the police, says Minister; 'I brought before you a boy who suffered pellet gun injury', says Rahul

GS II: Governance
New Delhi

Union Minister Jitendra Singh on Wednesday insisted that "no shots were fired" at students during the July 20 protest in Delhi, rejecting Leader of the Opposition in the Lok Sabha Rahul Gandhi's allegation that Home Minister Amit Shah had ordered security forces to open fire on the protesters. He was replying to the debate on the Public Examinations (Prevention of Unfair Means) Amendment Bill, 2026.

The Bill, which proposes tightening penalties and introducing time-bound investigations and trials for paper leak cases, was passed amid Opposition protests over the alleged police excesses against students during the NEET-UG agitation. Soon after its passage, Mr. Shah hailed the legislation in a post on X, congratulating students across the country and describing the amendment as



Centre's stand: Union Minister Jitendra Singh speaks in the Lok Sabha on the paper leak Bill on Wednesday. ANI

a measure that would "shield the dreams and aspirations" of the youth.

"The Modi govt. will spare no one who attempts to imperil the future of our students and will leave no stone unturned to ensure that they face the full wrath of the law," the Minister said. However, he did not respond to the charges that Mr. Gandhi sought to raise inside the Lok Sabha in his speech.

Dr. Singh, who is the Minister of State in the Prime Minister's Office and handles the Department of Personnel and Training, responded to the charge while replying to the debate on the paper leak Bill.

dles the Department of Personnel and Training, responded to the charge while replying to the debate on the paper leak Bill.

'Utmost restraint'

He said "utmost restraint was exercised" during the police action and "it was made sure that casualties do not happen". Mr. Singh accused the Congress of attempting to politicise a legislation aimed at safeguarding the integrity of public examinations.

The Minister said the

amendments reflected an willingness to "learn from experience" after the implementation of the 2024 anti-paper leak law. So far, 52 FIRs had been registered since the original law came into force and suicides linked to paper leaks had declined, he informed the Lok Sabha.

Responding to the government's assertion that no shots had been fired, Mr. Gandhi stood by his charge.

"I brought before you a boy who suffered pellet gun injury. He could lose an eye and the pellet gun is a lethal weapon. And the government is saying I am lying. What do you want me to do? Bring the gun?" he said.

The amendments significantly strengthen the 2024 law. They mandate that investigations be completed within two months and empower States and Union Territories to designate Sessions Courts as Fast Track Special Courts to conduct day-to-day trials.

30J7. LS passes paper leak Bill amid Opposition protests

लोकसभा ने विपक्ष के विरोध के बीच प्रश्नपत्र लीक विधेयक पारित किया

- He was replying to the debate on the **Public Examinations (Prevention of Unfair Means) Amendment Bill, 2026**.

वे लोक परीक्षा (अनुचित साधनों की रोकथाम) संशोधन विधेयक, 2026 पर हुई चर्चा का उत्तर दे रहे थे।

- The **amendments significantly strengthen the 2024 law**.

ये संशोधन 2024 के कानून को उल्लेखनीय रूप से अधिक सशक्त बनाते हैं।

- They mandate that **investigations** be completed within **two months** and empower **States and Union Territories** to designate **Sessions Courts** as **Fast Track Special Courts** to conduct **day-to-day trials**.

इनमें यह अनिवार्य किया गया है कि जाँच दो महीने के भीतर पूरी की जाए तथा राज्यों और केंद्रशासित प्रदेशों को सत्र न्यायालयों को फास्ट ट्रैक विशेष न्यायालय घोषित कर प्रतिदिन सुनवाई करने का अधिकार दिया गया है।



GS II: Governance

Hiding the scissors

The censor board has strayed from the law that underpins its existence

The Central Board of Film Certification (CBFC) wields significant cultural influence by deciding which films can be screened in Indian cinemas. Its decisions on what to excise from Indian films are followed nearly completely even by streaming services, despite not being required to show the censor's version of a filmmaker's artistic vision. The patterns that producers interpret from the CBFC's decisions determine which stories are even made. There is a reason why few political films that espouse the cause of secularism (or the ills of communalism) are seen in cinemas today. There is also a reason why few would dare to make a film such as *Satlu*, considering what it went through at the censors' hands, and the fate it was met with when an online release was briefly achieved. The censor board stands captured, blocking off films that are inconvenient to the ruling dispensation in ways that have never been seen before, and purging politics hostile to the dominant philosophy from films. All this to say, what the CBFC does matters, and the only check on its authority is the Cinematograph Act, 1952 and the rules framed thereunder, but its autonomy is only on paper.

The CBFC is required to watch and rule on films in a matter of weeks. For over a year, the film *Monkey Man*, featuring a dystopian vision of a society with supremacy baked in, has not even been watched. This amounts to a de facto ban, but the CBFC has chosen the route of avoiding that headline by simply not taking a call one way or the other. Even background references to the government's inaction during the COVID-19 pandemic were removed from *Homebound*, India's entry to the Oscars. The CBFC is also guilty of unlawful concealment. In plain defiance of Section 5A(2) of the Cinematograph Act, the board has stopped publishing certificates in the government Gazette. In addition, it has now placed the online details of its certificates with cuts – unindexed and difficult to obtain as they are – behind an “under maintenance” message. Archives have stopped receiving cut portions of films for researchers' study. Pre-censorship as a concept is odious to free societies, and the CBFC's role ought to be curtailed, if not abolished altogether. While it exists, however, the CBFC must be compelled by the film fraternity, and its founding statute, to follow the law. The censor's scissors have plagued and stifled the voice of generations of storytellers, but the dynamic this has played out in has been visible and must be held accountable.

30J7. Hiding the scissors

कैंची को छिपाना

- The **Central Board of Film Certification (CBFC)** wields significant **cultural influence** by deciding which **films** can be screened in Indian cinemas.

केंद्रीय फिल्म प्रमाणन बोर्ड (CBFC) यह निर्धारित करके कि भारतीय सिनेमाघरों में कौन-सी फिल्में प्रदर्शित की जा सकती हैं, महत्वपूर्ण सांस्कृतिक प्रभाव रखता है।

- All this to say, what the **CBFC** does matters, and the only check on its authority is the **Cinematograph Act, 1952** and the rules framed thereunder, but its autonomy is only on paper.

इन सबका अर्थ यह है कि **CBFC** की कार्यवाही अत्यंत महत्वपूर्ण है, और उसकी शक्तियों पर एकमात्र नियंत्रण **सिनेमैटोग्राफ अधिनियम, 1952** तथा उसके अधीन बनाए गए नियम हैं, किंतु उसकी स्वायत्तता केवल कागज़ों तक सीमित है।

- The **CBFC** is required to watch and rule on films in a matter of weeks.

CBFC को कुछ ही सप्ताहों के भीतर फिल्मों को देखकर उन पर निर्णय देना आवश्यक होता है।

- For over a year, the film **Monkey Man**, featuring a dystopian vision of a society with supremacy baked in, has not even been watched.

एक वर्ष से अधिक समय से **Monkey Man** नामक फिल्म, जिसमें वर्चस्ववादी प्रवृत्ति वाले समाज का डिस्टोपियन चित्रण है, को देखा तक नहीं गया है।

- In plain defiance of **Section 5A(2) of the Cinematograph Act**, the board has stopped publishing certificates in the **Government Gazette**.

सिनेमैटोग्राफ अधिनियम की धारा 5A(2) की स्पष्ट अवहेलना करते हुए बोर्ड ने राजपत्र (**Government Gazette**) में प्रमाणपत्र प्रकाशित करना बंद कर दिया है।



FCRA Bill 2026, a threat to civil society organisations

GS II: Governance

According to the government's legislative programme for the monsoon session of Parliament, the Foreign Contribution (Regulation) Amendment Bill, 2026, has been listed for consideration. Although the Bill was included in the legislative agenda during the previous session, its consideration was postponed following widespread protests, particularly from Christian organisations and non-governmental organisations (NGO). At the time, the government made it clear that it remained committed to passing the Bill. Nevertheless, some interpreted the postponement as a sign that the government intended to defer it indefinitely or even drop it altogether. Those expectations have now been dispelled.

The politics of foreign contributions

In India, foreign contribution has always been a controversial issue. Normally, foreign contributions are allowed to support humanitarian relief and sectors such as health care, education, and environmental protection.

However, the inflow of foreign funds is regulated in all countries that permit such contributions. In India, there was no statutory framework governing foreign contributions before 1976, when the government of Indira Gandhi enacted the Foreign Contribution (Regulation) Act (FCRA) for the first time. The Act established a regulatory framework to control the acceptance and utilisation of foreign contributions and foreign hospitality. In fact, the government of the day feared, whether real or perceived, the destabilisation of India's democratic system by foreign forces inimical to India's interests. The Emergency regime was quite paranoid about the inflow of foreign money through multiple channels, including NGOs operating in the country.

The most interesting aspect of the brouhaha often raised over foreign contributions in India is that such contributions were never prohibited in general; they were always permitted to come into India. Of course, their acceptance and utilisation came under regulation, which became progressively stricter with every amendment. In 2010, the existing law was replaced by the Foreign Contribution (Regulation) Act, 2010. As in the 1976 Act, the primary focus of regulation under the 2010 Act was the legislature and political parties. The government's concern was the possibility of a large-scale infusion of foreign money into politics. This concern was adequately addressed in the 2010 Act, wherein provisions were made to prohibit the receipt of any form of foreign contribution by candidates for election, media personnel, public servants, judges, government employees, members of the legislature, political parties and their office-bearers, as well as organisations of a political nature.

The Act also provided for the vesting of assets created out of foreign contributions in a prescribed authority under certain circumstances



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and situations. It was also laid down that any person or organisation engaged in definite cultural, economic, educational, religious, or social programmes must obtain a certificate of registration, without which no foreign contribution could be received. One point that deserves mention in the context of these laws is that, although they were regulatory in nature, they were not unduly harsh on the recipients. Foreign funds were allowed to flow into the country for a variety of humanitarian purposes, under the prescribed regulatory framework.

Sledgehammer effect

But when we look at the present Bill, it gives us a different picture. It in fact has a sledgehammer effect on NGOs and religious and cultural organisations.

The Act of 2010 contains provisions for the registration of applicants and the grant of certificates to receive foreign contributions. There are different conditions under which such a certificate is issued. One of these conditions is that the applicant has not been prosecuted, convicted, or found to have indulged in activities aimed at religious conversion through inducement or force, either directly or indirectly, from one faith to another. Another condition is that the applicant has not been prosecuted or convicted for creating communal tension, disharmony, or similar disturbances. Under the Bill of 2026, if such a certificate is cancelled, the foreign contribution received by the applicant, along with all assets created out of that foreign contribution, shall vest in the designated authority.

Section 16A(2) makes it clear that even if an asset has been created only partly out of foreign contributions, the whole asset shall vest in the designated authority. Initially, such vesting shall be provisional. However, if the applicant fails to obtain a fresh certificate or to have the certificate renewed or restored within the prescribed time frame, the foreign contribution and the assets created from it shall vest permanently in the designated authority. The authority may then transfer such assets to any ministry, department, or agency of the central government, a State government, or a local authority. It may also dispose of the assets through sale, auction, or any other prescribed method, and credit the sale proceeds, together with any unutilised foreign contribution, to the Consolidated Fund of India.

Thus, the cancellation of a certificate becomes a crucial factor in completely ruining an organisation that functions primarily on the strength of foreign contributions. It is, therefore, instructive to examine the circumstances under which a certificate authorising the receipt of foreign contributions can be cancelled by the government.

Clause (1)(c) of Section 14 of the Foreign Contribution (Regulation) Act, 2010, provides that a certificate may be cancelled if, in the opinion of the central government, it is necessary, in the public interest, to do so. The consequence of such cancellation is that the

organisation loses its authority to receive foreign contributions, its assets created out of such contributions may be taken over, and its activities may effectively come to a halt. This provision confers unfettered powers on the government to cancel a certificate at any time. The term "public interest" is vague. As the government is the custodian of public interest, it can readily justify its actions on that ground. Cancellation of the certificate would result in the vesting of the foreign contribution and the assets created out of it in the designated authority. Depending on the nature of the organisation, such assets could even include places of worship.

Cancellation of a certificate may also result if an individual or organisation is prosecuted in connection with a case alleging religious conversion through force or inducement. Experience suggests that it is very easy for a person determined to have the certificate of a religious organisation cancelled to file a complaint in a police station or in a court alleging forcible religious conversion. Consequently, this provision has immense potential for misuse, particularly against minority religious groups.

A rather unusual provision in this Bill is that if a person surrenders a certificate of registration, the entire foreign contribution remaining with the person, along with all the assets created out of such contribution, will vest in the designated authority. It is difficult to understand the rationale behind this provision. A person or organisation that has availed of foreign contributions and created assets from them may, after some time, decide that it no longer requires any further foreign contributions and may therefore surrender its certificate. However, under Clause 16A(1)(b) of the Bill, all the assets created out of the foreign contribution, together with any unutilised portion of such contribution, shall vest in the authority.

Exemption clause

Finally, Clause 16L exempts any organisation, class of organisations, or person from the operation of this Bill if the government considers such an exemption to be in the public interest. Although the purpose of this clause appears to be obvious, the concern is that it may be vulnerable to challenge under Article 14 of the Constitution, which guarantees equality before the law. The clause neither identifies any intelligible differentia that distinguishes the favoured class of organisations or persons from those to whom the law applies in its entirety, nor establishes a rational nexus between such differential treatment and the object sought to be achieved by the legislation. The exemption of individuals or organisations is left entirely to the government's opinion that such action is expedient in the public interest. It is clear from the overall scheme of these amendments that the state seeks to eliminate organisations active in the educational, cultural, environmental, and charitable sectors on account of certain deep-seated prejudices.

30J7. FCRA Bill 2026, a threat to civil society organisation

एफसीआरए विधेयक 2026 : नागरिक समाज संगठनों के लिए एक खतरा

- According to the government's legislative programme for the monsoon session of Parliament, the **Foreign Contribution (Regulation) Amendment Bill, 2026**, has been listed for consideration.
संसद के मानसून सत्र के लिए सरकार के विधायी कार्यक्रम के अनुसार, विदेशी अंशदान (विनियमन) संशोधन विधेयक, 2026 (Foreign Contribution (Regulation) Amendment Bill, 2026) को विचारार्थ सूचीबद्ध किया गया है।
- Although the Bill was included in the legislative agenda during the previous session, its consideration was postponed following widespread protests, particularly from **Christian**

organisations and non-governmental organisations (NGOs).

यद्यपि इस विधेयक को पिछले सत्र के विधायी एजेंडा में शामिल किया गया था, किन्तु व्यापक विरोध-प्रदर्शनों, विशेष रूप से ईसाई संगठनों तथा गैर-सरकारी संगठनों (NGOs) के विरोध के कारण इसके विचार को स्थगित कर दिया गया।

- Normally, **foreign contributions** are allowed to support **humanitarian relief** and sectors such as **health care, education, and environmental protection**.
सामान्यतः विदेशी अंशदान को मानवीय राहत, स्वास्थ्य सेवा, शिक्षा तथा पर्यावरण संरक्षण जैसे क्षेत्रों के समर्थन के लिए अनुमति दी जाती है।
- In **India**, there was no **statutory framework** governing **foreign contributions** before **1976**, when the government of **Indira Gandhi** enacted the **Foreign Contribution (Regulation) Act (FCRA)** for the first time.
भारत में 1976 से पहले विदेशी अंशदान को नियंत्रित करने के लिए कोई वैधानिक ढाँचा (Statutory Framework) नहीं था। इंदिरा गांधी सरकार ने पहली बार विदेशी अंशदान (विनियमन) अधिनियम (FCRA) लागू किया।
- The **Act** established a **regulatory framework** to control the acceptance and utilisation of **foreign contributions** and **foreign hospitality**.
इस अधिनियम ने विदेशी अंशदान तथा विदेशी आतिथ्य (Foreign Hospitality) की स्वीकृति और उपयोग को नियंत्रित करने हेतु एक विनियामक ढाँचा (Regulatory Framework) स्थापित किया।
- In **2010**, the existing law was replaced by the **Foreign Contribution (Regulation) Act, 2010**.
2010 में पूर्ववर्ती कानून का स्थान विदेशी अंशदान (विनियमन) अधिनियम, 2010 (Foreign Contribution (Regulation) Act, 2010) ने ले लिया।
- As in the **1976 Act**, the primary focus of regulation under the **2010 Act** was the **legislature and political parties**.
1976 के अधिनियम की भाँति 2010 के अधिनियम का भी प्रमुख नियामक केंद्र विधायिका तथा राजनीतिक दल थे।
- This concern was adequately addressed in the **2010 Act**, wherein provisions were made to prohibit the receipt of any form of **foreign contribution** by **candidates for election, media personnel, public servants, judges, government employees, members of the legislature, political parties** and their **office-bearers**, as well as **organisations of a political nature**.
इस चिंता का पर्याप्त समाधान 2010 के अधिनियम में किया गया, जिसमें चुनाव लड़ने वाले प्रत्याशियों, मीडिया कर्मियों, लोक सेवकों, न्यायाधीशों, सरकारी कर्मचारियों, विधायिका के सदस्यों, राजनीतिक दलों तथा उनके पदाधिकारियों, और राजनीतिक प्रकृति वाले संगठनों द्वारा किसी भी प्रकार का विदेशी अंशदान प्राप्त करने पर प्रतिबंध लगाने का प्रावधान किया गया।
- It was also laid down that any **person** or **organisation** engaged in definite **cultural, economic, educational, religious, or social programmes** must obtain a **certificate of registration**, without which no **foreign contribution** could be received.
यह भी निर्धारित किया गया कि सांस्कृतिक, आर्थिक, शैक्षिक, धार्मिक अथवा सामाजिक कार्यक्रमों में संलग्न किसी भी व्यक्ति या संगठन को पंजीकरण प्रमाणपत्र (Certificate of Registration) प्राप्त करना अनिवार्य होगा, जिसके बिना कोई विदेशी अंशदान स्वीकार नहीं किया जा सकेगा।
- The **Act of 2010** contains provisions for the **registration** of applicants and the grant of **certificates** to receive **foreign contributions**.
2010 के अधिनियम में आवेदकों के पंजीकरण तथा विदेशी अंशदान प्राप्त करने के लिए प्रमाणपत्र प्रदान करने संबंधी प्रावधान हैं।
- There are different conditions under which such a **certificate** is issued.
ऐसे प्रमाणपत्र जारी करने के लिए विभिन्न शर्तें निर्धारित की गई हैं।
- One of these conditions is that the applicant has not been **prosecuted, convicted**, or found to have indulged in activities aimed at **religious conversion** through **inducement** or **force**, either directly or indirectly, from one faith to another.

इनमें से एक शर्त यह है कि आवेदक के विरुद्ध अभियोजन न चला हो, उसे दोषसिद्ध न किया गया हो, अथवा वह प्रत्यक्ष या परोक्ष रूप से प्रलोभन या बल के माध्यम से एक धर्म से दूसरे धर्म में धर्मांतरण कराने वाली गतिविधियों में संलिप्त न पाया गया हो।

- Another condition is that the applicant has not been **prosecuted** or **convicted** for creating **communal tension, disharmony**, or similar disturbances.
एक अन्य शर्त यह है कि आवेदक के विरुद्ध सांप्रदायिक तनाव, वैमनस्य अथवा इसी प्रकार की अशांति उत्पन्न करने के लिए अभियोजन न चला हो या उसे दोषसिद्ध न किया गया हो।
- Under the **Bill of 2026**, if such a **certificate** is cancelled, the **foreign contribution** received by the applicant, along with all **assets** created out of that foreign contribution, shall vest in a **designated authority**.
2026 के विधेयक के अंतर्गत यदि ऐसा प्रमाणपत्र निरस्त कर दिया जाता है, तो आवेदक द्वारा प्राप्त विदेशी अंशदान तथा उससे निर्मित सभी संपत्तियाँ एक नामित प्राधिकरण में निहित हो जाएँगी।
- **Section 16A(2) makes it clear that even if an asset has been created only partly out of foreign contributions, the whole asset shall vest in the designated authority.**
धारा 16A(2) यह स्पष्ट करती है कि यदि कोई संपत्ति केवल आंशिक रूप से विदेशी अंशदान से निर्मित हुई हो, तब भी संपूर्ण संपत्ति नामित प्राधिकरण में निहित होगी।
- However, if the applicant fails to obtain a fresh **certificate** or to have the certificate **renewed or restored** within the prescribed time frame, the **foreign contribution** and the **assets** created from it shall vest permanently in the **designated authority**.
किन्तु यदि आवेदक निर्धारित अवधि के भीतर नया प्रमाणपत्र प्राप्त करने अथवा प्रमाणपत्र का नवीनीकरण या पुनर्स्थापन कराने में असफल रहता है, तो विदेशी अंशदान तथा उससे निर्मित संपत्तियाँ स्थायी रूप से नामित प्राधिकरण में निहित हो जाएँगी।
- It may also dispose of the assets through **sale, auction**, or any other prescribed method, and credit the **sale proceeds**, together with any **unutilised foreign contribution**, to the **Consolidated Fund of India**.
वह इन संपत्तियों का विक्रय, नीलामी अथवा किसी अन्य निर्धारित विधि से निस्तारण कर सकता है तथा विक्रय से प्राप्त राशि और किसी भी अप्रयुक्त विदेशी अंशदान को भारत की संचित निधि (Consolidated Fund of India) में जमा कर सकता है।
- Thus, the cancellation of a **certificate** becomes a crucial factor in completely ruining an organisation that functions primarily on the strength of **foreign contributions**.
इस प्रकार, प्रमाणपत्र का निरस्तीकरण ऐसे संगठन को पूर्णतः नष्ट करने वाला महत्वपूर्ण कारक बन जाता है, जो मुख्यतः विदेशी अंशदान पर आधारित होकर कार्य करता है।
- It is, therefore, instructive to examine the circumstances under which a **certificate authorising the receipt of foreign contributions** can be cancelled by the **government**.
अतः यह समझना आवश्यक है कि किन परिस्थितियों में सरकार द्वारा विदेशी अंशदान प्राप्त करने के लिए अधिकृत प्रमाणपत्र निरस्त किया जा सकता है।
- **Clause (1)(c) of Section 14 of the Foreign Contribution (Regulation) Act, 2010, provides that a certificate may be cancelled if, in the opinion of the Central Government, it is necessary, in the public interest, to do so.**
विदेशी अंशदान (विनियमन) अधिनियम, 2010 की धारा 14 के उपबंध (1)(c) के अनुसार, यदि केंद्र सरकार की राय में लोकहित में ऐसा करना आवश्यक हो, तो प्रमाणपत्र निरस्त किया जा सकता है।
- The consequence of such cancellation is that the organisation loses its authority to receive **foreign contributions**, its **assets** created out of such contributions may be taken over, and its activities may effectively come to a halt.
ऐसे निरस्तीकरण के परिणामस्वरूप संगठन विदेशी अंशदान प्राप्त करने का अधिकार खो देता है, उससे निर्मित संपत्तियाँ अधिग्रहित की जा सकती हैं और उसकी गतिविधियाँ प्रभावी रूप से ठप हो सकती हैं।
- This provision confers **unfettered powers** on the **government** to cancel a **certificate** at any time.
यह प्रावधान सरकार को किसी भी समय प्रमाणपत्र निरस्त करने की असीमित शक्तियाँ प्रदान करता है।

- The term “**public interest**” is vague.
“लोकहित” शब्द अस्पष्ट है।
- As the **government** is the custodian of **public interest**, it can readily justify its actions on that ground.
चूँकि सरकार स्वयं को लोकहित की संरक्षक मानती है, इसलिए वह इसी आधार पर अपने निर्णयों का सहजता से औचित्य सिद्ध कर सकती है।
- Cancellation of the **certificate** would result in the **vesting** of the **foreign contribution** and the **assets** created out of it in the **designated authority**.
प्रमाणपत्र के निरस्तीकरण के परिणामस्वरूप विदेशी अंशदान तथा उससे निर्मित संपत्तियाँ नामित प्राधिकरण में निहित हो जाएँगी।
- Depending on the nature of the organisation, such **assets** could even include **places of worship**.
संगठन की प्रकृति के अनुसार ऐसी संपत्तियों में पूजा-स्थल भी सम्मिलित हो सकते हैं।
- Cancellation of a **certificate** may also result if an individual or organisation is **prosecuted** in connection with a case alleging **religious conversion** through **force** or **inducement**.
यदि किसी व्यक्ति या संगठन के विरुद्ध बल अथवा प्रलोभन द्वारा धर्मांतरण कराने के आरोप में अभियोजन चलाया जाता है, तो प्रमाणपत्र भी निरस्त किया जा सकता है।
- Experience suggests that it is very easy for a person determined to have the **certificate** of a **religious organisation** cancelled to file a **complaint** in a **police station** or in a **court** alleging **forcible religious conversion**.
अनुभव से यह स्पष्ट होता है कि यदि कोई व्यक्ति किसी धार्मिक संगठन का प्रमाणपत्र निरस्त कराना चाहता है, तो उसके लिए थाने या न्यायालय में बलपूर्वक धर्मांतरण का आरोप लगाते हुए शिकायत दर्ज कराना अत्यंत सरल है।
- Consequently, this provision has immense potential for **misuse**, particularly against **minority religious groups**.
फलस्वरूप, इस प्रावधान के दुरुपयोग की अत्यधिक संभावना है, विशेषकर अल्पसंख्यक धार्मिक समूहों के विरुद्ध।
- A rather unusual provision in this **Bill** is that if a person **surrenders a certificate of registration**, the **entire foreign contribution** remaining with the person, along with all the **assets** created out of such contribution, will vest in the **designated authority**.
इस विधेयक का एक असामान्य प्रावधान यह है कि यदि कोई व्यक्ति पंजीकरण प्रमाणपत्र समर्पित कर देता है, तो उसके पास शेष संपूर्ण विदेशी अंशदान तथा उससे निर्मित सभी संपत्तियाँ नामित प्राधिकरण में निहित हो जाएँगी।
- It is difficult to understand the **rationale** behind this provision.
इस प्रावधान के पीछे का औचित्य समझना कठिन है।
- A person or organisation that has availed of **foreign contributions** and created **assets** from them may, after some time, decide that it no longer requires any further foreign contributions and may therefore **surrender** its **certificate**.
कोई व्यक्ति अथवा संगठन, जिसने विदेशी अंशदान प्राप्त कर उससे संपत्तियाँ निर्मित की हों, कुछ समय पश्चात् यह निर्णय ले सकता है कि उसे अब आगे विदेशी अंशदान की आवश्यकता नहीं है और इसलिए वह अपना प्रमाणपत्र समर्पित कर सकता है।
- However, under **Clause 16A(1)(b) of the Bill**, all the **assets** created out of the **foreign contribution**, together with any **unutilised** portion of such contribution, shall vest in the **authority**.
किन्तु विधेयक के उपबंध 16A(1)(b) के अनुसार, विदेशी अंशदान से निर्मित सभी संपत्तियाँ, तथा उस अंशदान का कोई भी अप्रयुक्त भाग, प्राधिकरण में निहित हो जाएगा।

Exemption clause छूट संबंधी प्रावधान



- Finally, **Clause 16L exempts any organisation**, class of organisations, or person from the operation of this **Bill** if the **government** considers such an exemption to be in the **public interest**.
अंततः, **उपबंध 16L** किसी भी संगठन, संगठनों के वर्ग अथवा व्यक्ति को इस **विधेयक** के प्रावधानों से छूट प्रदान करता है, यदि **सरकार** ऐसा करना **लोकहित** में उचित समझे।
- Although the purpose of this clause appears to be obvious, the concern is that it may be vulnerable to challenge under **Article 14 of the Constitution**, which guarantees **equality before the law**.
यद्यपि इस उपबंध का उद्देश्य स्पष्ट प्रतीत होता है, तथापि यह आशंका है कि इसे **संविधान के अनुच्छेद 14**, जो **कानून के समक्ष समानता** की गारंटी देता है, के आधार पर चुनौती दी जा सकती है।
- The clause neither identifies any **intelligible differentia** that distinguishes the favoured class of organisations or persons from those to whom the law applies in its entirety, nor establishes a **rational nexus** between such differential treatment and the object sought to be achieved by the legislation.
यह उपबंध न तो किसी **युक्तिसंगत विभेद (Intelligible Differentia)** की पहचान करता है, जो विशेष लाभ प्राप्त संगठनों अथवा व्यक्तियों को अन्य से अलग करता हो, और न ही ऐसे भिन्न व्यवहार तथा विधि के उद्देश्य के बीच कोई **तार्किक संबंध (Rational Nexus)** स्थापित करता है।
- The exemption of individuals or organisations is left entirely to the **government's opinion that such action is expedient in the public interest**.
व्यक्तियों अथवा संगठनों को छूट प्रदान करना पूर्णतः **सरकार की राय** पर निर्भर है कि ऐसा करना **लोकहित** में आवश्यक है।
- It is clear from the overall scheme of these amendments that the **State** seeks to eliminate organisations active in the **educational, cultural, environmental, and charitable sectors on account of certain deep-seated prejudices**.
इन संशोधनों की समग्र रूपरेखा से यह स्पष्ट होता है कि **राज्य** कुछ गहरी जड़ें जमा चुकी पूर्वाग्रहपूर्ण धारणाओं के कारण **शैक्षिक, सांस्कृतिक, पर्यावरणीय तथा परोपकारी क्षेत्रों** में सक्रिय संगठनों को समाप्त करने का प्रयास कर रहा है।

GS Paper II: International Relations	30 July 2026
TOPICS COVERED	
30J7 QUIZ	

Questions and Answers to the previous day's daily quiz:

- This U.S. President signed legislation to create NASA after the Soviet Union launched Sputnik 1. Name the President and the year when the legislation was created. **Ans: Dwight D. Eisenhower and 1958**
- This Swedish Economist, who was born on this day, received the Nobel Peace Prize in 1961. He also served as the Secretary-General of the UN. Identify the economist. **Ans: Dag Hammarskjöld**
- At an international summit held in 2010, it was decided that July 29 would be marked as International Tiger Day. Did India take part in the summit, and name the host country. **Ans: Yes and Russia**
- The first part of this three-part fantasy novel series was published

30J7. QUIZ

1. Creation of NASA

- Following the Soviet Union's launch of **Sputnik 1 on 4 October 1957**, the United States accelerated its civilian space programme.
- President **Dwight D. Eisenhower** signed the **National Aeronautics and Space Act on 29 July 1958**.
- The Act, designated **Public Law 85-568**, formally created the **National Aeronautics and Space Administration (NASA)**.

2. Dag Hammarskjöld

- Dag Hjalmar Agne Carl Hammarskjöld** was born on **29 July 1905** in Jönköping, **Sweden**.
- Trained in economics and law, he became a **distinguished Swedish economist, civil servant and diplomat**.
- He served as the **second Secretary-General of the United Nations from 10 April 1953 to 18 September 1961**.
- The **1961 Nobel Peace Prize** was awarded to him posthumously

for strengthening the United Nations as an effective organisation for international peace and cooperation.

GS Paper III: Economy		30 July 2026
TOPICS COVERED		
30J7	India's refusal to uphold a global gig work law वैश्विक गिग कार्य कानून का समर्थन करने से भारत का इनकार	
30J7	Private R&D spends cross govt.'s in FY24 वित्त वर्ष 2023-24 में निजी अनुसंधान एवं विकास (R&D) व्यय ने सरकारी व्यय को पीछे छोड़ा	
30J7	Does the RBI believe rupee is 'undervalued'? क्या RBI का मानना है कि रुपया 'अवमूल्यित (Undervalued)' है?	

Private R&D spends cross govt.'s in FY24

A level last seen in 2009-10, official data reveal a structural shift: private industry accounted for 45.5% of national R&D spending in 2021-22, rising further to 51.8% in 2023-24, the first time businesses have contributed more to India's research effort than all levels of government combined

GS III: Economy
Jacob P Koshy
NEW DELHI

India's spending on research and development (R&D) surged to 0.83% of GDP in 2021-22, the first time that the country crossed the 0.8% threshold – a level last seen in 2009-10, according to newly disclosed government data.

The figures also reveal a structural shift in India's innovation landscape: private industry accounted for 45.5% of national R&D spending in 2021-22, rising further to 51.8% in 2023-24, the first time businesses have contributed more to India's research effort than all levels of government combined.

The figures were disclosed by the Department of Science and Technology (DST) in response to a Lok Sabha question on Wednesday. They form part of the latest Research & Development Statistics 2025-26,

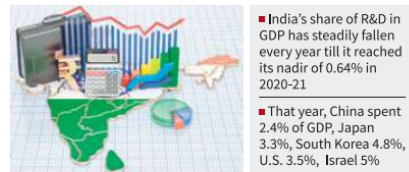
although the full statistical report itself has not yet been publicly released.

The numbers are significant because India, despite possessing one of the world's largest scientific workforces and ranking among the top countries in scientific publications, has long spent a much smaller share of its economy on research than major scientific powers. The share of R&D in GDP – long considered a bellwether of progress – has, in the case of India, steadily fallen every year till it reached its nadir of 0.64% in 2020-21.

That year China spent 2.4% of GDP, Japan 3.3%, South Korea 4.8%, United States 3.5% and around 5% in Israel. Successive governments have also repeatedly argued that India's innovation ecosystem is constrained because industry contributes a much smaller share of national R&D spending than in advanced economies, where

Science wins

The numbers are significant because India has long spent a much smaller share of its economy on research than major scientific powers



business routinely accounts for over 70% of research expenditure.

DST compiles India's official R&D statistics through its National Science and Technology Management Information System (NSTMIS), which has conducted national science surveys since 1973 using UNESCO and OECD definitions. The surveys gather expenditure data from central and state government agencies, universities, public sector enterprises and private

industry. The 2022-23 edition explicitly stated that its coverage had been expanded to include multinational companies and enterprises outside the Department of Scientific and Industrial Research's recognition scheme. There were 2,397 DSIR-recognised in-house R&D centres as of December 2022. Until Wednesday's parliamentary reply, the latest publicly available DST publication was the 2022-23 edition, released in 2023, which contained

data only up to 2020-21. The parliamentary reply is therefore the first official disclosure of India's R&D expenditure for 2021-22, 2022-23 and 2023-24, even though the corresponding statistical reports have yet to be published.

The fresh data point to an abrupt discontinuity. Gross Expenditure on Research and Development (GERD) fell from ₹1.33 lakh crore in 2019-20 to ₹1.27 lakh crore in 2020-21 (a COVID-year slump), before jumping 53% to ₹1.95 lakh crore in 2021-22. It subsequently rose to ₹2.13 lakh crore in 2022-23 and ₹2.45 lakh crore in 2023-24.

However, budget documents from the period do not suggest a commensurate surge in government science spending. Union allocations to the Department of Science and Technology, Department of Biotechnology, Department of Atomic Energy, ISRO and other major science agen-

cies rose only incrementally across these years, making it unlikely that the increase was driven solely by public expenditure.

The sharp rise in GERD coincided with a dramatic increase in the private sector industry's contribution to India's research spending. Private industry accounted for 38.5% of GERD in 2017-18, 37.7% in 2018-19, 33.8% in 2019-20 and 36.4% in 2020-21, before jumping to 45.5% in 2021-22, 48.0% in 2022-23 and 51.8% in 2023-24 – the first time private industry has contributed more than half of India's total R&D expenditure. In absolute terms, Industry R&D spending increased from about ₹43,800 crore in 2017-18 and ₹46,700 crore in 2018-19 to ₹44,800 crore in 2019-20 and ₹46,400 crore in 2020-21, before almost doubling to ₹88,600 crore in 2021-22 and rising further to ₹126,800 crore in 2023-24.

30J7. Private R&D spends cross govt.'s in FY24

वित्त वर्ष 2023-24 में निजी अनुसंधान एवं विकास (R&D) व्यय ने सरकारी व्यय को पीछे छोड़ा

- The figures also reveal a structural shift in India's innovation landscape: private industry accounted for 45.5% of national R&D spending in 2021-22, rising further to 51.8% in 2023-24, the first time businesses have contributed more to India's research effort than all levels of government combined.

ये आँकड़े भारत के नवाचार परिदृश्य (Innovation Landscape) में एक संरचनात्मक परिवर्तन

(Structural Shift) भी दर्शाते हैं। 2021-22 में राष्ट्रीय R&D व्यय का 45.5% हिस्सा निजी उद्योग द्वारा

वहन किया गया, जो 2023-24 में बढ़कर 51.8% हो गया। यह पहली बार है जब व्यवसायों का योगदान सरकार के सभी स्तरों के संयुक्त योगदान से अधिक रहा है।



- The figures were disclosed by the **Department of Science and Technology (DST)** in response to a **Lok Sabha** question on **Wednesday**.
ये आँकड़े विज्ञान एवं प्रौद्योगिकी विभाग (Department of Science and Technology - DST) ने बुधवार को लोकसभा में पूछे गए एक प्रश्न के उत्तर में प्रस्तुत किए।
- That year **China spent 2.4% of GDP, Japan 3.3%, South Korea 4.8%, United States 3.5%, and around 5% in Israel.**
उसी वर्ष चीन ने अपने GDP का 2.4%, जापान ने 3.3%, दक्षिण कोरिया ने 4.8%, संयुक्त राज्य अमेरिका ने 3.5%, तथा इज़राइल ने लगभग 5% R&D पर व्यय किया।
- The **2022-23 edition** explicitly stated that its coverage had been expanded to include **multinational companies** and **enterprises** outside the **Department of Scientific and Industrial Research (DSIR)** recognition scheme.
2022-23 संस्करण में स्पष्ट रूप से कहा गया था कि इसके दायरे का विस्तार करके **बहुराष्ट्रीय कंपनियों (Multinational Companies)** तथा **वैज्ञानिक एवं औद्योगिक अनुसंधान विभाग (Department of Scientific and Industrial Research - DSIR)** की मान्यता योजना से बाहर के **उद्यमों (Enterprises)** को भी शामिल किया गया है।

Does the RBI believe rupee is 'undervalued'?

GS III: Economy

EXPLAINER

Lalendu Mishra
MUMBAI

The story so far: The Reserve Bank of India (RBI) Governor Sanjay Malhotra, in a recent interview with *The Hindu Business Line*, reiterated the Indian rupee is "undervalued". This has drawn attention because central bankers rarely comment on whether a currency is priced fairly.

Answering a query from one of the journalists who interviewed him, Mr. Malhotra reportedly said, "I would like to reiterate it would be reasonable to think that the rupee is not overvalued. If anything, one could argue the rupee has become undervalued both in nominal and in REER (real effective exchange rate) terms."

REER is an economic metric that measures a country's currency value against a basket of trading partner currencies, adjusted for inflation.

He added the Reserve Bank does not target any specific exchange rate or band for the rupee.

Answering a direct question from a journalist post-Monetary Policy press conference, Mr. Malhotra, though, initially disagreeing that he had made any such statement during an interview, said, "It is reasonable to think that it [Rupee] may not be overvalued."

"Some people do say that it is undervalued in terms of REER if they look at. By some accounts, it is undervalued," he stated.

The remark came at a time when the rupee had weakened against the U.S. dollar amid global uncertainties, including elevated crude oil prices, geopolitical tensions and capital



Currency to view: Malhotra's (right) seems to believe rupee value does not reflect economy's strength.



outflows from emerging markets.

The Governor's assessment is believed to suggest that the recent depreciation does not accurately reflect the underlying strength of the Indian economy. It also offers an insight into how the RBI assesses exchange rate movements beyond the day-to-day fluctuations in the currency market.

Governor's say

Mr. Malhotra said the rupee is "undervalued" in both nominal terms and based on the real effective exchange rate. At the same time, he reiterated the RBI does not target a particular level for the exchange rate.

The RBI's interventions in the foreign exchange market are aimed at containing excessive volatility and ensuring orderly market conditions rather than defending a fixed value for the rupee, he had stated.

The financial markets have interpreted the remarks as an indication that the central bank believes the rupee has weakened beyond what economic fundamentals would justify.

Currency undervalued
A currency is described as being undervalued when

its market exchange rate is lower than what is considered consistent with a country's economic fundamentals.

Exchange rates are influenced by a range of factors, including economic growth, inflation, productivity, trade performance, capital flows and investor sentiment.

Temporary global shocks can also affect currency movements. If such factors cause a currency to weaken beyond its estimated equilibrium value, economists may regard it as undervalued.

In practical terms, the central bank's assessment is believed to imply that the rupee's current exchange rate does not fully reflect the resilience of India's macroeconomic fundamentals.

RBI's belief

The central bank's assessment is believed to be based on the divergence between domestic economic conditions and external developments.

India continues to remain one of the fastest-growing major economies with over 6% growth year after year.

Inflation has moderated from recent highs, foreign exchange reserves remain

substantial to meet 11 months of imports and the country's external position has remained relatively stable despite global headwinds.

However, the rupee has faced intense pressure because of factors such as higher crude oil prices, geopolitical uncertainties, a stronger U.S. dollar and intermittent outflows of foreign portfolio investment from emerging markets.

Foreign portfolio investors have drained out billions from the Indian stock market.

These developments have increased demand for dollars while reducing capital inflows into the country.

These short-term external pressures appear to have weakened the rupee beyond what India's underlying economic conditions would warrant. To be precise, the rupee has depreciated 5.8% year-to-date (YTD).

REER's importance

The Governor referred not only to the nominal exchange rate but also to the REER.

The nominal exchange rate measures the value of the rupee against another currency, such as the U.S. dollar, Euro, British Pound

and others.

The REER, however, compares the rupee with the currencies of India's major trading partners after adjusting for inflation differences. It therefore provides a broader measure of the currency's competitiveness and purchasing power.

Economists often rely on the REER to assess whether a currency is overvalued or undervalued because it captures changes in relative prices as well as movements against multiple currencies rather than only the U.S. dollar.

The RBI's reference to the REER indicates that its assessment is based on a broader evaluation of the rupee's external value.

Market determined

The RBI has consistently maintained that it does not seek either a permanently strong or a permanently weak currency. Its exchange rate policy is market-determined, with intervention limited to curbing excessive volatility.

A stronger rupee lowers the cost of imports thereby helping moderate inflationary pressures. But a weaker rupee tends to improve the competitiveness of exports by increasing exporters' earnings in domestic currency.

Given these effects, the central bank prefers to avoid abrupt or disorderly movements in either direction rather than pursue a specific exchange rate objective.

Anchor expectations

It should be viewed primarily as an assessment of India's economic fundamentals rather than as a signal of an imminent policy shift.

By describing the rupee as undervalued, the banking regulator is believed to

be implying that the recent depreciation has been driven largely by external developments rather than by any deterioration in domestic macroeconomic conditions.

The remark may also help anchor market expectations by indicating that the central bank is attentive to exchange rate movements that are inconsistent with the underlying fundamentals, according to some analysts.

Future trajectory

The future trajectory of the Indian rupee will continue to depend on several factors, including international crude oil prices, the U.S. monetary policy, global capital flows and geopolitical developments, they stated.

However, the Reserve Bank's assessment underscores its view that the Indian economy remains resilient and that recent weakness in the currency should be seen in the context of global rather than domestic factors.

Conclusion

The recent remarks highlight an important distinction between market movements of the Indian currency and the macroeconomic fundamentals of the country.

While exchange rates are influenced by global financial conditions and investor sentiment in the short term, they are also expected to reflect the strength of an economy over the medium term.

The central bank's assessment that the rupee is not overvalued but undervalued suggests that the recent depreciation against the Greenback is believed to have exceeded what India's macroeconomic fundamentals would ordinarily justify.

30J7. Does the RBI believe rupee is 'undervalued'?

क्या RBI का मानना है कि रुपया 'अवमूल्यित (Undervalued)' है?

- **The story so far:** The Reserve Bank of India (RBI) Governor Sanjay Malhotra, in a recent interview with The Hindu Business Line, reiterated the Indian rupee is "undervalued".
अब तक की स्थिति: भारतीय रिज़र्व बैंक (Reserve Bank of India - RBI) के गवर्नर संजय मल्होत्रा ने The Hindu Business Line को दिए एक हालिया साक्षात्कार में दोहराया कि भारतीय रुपया (Indian Rupee) "अवमूल्यित (Undervalued)" है।
- This has drawn attention because central bankers rarely comment on whether a currency is priced fairly.
इस टिप्पणी ने विशेष ध्यान आकर्षित किया क्योंकि केंद्रीय बैंक के गवर्नर (Central Bankers) सामान्यतः यह टिप्पणी नहीं करते कि किसी मुद्रा (Currency) का मूल्य उचित है या नहीं।
- Answering a query from one of the journalists who interviewed him, Mr. Malhotra reportedly said, "I would like to reiterate it would be reasonable to think that the rupee is not overvalued. If anything, one could argue the rupee has become undervalued both in nominal and in REER (Real Effective Exchange Rate) terms."
साक्षात्कार के दौरान एक पत्रकार के प्रश्न का उत्तर देते हुए श्री मल्होत्रा ने कहा, "मैं पुनः यह कहना चाहूंगा कि यह मानना उचित होगा कि रुपया अधिक मूल्यांकित (Overvalued) नहीं है। बल्कि यह तर्क दिया जा सकता है कि रुपया नाममात्र (Nominal) तथा वास्तविक प्रभावी विनिमय दर (Real Effective Exchange Rate - REER)—दोनों दृष्टियों से अवमूल्यित (Undervalued) हो गया है।"

REER's importance

आरईईआर (REER) का महत्व

- The Governor referred not only to the nominal exchange rate but also to the Real Effective Exchange Rate (REER).
गवर्नर ने केवल नाममात्र विनिमय दर (Nominal Exchange Rate) का ही नहीं, बल्कि वास्तविक प्रभावी विनिमय दर (Real Effective Exchange Rate - REER) का भी उल्लेख किया।
- Given these effects, the central bank prefers to avoid abrupt or disorderly movements in either direction rather than pursue a specific exchange rate objective.
इन प्रभावों को देखते हुए केंद्रीय बैंक किसी विशेष विनिमय दर लक्ष्य का अनुसरण करने के बजाय किसी भी दिशा में होने वाले अचानक या अव्यवस्थित उतार-चढ़ाव से बचना पसंद करता है।

Anchor expectations

अपेक्षाओं को स्थिर करना

- It should be viewed primarily as an assessment of India's economic fundamentals rather than as a signal of an imminent policy shift.
इसे किसी आसन्न नीतिगत परिवर्तन के संकेत के बजाय मुख्यतः भारत की आर्थिक बुनियादी स्थिति के आकलन के रूप में देखा जाना चाहिए।
- By describing the rupee as undervalued, the banking regulator is believed to be implying that the recent depreciation has been driven largely by external developments rather than by any deterioration in domestic macroeconomic conditions.
रुपये को कम मूल्यांकित (Undervalued) बताते हुए बैंकिंग नियामक का आशय यह माना जाता है कि हाल का अवमूल्यन मुख्यतः बाहरी घटनाक्रमों के कारण हुआ है, न कि घरेलू व्यापक आर्थिक परिस्थितियों में किसी गिरावट के कारण।
- The remark may also help anchor market expectations by indicating that the central bank is attentive to exchange rate movements that are inconsistent with the underlying fundamentals, according to some analysts.

कुछ विश्लेषकों के अनुसार, यह टिप्पणी बाज़ार की अपेक्षाओं को स्थिर करने में भी सहायक हो सकती है, क्योंकि इससे संकेत मिलता है कि केंद्रीय बैंक उन विनिमय दर परिवर्तनों पर नज़र रखता है जो मूलभूत आर्थिक आधारों के अनुरूप नहीं होते।

Future trajectory भविष्य की दिशा

- The future trajectory of the **Indian rupee** will continue to depend on several factors, including **international crude oil prices, U.S. monetary policy, global capital flows, and geopolitical developments**, they stated.
उन्होंने कहा कि भारतीय रुपये की भविष्य की दिशा कई कारकों पर निर्भर करेगी, जिनमें अंतरराष्ट्रीय कच्चे तेल की कीमतें, अमेरिकी मौद्रिक नीति, वैश्विक पूँजी प्रवाह तथा भूराजनीतिक घटनाक्रम शामिल हैं।
- However, the **Reserve Bank's** assessment underscores its view that the **Indian economy** remains **resilient** and that recent weakness in the currency should be seen in the context of **global** rather than **domestic** factors.
हालाँकि, भारतीय रिज़र्व बैंक का आकलन इस बात पर बल देता है कि भारतीय अर्थव्यवस्था अभी भी लचीली (**Resilient**) बनी हुई है और मुद्रा की हालिया कमजोरी को घरेलू कारकों के बजाय वैश्विक परिस्थितियों के संदर्भ में देखा जाना चाहिए।

Conclusion निष्कर्ष

- The recent remarks highlight an important distinction between **market movements** of the **Indian currency** and the country's **macroeconomic fundamentals**.
हाल की टिप्पणियाँ भारतीय मुद्रा के बाज़ार-आधारित उतार-चढ़ाव और देश की व्यापक आर्थिक बुनियादी स्थिति के बीच एक महत्वपूर्ण अंतर को रेखांकित करती हैं।
- While **exchange rates** are influenced by **global financial conditions** and **investor sentiment** in the short term, they are also expected to reflect the strength of an economy over the **medium term**.
यद्यपि अल्पकाल में विनिमय दरें वैश्विक वित्तीय परिस्थितियों और निवेशकों की धारणा से प्रभावित होती हैं, फिर भी मध्यम अवधि में उनसे किसी अर्थव्यवस्था की वास्तविक मजबूती को प्रतिबिंबित करने की अपेक्षा की जाती है।
- The **central bank's** assessment that the **rupee** is not **overvalued** but **undervalued** suggests that the recent depreciation against the **Greenback** is believed to have exceeded what **India's macroeconomic fundamentals** would ordinarily justify.
केंद्रीय बैंक का यह आकलन कि रुपया अधिक मूल्यांकित (**Overvalued**) नहीं बल्कि कम मूल्यांकित (**Undervalued**) है, यह संकेत देता है कि अमेरिकी डॉलर (**Greenback**) के मुकाबले हाल का अवमूल्यन भारत की व्यापक आर्थिक बुनियादी स्थिति के अनुसार सामान्यतः जितना उचित होता, उससे अधिक माना जा रहा है।

Effective Exchange Rate

- An **Effective Exchange Rate (EER)** measures the value of a country's currency **against a basket of currencies** of its major trading partners instead of comparing it with only one foreign currency.
- Each currency in the basket is assigned a **weight** according to the country's trade with that nation. Countries with which India trades more receive higher weights.

- Therefore, an effective exchange rate provides a more realistic measure of the overall value of the domestic currency.

Illustrative Example

Suppose India trades only with three countries.

Trading Partner	Share in India's Trade	Weight in Basket
United States	50%	50
China	30%	30
Japan	20%	20

- If the Rupee appreciates against the US Dollar but depreciates against the Chinese Yuan, the Effective Exchange Rate combines both movements according to their respective trade weights and presents one composite measure.
- Thus, instead of monitoring several bilateral exchange rates individually, policymakers analyse one summary index.

Nominal Effective Exchange Rate (NEER)

- **Nominal Effective Exchange Rate (NEER)** is the **trade-weighted average** of a country's bilateral nominal exchange rates against the currencies of its major trading partners.
- It measures the overall value of a country's currency **without adjusting for inflation**.
- Thus, NEER reflects only changes in the exchange rates.

According to the **Reserve Bank of India (RBI)**,

NEER is a weighted average of bilateral nominal exchange rates of the home currency against the currencies of major trading partners.

Simple Example

Suppose the Indian Rupee experiences the following changes:

- Appreciates by **5%** against the US Dollar.
- Depreciates by **2%** against the Euro.
- Remains unchanged against the Japanese Yen.

Instead of examining these three exchange rates separately, the NEER combines them according to their trade weights and provides one single index.

What Does NEER Indicate?

NEER indicates:

- Overall appreciation or depreciation of the domestic currency.
- External value of the currency.
- Broad trend of exchange rate movements.

However,

NEER does not consider inflation differences between countries.

Real Effective Exchange Rate (REER)

• **Real Effective Exchange Rate (REER)** is the **Nominal Effective Exchange Rate** adjusted for inflation differences between the home country and its trading partners.

- REER reflects both:
- Exchange rate movements.
- Relative inflation.

According to the **Reserve Bank of India (RBI)**,

REER is a weighted average of NEER adjusted for inflation differential between India and its trading partners.

Why is Inflation Adjustment Necessary?

Suppose:

- Exchange rate remains unchanged.
- India's inflation is **8%**.
- Japan's inflation is **2%**.

Although the exchange rate has not changed,

Indian goods become relatively more expensive than Japanese goods.

As a result:

- Indian exports become less competitive.
- Imports become relatively cheaper.

NEER cannot capture this change.

REER can.

Hence, REER is regarded as a much better indicator of **international competitiveness**.

Illustrative Example

Suppose:

Year 1

₹90 = US\$1

Year 2

₹90 = US\$1

The exchange rate has remained unchanged.

Therefore,

NEER remains almost unchanged.

Now assume:

- India's inflation = 8%
- USA's inflation = 2%

Indian goods become approximately **6% more expensive** relative to American goods.

Consequently:

- Indian exports lose competitiveness.
- Imports become more attractive.

This deterioration is reflected in **REER**, but **not in NEER**.

Difference between NEER and REER

Basis	NEER	REER
Full Form	Nominal Effective Exchange Rate	Real Effective Exchange Rate
Inflation Adjustment	No	Yes
Measures	Exchange rate movements	Exchange rate movements plus inflation
Indicates	Overall external value of currency	International competitiveness
Useful for Export Competitiveness	Limited	Highly useful
Published by RBI	Yes	Yes

Interpretation of NEER and REER

Increase in NEER

Generally indicates: Appreciation of the domestic currency in nominal terms.

Decrease in NEER

Generally indicates: Depreciation of the domestic currency.

Increase in REER

Usually indicates: Domestic goods have become relatively more expensive.

- Export competitiveness declines.
- Imports become relatively attractive.

Decrease in REER

Usually indicates:

- Domestic goods become relatively cheaper.
- Export competitiveness improves.
- Imports become relatively less attractive.

Important Note

The RBI publishes both NEER and REER as **index numbers**.

For the RBI indices:

- **Increase in the index indicates appreciation of the Rupee.**
- **Decrease in the index indicates depreciation of the Rupee.**

How Does the RBI Calculate NEER and REER?

The Reserve Bank of India periodically publishes:

- **40-Currency Trade-Based NEER and REER**
- **6-Currency Trade-Based NEER and REER**

Important Features



- **Base Year:** 2015–16 = 100
- **Inflation Measure:** Consumer Price Index (Combined)
- The basket and trade weights are revised periodically to reflect changes in India's trade pattern.

Importance of NEER and REER

NEER and REER help in:

- Assessing the international competitiveness of Indian exports.
- Monitoring appreciation or depreciation of the Indian Rupee.
- Analysing external sector performance.
- Assisting the RBI in exchange-rate analysis.
- Helping economists compare currency movements over time.
- Formulating trade, monetary and exchange-rate policies.

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TOPICS COVERED		
30J7	'Virtual magnet' claims reveal why EVs need their rare-earths 'वर्चुअल मैग्नेट' संबंधी दावे बताते हैं कि इलेक्ट्रिक वाहनों (EVs) को दुर्लभ मृदा तत्वों (Rare Earths) की आवश्यकता क्यों होती है	
30J7	Behind China's AI gift, a constraint चीन के एआई उपहार के पीछे छिपी एक बाध्यता	
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Staff from Nigeria's National Drug Law Enforcement Agency dismantle an abandoned methamphetamine laboratory in Ogun State on Wednesday. The remnants of a multimillion-dollar transnational operation were left behind in an abandoned shed. AFP

Staff from Nigeria's National Drug Law Enforcement Agency dismantle an abandoned **methamphetamine** laboratory in Ogun State on Wednesday. The remnants of a multimillion-dollar transnational operation were left behind in an abandoned shed.

Methamphetamine

- **Methamphetamine** (commonly known as **meth**, **crystal meth**, **ice**, or **glass**) is a **highly addictive synthetic stimulant** that acts on the **Central Nervous System (CNS)**.

- It belongs to the **amphetamine class** of drugs and **produces powerful stimulant effects** by markedly increasing the release of **dopamine, norepinephrine, and serotonin** in the brain.
- It is a **psychotropic substance** controlled under international and national drug laws because of its high potential for abuse and dependence.

‘Virtual magnet’ claims reveal why EVs need their rare-earths

A large amount of effort has gone towards replacing permanent magnets in the rotor with either electromagnets or just a piece of iron; however, efficiency, starting torque capability, and the maximum speed achievable are some important constraints that have kept such motors out of EVs

GS III: S&T

G. Bhuvaneshwari

There have been a number of news reports recently about a startup in Bengaluru called Vimag Labs that has replaced rare-earth magnets in motors with so-called “virtual” magnets.

One such report quoted Manish Seth, the start-up’s CEO, as saying: “We remove permanent magnets, replace them with copper coils, and then through software, we generate magnetic fields inside the motor.”

To understand this claim, it helps to first see how electric motors produce magnetic fields and why they use permanent magnets in the first place.

Rotor and stator

A motor needs a magnetic field to operate. One way to create it is using a permanent magnet. Another is to pass current through copper coils that have been wound around a ferromagnet, temporarily turning it into a magnet. This is called an electromagnet – and it is this approach that the startup has used, instead of permanent magnets.

When an electrical machine converts electricity into mechanical motion, it is called a motor. On the other hand, a machine that converts mechanical movement into electricity is called a generator. In both cases, the conversion happens via a magnetic field.

In a motor, for example, mechanical energy is harvested when the electric energy is used to rotate a component called the rotor. In a generator, electricity is harvested through conductors embedded in a stationary component called the stator.

You can imagine both the stator and the rotor to be two concentric cylinders. Most of the time, the rotor is the inner cylinder. And the magnetic field is established in the gap between the stator and the rotor for the energy conversion process to happen.

An old technology

This is how the large generators in hydroelectric, thermal, and nuclear power plants work. And for a long time now, they have used electromagnets instead of permanent magnets.

In these generators, a turbine spins the rotor. In a thermal or nuclear power station, the turbine is driven by steam. In a hydroelectric power station, it is driven by falling water. The rotor rotates at a fixed speed to generate an alternating current (AC) of frequency 50 Hz. The rotor has copper coils wound around its ferromagnetic core. When these coils are supplied with a direct current (DC), they create a magnetic field, and the core acquires a magnetic north and a magnetic south pole. And as the rotor spins, this magnetic field sweeps past the stator windings, inducing an alternating voltage in them. This helps convert mechanical power into electricity. This technology has been around for 135 years.

The next question is how electricity can be fed continuously into coils that are themselves rotating. Enter: the brushless excitation system. The rotor coils need DC – but supplying it through sliding electrical contacts is difficult because the rotor is constantly spinning. The solution is to mount a rectifier, a device that



In any EV, the battery pack is the costliest and heaviest component, which is why the focus is on optimising the battery’s rating. In turn, permanent magnet synchronous motors dominate the EV market because their efficiency is the highest at present. J. ALLEN EGENUSE

converts AC into DC, on the rotor itself. To this rotating rectifier, an AC is supplied from another generator. And this other generator is coupled to the same shaft of the turbine imparting mechanical power to the main generator.

Software and magnetism

This is essentially the principle behind the start-up’s “virtual” magnet: software regulates the current flowing through the electromagnets, thus controlling the strength and direction of the magnetic field. The rectified current can be fed in a controlled manner to the copper coils in the rotor that would make the magnetic strength and direction controllable.

In other words, the software is not creating magnetism by itself. It is just controlling how much current flows through the electromagnets, and thus how strong the magnetic field becomes. There is no novelty in this design.

A permanent magnet establishes the magnetic field in the air gap of an electrical machine in a one-step process. And because the magnet already exists, no electrical energy is needed simply to create the magnetic field. On the other hand, with electromagnets, the magnetic field first has to be established, and the electric current modulated as per the requirement using software.

And every additional step here consumes some energy. There are

magnetic losses in the ferromagnetic core, called core losses. The copper conductor has resistance losses. The electronic switches have switching and conduction losses. As a result, it is unlikely for a motor with an electromagnet to be more efficient than a motor with a permanent magnet.

Electromagnets in EVs

BMW and Renault have been trying to build such an electrically excited motor. The three-phase induction motor that Nikola Tesla invented in 1888 – a light yet rugged machine – was used by the first version of the Model S from Tesla in 2012. However, its efficiency was not good enough.

Every 0.1% increase in efficiency of the propulsion motor drive matters in an electric vehicle (EV). This is because any increase in the drive’s efficiency will improve the range drastically for a given battery rating. Put another way, for a given mileage, the battery size can be reduced when the efficiency of the motor drive improves. Thus, increasing the motor drive’s efficiency will bring down the weight and cost of the car perceptibly.

In any EV, the battery pack is the costliest and heaviest component, which is why the focus is on optimising the battery’s rating. In turn, permanent magnet synchronous motors dominate the EV market because their efficiency is

the highest at present.

Electromagnets are not the only alternative to permanent magnets. Another approach is the switched reluctance motor (SRM), whose rotor contains neither permanent magnets nor copper coils. Instead, SRMs have lower rotor inertia than even induction motors. In exchange, their torque comes in spurts, which makes the motor noisy and less efficient.

Recently, Honda joined hands with a start-up from Canada called Eneyard to improve the performance of an SRM to be used in an EV. Hitachi Astemo is similarly trying to use a synchronous reluctance motor in a battery-driven EV to get rid of the dependency on rare-earth magnets.

On the whole, a large amount of effort has gone towards replacing permanent magnets in the rotor with either electromagnets or just a piece of iron. However, efficiency, starting torque capability, and the maximum speed achievable are some important constraints that have kept these motors out of EVs.

At this time, we will have to wait and see how the Bengaluru start-up fares in the four-wheeler EV market. (G. Bhuvaneshwari is professor, Electrical and Computer Engineering Department, Mahindra University, Hyderabad, and former faculty member, IIT-Delhi. bhuvan225@gmail.com)



30J7. 'Virtual magnet' claims reveal why EVs need their rare-earths 'वर्चुअल मैग्नेट' संबंधी दावे बताते हैं कि इलेक्ट्रिक वाहनों (EVs) को दुर्लभ मृदा तत्वों (Rare Earths) की आवश्यकता क्यों होती है

- There have been a number of news reports recently about a startup in **Bengaluru** called **Vimag Labs** that has replaced **rare-earth magnets** in motors with so-called "**virtual magnets**."
हाल ही में बेंगलुरु स्थित Vimag Labs नामक एक स्टार्टअप के बारे में अनेक समाचार प्रकाशित हुए हैं, जिसने मोटरों में प्रयुक्त दुर्लभ मृदा चुंबकों (Rare-Earth Magnets) के स्थान पर तथाकथित "वर्चुअल" चुंबकों का उपयोग करने का दावा किया है।
- One such report quoted **Manish Seth**, the start-up's CEO, as saying: "**We remove permanent magnets, replace them with copper coils, and then through software, we generate magnetic fields inside the motor.**"
ऐसी ही एक रिपोर्ट में स्टार्टअप के मुख्य कार्यकारी अधिकारी (CEO) मनीष सेठ के कथन का उल्लेख किया गया: "हम स्थायी चुंबकों (Permanent Magnets) को हटाकर उनकी जगह ताँबे की कुंडलियाँ (Copper Coils) लगाते हैं, और फिर सॉफ्टवेयर के माध्यम से मोटर के भीतर चुंबकीय क्षेत्र (Magnetic Fields) उत्पन्न करते हैं।"
- To understand this claim, it helps to first see **how electric motors produce magnetic fields and why they use permanent magnets in the first place.**
इस दावे को समझने के लिए पहले यह जानना आवश्यक है कि विद्युत मोटरें (Electric Motors) चुंबकीय क्षेत्र (Magnetic Fields) कैसे उत्पन्न करती हैं और वे प्रारंभ से ही स्थायी चुंबकों (Permanent Magnets) का उपयोग क्यों करती हैं।

Rotor and stator रोटर और स्टेटर

- A motor needs a **magnetic field** to operate.
किसी मोटर को कार्य करने के लिए चुंबकीय क्षेत्र (Magnetic Field) की आवश्यकता होती है।
- One way to create it is using a **permanent magnet**.
इसे उत्पन्न करने का एक तरीका स्थायी चुंबक (Permanent Magnet) का उपयोग करना है।
- Another is to **pass current through copper coils that have been wound around a ferromagnet, temporarily turning it into a magnet.**
दूसरा तरीका यह है कि लौहचुंबकीय पदार्थ (Ferromagnet) के चारों ओर लिपटी हुई ताँबे की कुंडलियों (Copper Coils) में विद्युत धारा प्रवाहित की जाए, जिससे वह अस्थायी रूप से चुंबक बन जाता है।
- This is called an electromagnet** — and it is this approach that the startup has used, instead of permanent magnets.
इसे विद्युतचुंबक (Electromagnet) कहा जाता है — और स्थायी चुंबकों (Permanent Magnets) के स्थान पर स्टार्टअप ने इसी विधि का उपयोग किया है।
- When an electrical machine converts electricity into mechanical motion, it is called a motor.**
जब कोई विद्युत मशीन (Electrical Machine) विद्युत ऊर्जा (Electricity) को यांत्रिक गति (Mechanical Motion) में परिवर्तित करती है, तो उसे मोटर (Motor) कहा जाता है।
- On the other hand, **a machine that converts mechanical movement into electricity is called a generator.**
इसके विपरीत, जो मशीन यांत्रिक गति (Mechanical Movement) को विद्युत ऊर्जा (Electricity) में परिवर्तित करती है, उसे जनरेटर (Generator) कहा जाता है।

- In both cases, the conversion happens via a **magnetic field**.
दोनों ही स्थितियों में यह रूपांतरण चुंबकीय क्षेत्र (Magnetic Field) के माध्यम से होता है।
- In a **generator**, **electricity** is harvested through **conductors** embedded in a stationary component called the **stator**.
जनरेटर (Generator) में स्टेटर (Stator) नामक स्थिर घटक में स्थित चालकों (Conductors) के माध्यम से विद्युत ऊर्जा (Electricity) प्राप्त की जाती है।
- You can imagine both the **stator** and the **rotor** to be two **concentric cylinders**.
आप स्टेटर (Stator) और रोटर (Rotor) दोनों की कल्पना दो समकेंद्रीय बेलनों (Concentric Cylinders) के रूप में कर सकते हैं।
- Most of the time, the **rotor** is the inner cylinder.
अधिकांश स्थितियों में रोटर (Rotor) भीतरी बेलन होता है।
- And the **magnetic field** is established in the gap between the **stator** and the **rotor** for the **energy conversion process** to happen.
और ऊर्जा रूपांतरण प्रक्रिया (Energy Conversion Process) संपन्न होने के लिए स्टेटर (Stator) और रोटर (Rotor) के बीच के अंतराल में चुंबकीय क्षेत्र (Magnetic Field) स्थापित किया जाता है।

An old technology एक पुरानी प्रौद्योगिकी

- And for a long time now, they have used **electromagnets** instead of **permanent magnets**.
और लंबे समय से इनमें स्थायी चुंबकों (Permanent Magnets) के स्थान पर विद्युतचुंबकों (Electromagnets) का उपयोग किया जा रहा है।
- In these generators, a **turbine** spins the **rotor**.
इन जनरेटरों में एक टर्बाइन रोटर को घुमाती है।
- In a **thermal or nuclear power station**, the turbine is driven by **steam**.
तापीय अथवा परमाणु विद्युत स्टेशन में टर्बाइन भाप द्वारा संचालित होती है।
- In a **hydroelectric power station**, it is driven by **falling water**.
जलविद्युत विद्युत स्टेशन में यह गिरते हुए जल द्वारा संचालित होती है।
- The rotor rotates at a **fixed speed** to generate an **alternating current (AC)** of frequency **50 Hz**.
रोटर 50 हर्ट्ज़ आवृत्ति की प्रत्यावर्ती धारा (AC) उत्पन्न करने के लिए निश्चित गति से घूमता है।
- The rotor has **copper coils** wound around its **ferromagnetic core**.
रोटर के फेरोचुंबकीय कोर के चारों ओर ताँबे की कुंडलियाँ लिपटी होती हैं।
- When these coils are supplied with a **direct current (DC)**, they create a **magnetic field**, and the core acquires a **magnetic north** and a **magnetic south pole**.
जब इन कुंडलियों को दिष्ट धारा (DC) प्रदान की जाती है, तब वे एक चुंबकीय क्षेत्र उत्पन्न करती हैं और कोर में चुंबकीय उत्तर ध्रुव तथा चुंबकीय दक्षिण ध्रुव विकसित हो जाते हैं।
- And as the rotor spins, this **magnetic field** sweeps past the **stator windings**, inducing an **alternating voltage** in them.
जब रोटर घूमता है, तब यह चुंबकीय क्षेत्र स्टेटर वाइंडिंग्स के पास से गुजरता है और उनमें प्रत्यावर्ती वोल्टेज प्रेरित करता है।
- This helps convert **mechanical power** into **electricity**.
इससे यांत्रिक शक्ति का विद्युत ऊर्जा में रूपांतरण होता है।

Software and magnetism सॉफ्टवेयर और चुंबकत्व

- This is essentially the principle behind the start-up's "**virtual**" magnet: software regulates the **current** flowing through the **electromagnets**, thus controlling the **strength** and **direction** of



the magnetic field.

यही मूलतः स्टार्ट-अप के "आभासी (Virtual) चुंबक" के पीछे का सिद्धांत है, जिसमें सॉफ्टवेयर विद्युतचुंबकों में प्रवाहित होने वाली धारा को नियंत्रित करता है, जिससे चुंबकीय क्षेत्र की तीव्रता और दिशा नियंत्रित होती है।

- The rectified current can be fed in a controlled manner to the copper coils in the rotor that would make the magnetic strength and direction controllable.

रेक्टिफाइड धारा को नियंत्रित ढंग से रोटर की ताँबे की कुंडलियों में प्रवाहित किया जा सकता है, जिससे चुंबकीय तीव्रता और दिशा को नियंत्रित किया जा सके।

- In other words, the software is not creating magnetism by itself.

दूसरे शब्दों में, सॉफ्टवेयर स्वयं चुंबकत्व उत्पन्न नहीं कर रहा है।

- It is just controlling how much current flows through the electromagnets, and thus how strong the magnetic field becomes.

यह केवल विद्युतचुंबकों में प्रवाहित होने वाली धारा की मात्रा को नियंत्रित करता है, जिससे चुंबकीय क्षेत्र की तीव्रता निर्धारित होती है।

- A permanent magnet establishes the magnetic field in the air gap of an electrical machine in a one-step process.

एक स्थायी चुंबक किसी विद्युत मशीन के वायु-अंतराल (Air Gap) में चुंबकीय क्षेत्र को एक ही चरण में स्थापित कर देता है।

- And because the magnet already exists, no electrical energy is needed simply to create the magnetic field.

और क्योंकि चुंबक पहले से ही विद्यमान होता है, इसलिए केवल चुंबकीय क्षेत्र उत्पन्न करने के लिए अतिरिक्त विद्युत ऊर्जा की आवश्यकता नहीं होती।

- On the other hand, with electromagnets, the magnetic field first has to be established, and the electric current modulated as per the requirement using software.

दूसरी ओर, विद्युतचुंबकों के साथ पहले चुंबकीय क्षेत्र स्थापित करना पड़ता है और उसके बाद आवश्यकता के अनुसार सॉफ्टवेयर द्वारा विद्युत धारा का नियमन किया जाता है।

- There are magnetic losses in the ferromagnetic core, called core losses.

फेरोचुंबकीय कोर में चुंबकीय हानियाँ होती हैं, जिन्हें कोर हानियाँ (Core Losses) कहा जाता है।

- In turn, permanent magnet synchronous motors dominate the EV market because their efficiency is the highest at present.

इसी कारण स्थायी चुंबक समकालिक मोटर (Permanent Magnet Synchronous Motors) वर्तमान में ईवी बाज़ार पर प्रभुत्व बनाए हुए हैं क्योंकि उनकी दक्षता सबसे अधिक है।

- Another approach is the switched reluctance motor (SRM), whose rotor contains neither permanent magnets nor copper coils.

एक अन्य विकल्प स्विचड रिलक्टेंस मोटर (Switched Reluctance Motor - SRM) है, जिसके रोटर में न तो स्थायी चुंबक होते हैं और न ही ताँबे की कुंडलियाँ।

- Instead, SRMs have lower rotor inertia than even induction motors.

इसके स्थान पर SRM में रोटर जड़त्व (Rotor Inertia), प्रेरण मोटर (Induction Motor) की तुलना में भी कम होता है।

- In exchange, their torque comes in spurts, which makes the motor noisy and less efficient.

हालाँकि, इनका टॉर्क रुक-रुककर उत्पन्न होता है, जिससे मोटर अधिक शोरयुक्त तथा कम दक्ष हो जाती है।

"Virtual Magnets" in Electric Motors

- An electric motor needs a magnetic field to produce rotation.
- This field can be created either by a permanent magnet or by an electromagnet.
- A permanent magnet remains magnetic without an external electricity supply.
- An electromagnet is produced by passing electric current through copper coils wound around a ferromagnetic material such as iron.
- A motor mainly contains two parts.
- The stator is the stationary outer part, while the rotor is generally the inner rotating part.



- A magnetic field is created in the small air gap between them.
- Interaction between this field and electric current produces force, causing the rotor to turn. Thus, **a motor converts electrical energy into mechanical motion**.
- A generator performs the reverse process by converting mechanical motion into electricity.
- The expression **“virtual magnet”** does not mean that software itself creates magnetism. **Copper coils first create an electromagnet. Software merely regulates the current passing through those coils, thereby controlling the strength and direction of the magnetic field.** It is similar to controlling the brightness of an electric bulb using a dimmer: the dimmer does not create light; it controls the electricity producing the light.
- This principle is not entirely new. Large generators in hydroelectric, thermal and nuclear power plants have long used electromagnets. In such generators, **a turbine rotates a rotor containing copper coils. Direct current energises these coils, and the rotating magnetic field induces alternating voltage in the stator windings. A brushless excitation system** supplies electricity to the rotating coils without relying on conventional sliding contacts.
- Removing permanent magnets can reduce dependence on expensive **rare-earth materials**. However, electromagnets consume electricity merely to maintain their magnetic field. They also suffer from copper-resistance losses, magnetic core losses and electronic switching losses. Therefore, they may be less efficient than permanent-magnet motors.
- Efficiency is especially important in electric vehicles because even a small improvement can increase driving range or permit a smaller, lighter and cheaper battery. Permanent-magnet synchronous motors presently remain prominent because of their high efficiency. Other **magnet-free alternatives include induction motors and switched reluctance motors**, although each involves compromises in efficiency, noise, weight or torque smoothness.

Behind China's AI gift, a constraint

China's embrace of open-weight AI models is driven as much by compute constraints as by a bid to project itself as a responsible global AI power; until it overcomes chip and inference bottlenecks, Beijing is likely to keep sharing its models with the world

CS III: S&T

WORLD INSIGHT

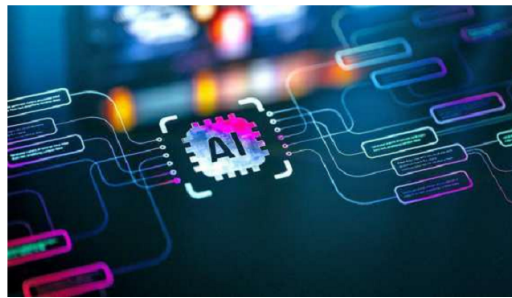
Amit Kumar

At the ninth World AI Conference in Shanghai this month, Chinese President Xi Jinping addressed the gathering for the first time in nine years. It is indicative of the priority that AI occupies for the leadership. At the conference, Mr. Xi pitched Chinese AI models as a global public good. The contrast was clear as day. America is selling closed-source, proprietary models while China is offering open-weight models to the world. This distinction is not merely technical, but equally political.

Unlike Anthropic, OpenAI, and Google, which host their frontier models on their respective servers and offer services via an application programming interface (API), Chinese labs such as DeepSeek, Qwen, and Moonshot also release their weights for anyone to download. Unlike American models, these can be customised, modified, and even further trained. There is no subscription to cancel or terms of service. The maker cannot revoke or restrict access. So long as one can manage the requisite compute to host the model, even Papua New Guinea or Senegal can run it locally on their servers. And most importantly, the data never leaves the border.

AI diplomacy

However, one may wonder what explains China's benevolence. Well, to begin with, the objective is to project China as a responsible AI player in the comity of nations. Unlike the Americans, who he alleged to have overstretched the concept of national security to AI, and thereby adopted an exclusionary approach, China is committed to sharing the benefits and fruits of AI. Mr. Xi's framing was indicative in this regard. He described AI as "humanity's collective wisdom," a "historic opportunity" to "bridge the AI and digital divides," and something that



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"should not be a solo performance by a single country but a symphony of international cooperation." The underlying message, aimed at Washington, projected Beijing as the open and cooperative alternative to the U.S.'s AI models.

But there is a limiting factor at play too that explains Beijing's benevolence – its compute constraint, both for training and inference.

Since 2022, the U.S. administration, in concert with its allies, has imposed a series of export restrictions on China, limiting its ability to both mass-import and mass-manufacture high-end chips.

The compute constraint

To understand this constraint, one must separate two very different tasks – training a model and serving it. Training is a one-time cost. A lab assembles a cluster of chips, runs it for a few months and comes up with a finished model. The fleet required is numerically small. For instance, GPT-4 was trained on an estimated 25,000 Nvidia chips, and Meta trained its Llama 3.1 on ~16,400 chips. DeepSeek, on the other hand, trained its acclaimed V3 model on ~2,000 export-compliant H800s. A frontier

model, in other words, needs chips in the thousands, and it needs them only once.

Serving that model to the public, however, is an altogether different proposition. Inference scales with the user base and requires continuous expansion as it must answer hundreds of millions of user queries. OpenAI crossed a million GPUs in 2025, and Meta targeted the equivalent of 1.3 million by the end of 2025. Thus, for any model with a mass consumer base, the serving fleet dwarfs the training fleet, often by ten to a hundred times.

In other words, the distinction is that of a stockpile and a flow. To train a model, a lab can accumulate ten or twenty thousand chips through smuggling, stockpiling, and modest domestic production. This is precisely why the export controls could not prevent China from reaching parity at the model level. Inference, however, cannot be solved this way. The export controls mean that the most advanced chips remain out of bounds for Chinese firms. Additionally, the concessions the U.S. has offered exist largely on paper. Around 10 Chinese firms were cleared in principle to buy up to 75,000 H200 chips each, but not a single unit had been delivered by mid-2026, as

sales remained stalled and Beijing itself directed firms towards domestic alternatives.

China can attempt to bridge the shortfall through domestic production, but even here, restrictions on export of EUVs continue to prove a handicap. SMIC's 5nm line in China runs at roughly 20% yield without EUV tools, far short of commercial viability. This severely restricts the ability of Chinese labs to offer services via API alone. DeepSeek's decision to freeze new registrations in January 2025 was influenced by a surge in traffic it could not serve, alongside a reported 'large-scale malicious attack'.

Openness by necessity

Furthermore, given that Chinese models are nearly as good as the U.S.'s frontier models, their popularity is increasing. Data show that the Chinese models' share of U.S. firms' AI usage has hit a record 60% on OpenRouter – a marketplace for routing queries to various models based on requests.

American firms are preferring Chinese models as they provide comparable services at a fraction of the cost. But this success comes with a rider – the need for enormous compute. The solution thus is to simply outsource compute via open-weight models. Hence, China's open-weight offering to the world is largely a product of its structural constraint. It can build models that rival the U.S. but cannot serve them at scale. But Beijing cannot ignore the urge to securitise and restrain access for too long. Sooner or later, it will face that choice. Indeed, Beijing is already reported to be weighing restrictions on overseas access to its most capable models.

One can expect China's frontier models to move towards proprietary models, while trailing models remaining open-weight. But so long as China cannot overcome the larger constraint, it is likely to continue fielding open-weight models. And China's constraint is the world's gain. (Amit Kumar is a Staff Research Analyst at Takshashila Institution)

THE GIST

China's open-weight AI model can be downloaded, customised and deployed on local servers, allowing countries to retain control over their data without relying on proprietary, API-based service

Even as Beijing promotes open-weight AI as a global public good, it is already weighing restrictions on overseas access to its most capable frontier models, signalling that this openness may not be permanent.



30J7. Behind China's AI gift, a constraint चीन के एआई उपहार के पीछे छिपी एक बाध्यता

- At the ninth **World AI Conference in Shanghai** this month, Chinese President Xi Jinping addressed the gathering for the first time in **nine years**.
इस माह शंघाई में आयोजित नौवें विश्व कृत्रिम बुद्धिमत्ता सम्मेलन (World AI Conference) में चीनी राष्ट्रपति शी जिनपिंग ने नौ वर्षों में पहली बार सम्मेलन को संबोधित किया।
- Unlike **Anthropic**, **OpenAI**, and **Google**, which host their **frontier models** on their respective servers and offer services via an **application programming interface (API)**, Chinese labs such as **DeepSeek**, **Qwen**, and **Moonshot** also release their **weights** for anyone to download.
Anthropic, **OpenAI** और **Google**, जो अपने उन्नत एआई मॉडलों (Frontier Models) को अपने-अपने सर्वरों पर होस्ट करते हैं और एप्लिकेशन प्रोग्रामिंग इंटरफेस (API) के माध्यम से सेवाएँ प्रदान करते हैं, उनसे भिन्न **DeepSeek**, **Qwen** तथा **Moonshot** जैसी चीनी प्रयोगशालाएँ अपने मॉडल के वेट्स (Weights) भी सार्वजनिक रूप से डाउनलोड हेतु उपलब्ध कराती हैं।
- So long as one can manage the requisite **compute** to host the model, even **Papua New Guinea** or **Senegal** can run it locally on their servers.
यदि कोई आवश्यक कंप्यूटिंग क्षमता (Compute) उपलब्ध करा सके, तो पापुआ न्यू गिनी या सेनेगल जैसे देश भी इन मॉडलों को अपने स्थानीय सर्वरों पर संचालित कर सकते हैं।

The IACS and the making of modern Indian science

Indian Association for the Cultivation of Science fulfilled Mahendralal Sircar's vision of scientific self-reliance

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Shekhar Mande

The late eighteenth and nineteenth centuries marked a period of profound intellectual and cultural awakening across India, with Bengal emerging as its prominent centre. Although similar currents of intellectual, social, and cultural reform were taking shape in several other parts of the country, the scale, diversity, and enduring influence of this awakening found their fullest expression in Bengal.

What is now widely known as the Bengal Renaissance not only transformed Bengal but also profoundly influenced the intellectual, social, and cultural evolution of modern India. The movement fostered remarkable advances across a broad spectrum of disciplines, ranging from philosophy, spirituality, literature, and the arts to education, social reform, and the natural sciences. It produced an extraordinary generation of philosophers, reformers, educators, scientists, writers,

and artists whose collective vision and achievements laid many intellectual and institutional foundations of modern India.

A vision for scientific self-reliance

One of the most influential figures of this remarkable period was Mahendralal Sircar (1833-1904). Deeply concerned that the colonial administration had failed to provide adequate opportunities for Indians to pursue education and research in the natural sciences, Sircar articulated a bold vision for scientific self-reliance.

In 1869, in an article published in the *Calcutta Journal of Medicine*, he proposed the establishment of the Indian Association for the Cultivation of Science (IACS), arguing that scientific education was indispensable for India's intellectual and societal progress. As he wrote: "The best method, and under the present circumstances, the only method, that we can conceive of, by which the people of India can be essentially improved, by which the Hindu mind can be developed to its full proportions, is as we have seen

above, by the cultivation of the Physical Sciences". Three years later, while addressing a meeting of the Bethune Society at the Medical College Theatre in Calcutta in 1872, Sircar lamented the lack of institutional support for scientific research in India under colonial rule: "I must say, though I say with deep regret, that our Government has hitherto afforded no opportunity, nor offered any encouragement to the pursuit of science by the native of this country".

These statements reveal Sircar's remarkable foresight. At a time when scientific research in India received little official encouragement, he envisioned an institution that would enable Indians to pursue scientific inquiry and contribute to the advancement of knowledge. That vision culminated in the establishment of the IACS on July 29, 1876, as the country's first national institution dedicated to scientific research by Indians. Today, as we celebrate its 150th anniversary, we honour not merely the founding of an institution but the birth of a scientific

movement that transformed the landscape of Indian science.

Among the most celebrated scientists associated with the IACS was C.V. Raman, whose pioneering work transformed modern physics. Shortly after joining the Accountant General's Office in Calcutta in 1907, Raman noticed a "strange-looking board" bearing the name 'Indian Association for the Cultivation of Science'. Intrigued, he made enquiries about the institution and was introduced to Amrit Lal Sircar, the son of the Association's founder. Recognising Raman's enthusiasm for scientific research, Amrit extended an open invitation to use the Association's laboratories for his experiments outside office hours.

For nearly a decade, Raman followed a remarkable routine. He spent the early mornings and evenings at the IACS laboratory while serving as a government officer during the day. This extraordinary dedication continued until 1917, when he resigned from the Finance Department to accept the Palit Professorship of Physics at the University of Calcutta. Even thereafter, IACS remained the principal venue for his experimental investigations.

It was in the laboratories of IACS that Raman made his most celebrated discovery, the Raman effect, which he announced to the world on February 28, 1928. This landmark discovery earned him the Nobel Prize in physics in 1930, making him the first Asian scientist to win this prize in the sciences. In many ways, Raman's achievement represented the

fulfilment of Sircar's vision: that an institution founded and nurtured by Indians for the cultivation of science could produce discoveries of the highest international significance.

A legacy that endures

The founding of the IACS also marked a defining moment in the renaissance of science in India. More than the establishment of a scientific institution, it embodied the aspiration that Indians should not merely learn science but actively create it. Over the past century and a half, IACS has nurtured generations of exceptional scientists, provided a vibrant institutional framework for the pursuit of scientific inquiry, and made contributions of enduring significance to the advancement of science worldwide.

As we commemorate this historic milestone, we pay our deepest tribute to the vision and foresight of Mahendralal Sircar, whose unwavering belief in the transformative power of science made the institution possible. We also celebrate the extraordinary legacy of the IACS itself, a legacy of intellectual curiosity, scientific excellence, and national service that continues to inspire generations of researchers. May that spirit continue to guide the Institute, advancing the frontiers of knowledge and contributing to the scientific and technological progress of India and the world. (Shekhar C. Mande is president, Indian National Science Academy, and national president, Vijnana Bharati)

30J7. The IACS and the making of modern Indian science आईसीएस (IACS) और आधुनिक भारतीय विज्ञान के निर्माण की यात्रा

- The late **eighteenth** and **nineteenth centuries** marked a period of profound **intellectual** and **cultural awakening** across India, with **Bengal** emerging as its prominent centre.
अठारहवीं शताब्दी के उत्तरार्ध और उन्नीसवीं शताब्दी ने भारत में गहन बौद्धिक एवं सांस्कृतिक जागरण के एक महत्वपूर्ण काल को चिह्नित किया, जिसमें बंगाल इसका प्रमुख केंद्र बनकर उभरा।

- Although similar currents of **intellectual, social, and cultural reform** were taking shape in several other parts of the country, the scale, diversity, and enduring influence of this awakening found their fullest expression in **Bengal**.
यद्यपि देश के अनेक अन्य भागों में भी **बौद्धिक, सामाजिक तथा सांस्कृतिक सुधारों** की समान धाराएँ विकसित हो रही थीं, फिर भी इस जागरण का व्यापक स्वरूप, विविधता और स्थायी प्रभाव **बंगाल** में सर्वाधिक स्पष्ट रूप से प्रकट हुआ।
- What is now widely known as the **Bengal Renaissance** not only transformed **Bengal** but also profoundly influenced the **intellectual, social, and cultural evolution** of **modern India**.
जिसे आज व्यापक रूप से **बंगाल पुनर्जागरण (Bengal Renaissance)** के नाम से जाना जाता है, उसने न केवल **बंगाल** को परिवर्तित किया, बल्कि **आधुनिक भारत** के **बौद्धिक, सामाजिक और सांस्कृतिक विकास** को भी गहराई से प्रभावित किया।
- The movement fostered remarkable advances across a broad spectrum of disciplines, ranging from **philosophy, spirituality, literature, and the arts** to **education, social reform, and the natural sciences**.
इस आंदोलन ने **दर्शन, आध्यात्मिकता, साहित्य, कला, शिक्षा, सामाजिक सुधार तथा प्राकृतिक विज्ञानों** सहित अनेक क्षेत्रों में उल्लेखनीय प्रगति को प्रोत्साहित किया।
- It produced an extraordinary generation of **philosophers, reformers, educators, scientists, writers, and artists** whose collective vision and achievements laid many **intellectual and institutional foundations** of **modern India**.
इसने **दार्शनिकों, सुधारकों, शिक्षाविदों, वैज्ञानिकों, लेखकों तथा कलाकारों** की एक असाधारण पीढ़ी को जन्म दिया, जिनकी सामूहिक दृष्टि और उपलब्धियों ने **आधुनिक भारत** की अनेक **बौद्धिक तथा संस्थागत नींवों** का निर्माण किया।
- One of the most influential figures of this remarkable period was **Mahendralal Sircar (1833–1904)**.
इस उल्लेखनीय काल के सबसे प्रभावशाली व्यक्तित्वों में से एक **महेंद्रलाल सरकार (1833–1904)** थे।
- Deeply concerned that the **colonial administration** had failed to provide adequate opportunities for **Indians** to pursue **education and research** in the **natural sciences**, Sircar articulated a bold vision for **scientific self-reliance**.
इस बात से अत्यंत चिंतित कि **औपनिवेशिक प्रशासन** ने **भारतीयों** को **प्राकृतिक विज्ञानों** में **शिक्षा और अनुसंधान** के पर्याप्त अवसर उपलब्ध नहीं कराए, **सरकार** ने **वैज्ञानिक आत्मनिर्भरता** का एक साहसिक दृष्टिकोण प्रस्तुत किया।
- In **1869**, in an article published in the **Calcutta Journal of Medicine**, he proposed the establishment of the **Indian Association for the Cultivation of Science (IACS)**, arguing that **scientific education** was indispensable for **India's intellectual and societal progress**.
1869 में **Calcutta Journal of Medicine** में प्रकाशित एक लेख में उन्होंने **इंडियन एसोसिएशन फॉर द कल्चिवेशन ऑफ साइंस (Indian Association for the Cultivation of Science - IACS)** की स्थापना का प्रस्ताव रखा और तर्क दिया कि **वैज्ञानिक शिक्षा भारत की बौद्धिक तथा सामाजिक प्रगति** के लिए अनिवार्य है।
- As he wrote: "The best method, and under the present circumstances, the only method, that we can conceive of, by which the people of India can be essentially improved, by which the Hindu mind can be developed to its full proportions, is as we have seen above, by the cultivation of the **Physical Sciences**".
जैसा कि उन्होंने लिखा: "वर्तमान परिस्थितियों में, भारत के लोगों का वास्तविक उत्थान करने तथा **हिंदू मस्तिष्क** का पूर्ण विकास करने का सर्वोत्तम, बल्कि एकमात्र उपाय, जैसा कि हमने ऊपर देखा है, **भौतिक विज्ञानों (Physical Sciences)** का विकास करना है।"
- Three years later, while addressing a meeting of the **Bethune Society** at the **Medical College Theatre** in **Calcutta** in **1872**, Sircar lamented the lack of **institutional support** for **scientific research** in **India** under **colonial rule**.
तीन वर्ष बाद, **1872** में **कलकत्ता के मेडिकल कॉलेज थिएटर** में आयोजित **बेथून सोसाइटी (Bethune**

Society) की एक बैठक को संबोधित करते हुए सरकार ने औपनिवेशिक शासन के अंतर्गत भारत में वैज्ञानिक अनुसंधान के लिए संस्थागत समर्थन के अभाव पर गहरा खेद व्यक्त किया।

- "I must say, though I say with deep regret, that our **Government** has hitherto afforded no opportunity, nor offered any encouragement to the pursuit of **science** by the **native** of this country".
उन्होंने कहा, "मुझे अत्यंत खेद के साथ कहना पड़ता है कि हमारी सरकार ने अब तक इस देश के स्थानीय लोगों को विज्ञान के अध्ययन और अनुसंधान के लिए न तो कोई अवसर प्रदान किया है और न ही कोई प्रोत्साहन दिया है।"
- These statements reveal Sircar's remarkable foresight
ये कथन सरकार (Sircar) की अद्भुत दूरदर्शिता को प्रकट करते हैं
- These statements reveal Sircar's remarkable foresight.
ये कथन सरकार (Sircar) की अद्भुत दूरदर्शिता को प्रकट करते हैं।
- At a time when **scientific research** in India received little official encouragement, he envisioned an institution that would enable Indians to pursue **scientific inquiry** and contribute to the advancement of **knowledge**.
ऐसे समय में, जब भारत में वैज्ञानिक अनुसंधान को आधिकारिक स्तर पर बहुत कम प्रोत्साहन प्राप्त था, उन्होंने ऐसी संस्था की परिकल्पना की जो भारतीयों को वैज्ञानिक अनुसंधान करने तथा ज्ञान की उन्नति में योगदान देने में सक्षम बनाए।
- That vision culminated in the establishment of the **IACS** on **July 29, 1876**, as the country's **first national institution** dedicated to **scientific research** by Indians.
यह दूरदृष्टि 29 जुलाई, 1876 को आईएसएस (IACS) की स्थापना के रूप में साकार हुई, जो भारतीयों द्वारा वैज्ञानिक अनुसंधान के लिए समर्पित देश की प्रथम राष्ट्रीय संस्था बनी।
- Today, as we celebrate its **150th anniversary**, we honour not merely the founding of an institution but the birth of a **scientific movement** that transformed the landscape of **Indian science**.
आज, जब हम इसकी 150वीं वर्षगांठ मना रहे हैं, तब हम केवल एक संस्था की स्थापना का नहीं, बल्कि उस वैज्ञानिक आंदोलन के जन्म का सम्मान कर रहे हैं जिसने भारतीय विज्ञान की दिशा ही बदल दी।
- Among the most celebrated scientists associated with the **IACS** was **C.V. Raman**, whose pioneering work transformed **modern physics**.
आईएसएस (IACS) से जुड़े सबसे प्रतिष्ठित वैज्ञानिकों में सी. वी. रमन (C.V. Raman) का नाम प्रमुख है, जिनके अग्रणी कार्यों ने आधुनिक भौतिकी को नई दिशा दी।
- Shortly after joining the **Accountant General's Office** in **Calcutta** in **1907**, Raman noticed a "strange-looking board" bearing the name '**Indian Association for the Cultivation of Science**'.
1907 में कलकत्ता स्थित महालेखाकार कार्यालय (Accountant General's Office) में नियुक्ति के कुछ समय बाद, रमन ने 'इंडियन एसोसिएशन फॉर द कल्टीवेशन ऑफ साइंस' नाम का एक "असामान्य-सा बोर्ड" देखा।
- Intrigued, he made enquiries about the institution and was introduced to **Amrit Lal Sircar**, the son of the Association's founder.
जिज्ञासावश उन्होंने संस्था के बारे में जानकारी प्राप्त की और उनकी भेंट संस्था के संस्थापक के पुत्र अमृत लाल सरकार (Amrit Lal Sircar) से कराई गई।
- Recognising Raman's enthusiasm for **scientific research**, Amrit extended an open invitation to use the Association's **laboratories** for his experiments outside office hours.
वैज्ञानिक अनुसंधान के प्रति रमन के उत्साह को देखते हुए, अमृत लाल ने उन्हें कार्यालय समय के अतिरिक्त संस्था की प्रयोगशालाओं का उपयोग अपने प्रयोगों के लिए करने का खुला निमंत्रण दिया।
- For nearly a **decade**, Raman followed a remarkable routine.
लगभग एक दशक तक रमन ने एक अत्यंत अनुकरणीय दिनचर्या का पालन किया।

- He spent the early mornings and evenings at the **IACS laboratory** while serving as a **government officer** during the day.
वे प्रातःकाल और सायंकाल आईएसीएस की प्रयोगशाला में कार्य करते थे, जबकि दिन में सरकारी अधिकारी के रूप में अपनी सेवाएँ देते थे।
- This extraordinary dedication continued until **1917**, when he resigned from the **Finance Department** to accept the **Palit Professorship of Physics** at the **University of Calcutta**.
उनकी यह असाधारण निष्ठा 1917 तक जारी रही, जब उन्होंने वित्त विभाग से त्यागपत्र देकर कलकत्ता विश्वविद्यालय में पालित प्रोफेसर ऑफ फिजिक्स (Palit Professorship of Physics) का पद स्वीकार किया।
- Even thereafter, **IACS** remained the principal venue for his experimental investigations.
इसके बाद भी आईएसीएस (IACS) उनकी प्रयोगात्मक शोध गतिविधियों का प्रमुख केंद्र बना रहा।
- It was in the laboratories of **IACS** that Raman made his most celebrated discovery, the **Raman Effect**, which he announced to the world on **February 28, 1928**.
आईएसीएस की प्रयोगशालाओं में ही रमन ने अपनी सर्वाधिक प्रसिद्ध खोज रमन प्रभाव (Raman Effect) की, जिसकी घोषणा उन्होंने 28 फरवरी, 1928 को विश्व के समक्ष की।
- This landmark discovery earned him the **Nobel Prize in Physics** in **1930**, making him the **first Asian scientist** to win this prize in the sciences.
इस ऐतिहासिक खोज के लिए उन्हें 1930 में भौतिकी का नोबेल पुरस्कार प्राप्त हुआ, जिससे वे विज्ञान के क्षेत्र में यह सम्मान पाने वाले प्रथम एशियाई वैज्ञानिक बने।
- In many ways, Raman's achievement represented the fulfilment of **Sircar's vision**: that an institution founded and nurtured by Indians for the cultivation of science could produce discoveries of the highest international significance.
अनेक दृष्टियों से रमन की यह उपलब्धि सरकार (Sircar) के उस स्वप्न की पूर्ति थी कि भारतीयों द्वारा स्थापित और विकसित की गई वैज्ञानिक संस्था विश्वस्तरीय महत्त्व की खोजें कर सकती है।

A legacy that endures

एक ऐसी विरासत जो आज भी जीवित है

- The founding of the **IACS** also marked a defining moment in the renaissance of **science in India**.
आईएसीएस (IACS) की स्थापना ने भारत में विज्ञान के पुनर्जागरण का एक निर्णायक अध्याय भी आरम्भ किया।
- More than the establishment of a **scientific institution**, it embodied the aspiration that Indians should not merely learn **science** but actively create it.
यह केवल एक वैज्ञानिक संस्था की स्थापना नहीं थी, बल्कि इस आकांक्षा का प्रतीक थी कि भारतीय केवल विज्ञान का अध्ययन ही न करें, बल्कि उसके सृजन में भी सक्रिय योगदान दें।
- Over the past **century and a half**, **IACS** has nurtured generations of exceptional scientists, provided a vibrant institutional framework for the pursuit of **scientific inquiry**, and made contributions of enduring significance to the advancement of **science** worldwide.
पिछले डेढ़ शताब्दी के दौरान आईएसीएस ने असाधारण वैज्ञानिकों की अनेक पीढ़ियों का मार्गदर्शन किया, वैज्ञानिक अनुसंधान के लिए एक सशक्त संस्थागत ढाँचा प्रदान किया तथा विश्वभर में विज्ञान की प्रगति में स्थायी महत्त्व का योगदान दिया।
- As we commemorate this historic milestone, we pay our deepest tribute to the **vision** and **foresight** of **Mahendralal Sircar**, whose unwavering belief in the transformative power of **science** made the institution possible.
इस ऐतिहासिक अवसर पर हम महेंद्रलाल सरकार (Mahendralal Sircar) की दूरदर्शिता और दृष्टि को अपनी गहन श्रद्धांजलि अर्पित करते हैं, जिनके विज्ञान की परिवर्तनकारी शक्ति में अटूट विश्वास ने इस संस्था की स्थापना को संभव बनाया।



- We also celebrate the extraordinary legacy of the **IACS** itself, a legacy of **intellectual curiosity, scientific excellence**, and **national service** that continues to inspire generations of researchers.
हम स्वयं आईएससीएस की उस असाधारण विरासत का भी उत्सव मनाते हैं, जो **बौद्धिक जिज्ञासा, वैज्ञानिक उत्कृष्टता और राष्ट्रीय सेवा** की भावना से परिपूर्ण है तथा आज भी शोधकर्ताओं की पीढ़ियों को प्रेरित करती है।
- May that spirit continue to guide the **Institute**, advancing the frontiers of **knowledge** and contributing to the **scientific and technological progress** of **India** and the **world**.
कामना है कि यही भावना भविष्य में भी इस संस्थान का मार्गदर्शन करती रहे, **ज्ञान** की सीमाओं का विस्तार करे तथा **भारत और विश्व की वैज्ञानिक एवं प्रौद्योगिकीय प्रगति** में निरंतर योगदान देती रहे।

GS Paper III: Environment		30 July 2026
TOPICS COVERED		
30J7	SC restricts 'retrospective' green clearances सर्वोच्च न्यायालय ने 'पूर्वव्यापी' पर्यावरणीय स्वीकृतियों पर रोक लगाई	
30J7	Nepal's tiger numbers climb 20% to estimated 429, says survey सर्वेक्षण के अनुसार नेपाल में बाघों की संख्या 20% बढ़कर अनुमानित 429 तक पहुँची	

SC restricts 'retrospective' green clearances

2021 order envisages perpetual environmental clearance for projects without prior EC, it says

SC says amnesty can be given, backed by proper notification, not through administrative orders

Court also bars the use of administrative orders to grant *ex post facto* clearances in the future

GS III: Environment

Krishnadas Rajagopal
NEW DELHI

court noted in an 80-page judgment.

The Supreme Court on Wednesday quashed, with prospective effect, a 2021 Office Memorandum (OM) granting *ex post facto* environmental clearances to infrastructure projects, holding that the Union government cannot substantially alter protective environmental checks by issuing mere administrative instructions.

"The 2021 OM is an administrative order, and envisages a perpetual regime for grant of environmental clearance to projects undertaken without prior environmental clearance. It substantially alters the nature of enquiry and criteria for grant of environmental clearance under the 2006 notification. It supplants an earlier delegated legislation [2006 notification] through an administrative instruction, which is impermissible in law," the

'No parallel route'

An 'amnesty' measure cannot become a permanent, parallel route which circumvents the prior environmental clearance (EC) regime under the 2006 notification of the Environment Ministry. A valid amnesty measure should be used as a rare exception, must be finite in duration and confined to its class, a Bench headed by Chief Justice of India Surya Kant observed.

The court said the prior EC regime of the 2006 notification, spanning across various sectors like highways, airports, real estate and township developments, and mining and resource extraction, was mandatory in nature.

The 2006 notification's mandate could have only been amended through a subsequent and appropriate amnesty notification for select, deserving pro-



jects whose continuation was of "supervening public interest", Justice Joymalya Bagchi, who authored the judgment, held.

The court barred the Centre from passing administrative orders to grant *ex post facto* clearances in the future. Justice Bagchi added that the present judgment would not, however, stand in the way of the top court granting *ex post facto* clearances in exercise of its plenary powers under Article 142 of the Constitution.

"The 2021 OM, as a perpetual amnesty scheme applicable to all permissive

projects, failed to lay down an intelligible differential for selection of projects for grant of *post facto* environmental clearance having rational nexus with supervening public interest, and is thereby *ultra vires* of the objectives of the Environmental Protection Act of 1986, namely preservation of the environment through a balanced approach through precautionary principle and sustainable development... The OM does not satisfy the threshold of reasonableness and proportionality and is violative of Arti-

cles 14 and 21," Justice Bagchi said.

The court held that an amnesty-regularisation scheme was not a right. A project proponent who had built in breach stood upon no footing of entitlement. The 2021 OM had indiscriminately allowed every permissible industry to be regularised for a meagre compensation. It had yielded to a principle of 'pollute and then pay', rather than to sustainable development.

The decriminalisation of the offence of breaching the prior clearance regime through the Jan Vishwas (Amendment of Provisions) Act of 2023 did not help matters either. Before the 2023 Act altered the offence into a civil liability, violators faced imprisonment of up to five years, or with fine of up to ₹1 lakh, or both.

"A lax implementation regime, coupled with a regularisation scheme unlimited in time and subject

to capped environmental compensation at a flea-bite level, rendered the prior EC regime otiose both in fact and in law," Justice Bagchi wrote.

The court said there were cases in which the state, the preserver of the rule of law, has violated the law of the prior EC regime. "Future amnesty schemes, if any, should provide effective deterrent measures against individual public servants, including disciplinary action and personal liability for environmental damage, wherever the state or its instrumentalities, as project proponents, violate the prior EC regime," the Bench ordered.

The top court quashed the 2021 OM prospectively to not upset ongoing projects, including the AIIMS Medical College and Hospital building in Odisha, the Centre of Excellence for Cancer Diseases in Tamil Nadu, Vijayapura Airport in Karnataka, medical col-

leges, slum rehabilitation and irrigation projects for drought-prone areas.

It said retrospective clearances given under 2017 notification, which provided a 'one-time amnesty' for undertakings started without prior clearance, and the 2021 OM would remain valid unless individually assailed in accordance with law. The 2021 OM was derived from the 2017 notification, and institutionalised *ex post facto* clearances.

The case has had a roller coaster ride with a Division Bench of the apex court declaring such retrospective clearances a gross illegality and an anathema to the environment in a May 2025 judgment. In November that year, a larger Bench had diluted the judgment, reasoning that doing away with the retrospective clearance regime would have a "devastating effect" on ongoing public projects worth "thousands of crores of Rupees".

30J7. SC restricts 'retrospective' green clearances

सर्वोच्च न्यायालय ने 'पूर्वव्यापी' पर्यावरणीय स्वीकृतियों पर रोक लगाई

- The Supreme Court on Wednesday quashed, with prospective effect, a 2021 Office Memorandum (OM) granting *ex post facto* environmental clearances to infrastructure projects, holding that the Union Government cannot substantially alter protective

environmental checks by issuing mere administrative instructions.

सर्वोच्च न्यायालय ने बुधवार को भावी प्रभाव (Prospective Effect) के साथ 2021 के कार्यालय ज्ञापन (Office Memorandum - OM) को निरस्त कर दिया, जिसमें अवसंरचना परियोजनाओं (Infrastructure Projects) को पश्चात प्रभाव से पर्यावरणीय स्वीकृति (Ex Post Facto Environmental Clearance) देने का प्रावधान था। न्यायालय ने कहा कि केंद्र सरकार केवल प्रशासनिक निर्देश जारी करके पर्यावरण संरक्षण संबंधी अनिवार्य जाँच व्यवस्थाओं में मूलभूत परिवर्तन नहीं कर सकती।

- “The 2021 OM is an **administrative order**, and envisages a perpetual regime for grant of **environmental clearance** to projects undertaken without prior environmental clearance. “2021 का कार्यालय ज्ञापन (OM) एक प्रशासनिक आदेश (Administrative Order) है, जो उन परियोजनाओं को पर्यावरणीय स्वीकृति (Environmental Clearance) प्रदान करने के लिए एक स्थायी व्यवस्था का प्रावधान करता है, जिन्हें पूर्व पर्यावरणीय स्वीकृति के बिना आरम्भ किया गया था।
- It substantially alters the nature of enquiry and criteria for grant of **environmental clearance** under the 2006 notification.

यह 2006 की अधिसूचना (2006 Notification) के अंतर्गत पर्यावरणीय स्वीकृति प्रदान करने की जाँच प्रक्रिया और मानदंडों की प्रकृति में महत्वपूर्ण परिवर्तन करता है।

- It supplants an earlier **delegated legislation (2006 notification)** through an **administrative instruction**, which is impermissible in law,” the court noted in an **80-page judgment**. यह एक पूर्व प्रत्यायोजित विधायन (Delegated Legislation) अर्थात् 2006 की अधिसूचना का स्थान मात्र एक प्रशासनिक निर्देश (Administrative Instruction) के माध्यम से लेता है, जो विधि की दृष्टि से स्वीकार्य नहीं है,” न्यायालय ने अपने 80 पृष्ठों के निर्णय में कहा।

- An ‘**amnesty**’ measure cannot become a permanent, parallel route which circumvents the **prior environmental clearance (EC)** regime under the 2006 notification of the Environment Ministry.

कोई ‘आम माफी (Amnesty)’ उपाय ऐसा स्थायी और समानांतर मार्ग नहीं बन सकता, जो पर्यावरण मंत्रालय की 2006 की अधिसूचना के अंतर्गत लागू पूर्व पर्यावरणीय स्वीकृति (Prior Environmental Clearance - EC) व्यवस्था को दरकिनार कर दे।

- A valid **amnesty measure** should be used as a rare exception, must be finite in duration and confined to its class, a Bench headed by **Chief Justice of India Surya Kant** observed.

भारत के मुख्य न्यायाधीश सूर्यकांत की अध्यक्षता वाली पीठ (Bench) ने कहा कि एक वैध आम माफी योजना केवल दुर्लभ अपवाद के रूप में प्रयोग की जानी चाहिए, उसकी अवधि सीमित होनी चाहिए और उसका दायरा भी निर्धारित होना चाहिए।

- The court said the **prior EC regime** of the 2006 notification, spanning across various sectors like **highways, airports, real estate and township developments, and mining and resource extraction**, was mandatory in nature.

न्यायालय ने कहा कि 2006 की अधिसूचना के अंतर्गत लागू पूर्व पर्यावरणीय स्वीकृति (EC) व्यवस्था, जो राजमार्गों, हवाई अड्डों, रियल एस्टेट, टाउनशिप विकास, खनन तथा प्राकृतिक संसाधनों के दोहन जैसे विभिन्न क्षेत्रों पर लागू होती है, अनिवार्य प्रकृति की है।

- The 2006 notification’s mandate could have only been amended through a subsequent and appropriate **amnesty notification** for select, deserving projects whose continuation was of “**supervening public interest**”, Justice **Joymalya Bagchi**, who authored the judgment, held.

निर्णय लिखने वाले न्यायमूर्ति जॉयमाल्य बागची ने कहा कि 2006 की अधिसूचना के प्रावधानों में संशोधन केवल एक उपयुक्त और बाद की आम माफी अधिसूचना (Amnesty Notification) के माध्यम से ही किया जा सकता था, और वह भी केवल उन चयनित परियोजनाओं के लिए जिनका जारी रहना “प्रबल लोकहित (Supervening Public Interest)” में हो।

- The court barred the **Centre** from passing **administrative orders** to grant **ex post facto clearances** in the future.



न्यायालय ने केंद्र सरकार को भविष्य में प्रशासनिक आदेशों के माध्यम से पश्चात प्रभाव से पर्यावरणीय स्वीकृतियाँ (Ex Post Facto Clearances) देने से रोक दिया।

- **Justice Bagchi** added that the present judgment would not, however, stand in the way of the **Supreme Court** granting **ex post facto clearances** in exercise of its **plenary powers** under **Article 142 of the Constitution**.

न्यायमूर्ति बागची ने यह भी स्पष्ट किया कि यह निर्णय सर्वोच्च न्यायालय को संविधान के अनुच्छेद 142 के अंतर्गत प्राप्त अपनी पूर्णधिकार शक्तियों (Plenary Powers) का प्रयोग कर पश्चात प्रभाव से पर्यावरणीय स्वीकृति प्रदान करने से नहीं रोकेगा।

- “The **2021 OM**, as a perpetual **amnesty scheme** applicable to all permissible projects, failed to lay down an intelligible **differentia** for selection of projects for grant of **post facto environmental clearance** having rational nexus with **supervening public interest**, and is thereby **ultra vires** of the objectives of the **Environmental Protection Act of 1986**, namely preservation of the environment through a balanced approach based on the **precautionary principle** and **sustainable development**...”

“**2021 का कार्यालय जापन**, जो सभी अनुमेष परियोजनाओं पर लागू एक स्थायी आम माफी योजना है, पश्चात पर्यावरणीय स्वीकृति प्रदान करने हेतु परियोजनाओं के चयन के लिए कोई युक्तिसंगत भेदकारी आधार (Differentia) निर्धारित नहीं करता, जिसका प्रबल लोकहित से तार्किक संबंध हो। इस प्रकार यह पर्यावरण संरक्षण अधिनियम, 1986 के उद्देश्यों, अर्थात् सावधानी सिद्धांत (Precautionary Principle) तथा सतत विकास (Sustainable Development) पर आधारित संतुलित दृष्टिकोण से पर्यावरण संरक्षण, के विपरीत (Ultra Vires) है...”

- “The **OM** does not satisfy the threshold of **reasonableness** and **proportionality** and is violative of **Articles 14 and 21**,” **Justice Bagchi** said.

“यह कार्यालय जापन (OM) युक्तिसंगतता (Reasonableness) और आनुपातिकता (Proportionality) की आवश्यक कसौटी पर खरा नहीं उतरता तथा संविधान के अनुच्छेद 14 और 21 का उल्लंघन करता है,” न्यायमूर्ति बागची ने कहा।

- The court held that an **amnesty-regularisation scheme** was not a right. न्यायालय ने कहा कि आम माफी-नियमितीकरण योजना (Amnesty-Regularisation Scheme) कोई अधिकार नहीं है।
- A **project proponent** who had built in breach stood upon no footing of entitlement. जिस परियोजना प्रवर्तक (Project Proponent) ने नियमों का उल्लंघन करते हुए निर्माण किया है, उसे किसी प्रकार का वैधानिक अधिकार प्राप्त नहीं हो सकता।
- The **2021 OM** had indiscriminately allowed every permissible industry to be regularised for a meagre compensation.

2021 के कार्यालय जापन ने अत्यंत कम क्षतिपूर्ति के बदले लगभग प्रत्येक अनुमेष उद्योग को बिना भेदभाव नियमित किए जाने की अनुमति दे दी थी।

- It had yielded to a principle of ‘**pollute and then pay**’, rather than to **sustainable development**.

यह ‘पहले प्रदूषण करो, फिर भुगतान करो (Pollute and Then Pay)’ के सिद्धांत को बढ़ावा देता है, न कि सतत विकास के सिद्धांत को।

- The **decriminalisation** of the offence of breaching the **prior clearance regime** through the **Jan Vishwas (Amendment of Provisions) Act, 2023** did not help matters either.

जन विश्वास (उपबंधों का संशोधन) अधिनियम, 2023 के माध्यम से पूर्व पर्यावरणीय स्वीकृति व्यवस्था के उल्लंघन को अपराधमुक्त (Decriminalisation) किए जाने से भी स्थिति में कोई सुधार नहीं हुआ।

- Before the **2023 Act** altered the offence into a **civil liability**, violators faced imprisonment of up to **five years**, or a fine of up to **₹1 lakh**, or both.

2023 के अधिनियम द्वारा इस अपराध को दीवानी दायित्व (Civil Liability) में परिवर्तित किए जाने से

पहले, उल्लंघन करने वालों को पाँच वर्ष तक के कारावास, ₹1 लाख तक के जुर्माने, या दोनों का सामना करना पड़ता था।

- “A lax implementation regime, coupled with a regularisation scheme unlimited in time and subject to capped environmental compensation at a flea-bite level, rendered the prior Environmental Clearance (EC) regime otiose both in fact and in law,” Justice Bagchi wrote.
- “एक शिथिल क्रियान्वयन व्यवस्था, जो समय-सीमा से रहित नियमितीकरण योजना तथा अत्यंत नगण्य स्तर (Flea-Bite Level) पर सीमित पर्यावरणीय क्षतिपूर्ति (Environmental Compensation) के साथ जुड़ी हुई है, उसने पूर्व पर्यावरणीय स्वीकृति (Environmental Clearance - EC) व्यवस्था को व्यवहारिक तथा विधिक—दोनों ही दृष्टियों से निष्प्रभावी (Otiose) बना दिया है,” न्यायमूर्ति बागची ने लिखा।
- The court said there were cases in which the State, the preserver of the rule of law, has violated the law of the prior EC regime.
न्यायालय ने कहा कि ऐसे मामले भी सामने आए हैं, जिनमें विधि के शासन (Rule of Law) का संरक्षक स्वयं राज्य ही पूर्व पर्यावरणीय स्वीकृति (EC) व्यवस्था के कानून का उल्लंघन करता पाया गया।
- “Future amnesty schemes, if any, should provide effective deterrent measures against individual public servants, including disciplinary action and personal liability for environmental damage, wherever the State or its instrumentalities, as project proponents, violate the prior EC regime,” the Bench ordered.
पीठ ने निर्देश दिया कि “भविष्य में यदि कोई आम माफी योजनाएँ (Amnesty Schemes) लाई जाती हैं, तो उनमें व्यक्तिगत लोक सेवकों (Public Servants) के विरुद्ध प्रभावी निवारक उपाय (Deterrent Measures) होने चाहिए, जिनमें अनुशासनात्मक कार्रवाई (Disciplinary Action) तथा पर्यावरणीय क्षति (Environmental Damage) के लिए व्यक्तिगत दायित्व (Personal Liability) भी शामिल हो, जहाँ राज्य अथवा उसकी संस्थाएँ (Instrumentalities) परियोजना प्रवर्तक (Project Proponents) के रूप में पूर्व पर्यावरणीय स्वीकृति व्यवस्था का उल्लंघन करें।”
- The Supreme Court quashed the 2021 OM prospectively to not upset ongoing projects, including the AIIMS Medical College and Hospital building in Odisha, the Centre of Excellence for Cancer Diseases in Tamil Nadu, Vijayapura Airport in Karnataka, medical colleges, slum rehabilitation, and irrigation projects for drought-prone areas.
सर्वोच्च न्यायालय ने 2021 के कार्यालय ज्ञापन (OM) को भावी प्रभाव (Prospectively) से निरस्त किया, ताकि वर्तमान में चल रही परियोजनाएँ प्रभावित न हों। इनमें ओडिशा में एम्स मेडिकल कॉलेज एवं अस्पताल (AIIMS Medical College and Hospital) का भवन, तमिलनाडु में सेंटर ऑफ एक्सीलेंस फॉर कैंसर डिजीज़ (Centre of Excellence for Cancer Diseases), कर्नाटक का विजयपुरा हवाई अड्डा (Vijayapura Airport), चिकित्सा महाविद्यालय, झुग्गी पुनर्वास (Slum Rehabilitation) तथा सूखा-प्रवण क्षेत्रों (Drought-Prone Areas) की सिंचाई परियोजनाएँ (Irrigation Projects) शामिल हैं।
- It said retrospective clearances given under the 2017 notification, which provided a ‘one-time amnesty’ for undertakings started without prior clearance, and the 2021 OM would remain valid unless individually assailed in accordance with law.
न्यायालय ने कहा कि 2017 की अधिसूचना, जिसने पूर्व स्वीकृति के बिना प्रारम्भ की गई परियोजनाओं के लिए ‘एकमुश्त आम माफी (One-Time Amnesty)’ का प्रावधान किया था, तथा 2021 के कार्यालय ज्ञापन के अंतर्गत दी गई पूर्वव्यापी पर्यावरणीय स्वीकृतियाँ (Retrospective Clearances) तब तक वैध रहेंगी, जब तक उन्हें विधि के अनुसार व्यक्तिगत रूप से चुनौती नहीं दी जाती।
- The 2021 OM was derived from the 2017 notification, and institutionalised ex post facto clearances.
2021 का कार्यालय ज्ञापन 2017 की अधिसूचना से उत्पन्न हुआ था और उसने पश्चात प्रभाव से पर्यावरणीय स्वीकृतियों (Ex Post Facto Clearances) को संस्थागत स्वरूप प्रदान कर दिया था।
- The case has had a roller-coaster ride with a Division Bench of the Supreme Court declaring such retrospective clearances a gross illegality and an anathema to the environment in a May 2025 judgment.

यह मामला कई उतार-चढ़ावों से गुज़रा है। मई 2025 के एक निर्णय में सर्वोच्च न्यायालय की खंडपीठ (Division Bench) ने ऐसी पूर्वव्यापी पर्यावरणीय स्वीकृतियों को घोर अवैध (Gross Illegality) तथा पर्यावरण के लिए घातक (Anathema to the Environment) घोषित किया था।

- In November that year, a larger Bench had diluted the judgment, reasoning that doing away with the retrospective clearance regime would have a “devastating effect” on ongoing public projects worth “thousands of crores of Rupees”.

उसी वर्ष नवंबर में बड़ी पीठ (Larger Bench) ने उस निर्णय के प्रभाव को सीमित करते हुए कहा था कि पूर्वव्यापी पर्यावरणीय स्वीकृति व्यवस्था को पूरी तरह समाप्त कर देने से “हजारों करोड़ रुपये” की लागत वाली चल रही सार्वजनिक परियोजनाओं (Public Projects) पर “विनाशकारी प्रभाव (Devastating Effect)” पड़ेगा।

Nepal's tiger numbers climb 20% to estimated 429, says survey

GS III: Environment
Agence France-Presse

Nepal's tiger population has risen by roughly 20% in the past four years to an estimated 429, officials said on Wednesday, a conservation milestone despite challenges from human-wildlife conflict.

The latest nationwide survey found tiger numbers had increased from 355 in 2022, reinforcing the Himalayan nation's reputation as a success story in big-cat conservation.

“The data analysis shows that the tiger population has increased by five percent each year, and we are happy to see this increasing trend,” Bed Kumar Dhakal, spokesperson for Nepal's Department of National Parks and Wildlife Conservation, said.

The survey was conducted between December and July, and was announced to coincide with International Tiger Day. It covered more than 7,300 square kilometres of Nepal's southern plains that are home to the predators.

Nepal pledged in 2010 to double its tiger numbers by 2022 and also became the first nation to meet that goal, boosting its tiger population to 355 in 2022 from about 121 in 2009

Wildlife officials deployed more than 3,600 motion-sensitive cameras across five protected areas, with experts analysing thousands of images to identify individual tigers by their distinctive stripe patterns.

“The reason behind the increasing number of tigers is because we could keep their habitat secure,” said conservation department ecologist Hari Bhadra Acharya.

Deforestation, habitat loss, and poaching have been major challenges for tiger populations across Asia, and Nepal has won international praise for reversing the decline.

In 2010, Nepal joined 12 other countries in pledging to double tiger numbers by 2022.

It became the first nation to meet that goal, boosting its tiger population to 355 in 2022 from about 121 in 2009.

Unintended risks

However, the conservation success has also brought unintended risks for communities living near tiger habitats.

Government data shows at least 38 people were killed in tiger attacks between 2019 and 2023.

“The local communities played a crucial role in increasing the tiger numbers, but the government and organisations are not taking action when the tigers are attacking the same communities,” said Nischal Neupane, an advocate for tiger victims in Bardiya district.

The district is home to 112 tigers, up from only 18 in 2009.

World Wide Fund for Nature Nepal representative Ghana Shyam Gurung said conservation gains must be matched by efforts to ensure “people and wildlife can thrive together”.

“By investing in effective co-existence programmes, Nepal can continue to offer a powerful model for other tiger range countries.”

More than 1,00,000 tigers roamed the wild at the start of the 20th century, but global numbers plunged to an estimated 3,200 in 2010 before recovering in parts of Asia through intensified conservation efforts.

30J7. Nepal's tiger numbers climb 20% to estimated 429, says survey

सर्वेक्षण के अनुसार नेपाल में बाघों की संख्या 20% बढ़कर अनुमानित 429 तक पहुँची

- The survey was conducted between December and July, and was announced to coincide with International Tiger Day.

यह सर्वेक्षण दिसंबर से जुलाई के बीच आयोजित किया गया था और इसकी घोषणा अंतर्राष्ट्रीय बाघ दिवस (International Tiger Day) के अवसर पर की गई।



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