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PCS Special:	05 February
1.	A sociologist with rigorous scholarship who laid emphasis on importance of fieldwork कठोर विद्वत्ता वाले समाजशास्त्री जिन्होंने क्षेत्रीय अध्ययन के महत्व पर जोर दिया
2.	Generations apart पीढ़ियों का अंतर
3.	QUIZ
4.	Iran formally allows women to ride motorcycles ईरान औपचारिक रूप से महिलाओं को मोटरसाइकिल चलाने की अनुमति देता है

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A sociologist with rigorous scholarship who laid emphasis on importance of fieldwork

FCS
Nistula Hebbar
NEW DELHI

Renowned Indian sociologist and writer **Andre Beteille** died from age-related illness at his residence in New Delhi on Tuesday. He was 91.

The passing away of Professor Beteille, one of India's foremost scholars, brought forth a rush of tributes from colleagues and former students, amid a realisation that it also marks the passing of a particular way of scholarship and of a practitioner of teaching as a vocation.

Anyone entering the Delhi School of Economics (DSE) for a Master's degree in sociology, for which the institution is justly famous, could not help but be aware of the village of Sripuram in Thanjavur district of Tamil Nadu, the site of Professor Beteille's field-



ANDRE BETEILLE (1934-2026)

work for his work *Caste, Class and Power* on agrarian relations and shifting power structures in India. It was a work that perhaps gave many graduate students, hailing from different strands of social classes, a taste of not just the complexity but also the structural nature of social categories and how they interact.

One entered "D'School", as the DSE is referred to, with an aware-

ness of Professor Beteille's rigorous scholarship and his emphasis on the importance of fieldwork; once there, his commitment to teaching – mercifully jargon-free and disciplined – was the next experience with him.

Born in Chandannagar, West Bengal, in 1934 to a French father and Bengali mother, he could read three languages fluently – English, French, and Bengali. The books and papers

that he wrote, including *Inequality and Social Change*, *Studies in Agrarian Social Structure and Society and Politics in India: Essays in a Comparative Perspective*, attest to his rigorous scholarship.

It is as a teacher, however, that his legions of students remember him. Speaking to *The Hindu*, his former colleague Virginius Xaxa said he too acknowledges Professor Beteille as an "undeclared mentor" to him, in guiding him, through affable nudges (the two had offices next to each other on the DSE campus) towards the study of tribal societies in India, for which Professor Xaxa is known for. "He was a teacher par excellence, not just in terms of style and canvas of his knowledge, but also as an ethical person in terms of responsibility to students," he said.

Students who studied under him recall that regardless of strikes or other disruptions, he would, as was his wont, turn up at the DSE.

Janaki Abraham, who had been a student of Professor Beteille and is now teaching at the DSE, said teaching schedules remained inviolate for him. "He would always say, please attend conferences during holidays, not during semester. As a teacher, he would interact a lot with students and was accessible to us," she said.

His scholarly work is still part of academic curricula in courses on Indian sociology.

While he was accorded the Padma Bhushan in 2005 for his contributions to literature and education, his legions of students give a more lasting account of his career.

A sociologist with rigorous scholarship who laid emphasis on importance of fieldwork

कठोर विद्वत्ता वाले समाजशास्त्री जिन्होंने क्षेत्रीय अध्ययन के महत्व पर जोर दिया

- Renowned **Indian sociologist and writer Andre Beteille** died from **age-related illness** at his residence in **New Delhi on Tuesday**. He was **91**.
प्रसिद्ध भारतीय समाजशास्त्री और लेखक आंद्रे बेटेल का मंगलवार को नई दिल्ली स्थित उनके आवास पर आयु-सम्बंधी बीमारी से निधन हो गया। वह 91 वर्ष के थे।
- The passing away of **Professor Beteille**, one of India's **foremost scholars**, brought forth a rush of tributes from colleagues and former students, amid a realisation that it also marks the passing of a particular way of scholarship and of a practitioner of teaching as a vocation.
भारत के प्रमुख विद्वानों में से एक प्रोफेसर बेटेल के निधन से सहकर्मियों और पूर्व छात्रों की ओर से श्रद्धांजलियों की बाढ़ आ गई, साथ ही यह अहसास भी हुआ कि यह विद्वत्ता की एक विशेष परंपरा और शिक्षण को एक पेशे के रूप में अपनाने वाले व्यक्ति का अंत है।
- Anyone entering the **Delhi School of Economics (DSE)** for a **Master's degree in sociology**, for which the institution is justly famous, could not help but be aware of the village of **Sripuram in Thanjavur district of Tamil Nadu**, the site of Professor Beteille's **fieldwork** for his work **Caste, Class and Power on agrarian relations and shifting power structures in India**.
दिल्ली स्कूल ऑफ इकोनॉमिक्स (DSE) में समाजशास्त्र में मास्टर्स डिग्री के लिए प्रवेश लेने वाला कोई भी व्यक्ति, जिसके लिए यह संस्थान प्रसिद्ध है, **तमिलनाडु के तंजावुर ज़िले के श्रीपुरम गाँव** से अनजान नहीं रह सकता था, जो भारत में कृषि संबंधों और बदलती सत्ता संरचनाओं पर प्रोफेसर बेटेल के **क्षेत्रीय अध्ययन** और उनके कार्य **Caste, Class and Power** का स्थल था।
- It was a work that perhaps gave many graduate students, hailing from different strands of social classes, a taste of not just the complexity but also the **structural nature of social categories and how they interact**.
यह ऐसा कार्य था जिसने विभिन्न सामाजिक वर्गों से आए अनेक स्नातकोत्तर छात्रों को न केवल जटिलता बल्कि **सामाजिक श्रेणियों की संरचनात्मक प्रकृति** और उनके पारस्परिक संबंधों की समझ दी।
- One entered "**D'School**", as the DSE is referred to, with an awareness of Professor Beteille's **rigorous scholarship** and his emphasis on the importance of **fieldwork**; once there, his **commitment to teaching** — mercifully jargon-free and disciplined — was the next experience with him.
"डी'स्कूल", जैसा कि DSE को कहा जाता है, में प्रवेश प्रोफेसर बेटेल की **कठोर विद्वत्ता और क्षेत्रीय अध्ययन**



के महत्व पर उनके जोर की जानकारी के साथ होता था; वहाँ पहुँचने पर उनका शिक्षण के प्रति समर्पण — बिना अनावश्यक जार्नि और अनुशासित — अगला अनुभव होता था।

- Born in Chandannagar, West Bengal, in 1934 to a French father and Bengali mother, he could read three languages fluently — English, French, and Bengali.
1934 में पश्चिम बंगाल के चंदननगर में फ्रांसीसी पिता और बंगाली माता के यहाँ जन्मे, वह अंग्रेज़ी, फ्रेंच और बंगाली — तीन भाषाएँ धाराप्रवाह पढ़ सकते थे।
- The books and papers that he wrote, including **Inequality and Social Change, Studies in Agrarian Social Structure and Society and Politics in India: Essays in a Comparative Perspective**, attest to his rigorous scholarship.
उनकी लिखी पुस्तकों और शोधपत्रों में **Inequality and Social Change, Studies in Agrarian Social Structure और Society and Politics in India: Essays in a Comparative Perspective** शामिल हैं, जो उनकी कठोर विद्वत्ता की पुष्टि करते हैं।
- It is as a teacher, however, that his legions of students remember him.
हालाँकि, उन्हें उनके असंख्य छात्र सबसे अधिक एक शिक्षक के रूप में याद करते हैं।
- Speaking to **The Hindu**, his former colleague **Virginius Xaxa** said he too acknowledges Professor Beteille as an “undeclared mentor” to him, in guiding him, through **affable nudges** (the two had offices next to each other on the DSE campus) towards the study of **tribal societies in India**, for which Professor Xaxa is known for.
द हिंदू से बातचीत में उनके पूर्व सहकर्मी **वर्जीनियस ज़ाक्सा** ने कहा कि वह भी प्रोफेसर बेटेल को अपना “अघोषित मार्गदर्शक” मानते हैं, जिन्होंने **सौम्य प्रेरणाओं** के माध्यम से (DSE परिसर में दोनों के कार्यालय पास-पास थे) उन्हें **भारत की जनजातीय समाजों** के अध्ययन की ओर मार्गदर्शन दिया, जिसके लिए प्रोफेसर ज़ाक्सा प्रसिद्ध हैं।
- “He was a teacher par excellence, not just in terms of style and canvas of his knowledge, but also as an ethical person in terms of responsibility to students,” he said.
उन्होंने कहा, “वह उत्कृष्ट शिक्षक थे, न केवल अपनी ज्ञान-शैली और विस्तार में, बल्कि छात्रों के प्रति जिम्मेदारी के संदर्भ में एक नैतिक व्यक्ति भी थे।”
- Students who studied under him recall that regardless of strikes or other disruptions, he would, as was his wont, **turn up at the DSE**.
उनके अधीन अध्ययन करने वाले छात्र याद करते हैं कि **हड़तालों** या अन्य व्यवधानों के बावजूद, वह अपनी आदत के अनुसार **DSE पहुँच जाते थे**।
- **Janaki Abraham**, who had been a student of Professor Beteille and is now teaching at the DSE, said teaching schedules remained **inviolable** for him.
जानकी अब्राहम, जो प्रोफेसर बेटेल की छात्रा रह चुकी हैं और अब DSE में अध्यापन कर रही हैं, ने कहा कि उनके लिए शिक्षण कार्यक्रम **अटूट** रहते थे।
- “He would always say, please attend conferences during **holidays**, not during **semester**. As a teacher, he would interact a lot with students and was **accessible** to us,” she said.
उन्होंने कहा, “वह हमेशा कहते थे, कृपया **छुट्टियों** में सम्मेलन में जाएँ, **सेमेस्टर** के दौरान नहीं। एक शिक्षक के रूप में वह छात्रों से बहुत संवाद करते थे और हमारे लिए **सुलभ** थे।”
- His **scholarly work** is still part of **academic curricula** in courses on **Indian sociology**.
उनका **शोधपूर्ण कार्य** आज भी **भारतीय समाजशास्त्र** के पाठ्यक्रमों में **शैक्षणिक पाठ्यक्रम** का हिस्सा है।
- While he was accorded the **Padma Bhushan** in **2005** for his contributions to **literature and education**, his legions of students give a more lasting account of his career.
हालाँकि उन्हें **2005** में **साहित्य और शिक्षा** में योगदान के लिए **पद्म भूषण** से सम्मानित किया गया, लेकिन उनके असंख्य छात्र उनके करियर की कहीं अधिक स्थायी गवाही देते हैं।



PCS

Generations apart

Despite being separated by 16 years, Djokovic fought as an equal with Alcaraz

Ever since Carlos Alcaraz won his maiden Grand Slam title at the 2022 US Open and scaled the pinnacle of ATP rankings as a tender 19-year-old, he was said to be on a fast lane to success. On Sunday, with his first Australian Open singles crown and seventh Major overall, the Spaniard proved that those predictions were not ill-founded. The four-set triumph over the legendary Novak Djokovic drew Alcaraz level with greats such as John McEnroe and Mats Wilander in the all-time Slam tally. At 22 years, eight months and 28 days, Alcaraz is also the youngest to complete the career Grand Slam (acquiring all four Majors at least once), surpassing 22-time Slam winner Rafael Nadal's record of 24 years, three months and 10 days. Melbourne had long been Alcaraz's Achilles heel. He had not gone past the quarterfinals in four prior attempts, and this time, he had arrived Down Under without his long-term coach Juan Carlos Ferrero, from whom he recently split. But the World No.1 thrived, often under pressure, not just in the final where he fended off a resurgent Djokovic aiming for his 25th Major, but also in the semifinals where he battled from the brink – both tennis-wise and health-wise – to outlast Germany's Alexander Zverev in a five-hour, 27-minute humdinger.

The fortnight also served as a timely reminder of Djokovic's enduring genius. The rousing four-hour, nine-minute semifinal victory over World No.2 and two-time defending champion Jannik Sinner – his first over the Italian in six attempts – showed that even at the grand old tennis age of 38, the Serb is among the very best. He may have benefitted from a walkover in the fourth round and a retirement in the quarterfinals, but what shone were his technical mastery and the ability to hit peak level when needed. Djokovic is now up to No. 3, and such is his recent record – four semifinals and a final in the last five Majors – that any talk of retirement appears incongruous. However, it will be in the best interest of men's tennis if a contemporary star can be unearthed to challenge the Alcaraz-Sinner duopoly than just depending on a seemingly timeless patriarch. The women's game does not suffer from such lacuna as Elena Rybakina captured her second Slam title – after Wimbledon 2022 – with a stunning three-set defeat of World No. 1 and four-time Major winner Aryna Sabalenka. The 26-year-old Kazakh is now ranked No. 3, and the fact that she beat No. 2 Iga Swiatek – who was on her own mission to achieve a career Slam – and No. 6 Jessica Pegula en route will halo her achievement.

- But the **World No.1** thrived, often under pressure, not just in the **final** against Djokovic aiming for his **25th Major**, but also in the **semifinals** against **Alexander Zverev** in a **five-hour, 27-minute** battle.

लेकिन विश्व नंबर 1 ने दबाव में भी शानदार प्रदर्शन किया, न केवल फाइनल में 25वें मेजर के लक्ष्य वाले

Generations apart पीढ़ियों का अंतर

- Despite being separated by **16 years**, Djokovic fought as an equal with **Alcaraz**
16 वर्ष के अंतर के बावजूद **जोकोविच** ने **अल्काराज़** के साथ बराबरी की टक्कर दी

Alcaraz completes career Grand Slam with Australian Open title

ऑस्ट्रेलियन ओपन खिताब के साथ अल्काराज़ ने करियर ग्रैंड स्लैम पूरा किया

- Ever since **Carlos Alcaraz** won his maiden **Grand Slam title at the 2022 US Open** and scaled the pinnacle of **ATP rankings** as a **19-year-old**, he was said to be on a **fast lane to success**.

जब से **कार्लोस अल्काराज़** ने **2022 यूएस ओपन** में अपना पहला **ग्रैंड स्लैम खिताब** जीता और **19 वर्ष** की उम्र में **एटीपी रैंकिंग** के शीर्ष पर पहुँचे, तब से उन्हें **तेजी से सफलता की ओर बढ़ता** माना गया।

- On **Sunday**, with his first **Australian Open singles crown** and **seventh Major overall**, the Spaniard proved that those predictions were **not ill-founded**. **रविवार** को अपने पहले **ऑस्ट्रेलियन ओपन एकल खिताब** और कुल **सातवें मेजर** के साथ स्पेनिश खिलाड़ी ने साबित किया कि वे भविष्यवाणियाँ **गलत नहीं थीं**।

- The four-set triumph over the legendary **Novak Djokovic** drew Alcaraz level with greats such as **John McEnroe** and **Mats Wilander** in the **all-time Slam tally**.

दिग्गज **नोवाक जोकोविच** पर चार सेट की जीत के साथ अल्काराज़ **जॉन मैकनरो** और **मैट्स विलेंडर** जैसे महान खिलाड़ियों के **ऑल-टाइम स्लैम रिकॉर्ड** के बराबर पहुँच गए।

- At **22 years, eight months and 28 days**, Alcaraz is the **youngest to complete the career Grand Slam**, surpassing **Rafael Nadal's record of 24 years, three months and 10 days**.

22 वर्ष, 8 महीने और 28 दिन की उम्र में अल्काराज़ **करियर ग्रैंड स्लैम पूरा करने वाले सबसे युवा खिलाड़ी** बने, उन्होंने **राफेल नडाल के 24 वर्ष, 3 महीने और 10 दिन** के रिकॉर्ड को तोड़ा।

- **Melbourne** had long been Alcaraz's **Achilles heel**, as he had not gone past the **quarterfinals in four prior attempts**.

मेलबर्न लंबे समय तक अल्काराज़ की **कमजोरी** रहा, क्योंकि वे पहले **चार प्रयासों में क्वार्टरफाइनल से आगे नहीं बढ़ पाए थे**।

- This time, he arrived **without his long-term coach Juan Carlos Ferrero**, from whom he recently **split**. इस बार वे **अपने लंबे समय के कोच जुआन कार्लोस फेररो के बिना** पहुँचे, जिनसे उनका हाल ही में **अलगाव** हुआ था।



जोकोविच के खिलाफ, बल्कि **सेमीफाइनल** में **अलेक्जेंडर ज्वेरेव** के खिलाफ **5 घंटे 27 मिनट** की लड़ाई में भी।

- The fortnight also served as a reminder of **Djokovic's enduring genius**. यह पखवाड़ा **जोकोविच की स्थायी प्रतिभा** की याद दिलाने वाला भी रहा।
- The four-hour, nine-minute **semifinal victory** over **World No.2 Jannik Sinner** — his first over the Italian in **six attempts** — showed that even at **38 years**, he remains among the **very best**.

विश्व नंबर 2 यानिक सिनर पर **4 घंटे 9 मिनट** की **सेमीफाइनल जीत** — इटालियन पर **छह प्रयासों में पहली जीत** — ने दिखाया कि **38 वर्ष** की उम्र में भी वे **सर्वश्रेष्ठ खिलाड़ियों में हैं**।

- He may have benefited from a **walkover in the fourth round** and a **retirement in the quarterfinals**, but his **technical mastery** and ability to hit **peak level when needed** stood out.

उन्हें **चौथे दौर में वॉकओवर** और **क्वार्टरफाइनल में रिटायरमेंट** का लाभ मिला, लेकिन उनकी **तकनीकी महारत** और **जरूरत पड़ने पर सर्वोच्च स्तर का प्रदर्शन** प्रमुख रहा।

- Djokovic is now ranked **No. 3**, and with **four semifinals and a final in the last five Majors**, talk of **retirement** appears **incongruous**.

जोकोविच अब **नंबर 3** पर हैं, और **पिछले पाँच मेजर में चार सेमीफाइनल और एक फाइनल** के साथ **संन्यास की चर्चा** असंगत लगती है।

- However, men's tennis would benefit if a **new contemporary star** emerges to challenge the **Alcaraz-Sinner duopoly**.

हालाँकि पुरुष टेनिस के लिए बेहतर होगा यदि **एक नया समकालीन सितारा** उभरे जो **अल्काराज़-सिनर वर्चस्व** को चुनौती दे सके।

- The **women's game** does not face such a gap, as **Elena Rybakina** captured her **second Slam title** — after **Wimbledon 2022** — defeating **World No.1 Aryna Sabalenka** in a **three-set match**.

महिला टेनिस में ऐसी कमी नहीं है, क्योंकि **एलेना र्यबाकिना** ने **विंबलडन 2022** के बाद अपना **दूसरा स्लैम खिताब** जीता और **विश्व नंबर 1 आर्यना सबालेंका** को **तीन सेट** में हराया।

- The **26-year-old Kazakh**, now ranked **No. 3**, also defeated **No. 2 Iga Swiatek** and **No. 6 Jessica Pegula** on her way to the title.

26 वर्षीय कजाख खिलाड़ी, जो अब **नंबर 3** पर हैं, ने खिताब की राह में **नंबर 2 इगा स्वियाटेक** और **नंबर 6 जेसिका पेगुला** को भी हराया।

Question and Answers to the previous

day's daily quiz: 1. Name the four grand slam tournaments? **Ans: Wimbledon, the French open, the Australian open, and the U.S. Open**

2. What is a golden slam? **Ans: winning the four grand slams and Olympic gold**

3. Roger Federer, Rafael Nadal, and Novak Djokovic are considered the 'big three' of tennis. Who among them has not completed the golden slam? **Ans: Roger Federer**

4. Name the first male and female players to complete calendar grand slams in the open era? **Ans: Rod Laver and Margaret Court**

5. Who is the first male player to complete a golden slam? **Ans: Andre Agassi**

Visual: Name this player who is the first ever to win a golden slam and the only one to achieve it in a calendar year? **Ans: Steffi Graf**

Early Birds: Pramod Singh | Vineet Giri | Varghese Joseph | Amit Kumar | Jisha Thakur

QUIZ

Grand Slam Tournaments in Tennis

Wimbledon

- **Wimbledon is the oldest and most prestigious tennis tournament, first held in 1877 at the All England Club, London.**
- It is played on grass courts, which makes the game faster and favors players with strong serves and volley skills.
- Wimbledon is famous for its traditions such as **the all-white dress code for players and royal patronage.**
- It is usually held from late June to early July and is considered the pinnacle of tennis excellence worldwide.

French Open (Roland Garros)

- The **French Open, held in Paris at Stade Roland Garros, is played on clay courts, which slow down the ball and demand high endurance and baseline play.**



- Started in 1891, it is the only Grand Slam on clay and is known for long rallies and physically demanding matches.
- It usually takes place from late May to early June. Winning this title requires exceptional stamina, consistency, and tactical skill, making it one of the toughest tournaments in professional tennis.

Australian Open

- The Australian Open is the first Grand Slam of the calendar year, held in Melbourne, Australia, usually in January.
- It is played on hard courts and is known for modern facilities and extreme summer heat conditions.
- The tournament began in 1905 and has grown into a major global sporting event.
- It introduced innovations like night matches and advanced tie-break rules. The competition tests players' physical fitness, adaptability, and mental strength at the start of the season.

U.S. Open

- The U.S. Open is held in New York at the USTA Billie Jean King National Tennis Center, usually from late August to early September.
- Played on hard courts, it is known for its energetic atmosphere and large crowds.
- Established in 1881, it was the first Grand Slam to allow professional players in 1968, marking the start of the Open Era.
- The tournament is famous for night matches, powerful baseline play, and intense competition among the world's top tennis players.

Golden Slam in Tennis

Meaning and Significance

- A Golden Slam in tennis refers to the rare achievement of winning all four Grand Slam tournaments — Australian Open, French Open, Wimbledon, and U.S. Open — along with the Olympic gold medal in the same calendar year.
- This feat demands exceptional consistency, endurance, and dominance across different surfaces and conditions.
- Germany's Steffi Graf became the first and only player to achieve a Calendar Golden Slam in 1988, making it one of the greatest accomplishments in tennis history.

Golden Slam and the 'Big Three'

Roger Federer and the Golden Slam

- Roger Federer has not completed a Golden Slam because he never won an Olympic gold medal in singles.
- Although he secured 20 Grand Slam singles titles and dominated tennis for many years, his only Olympic gold came in men's doubles at the 2008 Beijing Olympics with Stan Wawrinka.
- In singles, Federer won a silver medal at the 2012 London Olympics, finishing runner-up to Andy Murray, thus missing the complete Golden Slam achievement.

First Calendar Grand Slam Winners in the Open Era

Rod Laver — First Male Player

- Rod Laver of Australia became the first male player to complete a Calendar Grand Slam in the Open Era in 1969 by winning the Australian Open, French Open, Wimbledon, and U.S. Open in the same year.



- This achievement demonstrated his dominance across grass and clay courts.
- Laver had earlier also completed a Calendar Grand Slam in 1962 during the amateur era, making him the only male player in tennis history to achieve this feat twice.

Margaret Court — First Female Player

- Margaret Court of Australia became the first female player to complete a Calendar Grand Slam in the Open Era in 1970 by winning all four major titles in a single season.
- She dominated women's tennis with powerful serve-and-volley play and exceptional fitness.
- Court holds a record 24 Grand Slam singles titles, the highest in tennis history, and her 1970 Calendar Grand Slam remains one of the greatest accomplishments in women's tennis

First Male Player to Complete a Golden Slam

Andre Agassi — Career Golden Slam

- Andre Agassi became the first male tennis player to achieve a Career Golden Slam by winning all four Grand Slam singles titles — Australian Open, French Open, Wimbledon, and U.S. Open — along with an Olympic gold medal.
- He secured Olympic gold at the 1996 Atlanta Games and completed his final missing Grand Slam, the French Open, in 1999.
- This rare achievement highlighted his versatility across surfaces and confirmed his place among tennis legends.

PATRIOTIC IAS



Iran formally allows women to ride motorcycles

PCS
Agence France Presse
TEHRAN

Women in Iran can now formally obtain a licence to ride a motorcycle, local media reported Wednesday, ending years of legal ambiguity surrounding two-wheelers.

Previously, the law did not explicitly prohibit women from riding motorbikes and scooters, but in practice, authorities refused to issue licences.

Due to the grey area, women have been held legally responsible for accidents even when victims.

Iran's First Vice President Mohammad Reza Aref signed a resolution on Tuesday aimed at clarifying the traffic code, which was approved by Iran's Cabinet in late January, the country's *Ilna* news agency reported. The resolution obliges traffic police to "provide practical training to female applicants, organise an exam under the direct supervision of the police, and issue motorcycle driver's licences to women", *Ilna* said.

The change follows a wave of protests across Iran that were initially sparked by economic grievances but which grew last month into nationwide anti-government demonstrations.

Tehran has acknowledged that more than 3,000 deaths occurred during the unrest, insisting that most were members of the security forces and bystanders.

For Saina, a 33-year-old advertising agency employee who has been commuting to work by scooter for six months, the change to the traffic laws comes "too late" because "women have been riding motorcycles for months already". "I don't think this is the main problem in our society," she told *AFP*, referring to the recent protests.

Since Iran's 1979 Islamic revolution, women have faced a number of societal restrictions, with dress codes posing a challenge for those riding motorcycles.

इस प्रस्ताव के तहत यातायात पुलिस को "महिला आवेदकों को व्यावहारिक प्रशिक्षण देने, पुलिस की प्रत्यक्ष निगरानी में परीक्षा आयोजित करने और महिलाओं को मोटरसाइकिल चालक लाइसेंस जारी करने" के लिए बाध्य किया गया है, इलना ने कहा।

- The change follows a wave of protests across Iran that were initially sparked by **economic grievances** but which grew last month into nationwide **anti-government demonstrations**. यह बदलाव ईरान भर में हुए विरोध प्रदर्शनों की एक लहर के बाद आया है, जो शुरुआत में **आर्थिक शिकायतों** से शुरू हुए थे, लेकिन पिछले महीने **राष्ट्रव्यापी सरकार-विरोधी प्रदर्शनों** में बदल गए।
- **Tehran** has acknowledged that more than **3,000 deaths** occurred during the unrest, insisting that most were members of the **security forces** and **bystanders**. तेहरान ने स्वीकार किया है कि अशांति के दौरान **3,000 से अधिक मौतें** हुईं, और जोर दिया कि उनमें से अधिकांश **सुरक्षा बलों** के सदस्य और **राहगीर** थे।
- For **Saina**, a **33-year-old** advertising agency employee who has been commuting to work by scooter for **six months**, the change to the **traffic laws** comes "too late" because "women have been riding motorcycles for months already".
सैना, 33 वर्षीय विज्ञापन एजेंसी कर्मचारी, जो **छह महीनों** से स्कूटर से काम पर जा रही हैं, के लिए यातायात

Iran formally allows women to ride motorcycles

ईरान औपचारिक रूप से महिलाओं को मोटरसाइकिल चलाने की अनुमति देता है

- **Iran formally allows women to ride motorcycles**
ईरान औपचारिक रूप से महिलाओं को मोटरसाइकिल चलाने की अनुमति देता है
- **Women in Iran can now formally obtain a licence to ride a motorcycle**, local media reported Wednesday, ending years of legal ambiguity surrounding **two-wheelers**.
ईरान में महिलाएं अब औपचारिक रूप से **मोटरसाइकिल** चलाने के लिए **लाइसेंस** प्राप्त कर सकती हैं, स्थानीय मीडिया ने बुधवार को रिपोर्ट किया, जिससे **दो-पहिया वाहनों** से जुड़े वर्षों पुराने कानूनी अस्पष्टता का अंत हो गया।
- Previously, the law did not explicitly prohibit women from riding motorbikes and scooters, but in practice, authorities refused to issue licences.
पहले, कानून में महिलाओं को मोटरसाइकिल और स्कूटर चलाने से स्पष्ट रूप से नहीं रोका गया था, लेकिन व्यवहार में, अधिकारी लाइसेंस जारी करने से इनकार करते थे।
- Due to the grey area, women have been held legally responsible for accidents even when victims.
इस कानूनी अस्पष्टता के कारण, महिलाएं दुर्घटनाओं के लिए कानूनी रूप से जिम्मेदार ठहराई गईं, भले ही वे पीड़ित ही क्यों न हों।
- Iran's **First Vice President Mohammad Reza Aref** signed a **resolution** on Tuesday aimed at clarifying the **traffic code**, which was approved by **Iran's Cabinet** in late January, the country's **Ilna news agency** reported.
ईरान के **प्रथम उपराष्ट्रपति मोहम्मद रज़ा आरिफ** ने मंगलवार को **यातायात संहिता** को स्पष्ट करने के उद्देश्य से एक **प्रस्ताव** पर हस्ताक्षर किए, जिसे जनवरी के अंत में **ईरान की कैबिनेट** ने मंजूरी दी थी, देश की **इलना समाचार एजेंसी** ने रिपोर्ट किया।
- The resolution obliges **traffic police** to "provide practical training to female applicants, organise an exam under the direct supervision of the police, and issue motorcycle driver's licences to women", *Ilna* said.



कानूनों में यह बदलाव “बहुत देर से” आया है, क्योंकि “महिलाएं पहले से ही महीनों से मोटरसाइकिल चला रही हैं।”

- “I don’t think this is the main problem in our society,” she told **AFP**, referring to the recent protests.
“मुझे नहीं लगता कि यह हमारे समाज की मुख्य समस्या है,” उन्होंने हालिया प्रदर्शनों का जिक्र करते हुए **AFP** से कहा।
- Since **Iran’s 1979 Islamic revolution**, women have faced a number of **societal restrictions**, with **dress codes** posing a challenge for those riding motorcycles.
ईरान की 1979 की इस्लामी क्रांति के बाद से, महिलाओं को कई **सामाजिक प्रतिबंधों** का सामना करना पड़ा है, जिसमें मोटरसाइकिल चलाने वाली महिलाओं के लिए **ड्रेस कोड** एक चुनौती बना हुआ है।

GS Paper 1: Society

TOPICS COVERED

05 February 2026

1. **Denotified tribes seek constitutional recognition, separate Census entry**
विमुक्त जनजातियाँ संवैधानिक मान्यता और जनगणना में अलग प्रविष्टि की मांग करती हैं

PATRIOTIC IAS



Denotified tribes seek constitutional recognition, separate Census entry

Denotified tribes, nomadic tribes, semi-nomadic tribes seek 'separate column' in 2027 caste census, claiming they have been politically misclassified among SC, ST, OBC groups; they want sub-classification to highlight backwardness within grouping

GS I: Society

Abhinav Lakshman
NEW DELHI

Denotified tribes, nomadic tribes, and semi-nomadic tribes across the country are coming together to push for a "separate column" for themselves in Census 2027. Their demand is for constitutional recognition of the denotified tribes in a Schedule, on a par with the existing classifications of Scheduled Castes and Scheduled Tribes (SC/STs) and Other Backward Classes (OBCs).

In February 2027, India will conduct a caste enumeration for the first time since 1931. Five years after that 1931 Census, the origins of the Scheduled Castes list came into being in the form of the Government of India (Scheduled Castes) Order, 1936.

Half a century earlier, in 1871, a colonial law had classified entire communities, particularly nomadic and semi-nomadic tribes, as "criminals". After the law was repealed in 1952, these groups came to be known as "denotified" tribes.

The Social Justice Ministry has now recommended

Count the uncounted

Denotified tribes seek 'separate column' and formal identity after decades of misclassification

Classification & numbers

They were labelled 'criminal tribes' under the Criminal Tribes Act, 1871

The Act was repealed in 1952, after which these communities were denotified

The previous National Commission identified nearly 1,200 communities

Nearly 267 communities remain outside the SC, ST, and OBC lists

Estimates suggest up to 7 crore people in Uttar Pradesh alone



Key demands

Separate Census column for denotified tribes

Dedicated Constitutional Schedule

Sub-classification to reflect graded backwardness within communities

to the Office of the Registrar-General of India that these denotified, nomadic, and semi-nomadic tribes be included in the Census. The Office of the RGI has agreed to include them in next year's caste enumeration exercise, Ministry officials assured community leaders in North India in a virtual meeting on January 30.

'Separate column'

"But we have no idea how they will do this," B.K. Lodhi, a community organiser in Uttar Pradesh who was at the meeting, told *The Hindu*. "If we are not counted in a separate column, a separate code, in

the Census forms, we will be lost once again," said Balak Ram Sansi, 63, a Karnal-based organiser with the All India Denotified Nomadic Tribes Development Council.

Even as leaders from denotified, nomadic, and semi-nomadic communities across Uttar Pradesh, Haryana, Punjab, Rajasthan, and other parts of North India are fighting to have their own Schedule, some leaders have started to stress the importance of recognising "graded backwardness" within this grouping as well.

They want the demand for sub-classification to go hand in hand with that for

a separate Schedule. These leaders, like Dr. Lodhi, are drawing their arguments from an August 2024 judgment, in which the Supreme Court paved the way for sub-classification of SCs and STs.

Denotified tribes

The Criminal Tribes Act was first enacted in 1871 and then amended in 1924, before being officially repealed on August 31, 1952. The 1871 Act said it was for the "registration, surveillance and control of certain criminal tribes and eunuchs", describing "criminal tribes" as "tribe, gang, or class of persons" that are "addicted" to committing non-bailable offences. "These communities were among the first to confront the British and sustained the struggle. That is why the colonial government classified us as 'criminal tribes'," Mr. Sansi said.

The previous National Commission for Denotified Tribes, headed by Bhiku Ramji Idade, identified 1,200 such tribes, most of which have been assimilated in the SC, ST, or OBC classifications over the past seven decades. In its 2017 report, however, the Idade

Commission listed 267 DNT communities that have not been classified as such. Dr. Lodhi, who served as Deputy Secretary and Director (Research) to the Idade Commission, said, "Most of the DNTs have been amalgamated in the SC, ST, OBC lists and they are not able to compete in these categories because of how marginalised they are." Mr. Sansi said it was "politics" that led to the DNT communities being "misclassified".

No caste certificates

Despite schemes for DNTs run by both the State and the Centre, such as the SEED scheme, only a "miniscule" percentage of people are getting benefits, mainly because governments are not willing to issue DNT certificates, the leaders said.

The Social Justice Ministry has only spent ₹69.3 crore on the SEED scheme in the past five years (as of December 2025), compared to the planned expenditure of ₹200 crore. "The reason for this is that no State is issuing proper DNT community certificates for us despite reminders from the Centre," Dr. Lodhi said.

Denotified tribes seek constitutional recognition, separate Census entry विमुक्त जनजातियाँ संवैधानिक मान्यता और जनगणना में अलग प्रविष्टि की मांग करती हैं

- Denotified tribes, nomadic tribes, semi-nomadic tribes seek 'separate column' in 2027 caste census, claiming they have been politically misclassified among SC, ST, OBC groups; they want sub-classification to highlight backwardness within grouping

विमुक्त जनजातियाँ, घुमंतू जनजातियाँ, अर्ध-घुमंतू जनजातियाँ 2027 की जाति जनगणना में 'अलग कॉलम' की मांग कर रही हैं, यह दावा करते हुए कि उन्हें राजनीतिक रूप से एससी, एसटी, ओबीसी समूहों में गलत वर्गीकृत किया गया है; वे समूह के भीतर पिछड़ेपन को उजागर करने के लिए उप-वर्गीकरण चाहते हैं

- Denotified tribes, nomadic tribes, and semi-nomadic tribes across the country are coming together to push for a "separate column" for themselves in Census 2027. देश भर की विमुक्त जनजातियाँ, घुमंतू जनजातियाँ और अर्ध-घुमंतू जनजातियाँ 2027 की जनगणना में अपने लिए "अलग कॉलम" की मांग को लेकर एकजुट हो रही हैं।
- Their demand is for constitutional recognition of the denotified tribes in a Schedule, on a par with the existing classifications of Scheduled Castes and Scheduled Tribes (SC/STs) and Other Backward Classes (OBCs). उनकी मांग है कि विमुक्त जनजातियों को अनुसूची में संवैधानिक मान्यता दी जाए, ठीक उसी तरह जैसे अनुसूचित जाति और अनुसूचित जनजाति (एससी/एसटी) और अन्य पिछड़ा वर्ग (ओबीसी) को दी गई है।
- In February 2027, India will conduct a caste enumeration for the first time since 1931. फरवरी 2027 में भारत 1931 के बाद पहली बार जाति गणना करेगा।



- Five years after that **1931 Census**, the origins of the **Scheduled Castes list** came into being in the form of the **Government of India (Scheduled Castes) Order, 1936**.
1931 की जनगणना के पाँच वर्ष बाद **अनुसूचित जातियों की सूची** की उत्पत्ति **भारत सरकार (अनुसूचित जाति) आदेश, 1936** के रूप में हुई।
- Half a century earlier, in **1871**, a **colonial law** had classified entire communities, particularly **nomadic and semi-nomadic tribes**, as **“criminals”**.
इससे आधी सदी पहले, **1871** में, एक **औपनिवेशिक कानून** ने पूरी की पूरी समुदायों को, विशेष रूप से घुमंतू और अर्ध-घुमंतू जनजातियों को, **“अपराधी”** घोषित कर दिया था।
- After the law was repealed in **1952**, these groups came to be known as **“denotified” tribes**.
जब यह कानून **1952** में रद्द किया गया, तो इन समूहों को **“विमुक्त” जनजातियाँ** कहा जाने लगा।
- The **Social Justice Ministry** has now recommended to the **Office of the Registrar-General of India** that these denotified, nomadic, and semi-nomadic tribes be included in the **Census**.
सामाजिक न्याय मंत्रालय ने अब **भारत के रजिस्ट्रार जनरल कार्यालय** को सिफारिश की है कि इन विमुक्त, घुमंतू और अर्ध-घुमंतू जनजातियों को **जनगणना** में शामिल किया जाए।
- The **Office of the RGI** has agreed to include them in next year's **caste enumeration exercise**, Ministry officials assured community leaders in North India in a virtual meeting on **January 30**.
आरजीआई कार्यालय ने अगले वर्ष की **जाति गणना प्रक्रिया** में उन्हें शामिल करने पर सहमति जताई है, मंत्रालय के अधिकारियों ने **30 जनवरी** को उत्तर भारत के समुदाय नेताओं के साथ हुई एक वर्चुअल बैठक में आश्वासन दिया।

‘Separate column’ ‘अलग कॉलम’

- “But we have no idea how they will do this,” **B.K. Lodhi**, a community organiser in **Uttar Pradesh**, told *The Hindu*.
“लेकिन हमें नहीं पता कि वे यह कैसे करेंगे,” **उत्तर प्रदेश** के समुदाय आयोजक **बी.के. लोधी** ने *द हिंदू* से कहा।
- “If we are not counted in a **separate column**, a **separate code**, in the Census forms, we will be lost once again,” said **Balak Ram Sansi**, 63, a **Karnal-based organiser** with the **All India Denotified Nomadic Tribes Development Council**.
“यदि हमें जनगणना प्रपत्रों में **अलग कॉलम**, **अलग कोड** में नहीं गिना गया, तो हम एक बार फिर खो जाएंगे,” **ऑल इंडिया डिनोटिफाइड नोमैडिक ट्राइब्स डेवलपमेंट काउंसिल** के **करनाल** स्थित आयोजक **63 वर्षीय बालक राम सांसी** ने कहा।
- Even as leaders from denotified, nomadic, and semi-nomadic communities across **Uttar Pradesh, Haryana, Punjab, Rajasthan**, and other parts of **North India** are fighting to have their own **Schedule**, some leaders have started to stress the importance of recognising **“graded backwardness”** within this grouping as well.
जहाँ **उत्तर प्रदेश, हरियाणा, पंजाब, राजस्थान** और **उत्तर भारत** के अन्य हिस्सों की विमुक्त, घुमंतू और अर्ध-घुमंतू समुदायों के नेता अपनी **अलग अनुसूची** की मांग कर रहे हैं, वहीं कुछ नेता इस समूह के भीतर **“स्तरिकृत पिछड़ेपन”** को मान्यता देने की आवश्यकता पर भी जोर देने लगे हैं।
- They want the demand for **sub-classification** to go hand in hand with that for a **separate Schedule**.
वे चाहते हैं कि **उप-वर्गीकरण** की मांग **अलग अनुसूची** की मांग के साथ-साथ चले।
- These leaders, like **Dr. Lodhi**, are drawing their arguments from an **August 2024 judgment**, in which the **Supreme Court paved the way for sub-classification of SCs and STs**.
डॉ. लोधी जैसे ये नेता अपने तर्क **अगस्त 2024 के फैसले** से ले रहे हैं, जिसमें **सुप्रीम कोर्ट ने एससी और एसटी के उप-वर्गीकरण** का रास्ता साफ किया था।

Denotified tribes विमुक्त जनजातियाँ

- The **Criminal Tribes Act** was first enacted in **1871** and then amended in **1924**, before being **officially repealed on August 31, 1952**.
आपराधिक जनजाति अधिनियम पहली बार **1871** में लागू हुआ और फिर **1924** में संशोधित किया गया, इससे पहले कि इसे **31 अगस्त 1952** को आधिकारिक रूप से निरस्त किया गया।



- The **1871 Act** said it was for the “**registration, surveillance and control of certain criminal tribes and eunuchs**”, describing “**criminal tribes**” as “**tribe, gang, or class of persons**” that are “**addicted**” to committing **non-bailable offences**.
1871 के अधिनियम में कहा गया था कि यह “**कुछ आपराधिक जनजातियों और हिजड़ों के पंजीकरण, निगरानी और नियंत्रण**” के लिए है, और “**आपराधिक जनजातियों**” को ऐसे “**जनजाति, गिरोह या व्यक्तियों के वर्ग**” के रूप में वर्णित किया गया था जो **गैर-जमानती अपराध** करने के “**आदी**” हैं।
- “**These communities were among the first to confront the British and sustained the struggle. That is why the colonial government classified us as ‘criminal tribes’.**” **Mr. Sansi** said.
श्री सांसी ने कहा, “**ये समुदाय ब्रिटिशों का सामना करने वालों में सबसे पहले थे और उन्होंने संघर्ष को बनाए रखा। इसी कारण औपनिवेशिक सरकार ने हमें ‘आपराधिक जनजातियाँ’ घोषित किया।**”
- The previous **National Commission for Denotified Tribes**, headed by **Bhiku Ramji Idate**, identified **1,200** such tribes, most of which have been assimilated in the **SC, ST, or OBC** classifications over the past seven decades.
पूर्व **विमुक्त जनजाति राष्ट्रीय आयोग**, जिसकी अध्यक्षता **भिकू रामजी इडाते** ने की, ने **1,200** ऐसी जनजातियों की पहचान की, जिनमें से अधिकांश पिछले सात दशकों में **एससी, एसटी या ओबीसी** वर्गीकरण में समाहित हो गई हैं।
- In its **2017 report**, however, the **Idate Commission** listed **267 DNT communities** that have not been classified as such.
हालाँकि, अपनी **2017 की रिपोर्ट** में **इडाते आयोग** ने **267 डीएनटी समुदायों** को सूचीबद्ध किया, जिन्हें अब तक इस प्रकार वर्गीकृत नहीं किया गया है।
- Dr. Lodhi**, who served as **Deputy Secretary and Director (Research)** to the **Idate Commission**, said, “Most of the DNTs have been amalgamated in the **SC, ST, OBC** lists and they are not able to compete in these categories because of how **marginalised** they are.”
इडाते आयोग में उप सचिव और निदेशक (अनुसंधान) के रूप में कार्य कर चुके **डॉ. लोधी** ने कहा, “**अधिकांश डीएनटी एससी, एसटी, ओबीसी सूचियों में मिला दिए गए हैं और अपनी हाशिये पर स्थिति के कारण वे इन श्रेणियों में प्रतिस्पर्धा नहीं कर पा रहे हैं।**”
- Mr. Sansi** said it was “**politics**” that led to the DNT communities being “**misclassified**”.
श्री सांसी ने कहा कि डीएनटी समुदायों का “**गलत वर्गीकरण**” “**राजनीति**” का परिणाम है।

No caste certificates कोई जाति प्रमाणपत्र नहीं

- Despite schemes for DNTs run by both the **State and the Centre**, such as the **SEED scheme**, only a “**minuscule**” percentage of people are getting benefits, mainly because governments are not willing to issue **DNT certificates**, the leaders said.
राज्य और केंद्र द्वारा डीएनटी के लिए चलाई जा रही योजनाओं, जैसे **सीड (SEED) योजना**, के बावजूद केवल “**नगण्य**” प्रतिशत लोगों को लाभ मिल रहा है, मुख्यतः इसलिए क्योंकि सरकारें **डीएनटी प्रमाणपत्र** जारी करने को तैयार नहीं हैं, नेताओं ने कहा।
- The **Social Justice Ministry** has only spent **₹69.3 crore** on the **SEED scheme** in the past **five years** (as of **December 2025**), compared to the planned expenditure of **₹200 crore**.
सामाजिक न्याय मंत्रालय ने पिछले **पाँच वर्षों** में (दिसंबर 2025 तक) **सीड योजना** पर केवल **₹69.3 करोड़** खर्च किए हैं, जबकि नियोजित व्यय **₹200 करोड़** था।
- “The reason for this is that no State is issuing proper **DNT community certificates** for us despite reminders from the **Centre**,” **Dr. Lodhi** said.
डॉ. लोधी ने कहा, “**इसका कारण यह है कि केंद्र की याद दिलाने के बावजूद कोई भी राज्य हमारे लिए उचित डीएनटी समुदाय प्रमाणपत्र जारी नहीं कर रहा है।**”

GS Paper 1: Geography

TOPICS COVERED

05 February 2026



High alert



Wet week: A firefighter walks in a flooded street of Alcacer do Sal, south of Portugal, during the Leonardo storm on Wednesday. The Iberian Peninsula braced for a violent storm, with southern Spain shutting schools and Portugal placed on fresh alert after severe weather killed five people last week. AP

Wet week: A firefighter walks in a flooded street of Alcacer do Sal, south of Portugal, during the Leonardo storm on Wednesday. The **Iberian Peninsula** braced for a violent storm, with southern Spain shutting schools and Portugal placed on fresh alert after severe weather killed five people last week.

GS Paper II: Polity,	
TOPICS COVERED	
05 February 2026	
1. Issues surrounding UGC regulations यूजीसी विनियमों से जुड़े मुद्दे	

Issues surrounding UGC regulations

What prompted the Supreme Court to halt the UGC's revised equity framework? Why has the definition of caste-based discrimination triggered opposition from unreserved categories? Why does the court believe certain provisions may be open to misuse?

GS II: Polity

MOA

EXPLAINER

Rangarajan R.

The story so far:
The Supreme Court has stayed the University Grants Commission (Promotion of Equity in Higher Education Institutions) Regulations, 2026 (UGC regulations, 2026), holding that they are ambiguous and can be misused. The court has issued notice to the Centre and has held that the UGC's 2012 regulations on the subject will continue to remain in force for the time being.

What is the background?
In 2012, the UGC framed regulations aimed at promoting equity and preventing discrimination on university campuses.
These regulations defined "discrimination" as any act that nullifies or impairs equality of treatment in education, including denial of access to education, imposition of undignified conditions, or the maintenance of separate educational or social spaces on the basis of caste, creed, religion, language, ethnicity, gender, or disability. They also provided for the setting up of Equal Opportunity Cells and the appointment of an anti-discrimination officer as part of a grievance redressal mechanism.
After the suicide of Rohith Vemula in 2016 and Payal Tadvii in 2019, following allegations of caste discrimination, their mothers had moved the Supreme Court for stricter enforcement of the 2012 regulations.
During the course of the hearing of these petitions, the UGC constituted a committee to review the existing framework. The revised regulations published in 2026 were the culmination of this review.



A protest being held in Lucknow against the new UGC equity guidelines. SANDEEP SAXENA

Why are the 2026 regulations controversial?
The UGC Regulations, 2026 define "discrimination" as any unfair, differential, or biased treatment against any stakeholder – students, faculty members, or staff – on the grounds of religion, race, caste, gender, place of birth, disability, or any of them.
The main controversy arose because of the definition of "caste-based discrimination" in the new regulations. It is defined as discrimination solely based on caste or tribe against members of the Scheduled Castes, Scheduled Tribes, and Other Backward Classes (SC, ST, and OBC).
Members of the general or unreserved categories have alleged that this is biased and presumes that they would always be the perpetrators of caste-based discrimination against underprivileged sections. Further, there are no provisions for punishing "false" or "motivated" complaints, which can adversely affect stakeholders.

What did the court rule?
In *Mritunjay Tiwari versus Union of India*, the Supreme Court observed that some provisions of the regulations are ambiguous and could be misused. Further, it has framed four "substantive questions of law" to be addressed in this case, out of which the first two questions are pertinent to the current controversy.
First, whether a separate definition of "caste-based discrimination" bears a reasonable nexus to the objectives of the regulations, and whether it is necessary, considering that the regulations already define "discrimination" as including unfair or differential treatment on the grounds of caste. Second, whether this definition of "caste-based" discrimination will affect the sub-classification of the underprivileged sections.
What constitutional principles are at stake?
Article 14 of the Constitution guarantees equality before the law and equal protection of the law. Article 15 prohibits

discrimination by the State only on the grounds of race, religion, caste, sex, or place of birth. These provisions reflect the concept of "formal" equality, which is essential in any democratic society. Article 15 also enables the State to make special provisions for OBC, SC, and ST. This reflects the concept of "substantive" equality, which is based on the belief that formal equality is not sufficient to redress the difference between groups that have enjoyed privileges and those that have been historically underprivileged and discriminated against. This is pertinent not only for affirmative actions aimed at the advancement of backward classes but also for policies aimed at preventing discrimination. Laws like the Protection of Civil Rights Act, 1955, SC and ST (Prevention of atrocities) Act, 1989 are examples of such differential treatment.
It may be a valid argument that the 2026 regulations provide grievance redressal mechanisms against "discrimination" and that a definition of "caste-based discrimination" does not serve any additional purpose. However, the government is well within its rights to recognise a specific and serious subset of discrimination within the broader ambit of discrimination. In India, "caste-based discrimination" is asymmetric and is more detrimental to SC, ST, and OBCs.
Nonetheless, educational campuses are meant to ideally foster the atmosphere of shedding caste identities; any ambiguity that may precipitate it should be avoided. The government may engage with all stakeholders to refine the regulations that would address the issues raised. More importantly, as per the original petition of aggrieved mothers in 2019, the regulations should be strictly enforced to protect the underprivileged from any form of discrimination.
Rangarajan R is a former IAS officer and author of 'Courseware on Polity Simplified.' He currently trains at Officers IAS academy. Views expressed are personal.

THE GIST

- ▼ The Supreme Court stays the UGC Regulations, 2026, citing ambiguity and possible misuse, and keeps the 2012 regulations in force.
- ▼ The dispute arises from the definition of 'caste-based discrimination', limited to SC, ST and OBCs, which is alleged to be biased and lacking safeguards against false complaints.
- ▼ The case raises questions on equality under Articles 14 and 15, and the need for a separate definition of caste-based discrimination in higher education.

Issues surrounding UGC regulations

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यूजीसी विनियमों से जुड़े मुद्दे

- The **Supreme Court** has stayed the **University Grants Commission (Promotion of Equity in Higher Education Institutions) Regulations, 2026 (UGC regulations, 2026)**, holding that they are **ambiguous** and can be **misused**.
सुप्रीम कोर्ट ने यूनिवर्सिटी ग्रांट्स कमीशन (उच्च शिक्षा संस्थानों में समानता को बढ़ावा) विनियम, 2026 (UGC विनियम, 2026) पर रोक लगा दी है, यह कहते हुए कि वे अस्पष्ट हैं और उनका दुरुपयोग हो सकता है।
- The court has issued **notice to the Centre** and held that the **UGC's 2012 regulations** will continue to remain in force for the time being.
अदालत ने केंद्र सरकार को नोटिस जारी किया और कहा कि फिलहाल **UGC के 2012 विनियम** लागू रहेंगे।

What is the background?

पृष्ठभूमि क्या है?

- In **2012**, the UGC framed regulations aimed at promoting **equity** and preventing **discrimination** on university campuses.
2012 में UGC ने विश्वविद्यालय परिसरों में **समानता** को बढ़ावा देने और **भेदभाव** रोकने के लिए विनियम बनाए।
- These regulations defined "**discrimination**" as any act that nullifies or impairs **equality of treatment in education**, including denial of access to education, imposition of **undignified conditions**, or maintenance of **separate educational or social spaces** based on caste, creed, religion, language, ethnicity, gender, or disability.
इन विनियमों ने "भेदभाव" को शिक्षा में **समान व्यवहार को नष्ट या कमजोर करने वाला कार्य** बताया, जिसमें शिक्षा से वंचित करना, **अपमानजनक परिस्थितियाँ थोपना**, या जाति, धर्म, भाषा, लिंग, जातीयता या विकलांगता के आधार पर **अलग शैक्षणिक या सामाजिक स्थान बनाए रखना** शामिल है।
- They also provided for **setting up Equal Opportunity Cells** and appointment of an **anti-discrimination officer** as part of a **grievance redressal mechanism**.
इनमें **इकल ऑपचुनिटी सेल** स्थापित करने और **एंटी-डिस्क्रीमिनेशन अधिकारी** नियुक्त करने का प्रावधान भी था, जो **शिकायत निवारण तंत्र** का हिस्सा थे।
- After the suicide of **Rohith Vemula (2016)** and **Payal Tadvi (2019)** following allegations of caste discrimination, their mothers moved the **Supreme Court** for stricter enforcement of the **2012 regulations**.
रोहित वेमुला (2016) और **पायल तड़वी (2019)** की आत्महत्या के बाद, उनकी माताओं ने **सुप्रीम कोर्ट** में **2012 विनियमों** के सख्त पालन की मांग की।
- During hearings, the UGC constituted a **committee** to review the existing framework, leading to the **revised regulations of 2026**.
सुनवाई के दौरान UGC ने मौजूदा ढांचे की समीक्षा के लिए **समिति** बनाई, जिसके परिणामस्वरूप **2026 के संशोधित विनियम** आए।

Why are the 2026 regulations controversial?

2026 के विनियम विवादित क्यों हैं?

- The **UGC Regulations, 2026** define '**discrimination**' as any unfair, differential, or biased treatment against **students, faculty, or staff** on grounds of religion, race, caste, gender, place of birth, or disability.
UGC विनियम, 2026 के अनुसार 'भेदभाव' किसी भी छात्र, शिक्षक या कर्मचारी के साथ धर्म, जाति, लिंग, जन्मस्थान या विकलांगता के आधार पर अनुचित या पक्षपातपूर्ण व्यवहार है।
- The main controversy arose over the definition of '**caste-based discrimination**', defined as **discrimination solely based on caste or tribe against members of SC, ST, and OBC**.
मुख्य विवाद '**जाति-आधारित भेदभाव**' की परिभाषा को लेकर है, जिसमें **SC, ST और OBC** के सदस्यों के खिलाफ केवल जाति या जनजाति के आधार पर भेदभाव को शामिल किया गया है।
- Members of the **general/unreserved categories** alleged this is biased and presumes they would always be perpetrators of caste discrimination.



सामान्य/अनारक्षित वर्ग के सदस्यों ने आरोप लगाया कि यह पक्षपाती है और मान लेता है कि वही हमेशा जाति भेदभाव के दोषी होंगे।

- There are also **no provisions** for punishing **false or motivated complaints**, which may adversely affect stakeholders.
इसके अलावा झूठी या प्रेरित शिकायतों के लिए कोई दंड प्रावधान नहीं है, जिससे हितधारकों पर नकारात्मक प्रभाव पड़ सकता है।

What did the court rule?
अदालत ने क्या फैसला दिया?

- In **Mritunjay Tiwari versus Union of India**, the **Supreme Court** observed that some provisions of the regulations are **ambiguous** and could be **misused**.
मृत्युंजय तिवारी बनाम भारत संघ मामले में सुप्रीम कोर्ट ने कहा कि विनियमों के कुछ प्रावधान अस्पष्ट हैं और उनका दुरुपयोग हो सकता है।
- Further, it framed **four substantive questions of law**, out of which the **first two** are relevant to the present controversy.
इसके अलावा, अदालत ने चार महत्वपूर्ण विधिक प्रश्न तय किए, जिनमें से पहले दो वर्तमान विवाद से जुड़े हैं।
- **First, whether a separate definition of 'caste-based discrimination' has a reasonable nexus with the objectives of the regulations, and whether it is necessary when 'discrimination' already includes caste.**
पहला, क्या 'जाति-आधारित भेदभाव' की अलग परिभाषा विनियमों के उद्देश्यों से तार्किक रूप से जुड़ी है, और क्या इसकी आवश्यकता है जबकि 'भेदभाव' में पहले से जाति शामिल है।
- **Second, whether this definition of 'caste-based discrimination' will affect the sub-classification of underprivileged sections.**
दूसरा, क्या 'जाति-आधारित भेदभाव' की यह परिभाषा वंचित वर्गों के उप-वर्गीकरण को प्रभावित करेगी।

What constitutional principles are at stake?
कौन से संवैधानिक सिद्धांत दांव पर हैं?

- **Article 14 guarantees equality before law and equal protection of laws.**
अनुच्छेद 14 कानून के समक्ष समानता और कानून का समान संरक्षण सुनिश्चित करता है।
- **Article 15 prohibits State discrimination on grounds of race, religion, caste, sex, place of birth.**
अनुच्छेद 15 राज्य द्वारा जाति, धर्म, नस्ल, लिंग, जन्मस्थान के आधार पर भेदभाव को प्रतिबंधित करता है।
- **These reflect the concept of formal equality, essential in a democratic society.**
ये औपचारिक समानता की अवधारणा को दर्शाते हैं, जो लोकतांत्रिक समाज के लिए आवश्यक है।
- **Article 15 also allows special provisions for OBC, SC, ST, reflecting substantive equality.**
अनुच्छेद 15 OBC, SC, ST के लिए विशेष प्रावधान की अनुमति देता है, जो वास्तविक समानता को दर्शाता है।
- **Substantive equality recognises that formal equality alone cannot correct historical disadvantage.**
वास्तविक समानता मानती है कि केवल औपचारिक समानता ऐतिहासिक असमानताओं को समाप्त नहीं कर सकती।
- This applies to **affirmative action** and policies preventing discrimination.
यह सकारात्मक भेदभाव और भेदभाव रोकने वाली नीतियों पर लागू होता है।
- Laws like **Protection of Civil Rights Act, 1955** and **SC/ST (Prevention of Atrocities) Act, 1989** reflect such differential treatment.
सिविल राइट्स संरक्षण अधिनियम, 1955 और SC/ST अत्याचार निवारण अधिनियम, 1989 ऐसे भिन्न व्यवहार के उदाहरण हैं।
- **It may be argued that defining 'caste-based discrimination' separately may not serve additional purpose since grievance redressal already exists.**
यह तर्क दिया जा सकता है कि 'जाति-आधारित भेदभाव' की अलग परिभाषा अतिरिक्त उद्देश्य नहीं पूरा करती क्योंकि शिकायत निवारण पहले से मौजूद है।



- However, the government can legitimately recognise a **specific serious subset of discrimination** within broader discrimination.
हालाँकि सरकार व्यापक भेदभाव के भीतर **विशिष्ट गंभीर भेदभाव** को मान्यता दे सकती है।
- In India, **caste-based discrimination is asymmetric and more harmful to SC, ST, OBC**.
भारत में **जाति-आधारित भेदभाव असमान** है और **SC, ST, OBC** के लिए अधिक हानिकारक है।
- Educational campuses should ideally promote **shedding caste identities**, so ambiguity must be avoided.
शैक्षणिक परिसरों को आदर्श रूप से **जातिगत पहचान छोड़ने का वातावरण** बनाना चाहिए, इसलिए अस्पष्टता से बचना चाहिए।
- The government may consult **all stakeholders** to refine the regulations addressing raised concerns.
सरकार **सभी हितधारकों** से परामर्श कर उठाए गए मुद्दों के समाधान हेतु विनियमों को संशोधित कर सकती है।
- Most importantly, as per the **2019 petition**, **regulations must be strictly enforced to protect the underprivileged** from discrimination.
सबसे महत्वपूर्ण, **2019 की याचिका** के अनुसार, विनियमों को **सख्ती से लागू** किया जाना चाहिए ताकि **वंचित वर्गों** को भेदभाव से बचाया जा सके।

GS Paper II: Governance,	
TOPICS COVERED	05 February 2026
1.	2.83 lakh dog bite cases recorded in 2024-25 in Bihar; 776 people fall prey daily: State Economic Survey बिहार में 2024-25 में 2.83 लाख कुत्ते के काटने के मामले दर्ज; प्रतिदिन 776 लोग शिकार: राज्य आर्थिक सर्वेक्षण

Why are Meta and WhatsApp facing a judicial ultimatum?

What concern did the Supreme Court raise about digital literacy and consent?

GS II: Governance
John Xavier

The story so far:

For years, Meta, the parent company of WhatsApp, has treated user data as the “exhaust” of its messaging engine – a valuable byproduct to be harvested and refined for its advertising machine. But on February 3, India’s Supreme Court suggested a different metaphor: theft. In a hearing, a three-judge Bench led by Chief Justice Surya Kant signalled that “consent” in the age of monopolies may be little more than a legal fiction. The court’s observations go beyond simple privacy; they strike at the heart of Meta’s business model, questioning whether a platform’s market dominance renders the “choice” to share data essentially coercive.

When and where did the friction begin?

The friction began in 2021, when WhatsApp issued a “take-it-or-leave-it” update to its privacy policy. The update allowed for increased data sharing between the messaging app and its

parent, Meta. While WhatsApp insisted that end-to-end encryption kept messages private, the Competition Commission of India (CCI) saw the move as an abuse of dominance. It argued that for the average Indian user, “leaving” WhatsApp is not a viable option. The CCI slapped Meta with a ₹213.14 crore (\$25m) penalty – a sum that is pocket change for a trillion-dollar company, but a significant regulatory shot across the bow.

Meta then appealed the decision in the National Company Law Appellate Tribunal (NCLAT), which last year delivered a nuanced, if controversial, verdict. The NCLAT upheld the CCI’s finding that Meta had abused its market position. However, it significantly “softened” the regulatory blow.

While it retained the financial penalty, the NCLAT set aside a crucial CCI directive that would have barred Meta from sharing user data with its other entities for advertising purposes for a period of five years. The NCLAT appeared to argue that while the method of obtaining consent was coercive, the act of sharing data across a parent and subsidiary was a standard business practice.

The tribunal likely feared that a total five-year moratorium on data-sharing was a disproportionate “structural remedy” that could break the technical synergy of Meta’s platforms. Furthermore, with the Digital Personal Data Protection (DPDP) Act of 2023 looming on the horizon, the NCLAT seemed content to let privacy-specific legislation handle the nuances of data flows.

Why did Meta appeal to the SC? Unhappy with the penalty and NCLAT’s verdict, Meta eventually reached the Supreme Court. However, the apex court seemed in no mood for compromise. Chief Justice Kant’s retort to Meta’s lawyers – that opting out of WhatsApp in India is akin to “opting out of the country” – captures the “network effect” trap that competition regulators globally are struggling to dismantle.

Yet, the most provocative argument came from Justice Joyymalya Bagchi, who shifted the debate from privacy to “value.” India’s DPDP Act of 2023 focuses primarily on the sanctity of personal information. But Justice Bagchi noted a vacuum in the law regarding the

“rent-sharing” of data. If Meta uses a rural Indian’s behavioural trends to sell targeted ads, who owns the profit derived from that data?

This “data-as-property” logic aligns India more closely with the European Union’s Digital Services Act than with the more laissez-faire approach of the U.S. By imploring the Ministry of Electronics and Information Technology, the court forced the government to consider whether privacy is enough, or if the economic “value” of a citizen’s digital footprint requires a new form of sovereign protection.

What happens next?

The Solicitor General’s remark – that users are “not only consumers, but also products” – reflects a growing fatigue with the “free” internet model.

Meta’s defence remains rooted in the “cleverly-crafted” language of terms and conditions. But the Chief Justice’s “simple query” regarding whether a domestic helper could navigate such a policy serves as a reminder that in a country with varying levels of digital literacy, transparency is not the same as understanding.

The court has issued an ultimatum: Meta must provide an undertaking to stop sharing personal data, or face the dismissal of its case and “very strict conditions.” As the case heads toward interim directions on February 9, the message is clear. In the eyes of the Indian judiciary, a billion “silent consumers” are no longer willing to be the raw material for Meta’s bottom line. The era of “decent theft” may be coming to a close.

THE GIST

The Supreme Court questions Meta’s business model, holds that “consent” in a monopolistic WhatsApp ecosystem may be coercive, and shifts the debate from privacy to the “value” and “rent-sharing” of user data.

The case stems from WhatsApp’s 2021 “take-it-or-leave-it” privacy policy, the CCI’s finding of abuse of dominance, the NCLAT’s partial relief to Meta, and the court’s warning of “very strict conditions” unless data-sharing stops.

Why are Meta and WhatsApp facing a judicial ultimatum?
मेटा और व्हाट्सएप न्यायिक अल्टीमेटम का सामना क्यों कर रहे हैं?



- For years, Meta, the parent company of WhatsApp, has treated user data as the “exhaust” of its messaging engine — a valuable byproduct to be harvested and refined for its advertising machine.
कई वर्षों से, WhatsApp की मूल कंपनी Meta ने उपयोगकर्ता डेटा को अपने मैसेजिंग इंजन का “उत्सर्जन” माना है — एक मूल्यवान उप-उत्पाद जिसे अपने विज्ञापन तंत्र के लिए उपयोग और परिष्कृत किया जाता है।
- But on February 3, India’s Supreme Court suggested a different metaphor: theft.
लेकिन 3 फरवरी को भारत के सुप्रीम कोर्ट ने एक अलग उपमा दी: चोरी।
- In a hearing, a three-judge Bench led by Chief Justice Surya Kant signalled that “consent” in the age of monopolies may be little more than a legal fiction.
सुनवाई में मुख्य न्यायाधीश सूर्य कांत की अध्यक्षता वाली तीन-न्यायाधीशों की पीठ ने संकेत दिया कि एकाधिकार के युग में “सहमति” केवल एक कानूनी कल्पना हो सकती है।
- The court’s observations go beyond simple privacy; they strike at the heart of Meta’s business model, questioning whether market dominance makes data-sharing coercive.
अदालत की टिप्पणियाँ केवल गोपनीयता तक सीमित नहीं हैं; वे Meta के व्यापार मॉडल के मूल पर प्रहार करती हैं और यह प्रश्न उठाती हैं कि क्या बाजार प्रभुत्व डेटा साझा करने को जबरदस्ती बना देता है।

When and where did the friction begin?

टकराव कब और कहाँ शुरू हुआ?

- The friction began in 2021, when WhatsApp issued a “take-it-or-leave-it” privacy policy update allowing increased data sharing with Meta.
टकराव 2021 में शुरू हुआ, जब WhatsApp ने “ले लो या छोड़ दो” गोपनीयता नीति अपडेट जारी किया जिससे Meta के साथ डेटा साझा बढ़ गया।
- While WhatsApp cited end-to-end encryption, the Competition Commission of India (CCI) termed it abuse of dominance.
हालाँकि WhatsApp ने एंड-टू-एंड एन्क्रिप्शन का हवाला दिया, लेकिन भारतीय प्रतिस्पर्धा आयोग (CCI) ने इसे प्रभुत्व का दुरुपयोग कहा।
- The CCI fined Meta ₹213.14 crore, signalling regulatory action.
CCI ने Meta पर ₹213.14 करोड़ का जुर्माना लगाया, जो नियामक कार्रवाई का संकेत था।
- Meta appealed to NCLAT, which upheld abuse of dominance but softened the impact.
Meta ने NCLAT में अपील की, जिसने प्रभुत्व के दुरुपयोग को बरकरार रखा लेकिन प्रभाव को नरम किया।
- The tribunal retained penalty but removed the five-year ban on data sharing for advertising.
ट्रिब्यूनल ने जुर्माना बरकरार रखा लेकिन विज्ञापन हेतु पाँच साल का डेटा-साझाकरण प्रतिबंध हटा दिया।
- It held that coercive consent existed but data sharing between parent-subsidiary was standard business practice.
इसने माना कि सहमति जबरदस्ती थी लेकिन मूल कंपनी और सहायक के बीच डेटा साझा करना सामान्य व्यापार प्रथा है।
- The tribunal also considered the upcoming Digital Personal Data Protection (DPDP) Act, 2023.
ट्रिब्यूनल ने आगामी डिजिटल पर्सनल डेटा प्रोटेक्शन (DPDP) अधिनियम, 2023 को भी ध्यान में रखा।

Why did Meta appeal to the SC?

Meta ने सुप्रीम कोर्ट में अपील क्यों की?

- Meta challenged the penalty, but the Supreme Court showed little willingness to compromise.
Meta ने जुर्माने को चुनौती दी, लेकिन सुप्रीम कोर्ट समझौते के पक्ष में नहीं दिखा।
- The Chief Justice remarked that opting out of WhatsApp in India is like opting out of the country, highlighting the network effect.
मुख्य न्यायाधीश ने कहा कि भारत में WhatsApp छोड़ना देश छोड़ने जैसा है, जो नेटवर्क प्रभाव को दर्शाता है।
- Justice Joyimalya Bagchi shifted debate from privacy to economic value of data.
न्यायमूर्ति जायमाल्या बागची ने बहस को गोपनीयता से हटाकर डेटा के आर्थिक मूल्य पर केंद्रित किया।



- He raised the issue of “**rent-sharing of data**” — who owns profit generated from user data. उन्होंने “**डेटा के लाभ-वितरण**” का मुद्दा उठाया — उपयोगकर्ता डेटा से हुए लाभ का मालिक कौन है।
- This aligns India closer to **EU Digital Services Act** than the U.S. approach. यह भारत को **EU डिजिटल सर्विसेज एक्ट** के अधिक निकट लाता है, अमेरिकी दृष्टिकोण की तुलना में।
- The court asked the government whether **privacy alone is enough** or if data value needs **sovereign protection**.
अदालत ने सरकार से पूछा कि क्या **केवल गोपनीयता पर्याप्त है** या डेटा के मूल्य के लिए **संप्रभु संरक्षण** चाहिए।

What happens next? आगे क्या होगा?

- The **Solicitor General** said users are “**not only consumers but also products**”.
सॉलिसिटर जनरल ने कहा कि उपयोगकर्ता “**केवल उपभोक्ता नहीं बल्कि उत्पाद भी हैं**”।
- The Chief Justice questioned whether an average person could understand complex **terms and conditions**.
मुख्य न्यायाधीश ने पूछा कि क्या एक सामान्य व्यक्ति जटिल **नियम और शर्तें** समझ सकता है।
- The court issued an **ultimatum** — Meta must stop sharing **personal data** or face strict consequences.
अदालत ने **अल्टीमेटम** दिया — Meta को **व्यक्तिगत डेटा साझा करना बंद** करना होगा अन्यथा कड़ी कार्रवाई होगी।
- Interim directions are expected on **February 9**.
अंतरिम निर्देश **9 फरवरी** को अपेक्षित हैं।
- The message is clear: **a billion silent consumers are no longer raw material for Meta’s profit model**.
संदेश स्पष्ट है: **एक अरब मौन उपभोक्ता अब Meta के लाभ मॉडल का कच्चा माल नहीं रहना चाहते**।
- The era of “**decent theft**” may be ending.
“**सभ्य चोरी**” का युग समाप्त हो सकता है।

GS Paper II: International Relations

TOPICS COVERED

05 February 2026

1.	Jaishankar, Rubio welcome trade deal, discuss critical minerals, Quad cooperation जयशंकर, रूबियो ने व्यापार समझौते का स्वागत किया, महत्वपूर्ण खनिजों और क्वाड सहयोग पर चर्चा
2.	A turning point for nuclear deterrence परमाणु प्रतिरोधक क्षमता के लिए एक निर्णायक मोड़
3.	Donald Trump is turning U.S. into an authoritarian state, warns HRW डोनाल्ड ट्रंप अमेरिका को एक अधिनायकवादी राज्य में बदल रहे हैं, HRW की चेतावनी



Jaishankar, Rubio welcome trade deal, discuss critical minerals, Quad cooperation

GS II: IR

Suhasini Haidar
NEW DELHI

Welcoming the trade deal, External Affairs Minister S. Jaishankar met U.S. Secretary of State Marco Rubio and U.S. Treasury Secretary Scott Bessent in Washington on Wednesday, where both sides agreed to "formalise" cooperation on critical minerals, and take forward their economic partnership.

The meetings came two days after a call between U.S. President Donald Trump and Prime Minister Narendra Modi, after which they announced a reduction in U.S. tariffs on Indian goods to 18%, and the cancellation of 25% penalty tariffs for the purchase of Russian oil.

The Centre has come under sharp criticism from the Opposition over the lack of transparency and scant details of the India-U.S. trade deal, and in particular the U.S. government's statement that India has agreed to "stop buying" Russian oil, cut tariffs for most U.S. goods to zero, give U.S. agricultural products market access, and commit \$500 billion for investments and purchase of American goods.

In a social media post, Mr. Jaishankar said that he had held a "wide-ranging conversation" with Mr. Rubio, and that discussions included "trade, energy, nuclear, defence, critical minerals and technology". "[We] agreed on the early meetings of various mechanisms to advance our shared interests," he said, though the two leaders did not take any questions from the media.



Hand in hand: External Affairs Minister S. Jaishankar with U.S. Secretary of State Marco Rubio in Washington, AP

Speaking at the event, Mr. Jaishankar "underlined challenges of excessive concentration" of critical mineral supply chains, and expressed support for U.S. initiatives to de-risk them.

Mr. Jaishankar held the meetings ahead of attending the U.S.-led Critical Minerals Ministerial in Washington on Wednesday that called for "preferential trade zones" to secure semiconductor supply chains, in an effort to work around China's recent restrictions on trade in critical minerals, and build alternate supply routes.

The countries attending were invited to take membership of a grouping that will be shaped by the U.S., and included about 50 countries.

Restoring ties

Mr. Jaishankar's participation in the event is significant as many of the other countries present were represented by their Energy Ministers, and indicates a desire by Delhi and Washington to move quickly on restoring ties ruptured by a year of tensions, and U.S. tariffs on Indian goods.

Mr. Jaishankar's visit to Washington, his seventh since Mr. Trump's re-election

in November 2024, is seen as a move to reset ties, and pick up the engagements that were sidelined in 2025, particularly on the Quad and Indo-Pacific cooperation, and critical minerals and semiconductor technology. India is expected to be invited to join the U.S.-led Pax Silica Initiative launched in December 2025, U.S. Ambassador to India Sergio Gora had announced in January.

India will host the Artificial Intelligence Impact Summit later in February, where a high-level U.S. delegation is expected. Meanwhile, the government still hopes to host the Quad summit this year, which it was unable to do in 2025. Mr. Jaishankar discussed Quad cooperation with U.S. Secretary of State Marco Rubio, who has thus far not visited India.

"Secretary Rubio and Minister Jaishankar concluded their meeting by expressing their commitment to expanding bilateral and multilateral cooperation through the Quad. They acknowledged that a prosperous Indo-Pacific region remains vital to advancing our shared interests," the U.S. State Department said.

Jaishankar, Rubio welcome trade deal, discuss critical minerals, Quad cooperation

जयशंकर, रूबियो ने व्यापार समझौते का स्वागत किया, महत्वपूर्ण खनिजों और क्वाड सहयोग पर चर्चा

• Welcoming the **trade deal**, External Affairs Minister **S. Jaishankar** met **U.S. Secretary of State Marco Rubio** and **U.S. Treasury Secretary Scott Bessent** in **Washington** on **Wednesday**, where both sides agreed to "**formalise**" cooperation on **critical minerals**, and take forward their **economic partnership**.

व्यापार समझौते का स्वागत करते हुए, विदेश मंत्री **एस. जयशंकर** ने बुधवार को **वाशिंगटन** में **अमेरिकी विदेश मंत्री मार्को रूबियो** और **अमेरिकी ट्रेजरी सचिव स्कॉट बेसेंट** से मुलाकात की, जहां दोनों पक्षों ने **महत्वपूर्ण खनिजों** पर सहयोग को "**औपचारिक**" बनाने और **आर्थिक साझेदारी** को आगे बढ़ाने पर सहमति जताई।

• The meetings came two days after a call between **U.S. President Donald Trump** and **Prime Minister Narendra Modi**, after which they announced a reduction in **U.S. tariffs** on Indian goods to **18%**, and the cancellation of **25% penalty tariffs** for the purchase of **Russian oil**.

ये बैठकें **अमेरिकी राष्ट्रपति डोनाल्ड ट्रंप** और **प्रधानमंत्री नरेंद्र मोदी** के बीच कॉल के दो दिन बाद हुईं, जिसके बाद **भारतीय वस्तुओं** पर **अमेरिकी शुल्क घटाकर 18%** करने और **रूसी तेल** की खरीद पर **25% दंडात्मक शुल्क** रद्द करने की घोषणा की गई।

• The Centre has come under sharp criticism from the **Opposition** over the lack of **transparency** and scant details of the **India-U.S. trade deal**, and in particular the **U.S. government's statement** that India has agreed to "**stop buying**" Russian oil, cut tariffs for most **U.S. goods to zero**, give **U.S. agricultural products** market access, and commit **\$500 billion** for investments and purchase of

American goods.

केंद्र सरकार को **विपक्ष** की ओर से **पारदर्शिता** की कमी और **भारत-अमेरिका व्यापार समझौते** के सीमित विवरणों को लेकर कड़ी आलोचना का सामना करना पड़ा है, विशेष रूप से **अमेरिकी सरकार के बयान** पर कि भारत ने **रूसी तेल** की खरीद "**बंद**" करने, अधिकांश **अमेरिकी वस्तुओं** पर शुल्क **शून्य** करने, **अमेरिकी कृषि उत्पादों** को बाज़ार पहुंच देने और **\$500 अरब** के निवेश व **अमेरिकी वस्तुओं** की खरीद की प्रतिबद्धता जताई है।

- In a social media post, Mr. Jaishankar said that he had held a "**wide-ranging conversation**" with Mr. Rubio, and that discussions included "**trade, energy, nuclear, defence, critical minerals and technology**".

सोशल मीडिया पोस्ट में श्री जयशंकर ने कहा कि उनकी श्री रूबियो के साथ "**विस्तृत बातचीत**" हुई, जिसमें "**व्यापार, ऊर्जा, परमाणु, रक्षा, महत्वपूर्ण खनिज और प्रौद्योगिकी**" शामिल थे।

- "[We] agreed on the **early meetings** of various mechanisms to advance our **shared interests**," he said, though the two leaders did not take any **questions from the media**. उन्होंने कहा, "हमने अपने **साझा हितों** को आगे बढ़ाने के लिए विभिन्न तंत्रों की **शीघ्र बैठकों** पर सहमति जताई," हालांकि दोनों नेताओं ने **मीडिया के सवाल** नहीं लिए।



- Speaking at the event, Mr. Jaishankar “**underlined challenges of excessive concentration**” of **critical mineral supply chains**, and expressed support for **U.S. initiatives to de-risk** them.
कार्यक्रम में बोलते हुए, श्री जयशंकर ने **महत्वपूर्ण खनिज आपूर्ति शृंखलाओं** के “**अत्यधिक संकेन्द्रण की चुनौतियों**” को रेखांकित किया और उन्हें **जोखिम-मुक्त** करने के लिए **अमेरिकी पहलों** का समर्थन जताया।
- Mr. Jaishankar held the meetings ahead of attending the **U.S.-led Critical Minerals Ministerial in Washington** on Wednesday that called for “**preferential trade zones**” to secure **semiconductor supply chains**, in an effort to work around **China’s recent restrictions** on trade in **critical minerals**, and build **alternate supply routes**.
श्री जयशंकर ने बुधवार को **वाशिंगटन** में होने वाली **अमेरिकी नेतृत्व वाली क्रिटिकल मिनेरल्स मिनिस्टीरियल** में भाग लेने से पहले ये बैठकें कीं, जिसमें **सेमीकंडक्टर आपूर्ति शृंखलाओं** को सुरक्षित करने के लिए “**वरीय व्यापार क्षेत्र**” बनाने का आह्वान किया गया, ताकि **महत्वपूर्ण खनिजों** के व्यापार पर **चीन के हालिया प्रतिबंधों** से निपटा जा सके और **वैकल्पिक आपूर्ति मार्ग** बनाए जा सकें।
- The countries attending were invited to take membership of a grouping that will be shaped by the **U.S.**, and included about **50 countries**.
भाग लेने वाले देशों को **अमेरिका** द्वारा आकार दिए जाने वाले एक समूह की सदस्यता के लिए आमंत्रित किया गया, जिसमें लगभग **50 देश** शामिल थे।

Restoring ties संबंधों की बहाली

- Mr. Jaishankar’s participation in the event is **significant** as many of the other countries present were represented by their **Energy Ministers**, and indicates a desire by **Delhi and Washington** to move quickly on **restoring ties** ruptured by a year of **tensions**, and **U.S. tariffs** on Indian goods.
इस कार्यक्रम में श्री जयशंकर की भागीदारी **महत्वपूर्ण** है क्योंकि उपस्थित कई अन्य देशों का प्रतिनिधित्व उनके **ऊर्जा मंत्रियों** ने किया, और यह **दिल्ली और वाशिंगटन** की **तनाव** भरे एक वर्ष और **भारतीय वस्तुओं पर अमेरिकी शुल्क** से प्रभावित **संबंधों की बहाली** के लिए तेज़ी से आगे बढ़ने की इच्छा दर्शाता है।
- Mr. Jaishankar’s visit to **Washington**, his **seventh** since Mr. Trump’s **re-election in November 2024**, is seen as a move to **reset ties**, and pick up the engagements that were sidelined in **2025**, particularly on the **Quad** and **Indo-Pacific cooperation**, and **critical minerals and semiconductor technology**.
वाशिंगटन की श्री जयशंकर की यह यात्रा, **नवंबर 2024** में श्री ट्रंप के **पुनर्निर्वाचन** के बाद उनकी **सातवीं** यात्रा है, जिसे **संबंधों को रीसेट** करने और **2025** में हाशिये पर चली गई पहलों—विशेषकर **क्वाड** और **हिंद-प्रशांत सहयोग**, तथा **महत्वपूर्ण खनिजों और सेमीकंडक्टर प्रौद्योगिकी**—को फिर से आगे बढ़ाने के रूप में देखा जा रहा है।
- India is expected to be invited to join the **U.S.-led Pax Silica Initiative** launched in **December 2025**, **U.S. Ambassador to India Sergio Gor** had announced in **January**.
जनवरी में **भारत में अमेरिकी राजदूत सर्जियो गोर** ने घोषणा की थी कि **भारत को दिसंबर 2025** में शुरू की गई **अमेरिकी नेतृत्व वाली पैक्स सिलिका पहल** में शामिल होने के लिए आमंत्रित किए जाने की उम्मीद है।
- India will host the **Artificial Intelligence Impact Summit** later in **February**, where a **high-level U.S. delegation** is expected.
भारत फरवरी के अंत में **आर्टिफिशियल इंटेलिजेंस इम्पैक्ट समिट** की मेजबानी करेगा, जहां **उच्चस्तरीय अमेरिकी प्रतिनिधिमंडल** के आने की उम्मीद है।
- Meanwhile, the government still hopes to host the **Quad summit** this year, which it was unable to do in **2025**.
इस बीच, सरकार इस वर्ष **क्वाड शिखर सम्मेलन** की मेजबानी की उम्मीद अभी भी कर रही है, जो वह **2025** में नहीं कर पाई थी।
- Mr. Jaishankar discussed **Quad cooperation** with **U.S. Secretary of State Marco Rubio**, who has thus far not visited **India**.
श्री जयशंकर ने **अमेरिकी विदेश मंत्री मार्को रूबियो** के साथ **क्वाड सहयोग** पर चर्चा की, जिन्होंने अब तक **भारत** की यात्रा नहीं की है।
- “Secretary Rubio and Minister Jaishankar concluded their meeting by expressing their commitment to expanding **bilateral and multilateral cooperation** through the **Quad**. They acknowledged that a **prosperous Indo-Pacific region** remains vital to advancing our **shared interests**,” the **U.S. State Department** said.



अमेरिकी विदेश विभाग ने कहा, “सचिव रूबियो और मंत्री जयशंकर ने **क्लाड** के माध्यम से **द्विपक्षीय और बहुपक्षीय सहयोग** के विस्तार की अपनी प्रतिबद्धता व्यक्त करते हुए बैठक समाप्त की। उन्होंने स्वीकार किया

A turning point for nuclear deterrence

GS II: IR

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The rupture between Europe and Donald Trump's U.S. over Greenland may be papered over in time, but Europe's trust in the U.S. as a reliable North Atlantic Treaty Organization (NATO) ally has been irreparably broken. As the last remaining arms control treaty limiting Russia's nuclear arsenal comes to an end, conversations about defending Europe are acquiring a sharper edge.

NATO came together in 1949 as a defensive nuclear alliance against the Soviet Union with the U.S. as its *primus inter pares*—the ultimate guarantor of the security of its western European members. Now, the hegemon has turned on its own alliance, over Mr. Trump's desire to acquire Greenland, a sovereign territory under the jurisdiction of NATO member Denmark. Mr. Trump's bullying and economic warfare has broken trust, and without trust NATO as a nuclear alliance is hollowed out. How Europe responds to this rupture will shape not only the future of the continent's security, but also the future of conversations about nuclear deterrence. Depending on whether the new security architecture of Europe privileges nuclear deterrence, thinking about nuclear weapons will either be updated to reflect the lessons of the 80 years since a nuclear weapon was last detonated, or continue to echo conversations that took place when the Nuclear Non-Proliferation Treaty (NPT) separated the world into nuclear haves and have-nots.

The nuclear conversation

The intervening years since the NPT restrained horizontal proliferation have seen threats to world security shift from nuclear rivalry to terrorism and extremism; climate change; economic stress; inequality; and regional rivalries. While none of these is easily addressed by nuclear weapons, conversations about nuclear possession and use



Priyanjali Malik

writes on nuclear politics and security

At the dawn of the nuclear age, when possessors were still building their arsenals, there was a debate on whether deterrence rested on certainty or uncertainty

continue to privilege nukes as the ultimate guarantor of peace and security even as great power rivalry returns to the global stage.

Moreover, discussions about 'what deters' appear to have ossified. At the dawn of the nuclear age, when possessors were still building their arsenals, there was a debate on whether deterrence rested on certainty or uncertainty. Some believed that uncertainty was enough; that allowing an adversary to not be certain that any adventurism would not be countered with a nuclear response was enough for deterrence to work. A form of this deterrence arguably operated between India and Pakistan between the 1980s and 1998. Israel, with its opaque nuclear status, also relies on this uncertainty. For the rest of the nuclear possessors, a complex interplay of great power politics led to growing stockpiles and an emphasis on the certainty of a nuclear response. Testing demonstrated intent and number of weapons indicated resolve.

Yet, even as nuclear states were racing to stockpile warheads, a taboo on nuclear use was gaining strength. A nuclear weapon has not been deployed since 1945. While nuclear threats have been issued, and states have developed ever smaller and more 'useable' weapons (tactical or battlefield nukes), nuclear use, to the best of our knowledge, has never been seriously contemplated.

Arms control agreements between the U.S. and the Soviet Union/Russia, along with the global non-proliferation architecture may have contributed to sparing the world another Hiroshima, but thinking on nuclear deterrence remains essentially unchanged. And now, after a sharp reduction in nuclear stockpiles between the U.S. and Russia, the pendulum may be swinging back.

China, Russia and the U.S. are ambitiously modernising their nuclear stockpiles. China has reportedly added 100 warheads a

year since 2023 to reach a total of 600. In 2015, the U.K. reversed a 2006 decision to reduce its stockpile and is at 225 warheads. The last remaining arms control agreement between Russia and the U.S. —New START — expires on February 5, and if both states start increasing their stockpiles from the current 5,459 and 5,277, respectively, it will send a clear message of moving back to Cold War ideas of deterrence.

Lessons from Ukraine

The war in Ukraine should have led to a more serious debate about what deters. Russian President Vladimir Putin had made nuclear threats before his invasion and then again in October 2022. Yet those threats were countered not by the certainty of a nuclear response, but by the certainty of a robust response that left the nuclear element unclear. It is worth remembering that Ukraine — a non-nuclear country — has been able to defend itself against a nuclear adversary. Yes, it has had help and yes, it has lost territory, but Ukraine has not yet been defeated by its nuclear neighbour.

Therefore, what happens in the next few months as Europe comes up with a security architecture that does not rely on the U.S. could reshape nuclear thinking.

Apart from some tepid discussion about how France and the U.K. might extend their nuclear umbrella to cover Europe, most of the previous debate appeared to return to hugging the U.S. ever closer. In the meantime, an ad hoc grouping of mainly European states, called the Coalition of the Willing, has come together to guarantee Ukraine's security. Ukraine now has experience in defending itself against a nuclear state. Against this backdrop, whether Europe chooses to base its new security architecture on some sort of replacement nuclear alliance, or on a defensive alliance that may have a nuclear element, will shape future discussions about nuclear weapons and deterrence.

कि समृद्ध हिंद-प्रशांत क्षेत्र हमारे साझा हितों को आगे बढ़ाने के लिए अत्यंत महत्वपूर्ण बना हुआ है।”

A turning point for nuclear deterrence
परमाणु प्रतिरोधक क्षमता के लिए एक निर्णायक मोड़



Rupture between Europe and U.S. over Greenland ग्रीनलैंड को लेकर यूरोप और अमेरिका के बीच दरार

- The rupture between **Europe** and **Donald Trump's U.S.** over **Greenland** may be papered over in time, but Europe's **trust in the U.S. as a reliable NATO ally** has been **irreparably broken**.
ग्रीनलैंड को लेकर यूरोप और डोनाल्ड ट्रम्प के अमेरिका के बीच दरार समय के साथ भर सकती है, लेकिन विश्वसनीय नाटो सहयोगी के रूप में अमेरिका पर यूरोप का विश्वास स्थायी रूप से टूट चुका है।
- As the last remaining **arms control treaty limiting Russia's nuclear arsenal** ends, conversations about **defending Europe** are acquiring a sharper edge.
जैसे ही रूस के परमाणु शस्त्रागार को सीमित करने वाली अंतिम हथियार नियंत्रण संधि समाप्त हो रही है, यूरोप की रक्षा पर चर्चा और तीव्र हो रही है।
- **NATO came together in 1949 as a defensive nuclear alliance against the Soviet Union, with the U.S. as the ultimate guarantor of western European security.**
नाटो की स्थापना 1949 में सोवियत संघ के खिलाफ एक रक्षात्मक परमाणु गठबंधन के रूप में हुई, जिसमें अमेरिका पश्चिमी यूरोप की सुरक्षा का अंतिम गारंटर था।
- Now, the hegemon has turned on its own alliance over **Trump's desire to acquire Greenland, a sovereign territory of Denmark.**
अब प्रमुख शक्ति अपने ही गठबंधन के खिलाफ हो गई है क्योंकि ट्रम्प ग्रीनलैंड को हासिल करना चाहते हैं, जो डेनमार्क का संप्रभु क्षेत्र है।
- **Bullying and economic warfare** have broken trust, and without trust **NATO as a nuclear alliance is hollowed out.**
दबाव और आर्थिक युद्ध ने विश्वास तोड़ दिया है, और बिना विश्वास के परमाणु गठबंधन के रूप में नाटो कमजोर हो जाता है।
- Europe's response to this rupture will shape the **future of continental security** and the future of **nuclear deterrence debates.**
इस दरार पर यूरोप की प्रतिक्रिया महाद्वीपीय सुरक्षा के भविष्य और परमाणु निरोध बहस को प्रभावित करेगी।
- Depending on whether Europe's new **security architecture** privileges **nuclear deterrence**, nuclear thinking may be **updated** or continue echoing **NPT divisions between nuclear haves and have-nots.**
यह इस पर निर्भर करेगा कि यूरोप की नई सुरक्षा संरचना परमाणु निरोध को प्राथमिकता देती है या नहीं, जिससे परमाणु सोच आधुनिक हो सकती है या NPT के परमाणु संपन्न और वंचित देशों के विभाजन जैसी बनी रह सकती है।

The nuclear conversation परमाणु विमर्श

- The intervening years since the **NPT** restrained **horizontal proliferation** have seen threats shift from **nuclear rivalry to terrorism and extremism; climate change; economic stress; inequality; and regional rivalries.**
NPT द्वारा क्षैतिज प्रसार रोके जाने के बाद के वर्षों में खतरे परमाणु प्रतिस्पर्धा से हटकर आतंकवाद और उग्रवाद; जलवायु परिवर्तन; आर्थिक तनाव; असमानता; और क्षेत्रीय प्रतिद्वंद्विता बन गए हैं।
- While none of these is easily addressed by **nuclear weapons**, discussions still privilege nukes as the **ultimate guarantor of peace and security** even as **great power rivalry returns.**
हालाँकि इनमें से कोई भी परमाणु हथियारों से आसानी से हल नहीं होता, फिर भी परमाणु हथियारों को शांति और सुरक्षा का अंतिम गारंटर माना जाता है, जबकि महाशक्ति प्रतिस्पर्धा लौट रही है।
- Discussions about **'what deters'** appear to have **ossified.**
'निरोध क्या करता है' पर चर्चा स्थिर हो गई प्रतीत होती है।
- At the dawn of the **nuclear age**, there was debate on whether deterrence rested on **certainty or uncertainty.**
परमाणु युग की शुरुआत में इस बात पर बहस थी कि निरोध निश्चितता पर आधारित है या अनिश्चितता पर।
- Some believed **uncertainty** alone could deter adversaries by leaving them unsure of a **nuclear response.**



कुछ मानते थे कि केवल **अनिश्चितता** ही विरोधियों को रोक सकती है क्योंकि **परमाणु प्रतिक्रिया** अनिश्चित रहती है।

- A form of this deterrence operated between **India and Pakistan (1980s–1998)**.
ऐसा निरोध **भारत और पाकिस्तान (1980–1998)** के बीच देखा गया।
- **Israel**, with its **opaque nuclear status**, also relies on **uncertainty**.
इज़राइल, अपनी **अस्पष्ट परमाणु स्थिति** के साथ, **अनिश्चितता** पर निर्भर करता है।
- For other nuclear states, **great power politics** led to **growing stockpiles** and emphasis on **certainty of nuclear response**.
अन्य परमाणु राज्यों में **महाशक्ति राजनीति** के कारण **भंडार बढ़े** और **निश्चित परमाणु प्रतिक्रिया** पर जोर दिया गया।
- **Testing demonstrated intent** and the **number of weapons indicated resolve**.
परीक्षणों ने इरादा दिखाया और **हथियारों की संख्या ने दृढ़ता दर्शाई**।
- Even as states raced to stockpile warheads, a **taboo on nuclear use** strengthened.
भंडार बढ़ाने की दौड़ के बावजूद **परमाणु उपयोग पर निषेध** मजबूत हुआ।
- No nuclear weapon has been deployed since **1945**.
1945 के बाद कोई परमाणु हथियार उपयोग नहीं हुआ।
- Although **nuclear threats** and development of **tactical/battlefield nukes** continued, actual nuclear use has **never been seriously contemplated**.
हालाँकि **परमाणु धमकियाँ** और **टैक्टिकल परमाणु हथियारों** का विकास जारी रहा, फिर भी वास्तविक परमाणु उपयोग **कभी गंभीरता से नहीं सोचा गया**।

Arms control agreements हथियार नियंत्रण समझौते

- Arms control agreements between the **U.S.** and the **Soviet Union/Russia**, along with the global **non-proliferation architecture** may have contributed to sparing the world another **Hiroshima**, but thinking on **nuclear deterrence** remains essentially unchanged.
अमेरिका और **सोवियत संघ/रूस** के बीच **हथियार नियंत्रण समझौते** तथा वैश्विक **अप्रसार ढांचा** ने दुनिया को एक और **हिरोशिमा** से बचाने में योगदान दिया हो सकता है, लेकिन **परमाणु निरोध** पर सोच मूलतः अपरिवर्तित रही है।
- And now, after a sharp reduction in **nuclear stockpiles** between the **U.S. and Russia**, the **pendulum may be swinging back**.
अब **अमेरिका और रूस** के बीच **परमाणु भंडार में तीव्र कमी** के बाद स्थिति **फिर पलटती हुई** दिख रही है।
- **China, Russia and the U.S.** are ambitiously **modernising their nuclear stockpiles**.
चीन, रूस और अमेरिका महत्वाकांक्षी रूप से अपने **परमाणु भंडार का आधुनिकीकरण** कर रहे हैं।
- **China** has reportedly added **100 warheads a year since 2023** to reach a total of **600**.
रिपोर्ट के अनुसार **चीन** ने **2023 से प्रति वर्ष 100 वारहेड** जोड़े हैं और कुल **600** तक पहुँच गया है।
- In **2015**, the **U.K.** reversed a **2006 decision** to reduce its stockpile and is at **225 warheads**.
2015 में **यू.के.** ने **2006 के निर्णय** को पलट दिया और अब उसके पास **225 वारहेड** हैं।
- The last remaining arms control agreement between **Russia and the U.S.** — **New START** — **expires on February 5**, and if both states start increasing their stockpiles from the current **5,459 and 5,277**, respectively, it will send a clear message of moving back to **Cold War ideas of deterrence**.
रूस और अमेरिका के बीच अंतिम हथियार नियंत्रण समझौता — **न्यू स्टार्ट** — **5 फरवरी को समाप्त हो रहा है**, और यदि दोनों देश अपने वर्तमान **5,459 और 5,277** भंडार बढ़ाते हैं, तो यह **शीत युद्ध की निरोध नीति** की ओर वापसी का स्पष्ट संकेत होगा।

Lessons from Ukraine यूक्रेन से सबक

- The war in **Ukraine** should have led to a more serious debate about **what deters**.
यूक्रेन युद्ध को **निरोध के वास्तविक अर्थ** पर अधिक गंभीर बहस शुरू करनी चाहिए थी।
- Russian President **Vladimir Putin** had made **nuclear threats** before his invasion and then again in **October 2022**.
रूसी राष्ट्रपति व्लादिमीर पुतिन ने आक्रमण से पहले और फिर **अक्टूबर 2022** में **परमाणु धमकियाँ** दी थीं।



- Yet those threats were countered not by the certainty of a **nuclear response**, but by the certainty of a **robust response** that left the nuclear element unclear.
इन धमकियों का जवाब परमाणु प्रतिक्रिया की निश्चितता से नहीं बल्कि मजबूत प्रतिक्रिया की निश्चितता से दिया गया, जिसमें परमाणु तत्व अस्पष्ट था।
- It is worth remembering that **Ukraine — a non-nuclear country —** has been able to defend itself against a **nuclear adversary**.
यह याद रखना चाहिए कि यूक्रेन — एक गैर-परमाणु देश — ने परमाणु शक्ति वाले विरोधी के खिलाफ अपनी रक्षा की है।
- Yes, it has had help and yes, it has lost territory, but **Ukraine has not yet been defeated** by its nuclear neighbour.
हाँ, उसे सहायता मिली और उसने क्षेत्र खोया, लेकिन यूक्रेन अभी तक पराजित नहीं हुआ है।
- Therefore, what happens in the next few months as **Europe comes up with a security architecture that does not rely on the U.S.** could reshape **nuclear thinking**.
इसलिए अगले कुछ महीनों में जब यूरोप अमेरिका पर निर्भर न रहने वाली सुरक्षा संरचना बनाएगा, तो यह परमाणु सोच को बदल सकता है।
- Apart from some discussion about how **France and the U.K.** might extend their **nuclear umbrella** to cover Europe, most previous debate focused on **moving closer to the U.S.**
फ्रांस और यू.के. द्वारा यूरोप को परमाणु छतरी देने पर कुछ चर्चा को छोड़कर, अधिकांश पुरानी बहस अमेरिका के और करीब जाने पर केंद्रित थी।
- Meanwhile, an ad hoc group called the **Coalition of the Willing** has come together to guarantee **Ukraine's security**.
इसी बीच कोएलिशन ऑफ द विलिंग नामक समूह यूक्रेन की सुरक्षा सुनिश्चित करने के लिए बना है।
- **Ukraine** now has experience in defending itself against a **nuclear state**.
यूक्रेन के पास अब परमाणु शक्ति के खिलाफ रक्षा का अनुभव है।
- Whether Europe bases its new **security architecture** on a **replacement nuclear alliance** or on a **defensive alliance with a nuclear element** will shape future discussions about **nuclear weapons and deterrence**.
यूरोप अपनी नई सुरक्षा संरचना को नए परमाणु गठबंधन पर आधारित करता है या परमाणु तत्व वाले रक्षात्मक गठबंधन पर, यह भविष्य की परमाणु हथियार और निरोध बहस को प्रभावित करेगा।

WASHINGTON

Donald Trump is turning U.S. into an authoritarian state, warns HRW



GS II: IR
Human Rights Watch warned on Wednesday that President Donald Trump was turning the United States into an authoritarian state as democracy declines globally to its **lowest ebb in four decades**. Mr. Trump's return to the White House has intensified a **"downward spiral" on human rights**, the group said in its annual report. AFP

rights, the group said in its annual report.

समूह ने अपनी वार्षिक रिपोर्ट में कहा कि श्री ट्रंप की व्हाइट हाउस में वापसी ने मानवाधिकारों पर "नकारात्मक गिरावट" को और तेज़ कर दिया है।

Donald Trump is turning U.S. into an authoritarian state, warns HRW डोनाल्ड ट्रंप अमेरिका को एक अधिनायकवादी राज्य में बदल रहे हैं, HRW की चेतावनी

- Donald Trump is turning U.S. into an authoritarian state, warns **HRW**
डोनाल्ड ट्रंप अमेरिका को एक अधिनायकवादी राज्य में बदल रहे हैं, **HRW** की चेतावनी
- **Human Rights Watch** warned on Wednesday that **President Donald Trump** was turning the **United States** into an **authoritarian state** as **democracy** declines globally to its **lowest ebb in four decades**.
ह्यूमन राइट्स वॉच ने बुधवार को चेतावनी दी कि राष्ट्रपति डोनाल्ड ट्रंप संयुक्त राज्य अमेरिका को एक अधिनायकवादी राज्य में बदल रहे हैं, क्योंकि लोकतंत्र वैश्विक स्तर पर पिछले चार दशकों के सबसे निचले स्तर पर पहुंच गया है।
- **Mr. Trump's return to the White House** has intensified a **"downward spiral" on human**



GS Paper III: Economy,	
TOPICS COVERED	05 February 2026
1.	Agriculture and dairy sectors protected in India-U.S. trade deal, Goyal tells Parliament भारत-अमेरिका व्यापार समझौते में कृषि और डेयरी क्षेत्रों को संरक्षण, गोयल ने संसद को बताया
2.	The Budget and the imperative of fiscal consolidation बजट और राजकोषीय समेकन की अनिवार्यता
3.	The U.S. trade deal — gains from economic diplomacy अमेरिका का व्यापार समझौता — आर्थिक कूटनीति से लाभ
4.	'Investors more aware of crypto than corporate bonds' 'निवेशक कॉर्पोरेट बॉन्ड की तुलना में क्रिप्टो के प्रति अधिक जागरूक'
5.	On rare earth supply, Donald Trump administration for once seeks allies दुर्लभ पृथ्वी आपूर्ति पर, डोनाल्ड ट्रंप प्रशासन पहली बार सहयोगियों की तलाश करता है

Agriculture and dairy sectors protected in India-U.S. trade deal, Goyal tells Parliament

GS III: Economy

The Hindu Bureau
NEW DELHI

Union Commerce Minister Piyush Goyal on Wednesday told Parliament that the government had been successful in protecting the Indian agriculture and dairy sectors in the India-U.S. trade deal.

Making a statement in both Houses of Parliament, Mr. Goyal said the deal would help make India self-reliant, and added that the labour-intensive sectors would receive a major boost in exports following the reduction in tariffs to 18%, which were earlier pegged at 50%.

The tariffs on India are among the lowest compared with its competitor nations, the Union Minis-

The deal [with the U.S.] will help promote initiatives like 'Make in India' and 'Design in India', and will make India self-reliant...deal will open huge opportunities for skilled Indians and MSMEs

PIYUSH GOYAL
Union Commerce Minister



ter said in the Lok Sabha. "India has been successful in protecting the agricultural and dairy sectors," he said, adding that the deal would help promote initiatives such as "Make in India" and "Design in India", and would make India self-reliant. He said the deal would open huge opportunities for skilled Indians and micro, small, and medium enterprises (MSMEs).

He said both sides were working to complete the technical processes, and it would be announced soon. He added that ensuring energy security for Indians was the top priority of the government.

'National interest'

Observing that India needed goods from sectors such as aviation and nuclear energy, and the U.S. was a

major player in these segments, he said the deal was in the national interest.

Throughout Mr. Goyal's statement in the Lok Sabha, the Opposition continued to protest on the issue of the stand-off with China in 2020 and the unpublished memoir of former Army chief M.M. Naravane. The Minister later posted on social media platform X, "Today in the Lok Sabha, I was scheduled to deliver a statement regarding the India-U.S. Trade Deal. However, when the government came prepared to provide a factual clarification on the subject, the Opposition began creating a ruckus. Consequently, I am releasing my full statement here for everyone's benefit."

In the Rajya Sabha, soon after he made his statement, the Opposition members sought clarifications. Though Chairman C.P. Radhakrishnan called senior Congress member Jairam Ramesh, he could not speak as other members also stood up.

Later, Mr. Radhakrishnan, citing Rules, said questions cannot be asked considering the sensitivity of the matter.

Dravida Munnetra Kazhagam leader Tiruchi Siva and CPI(M) member John Brittas questioned the decision to disallow clarifications. Mr. Ramesh, however, was not allowed to speak. Mr. Radhakrishnan later said since there was no decorum, Mr. Ramesh could not be called.

Agriculture and dairy sectors protected in India-U.S. trade deal, Goyal tells Parliament

भारत-अमेरिका व्यापार समझौते में कृषि और डेयरी क्षेत्रों को संरक्षण, गोयल ने संसद को बताया



- Union Commerce Minister **Piyush Goyal** on Wednesday told **Parliament** that the government had been successful in protecting the Indian **agriculture** and **dairy sectors** in the **India-U.S. trade deal**.
केंद्रीय वाणिज्य मंत्री **पीयूष गोयल** ने बुधवार को **संसद** को बताया कि सरकार **भारत-अमेरिका व्यापार समझौते** में भारतीय **कृषि** और **डेयरी क्षेत्रों** को संरक्षण देने में सफल रही है।
- Making a statement in both **Houses of Parliament**, Mr. Goyal said the deal would help make India **self-reliant**, and added that the **labour-intensive sectors** would receive a major boost in **exports** following the reduction in **tariffs** to **18%**, which were earlier pegged at **50%**.
संसद के दोनों सदनों में बयान देते हुए श्री गोयल ने कहा कि यह समझौता भारत को **आत्मनिर्भर** बनाने में मदद करेगा, और **श्रम-प्रधान क्षेत्रों** को **निर्यात** में बड़ा बढ़ावा मिलेगा क्योंकि **शुल्क** घटाकर **18%** कर दिए गए हैं, जो पहले **50%** थे।
- The tariffs on India are among the **lowest** compared with its **competitor nations**, the Union Minister said in the **Lok Sabha**.
केंद्रीय मंत्री ने **लोकसभा** में कहा कि भारत पर लगाए गए शुल्क उसके **प्रतिद्वंद्वी देशों** की तुलना में **सबसे कम** में से हैं।
- “India has been successful in protecting the **agricultural and dairy sectors**,” he said, adding that the deal would help promote initiatives such as “**Make in India**” and “**Design in India**”, and would make India **self-reliant**.
उन्होंने कहा, “भारत **कृषि और डेयरी क्षेत्रों** को बचाने में सफल रहा है,” और जोड़ा कि यह समझौता “**मेक इन इंडिया**” और “**डिजाइन इन इंडिया**” जैसी पहलों को बढ़ावा देगा और भारत को **आत्मनिर्भर** बनाएगा।
- He said the deal would open huge opportunities for **skilled Indians** and **micro, small, and medium enterprises (MSMEs)**.
उन्होंने कहा कि यह समझौता **कुशल भारतीयों** और **सूक्ष्म, लघु एवं मध्यम उद्यमों (MSMEs)** के लिए बड़े अवसर खोलेगा।
- He said both sides were working to complete the **technical processes**, and it would be announced soon.
उन्होंने कहा कि दोनों पक्ष **तकनीकी प्रक्रियाओं** को पूरा करने पर काम कर रहे हैं और इसकी जल्द घोषणा की जाएगी।
- He added that ensuring **energy security** for Indians was the top priority of the government.
उन्होंने जोड़ा कि भारतीयों के लिए **ऊर्जा सुरक्षा** सुनिश्चित करना सरकार की सर्वोच्च प्राथमिकता है।

‘National interest’ ‘राष्ट्रीय हित’

- Observing that India needed goods from sectors such as **aviation** and **nuclear energy**, and the **U.S.** was a major player in these segments, he said the deal was in the **national interest**.
यह कहते हुए कि भारत को **विमानन** और **परमाणु ऊर्जा** जैसे क्षेत्रों से वस्तुओं की आवश्यकता है और **अमेरिका** इन क्षेत्रों में एक प्रमुख खिलाड़ी है, उन्होंने कहा कि यह समझौता **राष्ट्रीय हित** में है।
- Throughout Mr. Goyal’s statement in the **Lok Sabha**, the **Opposition** continued to protest on the issue of the **stand-off with China in 2020** and the **unpublished memoir** of former Army chief **M.M. Naravane**.
लोकसभा में श्री गोयल के पूरे बयान के दौरान **विपक्ष** ने **2020 में चीन के साथ गतिरोध** और पूर्व सेना प्रमुख **एम.एम. नरवणे** की **अप्रकाशित आत्मकथा** के मुद्दे पर विरोध जारी रखा।
- The Minister later posted on social media platform **X**, “Today in the Lok Sabha, I was scheduled to deliver a statement regarding the **India-U.S. Trade Deal**. However, when the government came prepared to provide a **factual clarification** on the subject, the Opposition began creating a **ruckus**. Consequently, I am releasing my full statement here for everyone’s **benefit**.”
मंत्री ने बाद में सोशल मीडिया मंच **एक्स** पर लिखा, “आज लोकसभा में मैं **भारत-अमेरिका व्यापार समझौते** पर बयान देने वाला था। हालांकि, जब सरकार इस विषय पर **तथ्यात्मक स्पष्टीकरण** देने के लिए तैयार आई, तो विपक्ष ने **हंगामा** शुरू कर दिया। परिणामस्वरूप, मैं सभी के **हित** के लिए अपना पूरा बयान यहां जारी कर रहा हूँ।”
- In the **Rajya Sabha**, soon after he made his statement, the Opposition members sought **clarifications**.
राज्यसभा में, बयान देने के तुरंत बाद, विपक्षी सदस्यों ने **स्पष्टीकरण** मांगा।



- Though Chairman **C.P. Radhakrishnan** called senior Congress member **Jairam Ramesh**, he could not speak as other members also stood up.
हालांकि अध्यक्ष **सी.पी. राधाकृष्णन** ने वरिष्ठ कांग्रेस सदस्य **जयराम रमेश** को बुलाया, लेकिन अन्य सदस्यों के खड़े हो जाने के कारण वे बोल नहीं सके।
- Later, Mr. Radhakrishnan, citing **Rules**, said questions cannot be asked considering the **sensitivity** of the matter.
बाद में श्री राधाकृष्णन ने **नियमों** का हवाला देते हुए कहा कि मामले की **संवेदनशीलता** को देखते हुए प्रश्न नहीं पूछे जा सकते।
- **Dravida Munnetra Kazhagam** leader **Tiruchi Siva** and **CPI(M)** member **John Brittas** questioned the decision to disallow **clarifications**.
द्रविड़ मुनेत्र कड़गम के नेता **तिरुची शिवा** और **सीपीआई(एम)** सदस्य **जॉन ब्रिट्टास** ने **स्पष्टीकरण** की अनुमति न देने के निर्णय पर सवाल उठाए।
- Mr. Ramesh, however, was not allowed to speak.
हालांकि, श्री **रमेश** को बोलने की अनुमति नहीं दी गई।
- Mr. Radhakrishnan later said since there was no **decorum**, Mr. Ramesh could not be called.
श्री राधाकृष्णन ने बाद में कहा कि **मर्यादा** न होने के कारण श्री रमेश को नहीं बुलाया जा सका।

The Budget and the imperative of fiscal consolidation

GS III: Economy: Budget

MCQ

While presenting the Union Budget 2026-27, a considerable part of the Finance Minister's Budget speech dealt with the expenditure programmes that will be launched to enable India to become developed by 2047. The emphasis on the advanced technology sectors such as Artificial Intelligence, biopharma, semiconductor and critical minerals among others, is well taken. The concern with these expenditure programmes is on how well they are going to be implemented and the pace at which they will enable the goal of Viksit Bharat to be achieved.

Expenditure priorities, revenue prospects
In order to provide fiscal space for these changing priorities, the Government of India has been successfully undertaking a restructuring, particularly of its revenue expenditures. For more than a decade, the share of revenue expenditure to total expenditure has been going down, from 88% in 2014-15 to about 77% in 2026-27 (BE), that is a fall of 11% points. Within this, the fall in central subsidies was 7% points of total expenditure. Correspondingly, the share of capital expenditure in total expenditure has increased.

The Centre's emphasis on capital expenditure has played an important role in supporting GDP growth. As a percentage of GDP, the Centre's capital expenditure, in the post-COVID-19 years, has been at a high level. However, its annual growth rate has fallen over time. Thus, from a recent peak growth of 28.3% in 2023-24, it fell to 10.8% in 2024-25 and to 4.2% in 2025-26 (RE). It is budgeted to increase now to 11.5% in 2026-27 (BE), which is only marginally higher than the assumed nominal GDP growth of 10.0%. Thus, it will almost remain static at 3.1% of GDP in 2025-26 (RE) and 2026-27 (BE). It may be noted that the budgeted capital expenditure growth in 2025-26 was 10.1%, but a growth of only 4.2% was achieved as already noted.

The Government of India's revenue receipts,



C. Rangarajan
is Chairman, Madras School of Economics, and a former Governor of the Reserve Bank of India



D.K. Srivastava
is Member, Advisory Council to the Sixteenth Finance Commission, and a former Director of the Madras School of Economics

The Budget pinpoints the critical areas where the government needs to focus on, but sustained growth needs monetary and fiscal stability

particularly projections for 2026-27 (BE) of tax revenues are cautious and are likely to be achieved. But the concern is that the buoyancy of Centre's gross tax revenues in 2026-27 (BE) has fallen to 0.8, well below the benchmark of 1. This consists of a buoyancy of 1.1 of direct taxes, which has a share of 61.2%, and a buoyancy of 0.3 of indirect taxes, which has a share of 38.8% in Centre's gross tax revenues. The main reason for the lower overall buoyancy is linked to the Goods and Services Tax (GST) collections, which are not expected to keep pace with GDP growth in 2026-27 (BE). In view of the high pressure on increasing expenditure, both developmental and welfare, the government should take a good look at the indirect taxes structure and raise their buoyancy to 1.

The recommendations of the Sixteenth Finance Commission (FC16) have not provided for any change in the share of States in the divisible pool of central taxes, keeping it at 41%.

The assignment of taxes to the States, therefore, has remained the same at 3.9% of GDP in 2025-26 (RE) and 2026-27 (BE). Also, the FC16 did not recommend any revenue deficit grants or sector/State-specific grants. Because of discontinuation of revenue deficit grants, there would be a reduction in the overall transfers to the States as compared to FC15. In fact, there has also been a reduction in other components of FC grants – the reason why total FC grants to the States have fallen from 0.43% of GDP in 2025-26 (RE) – the last year under the recommendations of FC15 – to 0.33% in 2026-27 (BE), the first year under the recommendations of the FC16. Usually, in the first year of an FC award period, there is a step jump in the volume of grants.

Pace of fiscal consolidation

The slowdown in the pace of fiscal consolidation is also a major concern. The pace of reduction in the fiscal deficit to GDP ratio has progressively fallen in the post-COVID-19 years. Considering the period from 2023-24, the annual reduction in this ratio in successive years was 0.7% points in

2024-25, 0.4% points in 2025-26 (RE) and only 0.1% point in 2026-27 (BE). The change in the targeting strategy from fiscal deficit to targeting the debt-GDP ratio also does not give much confidence. In fact, the debt-GDP ratio and fiscal deficit to GDP ratio are interdependent and move in tandem depending on the nominal GDP growth.

A transparent strategy would be to give the glide path of debt-GDP ratio and fiscal deficit relative to GDP with an underlying assumption of nominal GDP growth for the next five years. It should also indicate as to when the respective targets committed to in the Fiscal Responsibility and Budget Management Act 2018, that is, of 40% for debt-GDP ratio and of 3% for fiscal deficit to GDP ratio are likely to be achieved.

It is also useful to note that maintaining an unduly high debt-GDP ratio leads to a high interest payment to revenue receipts ratio. The effective interest rate for central government debt is estimated at 7.12% in 2026-27 (BE). This rate has been rising progressively for the last three years. In fact, as per the 2026-27 (BE), the interest payment to revenue receipts ratio is close to 40%, thereby squeezing the space for the required primary expenditures.

It must be stressed that the limit of fiscal deficit at 3% of GDP has a strong logic behind it. If the Centre and States take 8%-9% of GDP, the investible resources available for the private sector will come down strongly. In this situation, it is difficult to expect private investment to pick up.

A good framework

Taken together, the Budget presents a good road map to achieve the status of a developed country by 2047. It has highlighted the critical areas where the government and country must focus on. Sustained growth needs monetary and fiscal stability. The path of fiscal consolidation requires a relook.

The views expressed are personal

The Budget and the imperative of fiscal consolidation बजट और राजकोषीय समेकन की अनिवार्यता

Union Budget 2026-27 and expenditure priorities केंद्रीय बजट 2026-27 और व्यय प्राथमिकताएँ

- While presenting the **Union Budget 2026-27**, a considerable part of the **Finance Minister's Budget speech** dealt with the **expenditure programmes** that will be launched to enable



India to become developed by 2047.

केंद्रीय बजट 2026-27 प्रस्तुत करते समय वित्त मंत्री के बजट भाषण का एक बड़ा हिस्सा उन व्यय कार्यक्रमों पर केंद्रित था जो भारत को 2047 तक विकसित बनाने के लिए शुरू किए जाएंगे।

- The emphasis on **advanced technology sectors** such as **Artificial Intelligence, biopharma, semiconductor and critical minerals** among others, is well taken.
उन्नत प्रौद्योगिकी क्षेत्रों जैसे कृत्रिम बुद्धिमत्ता, बायोफार्मा, सेमीकंडक्टर और महत्वपूर्ण खनिज पर जोर दिया गया है।
- The concern with these **expenditure programmes** is on how well they are going to be **implemented** and the **pace** at which they will enable the goal of **Viksit Bharat** to be achieved.
इन व्यय कार्यक्रमों को लेकर चिंता यह है कि इन्हें कितनी अच्छी तरह लागू किया जाएगा और किस गति से ये विकसित भारत के लक्ष्य को प्राप्त करने में मदद करेंगे।

Expenditure priorities, revenue prospects व्यय प्राथमिकताएँ, राजस्व संभावनाएँ

- In order to provide **fiscal space** for these changing priorities, the **Government of India** has been undertaking a **restructuring of revenue expenditures**.
इन बदलती प्राथमिकताओं के लिए राजकोषीय स्थान उपलब्ध कराने हेतु भारत सरकार राजस्व व्यय के पुनर्गठन में लगी हुई है।
- For more than a decade, the share of **revenue expenditure to total expenditure** has been going down, from **88% in 2014-15** to about **77% in 2026-27 (BE)** — a fall of **11 percentage points**.
एक दशक से अधिक समय से कुल व्यय में राजस्व व्यय का हिस्सा घटकर 2014-15 में 88% से 2026-27 (BE) में 77% हो गया है — यानी 11 प्रतिशत अंक की गिरावट।
- Within this, the fall in **central subsidies** was **7 percentage points** of total expenditure.
इसमें केंद्रीय सब्सिडी में गिरावट कुल व्यय के 7 प्रतिशत अंक रही।
- Correspondingly, the share of **capital expenditure** in total expenditure has increased.
इसके अनुरूप पूंजीगत व्यय का हिस्सा बढ़ा है।
- The Centre's emphasis on **capital expenditure** has played an important role in supporting **GDP growth**.
केंद्र का पूंजीगत व्यय पर जोर जीडीपी वृद्धि को समर्थन देने में महत्वपूर्ण रहा है।
- As a percentage of GDP, the Centre's capital expenditure in the **post-COVID years** has been at a **high level**.
कोविड के बाद के वर्षों में जीडीपी के प्रतिशत के रूप में केंद्र का पूंजीगत व्यय उच्च स्तर पर रहा है।
- However, its **annual growth rate** has fallen over time.
हालाँकि इसका वार्षिक वृद्धि दर समय के साथ घटा है।
- From a recent peak of **28.3% in 2023-24**, it fell to **10.8% in 2024-25** and to **4.2% in 2025-26 (RE)**.
2023-24 में 28.3% के उच्च स्तर से यह घटकर 2024-25 में 10.8% और 2025-26 (RE) में 4.2% हो गया।
- It is budgeted to increase to **11.5% in 2026-27 (BE)**, only marginally higher than **nominal GDP growth of 10.0%**.
इसे 2026-27 (BE) में 11.5% तक बढ़ाने का अनुमान है, जो 10.0% नाममात्र जीडीपी वृद्धि से थोड़ा ही अधिक है।
- Thus, it will remain almost static at **3.1% of GDP in 2025-26 (RE) and 2026-27 (BE)**.
इस प्रकार यह 2025-26 (RE) और 2026-27 (BE) में जीडीपी का लगभग 3.1% स्थिर रहेगा।
- It may be noted that the budgeted capital expenditure growth in **2025-26 was 10.1%**, but only **4.2% was achieved**.
ध्यान देने योग्य है कि 2025-26 में अनुमानित पूंजीगत व्यय वृद्धि 10.1% थी, लेकिन केवल 4.2% ही प्राप्त हुई।
- The **Government of India's revenue receipts**, particularly **tax revenue projections for 2026-27 (BE)**, are cautious and likely to be achieved.
भारत सरकार की राजस्व प्राप्तियाँ, विशेषकर 2026-27 (BE) के कर राजस्व अनुमान, सावधानीपूर्वक हैं और संभवतः प्राप्त हो जाएंगे।



- But the concern is that the **buoyancy of Centre's gross tax revenues in 2026-27 (BE)** has fallen to **0.8**, below the benchmark of **1**.
लेकिन चिंता यह है कि **2026-27 (BE)** में केंद्र के सकल कर राजस्व की उछाल (बॉयेंसी) घटकर **0.8** रह गई है, जो **1** के मानक से कम है।
- This consists of **buoyancy of 1.1 in direct taxes** with a share of **61.2%**, and **0.3 in indirect taxes** with a share of **38.8%**.
इसमें **प्रत्यक्ष करों की उछाल 1.1 (61.2% हिस्सा)** और **अप्रत्यक्ष करों की उछाल 0.3 (38.8% हिस्सा)** है।
- The main reason for lower buoyancy is linked to **GST collections**, which are not expected to keep pace with **GDP growth in 2026-27 (BE)**.
कम उछाल का मुख्य कारण **जीएसटी संग्रह** है, जो **2026-27 (BE)** में जीडीपी वृद्धि के साथ तालमेल नहीं रख पाएगा।
- In view of high pressure on increasing **developmental and welfare expenditure**, the government should review the **indirect taxes structure** and raise their buoyancy to **1**.
विकासात्मक और कल्याणकारी व्यय बढ़ाने के दबाव को देखते हुए, सरकार को **अप्रत्यक्ष कर संरचना** की समीक्षा कर उनकी उछाल **1** तक बढ़ानी चाहिए।

Finance Commission transfers and fiscal consolidation वित्त आयोग हस्तांतरण और राजकोषीय समेकन

- The recommendations of the **Sixteenth Finance Commission (FC16)** have not provided for any change in the share of **States in the divisible pool of central taxes**, keeping it at **41%**.
सोलहवें वित्त आयोग (FC16) की सिफारिशों में **केंद्रीय करों के विभाज्य पूल में राज्यों की हिस्सेदारी** में कोई बदलाव नहीं किया गया और इसे **41%** पर रखा गया।
- The assignment of taxes to the **States** has remained the same at **3.9% of GDP in 2025-26 (RE)** and **2026-27 (BE)**.
राज्यों को कर आवंटन 2025-26 (RE) और **2026-27 (BE)** में जीडीपी का **3.9%** पर समान रहा।
- The **FC16** did not recommend any **revenue deficit grants** or **sector/State-specific grants**.
FC16 ने कोई **राजस्व घाटा अनुदान** या **क्षेत्र/राज्य-विशिष्ट अनुदान** की सिफारिश नहीं की।
- Because of discontinuation of **revenue deficit grants**, there would be a reduction in **overall transfers to the States** compared to **FC15**.
राजस्व घाटा अनुदान बंद होने के कारण **FC15** की तुलना में **राज्यों को कुल हस्तांतरण** में कमी होगी।
- There has also been a reduction in **other components of FC grants**, leading to total FC grants falling from **0.43% of GDP in 2025-26 (RE)** to **0.33% in 2026-27 (BE)**.
वित्त आयोग अनुदानों के अन्य घटकों में भी कमी आई है, जिससे कुल अनुदान **2025-26 (RE)** में **0.43%** से घटकर **2026-27 (BE)** में **0.33%** रह गया।
- Usually, in the **first year of an FC award period**, there is a **step jump in the volume of grants**.
आमतौर पर **वित्त आयोग पुरस्कार अवधि के पहले वर्ष** में **अनुदानों की मात्रा में बड़ी वृद्धि** होती है।

Pace of fiscal consolidation राजकोषीय समेकन की गति

- The slowdown in the pace of **fiscal consolidation** is a major concern.
राजकोषीय समेकन की गति में कमी एक बड़ी चिंता है।
- The pace of reduction in the **fiscal deficit to GDP ratio** has progressively fallen in the **post-COVID years**.
कोविड के बाद के वर्षों में **राजकोषीय घाटा-से-जीडीपी अनुपात** में कमी की गति लगातार घटी है।
- From **2023-24**, the annual reduction was **0.7 percentage points in 2024-25**, **0.4 points in 2025-26 (RE)** and only **0.1 point in 2026-27 (BE)**.
2023-24 के बाद **वार्षिक कमी 2024-25** में **0.7 प्रतिशत अंक**, **2025-26 (RE)** में **0.4 अंक**, और **2026-27 (BE)** में केवल **0.1 अंक** रही।
- The shift from targeting **fiscal deficit** to targeting the **debt-GDP ratio** does not give much confidence.
राजकोषीय घाटा से ऋण-जीडीपी अनुपात को लक्ष्य बनाने का बदलाव अधिक विश्वास नहीं देता।
- The **debt-GDP ratio** and **fiscal deficit to GDP ratio** are interdependent and move together depending on **nominal GDP growth**.



ऋण-जीडीपी अनुपात और राजकोषीय घाटा-जीडीपी अनुपात परस्पर निर्भर हैं और नाममात्र जीडीपी वृद्धि के अनुसार साथ चलते हैं।

- A transparent strategy would be to give the **glide path of debt-GDP ratio and fiscal deficit** with assumptions of **nominal GDP growth for the next five years**.
एक पारदर्शी रणनीति में **अगले पाँच वर्षों के नाममात्र जीडीपी वृद्धि** के आधार पर ऋण-जीडीपी और **राजकोषीय घाटा का ग्लाइड पथ** देना चाहिए।
- It should indicate when targets of the **Fiscal Responsibility and Budget Management Act 2018 — 40% debt-GDP ratio and 3% fiscal deficit** — will be achieved.
यह भी बताना चाहिए कि **वित्तीय उत्तरदायित्व एवं बजट प्रबंधन अधिनियम 2018** के लक्ष्य — ऋण-जीडीपी **40%** और **राजकोषीय घाटा 3%** — कब प्राप्त होंगे।
- Maintaining a high **debt-GDP ratio** leads to a high **interest payment to revenue receipts ratio**.
उच्च ऋण-जीडीपी अनुपात बनाए रखने से **राजस्व प्राप्तियों पर ब्याज भुगतान अनुपात** बढ़ जाता है।
- The **effective interest rate** for central government debt is estimated at **7.12% in 2026-27 (BE)** and has been rising for **three years**.
केंद्रीय सरकार के ऋण की **प्रभावी ब्याज दर 2026-27 (BE)** में **7.12%** अनुमानित है और यह **तीन वर्षों** से बढ़ रही है।
- The **interest payment to revenue receipts ratio** is close to **40%**, squeezing space for **primary expenditures**.
ब्याज भुगतान-राजस्व प्राप्ति अनुपात लगभग **40%** है, जिससे **प्राथमिक व्यय** के लिए स्थान कम हो रहा है।
- The limit of **fiscal deficit at 3% of GDP** has strong logic.
जीडीपी के 3% राजकोषीय घाटा सीमा का मजबूत तर्क है।
- If the Centre and States together take **8%-9% of GDP**, resources available for the **private sector** will decline sharply.
यदि केंद्र और राज्य मिलकर **जीडीपी का 8%-9%** लेते हैं, तो **निजी क्षेत्र** के लिए उपलब्ध संसाधन कम हो जाएंगे।
- In such a situation, it is difficult for **private investment** to pick up.
ऐसी स्थिति में **निजी निवेश** का बढ़ना कठिन है।

A good framework एक अच्छा ढांचा

- Taken together, the **Budget presents a good road map to achieve developed country status by 2047**.
कुल मिलाकर **बजट 2047 तक विकसित देश बनने** के लिए **एक अच्छा रोडमैप** प्रस्तुत करता है।
- It highlights the **critical areas** where the government and country must focus.
यह उन **महत्वपूर्ण क्षेत्रों** को दर्शाता है जिन पर सरकार और देश को ध्यान देना चाहिए।
- Sustained growth requires **monetary and fiscal stability**.
स्थायी वृद्धि के लिए **मौद्रिक और राजकोषीय स्थिरता** आवश्यक है।
- The path of **fiscal consolidation requires a relook**.
राजकोषीय समेकन के मार्ग की पुनर्समीक्षा आवश्यक है।



The U.S. trade deal — gains from economic diplomacy

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MCQ

India's trade playbook is working strongly, steadily and at scale. Its new trade architecture resembles a newly built expressway, anchored in strategic trade agreements that will enable faster, more predictable movement for trade. After concluding a major free trade agreement with the European Union (EU), the United Kingdom and other partners, India has now secured a consequential trade deal with the United States.

The road to this deal was neither short nor simple. Shaped through a demanding and intricate process, the deal stands as a testament to the strength, steadiness and foresight of Indian negotiators. After nearly a year of sustained dialogue, technical negotiations and quiet diplomacy, India and the U.S. agreed upon the lower tariff of 18%. The reduction of U.S. tariffs on Indian goods to this competitive level is a huge boost to Indian exports, providing improved market access, policy certainty and avenues for new strategic partnerships.

A growing network of partnerships

The India-U.S. trade deal represents an important outcome in India's expanding network of international trade partnerships. The trade agreements with the European Free Trade Association (EFTA), the U.K., and the EU give India preferential market access to the whole of Europe. Agreements with Australia and New Zealand make India a key partner of the Pacific, trade agreements with Oman and United Arab Emirates provide greater access to West Asia, and the latest deal with the U.S. deepens India's stronghold in America – a clear reflection of India's deep integration with the world.

The U.S. is the largest import market in the world and India's biggest export destination, accounting for almost one-fifth of India's total exports. Indian exports to the U.S. span a wide range of sectors, which includes apparel, gems and jewellery, agricultural products, footwear, leather and several other manufacturing products, supporting both employment and manufacturing value chains in India. With the elevated U.S. tariff levels of 50% last year, several Indian exporters were at a competitive



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Industry must use the opportunities that the India-U.S. trade deal presents

disadvantage in this critical market. The revised tariff not only provides meaningful relief and improves India's relative position vis-à-vis competing suppliers but also provides a constructive basis for advancing discussions under the ongoing India-U.S. Bilateral Trade Agreement (BTA). By easing immediate trade frictions, the agreement creates space to address broader issues such as regulatory cooperation, market access and supply chain under the BTA.

The gains and broader implications

The clearest gains from the tariff reduction are likely to accrue to employment-intensive export sectors, particularly apparel. The U.S. is the world's largest apparel import market, and with Indian exports now facing an 18% tariff, lower than key competitors such as Vietnam and Bangladesh, Indian manufacturers regain price competitiveness in several high-volume categories. Similar dynamics apply to gems and jewellery (where margins are highly sensitive to tariff changes and the U.S. remains a critical destination), as well as to marine products, processed foods, footwear and leather (where even modest tariff moderation materially improves landed costs). A lower tariff will enhance export viability across these sectors and support India's positioning in diversified global supply chains, further encouraging these industries to go for capacity expansion.

On the whole, the reduction in U.S. tariffs on Indian goods immediately enhances India's competitive position relative to several major exporting nations that face higher duties, including China, Bangladesh, Sri Lanka, Brazil, South Africa, Pakistan as well as the Association of Southeast Asian Nations (ASEAN) countries. This competitive positioning builds up India's export sectors and supports the country's long-term goal of becoming a global manufacturing hub.

Beyond immediate economic relief, the deal opens pathways for long-term growth and boosts the overall India-U.S. economic relationship. It encourages joint ventures, technology partnerships and investment in high-value sectors, fostering innovation, employment and

skill development.

For India, it consolidates global economic leadership and strengthens the country's capacity to engage in high-value international partnerships. For the U.S., it highlights the advantages of partnering with India to drive innovation, expand markets and reinforce supply chains. Progress on tariffs supports deeper engagement across regulatory co-operation, digital trade, clean energy and innovation-led sectors. The deal creates a mutually beneficial cycle of growth and opportunity, laying the foundation for collaboration that extends beyond commerce.

From a strategic perspective, closer economic ties complement cooperation in wider forums such as the Quad (India, Australia, Japan, the U.S.) where supply-chain resilience and trusted partnerships are central priorities. A stable trade relationship reinforces these objectives.

From tariffs to trust, a strategic reset in ties

This trade deal is more than a temporary adjustment of tariffs. It restores trust, unlocks economic opportunities and shores up a constructive strategic relationship. The India-U.S. partnership is poised to expand in areas which include technology, defence, energy and high-value manufacturing.

The deal demonstrates how thoughtful negotiation and shared priorities can turn complex challenges into lasting opportunities. It reveals how two democracies, when willing to engage thoughtfully, can craft solutions that serve national interests while advancing global stability. The India-U.S. trade deal is not just an economic milestone. It represents a renewed, balanced and strategic partnership, setting the stage for deeper cooperation and mutual prosperity in the decades ahead.

The India-U.S. trade improves access to the most important export destination, strengthens competitiveness across key sectors and supports the next phase of bilateral economic engagement. With policy momentum in place, the focus now shifts to industry to leverage these opportunities through investment, scale and enhanced competitiveness.

The U.S. trade deal — gains from economic diplomacy अमेरिका का व्यापार समझौता — आर्थिक कूटनीति से लाभ

India's new trade architecture and U.S. deal भारत की नई व्यापार संरचना और अमेरिका समझौता

- India's **trade playbook** is working **strongly, steadily and at scale**, resembling a newly built **expressway** anchored in **strategic trade agreements**.
भारत की **व्यापार रणनीति** मजबूती, **स्थिरता और बड़े पैमाने पर** काम कर रही है, जो **रणनीतिक व्यापार समझौतों** पर आधारित एक नए **एक्सप्रेसवे** जैसी है।
- After concluding major **free trade agreements** with the **European Union (EU)**, the **United Kingdom** and other partners, India has now secured a **consequential trade deal with the United States**.
यूरोपीय संघ (EU), **यूनाइटेड किंगडम** और अन्य साझेदारों के साथ प्रमुख **मुक्त व्यापार समझौते** करने के बाद, भारत ने अब **संयुक्त राज्य अमेरिका के साथ महत्वपूर्ण व्यापार समझौता** किया है।
- The road to this deal was neither **short nor simple**, shaped through a **demanding and intricate process**.
इस समझौते तक पहुँचने का रास्ता न तो **छोटा** था और न ही **सरल**, बल्कि एक **जटिल और कठिन प्रक्रिया** से गुज़रा।
- After nearly a year of **sustained dialogue, technical negotiations and quiet diplomacy**, India and the U.S. agreed on a **lower tariff of 18%**.
लगभग एक वर्ष की **निरंतर वार्ता, तकनीकी बातचीत और शांत कूटनीति** के बाद, भारत और अमेरिका **18% कम टैरिफ** पर सहमत हुए।
- The reduction of **U.S. tariffs on Indian goods** to this competitive level is a **huge boost to Indian exports**, improving **market access, policy certainty and strategic partnerships**.



भारतीय वस्तुओं पर अमेरिकी टैरिफ में कमी से भारतीय निर्यात को बड़ा प्रोत्साहन मिला है, जिससे बाजार पहुंच, नीति स्थिरता और रणनीतिक साझेदारी बेहतर होगी।

A growing network of partnerships साझेदारियों का बढ़ता नेटवर्क

- The **India-U.S. trade deal** is an important outcome in India's expanding **international trade partnerships**.
भारत-अमेरिकी व्यापार समझौता भारत के बढ़ते अंतरराष्ट्रीय व्यापार साझेदारी नेटवर्क का महत्वपूर्ण परिणाम है।
- Trade agreements with **EFTA, U.K. and EU** give India **preferential access to Europe**.
EFTA, यू.के. और EU के साथ समझौते भारत को यूरोप में विशेष बाजार पहुंच देते हैं।
- Agreements with **Australia and New Zealand** make India a key partner in the **Pacific**.
ऑस्ट्रेलिया और न्यूजीलैंड के साथ समझौते भारत को प्रशांत क्षेत्र का प्रमुख साझेदार बनाते हैं।
- Trade agreements with **Oman and UAE** provide greater access to **West Asia**.
ओमान और यूएई के साथ व्यापार समझौते भारत को पश्चिम एशिया में अधिक पहुंच देते हैं।
- The latest deal with the **U.S.** deepens India's **stronghold in America**, reflecting India's **global integration**.
अमेरिका के साथ नवीनतम समझौता भारत की अमेरिका में पकड़ मजबूत करता है और वैश्विक एकीकरण को दर्शाता है।
- The **U.S.** is the **largest import market** and India's **biggest export destination**, accounting for nearly **one-fifth of India's exports**.
अमेरिका दुनिया का सबसे बड़ा आयात बाजार और भारत का सबसे बड़ा निर्यात गंतव्य है, जो भारत के लगभग एक-पांचवें निर्यात का हिस्सा है।
- Indian exports to the U.S. include **apparel, gems and jewellery, agricultural products, footwear, leather and manufacturing goods**, supporting **employment and value chains**.
अमेरिका को भारतीय निर्यात में कपड़े, रत्न और आभूषण, कृषि उत्पाद, जूते, चमड़ा और विनिर्माण वस्तुएं शामिल हैं, जो रोजगार और मूल्य श्रृंखला को समर्थन देते हैं।
- With **U.S. tariffs of 50% last year**, many Indian exporters faced a **competitive disadvantage**.
पिछले वर्ष **50% अमेरिकी टैरिफ** के कारण कई भारतीय निर्यातकों को प्रतिस्पर्धात्मक नुकसान हुआ।
- The revised tariff provides **relief**, improves India's **competitive position**, and supports progress in the **India-U.S. Bilateral Trade Agreement (BTA)**.
संशोधित टैरिफ राहत प्रदान करता है, भारत की प्रतिस्पर्धात्मक स्थिति सुधारता है और भारत-अमेरिका द्विपक्षीय व्यापार समझौता (BTA) को आगे बढ़ाने में मदद करता है।
- By easing immediate **trade frictions**, the agreement creates space to address **regulatory cooperation, market access and supply chains** under the **BTA**.
तत्काल व्यापारिक तनाव कम करके यह समझौता नियामक सहयोग, बाजार पहुंच और आपूर्ति श्रृंखला जैसे मुद्दों पर BTA के तहत आगे बढ़ने का अवसर देता है।

The gains and broader implications लाभ और व्यापक प्रभाव

- The clearest gains from the **tariff reduction** are likely to accrue to **employment-intensive export sectors**, particularly **apparel**.
टैरिफ में कमी का सबसे स्पष्ट लाभ रोजगार-प्रधान निर्यात क्षेत्रों, विशेषकर परिधान उद्योग को मिलने की संभावना है।
- The **U.S.** is the world's largest **apparel import market**, and with Indian exports facing an **18% tariff**, lower than competitors such as **Vietnam and Bangladesh**, Indian manufacturers regain **price competitiveness**.
अमेरिका दुनिया का सबसे बड़ा परिधान आयात बाजार है, और भारतीय निर्यात पर **18% टैरिफ**, जो वियतनाम और बांग्लादेश से कम है, से भारतीय निर्माता मूल्य प्रतिस्पर्धा फिर से हासिल करते हैं।
- Similar dynamics apply to **gems and jewellery**, where margins are highly sensitive to **tariff changes** and the **U.S.** remains a critical destination.



इसी प्रकार रत्न और आभूषण क्षेत्र में भी, जहाँ लाभ मार्जिन टैरिफ बदलाव के प्रति संवेदनशील हैं और अमेरिका एक महत्वपूर्ण बाजार बना हुआ है।

- The same applies to **marine products, processed foods, footwear and leather**, where modest tariff moderation improves **landed costs**.
इसी प्रकार **समुद्री उत्पाद, प्रसंस्कृत खाद्य, जूते और चमड़ा** क्षेत्रों में भी, जहाँ मामूली टैरिफ कमी से **लैंडेड लागत** कम होती है।
- A lower tariff will enhance **export viability**, strengthen India's role in **global supply chains**, and encourage **capacity expansion**.
कम टैरिफ से **निर्यात व्यवहार्यता** बढ़ेगी, भारत की **वैश्विक आपूर्ति श्रृंखला** में स्थिति मजबूत होगी और **क्षमता विस्तार** को प्रोत्साहन मिलेगा।
- The reduction in **U.S. tariffs** enhances India's **competitive position** relative to exporters such as **China, Bangladesh, Sri Lanka, Brazil, South Africa, Pakistan and ASEAN countries**.
अमेरिकी टैरिफ में कमी से भारत की **प्रतिस्पर्धात्मक स्थिति** चीन, बांग्लादेश, श्रीलंका, ब्राजील, दक्षिण अफ्रीका, पाकिस्तान और **ASEAN देशों** की तुलना में मजबूत हुई है।
- This strengthens India's **export sectors** and supports its long-term goal of becoming a **global manufacturing hub**.
यह भारत के **निर्यात क्षेत्रों** को मजबूत करता है और **वैश्विक विनिर्माण केंद्र** बनने के दीर्घकालिक लक्ष्य का समर्थन करता है।
- Beyond immediate economic relief, the deal promotes **long-term growth** and strengthens the **India-U.S. economic relationship**.
तत्काल आर्थिक राहत से आगे बढ़कर यह समझौता **दीर्घकालिक वृद्धि** को बढ़ावा देता है और **भारत-अमेरिका आर्थिक संबंधों** को मजबूत करता है।
- It encourages **joint ventures, technology partnerships and investment in high-value sectors**, fostering **innovation, employment and skill development**.
यह **संयुक्त उद्यम, तकनीकी साझेदारी और उच्च-मूल्य क्षेत्रों में निवेश** को प्रोत्साहित करता है, जिससे **नवाचार, रोजगार और कौशल विकास** बढ़ते हैं।
- For India, it strengthens **global economic leadership** and the ability to engage in **high-value international partnerships**.
भारत के लिए यह **वैश्विक आर्थिक नेतृत्व** और **उच्च-मूल्य अंतरराष्ट्रीय साझेदारी** में भागीदारी की क्षमता को मजबूत करता है।
- For the **U.S.**, it highlights benefits of partnering with India to drive **innovation, market expansion and supply chain resilience**.
अमेरिका के लिए यह **नवाचार, बाजार विस्तार और आपूर्ति श्रृंखला मजबूती** के लिए भारत के साथ साझेदारी के लाभ दिखाता है।
- Progress on tariffs supports deeper cooperation in **regulatory cooperation, digital trade, clean energy and innovation sectors**.
टैरिफ प्रगति **नियामक सहयोग, डिजिटल व्यापार, स्वच्छ ऊर्जा और नवाचार क्षेत्रों** में गहरे सहयोग को समर्थन देती है।
- The deal creates a **mutually beneficial growth cycle** and lays the foundation for **long-term collaboration** beyond commerce.
यह समझौता **पारस्परिक लाभकारी विकास चक्र** बनाता है और व्यापार से आगे **दीर्घकालिक सहयोग** की नींव रखता है।
- From a **strategic perspective**, closer economic ties complement cooperation in the **Quad (India, Australia, Japan, U.S.)**, focusing on **supply-chain resilience and trusted partnerships**.
रणनीतिक दृष्टि से, मजबूत आर्थिक संबंध **क्वाड (भारत, ऑस्ट्रेलिया, जापान, अमेरिका)** में **आपूर्ति श्रृंखला मजबूती और विश्वसनीय साझेदारी** को समर्थन देते हैं।
- A stable **trade relationship** reinforces these objectives.
एक स्थिर **व्यापार संबंध** इन उद्देश्यों को मजबूत करता है।

From tariffs to trust, a strategic reset in ties
टैरिफ से विश्वास तक, संबंधों का रणनीतिक पुनर्संतुलन



- This deal is more than a **tariff adjustment**; it restores **trust**, unlocks **economic opportunities**, and strengthens **strategic partnership**.
यह समझौता केवल **टैरिफ समायोजन** नहीं है; यह **विश्वास बहाल** करता है, **आर्थिक अवसर** खोलता है और **रणनीतिक साझेदारी** मजबूत करता है।
- The **India-U.S. partnership** is set to expand in **technology, defence, energy and high-value manufacturing**.
भारत-अमेरिका साझेदारी प्रौद्योगिकी, रक्षा, ऊर्जा और उच्च-मूल्य विनिर्माण क्षेत्रों में विस्तार करने वाली है।
- The deal shows how **thoughtful negotiation and shared priorities** can transform **complex challenges into opportunities**.
यह समझौता दर्शाता है कि **सोच-समझकर की गई वार्ता** और **साझा प्राथमिकताएँ** जटिल चुनौतियों को **अवसरों में बदल सकती हैं**।
- It highlights how two **democracies** can craft solutions serving **national interests and global stability**.
यह दिखाता है कि दो **लोकतंत्र राष्ट्रीय हितों और वैश्विक स्थिरता** के लिए समाधान तैयार कर सकते हैं।
- The deal represents a **renewed, balanced and strategic partnership** for deeper cooperation and **mutual prosperity**.
यह समझौता **नवीन, संतुलित और रणनीतिक साझेदारी** का प्रतिनिधित्व करता है, जो गहरे सहयोग और **पारस्परिक समृद्धि** को बढ़ावा देता है।
- The **India-U.S. trade** improves access to the **most important export destination**, strengthens **competitiveness** and supports the next phase of **bilateral engagement**.
भारत-अमेरिका व्यापार सबसे महत्वपूर्ण **निर्यात बाजार तक पहुंच** बढ़ाता है, **प्रतिस्पर्धा** मजबूत करता है और **द्विपक्षीय सहयोग** के अगले चरण को समर्थन देता है।
- With policy momentum, the focus now shifts to **industry** to leverage opportunities through **investment, scale and competitiveness**.
नीतिगत गति के साथ अब ध्यान **उद्योग** पर है कि वह **निवेश, पैमाने और प्रतिस्पर्धा** के माध्यम से इन अवसरों का लाभ उठाए।



Investors more aware of crypto than corporate bonds'

GS III: Economy

Ashokamithran T.
MUMBAI

The increase in capital market participation has not raised the awareness about corporate bonds as an investment option, said SEBI Chairperson Tuhin Kanta Pandey on Wednesday while speaking at a corporate bond outreach event in Mumbai.

"Capital market participation is rising – the number of unique investors has grown from 43 million in FY20 to 139 million today," he said.

"Yet, SEBI's Investor Survey shows awareness of corporate bonds as an investment product is only about 10%, well below deposits, insurance, and small savings. Even cryptocurrency has higher awareness at 15%," he said speaking at the event.

Further, Mr. Pandey said that market structure is

'Awareness of corporate bonds as an investment product is only about 10%'

heavily skewed towards highly-rated issuers, and shallow secondary markets are challenges that act as impediment to the development of the corporate bond market.

'Regulation not enough'

"Regulation alone cannot build a market. The next phase depends on issuers, investors, intermediaries, stock exchanges, and regulators moving together. These outreach programmes are a listening exercise – to identify constraints and prioritise solutions," he said while listing questions that the regulator would be interested listening to from the participants in the market.

event.

कार्यक्रम में बोलते हुए उन्होंने कहा, "फिर भी सेबी के निवेशक सर्वेक्षण के अनुसार कॉर्पोरेट बॉन्ड को निवेश उत्पाद के रूप में लेकर जागरूकता केवल 10% है, जो जमा, बीमा और छोटी बचत से काफी कम है। यहां तक कि क्रिप्टोकॉरेसी की जागरूकता भी 15% है।"

- Further, Mr. Pandey said that **market structure** is heavily skewed towards **highly-rated issuers**, and **shallow secondary markets** are challenges that act as **impediment** to the development of the **corporate bond market**.

इसके अलावा, श्री पांडे ने कहा कि बाजार संरचना अत्यधिक रूप से उच्च-रेटेड जारीकर्ताओं की ओर झुकी हुई है, और कमजोर द्वितीयक बाजार ऐसी चुनौतियां हैं जो कॉर्पोरेट बॉन्ड बाजार के विकास में बाधा बनती हैं।

'Regulation not enough'
'नियमन पर्याप्त नहीं'

- "Regulation alone cannot build a market. The next phase depends on issuers, investors, intermediaries, stock exchanges, and regulators moving together. These outreach programmes are a listening exercise — to identify constraints and prioritise solutions," he said while listing questions that the regulator would be interested in listening to from the participants in the market.

उन्होंने कहा, "केवल नियमन से बाजार का निर्माण नहीं हो सकता। अगला चरण जारीकर्ताओं, निवेशकों, मध्यस्थों, स्टॉक एक्सचेंजों और नियामकों के साथ मिलकर आगे बढ़ने पर निर्भर करता है। ये आउटरीच कार्यक्रम एक सुनने की प्रक्रिया हैं — ताकि बाधाओं की पहचान की जा सके और समाधानों को

'Investors more aware of crypto than corporate bonds'

'निवेशक कॉर्पोरेट बॉन्ड की तुलना में क्रिप्टो के प्रति अधिक जागरूक'

- 'Investors more aware of crypto than corporate bonds'

'निवेशक कॉर्पोरेट बॉन्ड की तुलना में क्रिप्टो के प्रति अधिक जागरूक'

- The increase in **capital market participation** has not raised the awareness about **corporate bonds** as an investment option, said **SEBI Chairperson Tuhin Kanta Pandey** on Wednesday while speaking at a **corporate bond outreach event in Mumbai**.

पूंजी बाजार में भागीदारी बढ़ने के बावजूद कॉर्पोरेट बॉन्ड को निवेश विकल्प के रूप में लेकर जागरूकता नहीं बढ़ी है, यह बात सेबी अध्यक्ष तुहिन कान्त पांडे ने बुधवार को मुंबई में आयोजित कॉर्पोरेट बॉन्ड आउटरीच कार्यक्रम में कही।

- "Capital market participation is rising — the number of unique investors has grown from 43 million in FY20 to 139 million today," he said.

उन्होंने कहा, "पूंजी बाजार में भागीदारी बढ़ रही है — अद्वितीय निवेशकों की संख्या FY20 में 43 मिलियन से बढ़कर आज 139 मिलियन हो गई है।"

- "Yet, **SEBI's Investor Survey** shows awareness of **corporate bonds** as an investment product is only about **10%**, well below **deposits, insurance, and small savings**. Even **cryptocurrency** has higher awareness at **15%**," he said speaking at the



प्राथमिकता दी जा सके," यह कहते हुए उन्होंने उन सवालियों का उल्लेख किया जिन्हें नियामक बाजार प्रतिभागियों से सुनने में रुचि रखेगा।

On rare earth supply, Donald Trump administration for once seeks allies

Ag. GS III: Economy

WASHINGTON

In his year since returning to office, President Donald Trump has shown disdain for longstanding alliances, vowing "America First" even if U.S. friends lose out. But on Wednesday, his administration will attempt the closest it has come to traditional alliance diplomacy, leading a meeting of more than 50 countries on ensuring a stable supply of critical minerals.

The trigger is simple — China. The Asian power, seen by the United States as its long-term rival, has secured a dominant role over critical minerals.

China — flexing muscle in a trade war launched by President Trump — last year tightened its supply chain for rare earths, sending shivers through the glo-



File photo of rare earth mine in China. U.S.'s trigger for the meeting is China's dominant role over critical minerals. AP

bal economy.

China — which mines some 60% of the world's rare earths and processes around 90% — offered the United States a one-year reprieve in a deal with Mr. Trump in October.

The United States has aggressively reached agreements on critical minerals with allies including Japan — which this

week said it found potential in the first deep-sea search for rare earths — as well as Australia, Saudi Arabia, South Korea and Thailand.

Interior Secretary Doug Burgum said that another 11 countries will join Wednesday and that another 20 are interested in participating in what he called a "global coalition", a phrase

rarely uttered by the Trump administration.

"The concept there is that we would have tariff-free trade and exchanges amongst those countries around these critical and rare-earth minerals," Mr. Burgum said Tuesday at the Center for Strategic and International Studies.

Mr. Burgum said that the emerging bloc could go against free-market principles that the United States has historically espoused by regulating a minimum price for certain key minerals.

"If you have someone who's dominant who can flood a market with a particular material, they have the ability to essentially destroy the economic value of a company or a country's production," he said, in a veiled reference to China.

On rare earth supply, Donald Trump administration for once seeks allies

दुर्लभ पृथ्वी आपूर्ति पर, डोनाल्ड ट्रंप प्रशासन पहली बार सहयोगियों की तलाश करता है

- On rare earth supply, Donald Trump administration for once seeks allies
दुर्लभ पृथ्वी आपूर्ति पर, डोनाल्ड ट्रंप प्रशासन पहली बार सहयोगियों की तलाश करता है
- In his year since returning to office, President **Donald Trump** has shown disdain for longstanding **alliances**, vowing "**America First**" even if **U.S. friends** lose out.
कार्यालय में लौटने के बाद अपने एक वर्ष के कार्यकाल में, राष्ट्रपति **डोनाल्ड ट्रंप** ने लंबे समय से चली आ रही **साझेदारियों** के प्रति उपेक्षा दिखाई है, "**अमेरिका फर्स्ट**" का संकल्प लेते हुए, भले ही **अमेरिका के मित्र देशों** को नुकसान ही क्यों न हो।
- But on Wednesday, his administration will attempt the closest it has come to traditional **alliance diplomacy**, leading a meeting of more than **50 countries** on ensuring a stable supply of **critical minerals**.
लेकिन बुधवार को, उनका प्रशासन पारंपरिक **संधि कूटनीति** के सबसे करीब पहुंचते हुए, **महत्वपूर्ण खनिजों** की स्थिर आपूर्ति सुनिश्चित करने के लिए **50 से अधिक देशों** की एक बैठक का नेतृत्व करेगा।
- The trigger is simple — **China**.
इसका कारण सीधा है — **चीन**।
- The Asian power, seen by the **United States** as its long-term rival, has secured a dominant role over **critical minerals**.
संयुक्त राज्य अमेरिका द्वारा अपने दीर्घकालिक प्रतिद्वंद्वी के रूप में देखी जाने वाली यह एशियाई शक्ति **महत्वपूर्ण खनिजों** पर एक प्रभुत्वशाली भूमिका सुरक्षित कर चुकी है।



- **China** — flexing muscle in a **trade war** launched by President Trump — last year tightened its supply chain for **rare earths**, sending shivers through the **global economy**.
राष्ट्रपति ट्रंप द्वारा शुरू किए गए **व्यापार युद्ध** में ताकत दिखाते हुए, **चीन** ने पिछले वर्ष **दुर्लभ पृथ्वी तत्वों** की अपनी आपूर्ति श्रृंखला को कड़ा किया, जिससे **वैश्विक अर्थव्यवस्था** में हलचल मच गई।
- **China** — which mines some **60%** of the world's rare earths and processes around **90%** — offered the **United States** a **one-year reprieve** in a deal with Mr. Trump in **October**.
चीन — जो दुनिया के लगभग **60%** दुर्लभ पृथ्वी तत्वों का खनन करता है और करीब **90%** का प्रसंस्करण करता है — ने **अक्टूबर** में श्री ट्रंप के साथ एक समझौते में **संयुक्त राज्य अमेरिका** को **एक वर्ष की राहत** दी।
- The **United States** has aggressively reached agreements on critical minerals with allies including **Japan** — which this week said it found potential in the first **deep-sea search** for rare earths — as well as **Australia, Saudi Arabia, South Korea and Thailand**.
संयुक्त राज्य अमेरिका ने **जापान** सहित सहयोगी देशों के साथ महत्वपूर्ण खनिजों पर आक्रामक रूप से समझौते किए हैं — जिसने इस सप्ताह दुर्लभ पृथ्वी तत्वों की पहली **गहरे समुद्र में खोज** में संभावनाएं मिलने की बात कही — साथ ही **ऑस्ट्रेलिया, सऊदी अरब, दक्षिण कोरिया और थाईलैंड** के साथ भी।
- **Interior Secretary Doug Burgum** said that another **11 countries** will join Wednesday and that another **20** are interested in participating in what he called a **“global coalition”**, a phrase rarely uttered by the Trump administration.
गृह सचिव डग बर्गम ने कहा कि बुधवार को **11 अन्य देश** इसमें शामिल होंगे और **20 अन्य देश** उस भागीदारी में रुचि रखते हैं, जिसे उन्होंने **“वैश्विक गठबंधन”** कहा — यह शब्द ट्रंप प्रशासन द्वारा शायद ही कभी इस्तेमाल किया गया है।
- “The concept there is that we would have **tariff-free trade** and exchanges amongst those countries around these **critical and rare-earth minerals**,” Mr. Burgum said Tuesday at the **Center for Strategic and International Studies**.
“इसका विचार यह है कि इन **महत्वपूर्ण और दुर्लभ पृथ्वी खनिजों** को लेकर उन देशों के बीच **शुल्क-मुक्त व्यापार** और आदान-प्रदान हो,” श्री बर्गम ने मंगलवार को **सेंटर फॉर स्ट्रेटेजिक एंड इंटरनेशनल स्टडीज** में कहा।
- Mr. Burgum said that the emerging bloc could go against **free-market principles** that the United States has historically espoused by regulating a **minimum price** for certain key minerals.
श्री बर्गम ने कहा कि उभरता हुआ यह समूह कुछ प्रमुख खनिजों के लिए **न्यूनतम मूल्य** को नियंत्रित करके उन **मुक्त-बाज़ार सिद्धांतों** के खिलाफ जा सकता है, जिनका संयुक्त राज्य अमेरिका ऐतिहासिक रूप से समर्थन करता रहा है।
- “If you have someone who’s dominant who can **flood a market** with a particular material, they have the ability to essentially **destroy the economic value** of a company or a country’s production,” he said, in a veiled reference to **China**.
“यदि कोई प्रभुत्वशाली खिलाड़ी किसी विशेष सामग्री से **बाज़ार को भर** सकता है, तो उसके पास किसी कंपनी या किसी देश के उत्पादन के **आर्थिक मूल्य को नष्ट** करने की क्षमता होती है,” उन्होंने **चीन** की ओर परोक्ष संकेत करते हुए कहा।

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TOPICS COVERED	05 February 2026
1.	Launch of NASA’s mission to moon put off till March नासा के चंद्र मिशन का प्रक्षेपण मार्च तक टाला गया
2.	QUIZ
3.	Anthropic’s new AI tools deepen sell off in data analytics and software stocks, investors say एंथ्रोपिक के नए एआई टूल्स से डेटा एनालिटिक्स और सॉफ्टवेयर शेयरों में बिकवाली गहरी हुई, निवेशकों का कहना



Launch of NASA's mission to moon put off till March

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NASA said on Tuesday that it will be delaying until March the launch of its first crewed flyby mission to the moon in more than half a century after encountering leaks during final tests.

The mishaps during a run-through that the U.S. space agency calls a "wet dress rehearsal" dashed hopes that the mission around the moon could launch as soon as February 8. The next possible launch window now opens on March 6.

The two-day test included filling the Space Launch System rocket with propellants, liquid hydrogen, and liquid oxygen.

Teams were initially able to work through some of the hydrogen leaks they encountered, but ultimately the leak worsened as the simulated countdown reached about T-5 minutes, NASA Administrator Jared Isaacman said in a statement.

Operations were stopped, Isaacman said, adding that "we will only launch when we believe we are as ready to undertake this historic mission."

The Artemis programme at large aims to return humans to the moon to establish a sustainable presence and later prepare for future Martian exploration

Hydrogen is particularly energetic and difficult to contain because of its low density, NASA officials said at a briefing on Tuesday.

लॉन्च हो सकता है।

- The next possible **launch window** now opens on **March 6**. अगला संभावित **लॉन्च विंडो** अब **6 मार्च** को खुलेगा।
- The two-day test included **filling the Space Launch System rocket with propellants, liquid hydrogen, and liquid oxygen**. दो दिवसीय परीक्षण में **स्पेस लॉन्च सिस्टम रॉकेट में प्रोपेलेंट, तरल हाइड्रोजन और तरल ऑक्सीजन भरना** शामिल था।
- Teams were initially able to work through some of the **hydrogen leaks** they encountered, but ultimately the leak worsened as the simulated countdown reached about **T-5 minutes**, NASA Administrator **Jared Isaacman** said. टीमें शुरू में कुछ **हाइड्रोजन रिसाव** को ठीक करने में सक्षम थीं, लेकिन अंततः जैसे ही काउंटडाउन **T-5 मिनट** तक पहुँचा, रिसाव बढ़ गया, नासा प्रशासक **जेरेड इसाकमैन** ने कहा।
- Operations were stopped, Isaacman said, adding that "**we will only launch when we believe we are as ready to undertake this historic mission.**" ऑपरेशन रोक दिए गए, इसाकमैन ने कहा, और जोड़ा कि "**हम तभी लॉन्च करेंगे जब हमें लगेगा कि हम इस ऐतिहासिक मिशन के लिए पूरी तरह तैयार हैं।**"
- **Hydrogen** is particularly **energetic** and difficult to contain because of its **low density**, NASA officials said. **हाइड्रोजन** विशेष रूप से **ऊर्जावान** है और इसकी **कम घनत्व** के कारण इसे नियंत्रित करना कठिन है, नासा अधिकारियों ने कहा।

Along with leakages, teams had to troubleshoot a valve issue related to hatch pressurisation, in addition to dropouts of audio communications, NASA said.

The latest leaks mirror issues that delayed for months the Artemis 1 launch, which was an uncrewed test mission that ultimately circled the moon in 2022.

John Honeycutt, head of the Artemis 2 Mission Management Team, said scientists had been "aggressive" in their testing to understand the Artemis 1 leaks.

But "on the ground, we're pretty limited as to how much realism we can put into the test. We try to test like we fly, but this interface is a very complex interface. This one caught us off guard," he continued.

"To me, the big takeaway was we got a chance for the rocket to talk to us, and it did just that," Honeycutt said.

Mission managers said they are analysing the data collected and making necessary repairs ahead of plans to run another dress rehearsal. For now, officials said those fixes can be performed at the Florida launchpad.

The eventual Artemis 2 moonshot will send a team of four astronauts on a flyby of the earth's satellite. That approximately 10-day mission will lay the groundwork for NASA's next planned Artemis phase, when a crewed mission is intended to actually land on the moon.

U.S. President Donald Trump has made evident that he wants to send astronauts back to the moon as soon as possible, in order to "assert American leadership in space."

The Artemis 2 astronauts had been in quarantine in Houston but were released following the delay.

The Artemis programme at large aims to return humans to the moon to establish a sustainable presence and later prepare for future Martian exploration.

Launch of NASA's mission to moon put off till March

नासा के चंद्र मिशन का प्रक्षेपण मार्च तक टाला गया

NASA delays crewed moon flyby mission

नासा ने मानवयुक्त चंद्र फ्लाईबाय मिशन टाला

- NASA said on **Tuesday** that it will be delaying until **March** the launch of its **first crewed flyby mission to the moon in more than half a century** after encountering leaks during **final tests**.

नासा ने **मंगलवार** को कहा कि वह **अंतिम परीक्षणों के दौरान रिसाव** मिलने के बाद **आधे से अधिक सदी में अपने पहले मानवयुक्त चंद्र फ्लाईबाय मिशन** के प्रक्षेपण को **मार्च** तक टाल देगा।

- The mishaps during a run-through that the U.S. space agency calls a "**wet dress rehearsal**" dashed hopes that the mission around the moon could launch as soon as **February 8**.

अमेरिकी अंतरिक्ष एजेंसी द्वारा "**वेट ड्रेस रिहर्सल**" कहे जाने वाले परीक्षण के दौरान हुई गड़बड़ियों ने उम्मीदें तोड़ दीं कि मिशन **8 फरवरी** तक



- Along with **leakages**, teams had to troubleshoot a **valve issue related to hatch pressurisation**, in addition to **dropouts of audio communications**, NASA said.
रिसाव के साथ-साथ टीमों को हैच प्रेशराइजेशन से जुड़े वाल्व मुद्दे और ऑडियो संचार में बाधा को भी ठीक करना पड़ा, नासा ने कहा।
- The latest leaks mirror issues that delayed for months the **Artemis 1 launch**, which was an **uncrewed test mission** that ultimately circled the moon in **2022**.
हाल के रिसाव उन समस्याओं जैसे हैं जिन्होंने महीनों तक **आर्टेमिस-1 लॉन्च** को टाल दिया था, जो एक **बिना चालक वाला परीक्षण मिशन** था और जिसने **2022** में चंद्रमा की परिक्रमा की थी।
- **John Honeycutt**, head of the **Artemis 2 Mission Management Team**, said scientists had been **“aggressive” in their testing** to understand the Artemis 1 leaks.
जॉन हनीकट, आर्टेमिस-2 मिशन प्रबंधन टीम के प्रमुख, ने कहा कि वैज्ञानिक आर्टेमिस-1 रिसाव को समझने के लिए परीक्षण में **“आक्रामक”** रहे हैं।
- **“But on the ground, we’re pretty limited as to how much realism we can put into the test... this interface is a very complex interface... this one caught us off guard,”** he said.
“लेकिन जमीन पर हम परीक्षण में कितना वास्तविकता ला सकते हैं, इसमें सीमित हैं... यह एक बहुत जटिल इंटरफेस है... इसने हमें अचंभित कर दिया,” उन्होंने कहा।
- **“To me, the big takeaway was we got a chance for the rocket to talk to us, and it did just that,”** Honeycutt said.
“मेरे लिए मुख्य बात यह थी कि हमें रॉकेट से संकेत मिलने का अवसर मिला, और ऐसा ही हुआ,” हनीकट ने कहा।
- Mission managers said they are **analysing the data** and making **necessary repairs** ahead of another **dress rehearsal**, and fixes can be performed at the **Florida launchpad**.
मिशन प्रबंधकों ने कहा कि वे **डेटा का विश्लेषण** कर रहे हैं और अगली **ड्रेस रिहर्सल** से पहले **आवश्यक मरम्मत** कर रहे हैं, और ये सुधार **फ्लोरिडा लॉन्चपैड** पर किए जा सकते हैं।
- The eventual **Artemis 2 moonshot** will send **four astronauts** on a **flyby of the earth’s satellite**, an approximately **10-day mission**.
अंततः **आर्टेमिस-2 मिशन** चार अंतरिक्ष यात्रियों को **पृथ्वी के उपग्रह की फ्लाईबाय** पर भेजेगा, जो लगभग **10-दिन का मिशन** होगा।
- This mission will lay the groundwork for NASA’s next **Artemis phase**, when a **crewed mission** is intended to actually **land on the moon**.
यह मिशन नासा के अगले **आर्टेमिस चरण** की नींव रखेगा, जब एक **मानवयुक्त मिशन** वास्तव में **चंद्रमा पर उतरने** का लक्ष्य रखेगा।
- **U.S. President Donald Trump** has made evident that he wants astronauts back on the moon to **“assert American leadership in space.”**
अमेरिकी राष्ट्रपति डोनाल्ड ट्रम्प ने स्पष्ट किया है कि वे अंतरिक्ष यात्रियों को चंद्रमा पर वापस भेजना चाहते हैं ताकि **“अंतरिक्ष में अमेरिकी नेतृत्व स्थापित किया जा सके।”**
- The **Artemis 2 astronauts** had been in **quarantine in Houston** but were released following the delay.
आर्टेमिस-2 अंतरिक्ष यात्री ह्यूस्टन में क्वारंटीन में थे, लेकिन देरी के बाद उन्हें रिहा कर दिया गया।
- The **Artemis programme** aims to **return humans to the moon**, establish a **sustainable presence**, and later prepare for **future Martian exploration**.
आर्टेमिस कार्यक्रम का उद्देश्य **मानवों को चंद्रमा पर वापस भेजना**, **स्थायी उपस्थिति स्थापित करना**, और **आगे मंगल ग्रह अन्वेषण की तैयारी** करना है।



GS III: S&T

Send in your answers to
science@thehindu.co.in

Answers to January 29 quiz:

1. False claim – Ans: **Voyager 1 launched after, not before, Voyager 2**
2. No. of years in which solar system's outer planets align – Ans: **175**
3. **Voyager 2 is only human object to have flown past these bodies – Ans: Uranus, Neptune**
4. Instrument that measured properties of interstellar plasma – **Ans: Plasma Science**
5. Name of phonograph onboard Voyager 2 – Ans: **'The Sounds of Earth'** | Visual: **Triton**

First contact: Tamal Biswas | K.N. Viswanathan | Anmol Agrawal

enter interstellar space in 2012.

Both spacecraft were part of NASA's Voyager program to explore the outer planets and continue to send scientific data from deep space.

Alignment of the Solar System's Outer Planets

175-Year Alignment Cycle

The **outer planets — Jupiter, Saturn, Uranus, and Neptune** — approximately align in a similar configuration once about every 175 years due to their long orbital periods and gravitational dynamics. **This rare alignment enabled NASA's Voyager missions in 1977 to use gravitational assists for a "Grand Tour" of the outer planets**, greatly reducing travel time and fuel needs. Such alignments are not perfectly straight but occur within a narrow sector of space, allowing efficient interplanetary mission planning.

Voyager 2 and Its Unique Planetary Flybys

Uranus and Neptune

Voyager 2 remains the only human-made spacecraft to have flown past Uranus and Neptune. It encountered Uranus in January 1986, revealing its tilted magnetic field, faint rings, and new moons. Later, it flew by Neptune in August 1989, discovering the Great Dark Spot, strong winds, and the moon Triton's active geysers. These flybys provided the first close-up data of both ice giants, greatly expanding scientific understanding of the outer solar system and planetary atmospheres.

Instrument Measuring Interstellar Plasma

Plasma Science Experiment (PLS)

The **Plasma Science Experiment (PLS) aboard NASA's Voyager spacecraft measured the properties of plasma — ionized gas made of charged particles — in the solar wind and interstellar space.** It recorded plasma density, temperature, and velocity, helping scientists identify the boundary of the heliosphere and the transition into interstellar medium. After Voyager 1 entered interstellar space in 2012, plasma measurements confirmed a sharp rise in plasma density, providing key evidence of the spacecraft crossing beyond the Sun's influence.

Phonograph Record on Voyager 2

"The Sounds of Earth" (Voyager Golden Record)

The phonograph record onboard Voyager 2 is popularly known as "The Sounds of Earth," officially called the Voyager Golden Record. Launched in 1977, it contains greetings in 55 languages, natural

QUIZ

Voyager Missions — Correcting the False Claim

Launch Order of Voyager 1 and Voyager 2

The claim is false because **Voyager 1 was launched after Voyager 2, not before.**

NASA launched Voyager 2 first on August 20, 1977, followed by Voyager 1 on September 5, 1977. Despite launching later, **Voyager 1 traveled on a faster trajectory and became the first human-made object to**



sounds, music from different cultures, and images portraying life on Earth. Designed by a team led by Carl Sagan, the record serves as a message to potential extraterrestrial civilizations, representing

Anthropic's new AI tools deepen sell off in data analytics and software stocks, investors say

Reuters
NEW YORK/LONDON

A significant selloff among U.S. and European data analytics, professional services and software companies deepened on Tuesday, with some investors pointing to a recently updated artificial intelligence chatbot by Anthropic as the main culprit.

AI developer Anthropic launched plug-ins for its Claude Cowork agent on Friday that would automate tasks across legal, sales, marketing and data analysis. That move has sparked worries of an impending AI-fuelled disruption of the data and professional services industry, which were once seen as



AI fears: Some investors pointing to a recently updated AI chatbot by Anthropic as the main culprit behind the selloff. AP

major beneficiaries of the AI era, according to traders and analysts.

Toronto-based Thomson Reuters, which owns the West Law legal database, slumped by nearly 18%. It is on track for its biggest

daily loss on record and lowest close since June 2021. "I think Anthropic came out with some plug-ins to tackle the legal space," said Mike Archibald, a portfolio manager at AGF Investments in To-

ronto. "Obviously, that's where Thomson Reuters generates a good chunk of their revenues. Sometimes the market just shoots first and asks questions later."

Thomson Reuters, which is also the parent firm of Reuters News, is set to report its fourth quarter earnings results on Thursday. Its shares are now down 33% year-to-date after dropping about 22% in 2025. "Most of the investors we have spoken with recently are overwhelmingly bearish on TRI as the consensus opinion worries that the company will be unable to maintain the same level of growth within its legal segment given increased competition from specialised AI tools,"

Morgan Stanley analysts led by Toni Kaplan wrote in an investor note. Britain's RELX and the Netherlands' Wolters Kluwer, both providers of legal analytics services, fell 14% and about 13%, respectively.

RELX shares halved
RELX shares almost halved from their peak last February and on Tuesday were set for their biggest drop since 1988. Its dramatic reversal highlights the pressure AI is exerting on Europe's software sector.

Other professional services firms were also sharply lower. Factset Research fell 9%, Morningstar lost 8% and Legal Zoom slumped 19.2%. In London, Experian, Sage Group,

London Pearson fell between 6% and 12%. Traders and analysts said investor fear often outweighed company fundamentals.

"The selling pressure in software and data analytics reflects a deepening structural debate, accelerated today by Anthropic's legal automation tool challenging incumbents like RELX," said Schroders analyst Jonathan McMullan. "Investors are aggressively repricing these areas as the historical 'visibility premium' erodes; the speed of AI advancement makes long-term valuations harder to defend, as AI tools allow businesses to do more with fewer staff, threatening the traditional model of charging per software user."

humanity's diversity, science, and culture beyond the solar system.

Anthropic's new AI tools deepen sell off in data analytics and software stocks, investors say

एंथ्रोपिक के नए एआई टूल्स से डेटा एनालिटिक्स और सॉफ्टवेयर शेयरों में बिकवाली गहरी हुई, निवेशकों का कहना

- Anthropic's new AI tools deepen sell off in data analytics and software stocks, investors say
एंथ्रोपिक के नए एआई टूल्स से डेटा एनालिटिक्स और सॉफ्टवेयर शेयरों में बिकवाली गहरी हुई, निवेशकों का कहना
- A significant **sell off** among **U.S. and European data analytics, professional services and software companies** deepened on Tuesday, with some investors pointing to a recently updated **artificial intelligence chatbot by Anthropic** as the main culprit.
मंगलवार को अमेरिकी और यूरोपीय डेटा एनालिटिक्स, पेशेवर सेवाओं और सॉफ्टवेयर कंपनियों में बड़ी बिकवाली और गहरी हो गई, जहां कुछ निवेशकों ने हाल ही में अपडेट किए गए एंथ्रोपिक के आर्टिफिशियल इंटेलिजेंस चैटबॉट को इसका मुख्य कारण बताया।
- **AI developer Anthropic** launched **plug-ins** for its **Claude Cowork agent** on Friday that would **automate tasks across legal, sales, marketing and data analysis**.
एआई डेवलपर एंथ्रोपिक ने शुक्रवार को अपने क्लाउड कोवर्क एजेंट के लिए प्लग-इन लॉन्च किए, जो कानूनी, बिक्री, मार्केटिंग और डेटा विश्लेषण से जुड़े कार्यों को स्वचालित करेंगे।
- That move has sparked worries of an impending **AI-fuelled disruption of the data and professional services industry**, which were once seen as **major beneficiaries of the AI era, according to traders and analysts**.
ट्रेडरों और विश्लेषकों के अनुसार, इस कदम से डेटा और पेशेवर सेवा उद्योग में आने वाले एआई-प्रेरित व्यवधान को लेकर चिंताएं बढ़ गई हैं, जिन्हें कभी एआई युग के प्रमुख लाभार्थी के रूप में देखा जाता था।
- **Toronto-based Thomson Reuters**, which owns the **West Law legal database**, slumped by nearly **18%**.
टोरंटो स्थित थॉमसन रॉयटर्स, जो वेस्ट लॉ लीगल डेटाबेस का मालिक है, लगभग 18% गिर गया।
- It is on track for its **biggest daily loss on record** and **lowest close since June 2021**.
यह अपने अब तक के सबसे बड़े एकदिवसीय नुकसान और जून 2021 के बाद के सबसे निचले बंद स्तर की ओर बढ़ रहा है।



- “I think Anthropic came out with some plugins to tackle the legal space,” said Mike Archibald, a portfolio manager at AGF Investments in Toronto.
“मुझे लगता है कि एंथ्रोपिक ने कानूनी क्षेत्र को लक्षित करने के लिए कुछ प्लग-इन पेश किए हैं,” यह कहना है टोरंटो स्थित एजीएफ इन्वेस्टमेंट्स के पोर्टफोलियो मैनेजर माइक आर्चिबाल्ड का।
- “Obviously, that’s where Thomson Reuters generates a good chunk of their revenues. Sometimes the market just shoots first and asks questions later.”
“स्पष्ट है कि वहीं से थॉमसन रॉयटर्स अपने राजस्व का बड़ा हिस्सा कमाता है। कई बार बाजार पहले गोली चलाता है और बाद में सवाल पूछता है।”
- Thomson Reuters, which is also the parent firm of Reuters News, is set to report its fourth quarter earnings results on Thursday.
थॉमसन रॉयटर्स, जो रॉयटर्स न्यूज़ की मूल कंपनी भी है, गुरुवार को अपने चौथी तिमाही के नतीजे जारी करने वाली है।
- Its shares are now down 33% year-to-date after dropping about 22% in 2025.
इसके शेयर अब साल-दर-साल 33% नीचे हैं, जबकि 2025 में लगभग 22% की गिरावट आ चुकी है।
- “Most of the investors we have spoken with recently are overwhelmingly bearish on TRI as the consensus opinion worries that the company will be unable to maintain the same level of growth within its legal segment given increased competition from specialised AI tools,” Morgan Stanley analysts led by Toni Kaplan wrote in an investor note.
मॉर्गन स्टैनली के विश्लेषकों, जिनका नेतृत्व टोनी कैपलान कर रहे हैं, ने निवेशक नोट में लिखा कि हाल में जिन निवेशकों से बातचीत हुई, वे TRI को लेकर बेहद नकारात्मक हैं क्योंकि विशेषीकृत एआई टूल्स से बढ़ती प्रतिस्पर्धा के चलते कंपनी अपने कानूनी खंड में समान स्तर की वृद्धि बनाए नहीं रख पाएगी।
- Britain’s RELX and the Netherlands’ Wolters Kluwer, both providers of legal analytics services, fell 14% and about 13%, respectively.
ब्रिटेन की RELX और नीदरलैंड्स की वोल्टर्स क्लूवर, जो दोनों कानूनी एनालिटिक्स सेवाएं प्रदान करती हैं, क्रमशः 14% और लगभग 13% गिर गईं।

RELX shares halved RELX के शेयर आधे हुए

- RELX shares almost halved from their peak last February and on Tuesday were set for their biggest drop since 1988.
RELX के शेयर पिछले फरवरी के अपने शिखर स्तर से लगभग आधे हो चुके हैं और मंगलवार को 1988 के बाद की सबसे बड़ी गिरावट के लिए तैयार थे।
- Its dramatic reversal highlights the pressure AI is exerting on Europe’s software sector.
यह नाटकीय पलटाव दिखाता है कि यूरोप के सॉफ्टवेयर क्षेत्र पर एआई कितना दबाव बना रहा है।
- Other professional services firms were also sharply lower.
अन्य पेशेवर सेवा कंपनियों के शेयर भी तेज़ी से गिरे।
- Factset Research fell 9%, Morningstar lost 8% and Legal Zoom slumped 19.2%.
फैक्टसेट रिसर्च 9%, मॉर्निंगस्टार 8% गिरा और लीगल जूम में 19.2% की भारी गिरावट आई।
- In London, Experian, Sage Group, London Pearson fell between 6% and 12%.
लंदन में एक्सपीरियन, सेज ग्रुप, लंदन पियरसन के शेयर 6% से 12% के बीच गिरे।
- Traders and analysts said investor fear often outweighed company fundamentals.
ट्रेडरों और विश्लेषकों ने कहा कि अक्सर निवेशकों का डर कंपनियों के मूलभूत आधार पर भारी पड़ जाता है।
- “The selling pressure in software and data analytics reflects a deepening structural debate, accelerated today by Anthropic’s legal automation tool challenging incumbents like RELX,” said Schroders analyst Jonathan McMullan.
श्रोडर्स के विश्लेषक जोनाथन मैकमुलन ने कहा, “सॉफ्टवेयर और डेटा एनालिटिक्स में बिकवाली का दबाव एक गहराती संरचनात्मक बहस को दर्शाता है, जिसे आज एंथ्रोपिक के लीगल ऑटोमेशन टूल ने RELX जैसे मौजूदा खिलाड़ियों को चुनौती देकर तेज़ कर दिया है।”
- “Investors are aggressively repricing these areas as the historical ‘visibility premium’ erodes; the speed of AI advancement makes long-term valuations harder to defend, as AI tools allow businesses to do more with fewer staff, threatening the traditional model of charging per software user.”
“निवेशक इन क्षेत्रों का आक्रामक पुनर्मूल्यांकन कर रहे हैं क्योंकि ऐतिहासिक ‘विज़िबिलिटी प्रीमियम’ खत्म



हो रहा है, एआई की तेज़ प्रगति के कारण दीर्घकालिक मूल्यांकन को बनाए रखना कठिन हो गया है, क्योंकि एआई टूल्स कम कर्मचारियों में अधिक काम संभव बनाते हैं, जिससे प्रति सॉफ्टवेयर उपयोगकर्ता शुल्क का पारंपरिक मॉडल खतरे में पड़ रहा है।”

GS Paper III: Environment,	
TOPICS COVERED	05 February 2026
1.	The Mohanalal effect: actor's case paves way for amnesty on wildlife trophies मोहनलाल प्रभाव: अभिनेता का मामला वन्यजीव ट्रॉफियों पर आम माफी का मार्ग प्रशस्त करता है
2.	Indian cities could see far higher temperature rise than projected, says study भारतीय शहरों में अनुमान से कहीं अधिक तापमान वृद्धि हो सकती है, अध्ययन में कहा गया
3.	Could the near-extinct Asiatic cheetah rewild Saudi Arabia? क्या लगभग विलुप्त एशियाई चीता सऊदी अरब को फिर से वन्य बना सकता है?

The Mohanalal effect: actor's case paves way for amnesty on wildlife trophies

GS III: Environment

KOCHI

Actor Mohanalal's illegal ivory possession case has paved way for a general amnesty scheme to declare the possession of wildlife articles in Kerala.

The State Forest Department will soon come out with a notification enabling the public to declare the wildlife trophies in their possession by invoking Section 40 (4) of the Wildlife Protection Act 1972.

The deadline for declaring the possession of such articles had expired on September 30, 1991, in the State. The proposed scheme would benefit the



The scheme is unlikely to benefit those accused in cases related to illegal possession of wildlife articles. REPRESENTATIONAL IMAGE

legal owners of articles, who could not declare them after the expiry of the time limit, sources said.

The Act specifies that the department shall make an inquiry and prepare an inventory of the articles for which a declaration has

been sought. Once declared, the owners will get ownership certificates for the articles and immunity from any legal action.

The decision comes in the wake of a recent Kerala High Court verdict cancelling the ownership certifi-

cates of the two pairs of ivory and 13 ivory idols found in the possession of actor Mohanalal.

Case in point

However, the new scheme is unlikely to benefit the actor and others who stand accused in the cases related to the illegal possession of wildlife articles. The actor is facing trial in the case related to the illegal possession of two sets of ivory.

Mr. Mohanalal's possession of the idols has also become illegal since the court cancelled its ownership certificate. The legal option of challenging the order before the Supreme Court is open, sources pointed out.

The Mohanalal effect: actor's case paves way for amnesty on wildlife trophies
मोहनलाल प्रभाव: अभिनेता का मामला वन्यजीव ट्रॉफियों पर आम माफी का मार्ग प्रशस्त करता है

- Actor Mohanalal's illegal ivory possession case has paved way for a general amnesty scheme to declare the possession of wildlife articles in Kerala.



अभिनेता मोहनलाल के अवैध हाथीदांत रखने के मामले ने केरल में वन्यजीव वस्तुओं के स्वामित्व की घोषणा के लिए सामान्य माफी योजना का मार्ग प्रशस्त किया है।

- The **State Forest Department** will soon come out with a **notification** enabling the public to declare the wildlife trophies in their possession by invoking **Section 40 (4) of the Wildlife Protection Act 1972**.

राज्य वन विभाग जल्द ही एक अधिसूचना जारी करेगा, जिसके तहत जनता वन्यजीव संरक्षण अधिनियम 1972 की धारा 40 (4) के अंतर्गत अपने पास मौजूद वन्यजीव ट्रॉफियों की घोषणा कर सकेगी।

- The deadline for declaring the possession of such articles had expired on **September 30, 1991**, in the State.

राज्य में ऐसी वस्तुओं के स्वामित्व की घोषणा की अंतिम तिथि **30 सितंबर 1991** को समाप्त हो चुकी थी।

- The proposed scheme would benefit the **legal owners** of articles, who could not declare them after the expiry of the time limit, sources said.

प्रस्तावित योजना से उन वस्तुओं के कानूनी स्वामियों को लाभ होगा, जो समय-सीमा समाप्त होने के बाद उनकी घोषणा नहीं कर पाए थे, सूत्रों ने कहा।

- The Act specifies that the department shall make an **inquiry** and prepare an **inventory** of the articles for which a declaration has been sought.

अधिनियम में यह प्रावधान है कि विभाग जांच करेगा और जिन वस्तुओं के लिए घोषणा मांगी गई है उनकी सूची तैयार करेगा।

- Once declared, the owners will get **ownership certificates** for the articles and **immunity from any legal action**.

एक बार घोषणा होने के बाद, स्वामियों को उन वस्तुओं के लिए स्वामित्व प्रमाण पत्र मिलेगा और किसी भी कानूनी कार्रवाई से छूट प्राप्त होगी।

- The decision comes in the wake of a recent **Kerala High Court verdict** cancelling the **ownership certificates** of the two pairs of **ivory** and **13 ivory idols** found in the possession of actor **Mohanlal**.

यह निर्णय हालिया केरल उच्च न्यायालय के फैसले के बाद आया है, जिसमें अभिनेता मोहनलाल के पास पाए गए हाथीदांत के दो जोड़े और **13 हाथीदांत की मूर्तियों** के स्वामित्व प्रमाण पत्र रद्द कर दिए गए थे।

Case in point मामले का बिंदु

- However, the new scheme is unlikely to benefit the actor and others who stand accused in the cases related to the **illegal possession of wildlife articles**.

हालांकि, नई योजना से अभिनेता और अन्य वे लोग लाभान्वित होने की संभावना नहीं है, जिन पर वन्यजीव वस्तुओं के अवैध स्वामित्व से जुड़े मामलों में आरोप हैं।

- The actor is facing **trial** in the case related to the illegal possession of **two sets of ivory**. अभिनेता दो सेट हाथीदांत के अवैध स्वामित्व से जुड़े मामले में मुकदमे का सामना कर रहे हैं।

- Mr. Mohanlal's possession of the idols has also become **illegal** since the court cancelled its **ownership certificate**.

अदालत द्वारा स्वामित्व प्रमाण पत्र रद्द किए जाने के बाद श्री मोहनलाल के पास मौजूद मूर्तियों का स्वामित्व भी अवैध हो गया है।

- The legal option of challenging the order before the **Supreme Court** is open, sources pointed out.

सूत्रों ने बताया कि इस आदेश को सुप्रीम कोर्ट में चुनौती देने का कानूनी विकल्प खुला है।



Indian cities could see far higher temperature rise than projected, says study

GS III: Environment

Jacob Koshy
NEW DELHI

Climate models may be underestimating – by anything from half to two degrees – how much hotter India’s non-metropolitan cities can get from global warming relative to rural areas, according to a study published on Wednesday.

The researchers, from the University of East Anglia in the United Kingdom, analysed how temperatures would rise in 104 “medium-sized” cities in tropical and sub-tropical regions under a 2 degrees Celsius warming scenario, the emissions path that the globe is currently on. Rather than asking how hot regions become on average, the study asks a different question: how much faster do cities warm than their



Study includes 18 Indian cities, and finds that all of them warm faster than nearby rural areas.

surrounding countryside?

The study found that in Patiala, Punjab, land surface temperatures could rise at double the rate of warming projected by global climate models in comparison to its surrounding rural region – an extreme “outlier.” This means that if the models used in the Intergovernmental Panel on Climate Change’s assess-

ments predict a 2 degrees Celsius temperature rise in Patiala, the rise would actually be 4 degrees Celsius when urban heat-island effects are accounted for. An extra 2 degrees Celsius rise in temperature can have significant implications for susceptibility to heat strokes, water availability, and public expenditure on cooling.

Urban heat-island effect

The study includes 18 Indian cities, and finds that all of them warm faster than nearby rural areas. On average, Indian cities experience about 45% more warming than what Earth System Models (ESMs) project for the broader region. Urban heat-island effect is the tendency for cities to be hotter than nearby rural land.

Indian cities could see far higher temperature rise than projected, says study
भारतीय शहरों में अनुमान से कहीं अधिक तापमान वृद्धि हो सकती है, अध्ययन में कहा गया

- Indian cities could see far higher temperature rise than projected, says study
भारतीय शहरों में अनुमान से कहीं अधिक तापमान वृद्धि देखी जा सकती है, अध्ययन में कहा गया
- Climate models may be underestimating — by anything from **half to two degrees** — how much hotter India’s **non-metropolitan cities** can get from **global warming** relative to rural areas, according to a study published on Wednesday.
बुधवार को प्रकाशित एक अध्ययन के अनुसार, **जलवायु मॉडल** भारत के **गैर-महानगरीय शहरों** में **वैश्विक तापन** के कारण ग्रामीण क्षेत्रों की तुलना में तापमान कितना अधिक बढ़ सकता है, इसका **आधा से दो डिग्री** तक कम आकलन कर रहे हो सकते हैं।
- The researchers, from the **University of East Anglia** in the **United Kingdom**, analysed how temperatures would rise in **104 “medium-sized” cities** in tropical and sub-tropical regions under a **2 degrees Celsius warming scenario**, the emissions path that the globe is currently



on.

यूनाइटेड किंगडम के यूनिवर्सिटी ऑफ ईस्ट एंग्लिया के शोधकर्ताओं ने उष्णकटिबंधीय और उपोष्णकटिबंधीय क्षेत्रों के 104 “मध्यम आकार” के शहरों में 2 डिग्री सेल्सियस तापन परिदृश्य के तहत तापमान वृद्धि का विश्लेषण किया, जो वर्तमान में दुनिया के उत्सर्जन मार्ग के अनुरूप है।

- Rather than asking how hot regions become on average, the study asks a different question: how much faster do cities warm than their surrounding countryside?
यह अध्ययन यह पूछने के बजाय कि क्षेत्र औसतन कितने गर्म हो जाते हैं, एक अलग प्रश्न उठाता है: शहर अपने आसपास के ग्रामीण इलाकों की तुलना में कितनी तेजी से गर्म होते हैं?
- The study found that in **Patiala, Punjab**, land surface temperatures could rise at **double the rate** of warming projected by global climate models in comparison to its surrounding rural region — an extreme “**outlier**.”
अध्ययन में पाया गया कि **पंजाब के पटियाला** में भूमि सतह का तापमान, वैश्विक जलवायु मॉडलों द्वारा अनुमानित तापन दर की तुलना में, आसपास के ग्रामीण क्षेत्र के मुकाबले **दोगुनी दर** से बढ़ सकता है — जो एक अत्यधिक “**आउटलायर**” है।
- This means that if the models used in the **Intergovernmental Panel on Climate Change’s assessments** predict a **2 degrees Celsius** temperature rise in Patiala, the rise would actually be **4 degrees Celsius** when **urban heat-island effects** are accounted for.
इसका अर्थ है कि यदि **जलवायु परिवर्तन पर अंतरसरकारी पैनल (IPCC)** के आकलनों में प्रयुक्त मॉडल पटियाला में **2 डिग्री सेल्सियस** तापमान वृद्धि का अनुमान लगाते हैं, तो **शहरी हीट-आइलैंड प्रभाव** को शामिल करने पर वास्तविक वृद्धि **4 डिग्री सेल्सियस** होगी।
- An extra **2 degrees Celsius** rise in temperature can have significant implications for susceptibility to **heat strokes, water availability, and public expenditure on cooling**.
तापमान में अतिरिक्त **2 डिग्री सेल्सियस** वृद्धि का **लू लगने की संवेदनशीलता, जल उपलब्धता, और शीतलन पर सार्वजनिक खर्च** पर महत्वपूर्ण प्रभाव पड़ सकता है।

Urban heat-island effect शहरी हीट-आइलैंड प्रभाव

- The study includes **18 Indian cities**, and finds that all of them warm faster than nearby rural areas.
अध्ययन में **18 भारतीय शहर** शामिल हैं, और यह पाया गया कि ये सभी अपने नजदीकी ग्रामीण क्षेत्रों की तुलना में अधिक तेजी से गर्म होते हैं।
- On average, Indian cities experience about **45% more warming** than what **Earth System Models (ESMs)** project for the broader region.
औसतन, भारतीय शहरों में **पृथ्वी प्रणाली मॉडल (ESMs)** द्वारा व्यापक क्षेत्र के लिए अनुमानित तापन की तुलना में लगभग **45% अधिक तापन** होता है।
- **Urban heat-island effect** is the tendency for cities to be hotter than nearby rural land.
शहरी हीट-आइलैंड प्रभाव शहरों के आसपास की ग्रामीण भूमि की तुलना में अधिक गर्म होने की प्रवृत्ति को दर्शाता है।



Could the near-extinct Asiatic cheetah rewild Saudi Arabia?

Mummified cheetahs unearthed in Saudi Arabia give scientists an opportunity to understand the evolutionary history of the cats; the researchers concluded that cheetahs to 'rewild' the kingdom can be sourced from the closest subspecies of those they found, paving the way for their return

GS III: Environment
Divya Gandhi
BENGALURU

The cheetah is a spotted beast that can burn through savannas like a bolt of lightning to hunt prey vastly bigger than itself. This big cat is the world's fastest terrestrial mammal, which purrs more than it growls and has been historically tamed and trained by people to hunt game.

Cheetahs once roamed most of Africa and western and southern Asia, from the Arabian Peninsula to India. Today, they have vanished from 91% of its historical global range. In India, it was declared extinct in 1952 from hunting and habitat loss, and over a century ago, it vanished from Saudi Arabia.

Asiatic cheetahs (*Acinonyx jubatus venaticus*), unlike those in Africa, which that tenuously hold on, are the most critically endangered: just around 50 individual Asiatic cheetahs remain in the wild, a small population in Iran.

Amidst this dire scenario came a "serendipitous discovery" recently in the caves of Saudi Arabia of the "long-term presence" of cheetahs. Scientists discovered seven naturally mummified animals and skeletal remains of 54, reported in the latest edition of *Nature Communications Earth and Environment*.

The remains, unearthed from the Lauga cave network in the Arar area of northern Saudi Arabia, dated back to 4,223 years ago and some to just over a century ago, giving scientists a valuable opportunity to understand the evolutionary history of cheetahs in their former range. They concluded that "rewilding" of cheetahs in Saudi Arabia can be sourced from the closest subspecies of the discovered cheetahs", potentially paving the way for their 'return'.

Treasures from caves

Genomic data of these specimens showed the presence of two subspecies, the Asiatic cheetah (*A. j. venaticus*) and the north-western African cheetah (*A. j. hecki*), neither of which occur in the Arabian Peninsula any more. The many caves in the region could have been used as denning sites for the creatures. The study used palaeo-chronological dating to establish the time period, genomic sequencing to identify subspecies, and radiographic analysis to determine age.

Although records indisputably suggest the historical presence of the species in the areas designated Saudi Arabia, Oman, Yemen, Kuwait, Iraq, Jordan, and Palestine today, some point to the scarcity of evidence to adequately represent the true historical distribution of the cheetah. While the primary reasons for the Arabian Peninsula's vanishing cheetah are poorly documented, they are thought to be habitat loss and fragmentation, prey depletion, human-wildlife conflict, unregulated hunting, and trade in cheetah as pets or game hunting, said the research paper.

Over the past 50 years, Saudi Arabia has significantly changed wildlife management policy and one of its biodiversity goals includes the re-establishment of animals to their former biogeographic ranges.

The kingdom has already successfully restored ungulates to landscapes where they had disappeared or dwindled, e.g.



Cats from the past: Scientists discovered seven naturally mummified cheetahs and skeletal remains of 54 in Saudi Arabia's caves. Here, a researcher examines one of the mummified cheetahs in a lab. AP

Arabian oryx, Arabian gazelles, and the Nubian ibex. As ungulate populations recover here, "it is timely for the reestablishment of extirpated apex carnivores – among them cheetah," said the paper. DNA studies showed that the prehistoric Saudi Arabia cheetahs are genomically closest to the west African subspecies *A. j. hecki*.

The results also highlight the important role that caves play "as repositories of ancient biodiversity informing." Natural mummies can remain well preserved for thousands of years, especially in arid soil caves where desiccation was made possible by dry microclimates where bacterial action is diminished.

Africa's cheetahs are in peril too: 90%



This undated image provided by Communications Earth and Environment shows the claws of a mummified cheetah. AP

Cheetahs once roamed most of Africa and western and southern Asia, from the Arabian Peninsula to India. Today, they have vanished from 91% of its historical global range, with Asiatic cheetahs unlike those in Africa, which that tenuously hold on, being the most critically endangered

of the animals live outside protected areas and on private farmlands, and conflict with people is not infrequent: the cats prey on livestock quite visibly during the day, and farmers, to save their animals, often trap or shoot cheetahs, per the paper. Larger carnivores such as lions, leopards, and hyena also kill cheetahs when competing for prey or territory. As a result, in Saharan Africa, the spotted cats are as few as 0.0002/km.

An adequate habitat?

Ravi Chellam, wildlife biologist and CEO, Metastring Foundation, Bengaluru, has been tracking Project Cheetah in India, as part of which several African cheetahs have been introduced to Madhya Pradesh. The Hindu asked him about the prudence of reintroducing cheetahs to Saudi Arabia: "This is a sovereign decision for each country to take. Having said that, from an ecological perspective it is important to ensure that adequate good quality habitats are available before sourcing the cheetahs for the reintroduction effort," he said.

Based on the evidence, at least 1 lakh sq. km. of habitat is required to establish a viable and self-sustaining population of cheetahs in the semi-desert

and desert landscapes of Saudi Arabia. The chosen habitats should support a reasonable density and diversity of prey species and be relatively free of human activities especially road traffic, he added.

As for whether Asian cheetahs should have been introduced to India, Dr. Chellam said that with the highly endangered status of Asiatic cheetahs in Iran, "it is not advisable to remove any cheetahs from this very small population."

For the same reason, cheetahs reintroduced to Saudi Arabia would have to be the northwest African sub-species, *A. j. hecki*. But even this subspecies is endangered in the wild in western and northern Africa. So "the only realistic options are to source the required cheetahs from either *A. j. raineyi* (east Africa) or *A. j. jubatus* (southern Africa)," Dr. Chellam said.

There is little clarity about the funding for India's Project Cheetah but, he added, "it will be one of the most expensive projects" in India's conservation history.

Liz Kierepka, a molecular ecologist who wasn't involved in the Saudi Arabia study, told *ScienceNews* that the discovery is "quite the rarity," outside of permafrost areas where several natural mummies of megafauna from the Ice Age exist. She also said relocating cheetahs from already tiny populations has the potential to cause "new problems for the donor pools."

It requires more data, but Dr. Kierepka said she is curious what shows up in genetic analyses to help select donor cheetahs: "If they really want to pursue rewilding," she said, that could make reintroduction more likely to succeed. divya.gandhi@thehindu.co.in



Could the near-extinct Asiatic cheetah rewild Saudi Arabia? क्या लगभग विलुप्त एशियाई चीता सऊदी अरब को फिर से वन्य बना सकता है?

- **Mummified cheetahs** unearthed in **Saudi Arabia** give **scientists** an opportunity to understand the **evolutionary history** of the **cats**; the **researchers** concluded that **cheetahs** to **'rewild'** the **kingdom** can be sourced from the **closest subspecies** of those they found, paving the way for their **'return'**
सऊदी अरब में पाए गए ममीकृत चीते वैज्ञानिकों को बिल्ली प्रजाति के विकासवादी इतिहास को समझने का अवसर देते हैं; शोधकर्ताओं ने निष्कर्ष निकाला कि राज्य को 'फिर से वन्य बनाने' के लिए चीते उन्हीं के पाए गए सबसे निकट उपप्रजाति से लिए जा सकते हैं, जिससे उनके 'वापसी' का मार्ग प्रशस्त होता है

The cheetah is a spotted beast चीता एक धब्बेदार जानवर है

- The **cheetah** is a **spotted beast** that can burn through **savannas** like a **bolt of lightning** to hunt **prey** vastly bigger than itself.
चीता एक धब्बेदार जानवर है जो सवाना में बिजली की तरह दौड़कर अपने से कहीं बड़े शिकार को पकड़ता है।
- This big cat is the **world's fastest terrestrial mammal**, which **purrs** more than it **growls** and has been historically **tamed and trained** by people to hunt **game**.
यह बड़ी बिल्ली दुनिया का सबसे तेज़ स्थलीय स्तनधारी है, जो गरनि से अधिक घुरघुराती है और ऐतिहासिक रूप से लोगों द्वारा पालतू बनाकर और प्रशिक्षित करके शिकार के लिए इस्तेमाल की गई है।
- **Cheetahs** once roamed most of **Africa** and **western and southern Asia**, from the **Arabian Peninsula to India**.
चीतों का विस्तार कभी अफ्रीका और पश्चिमी तथा दक्षिणी एशिया के अधिकांश भागों में था, अरब प्रायद्वीप से लेकर भारत तक।
- **Today, they have vanished from 91% of its historical global range**.
आज वे अपने ऐतिहासिक वैश्विक क्षेत्र के 91% से लुप्त हो चुके हैं।
- **In India, it was declared extinct in 1952 from hunting and habitat loss, and over a century ago, it vanished from Saudi Arabia**.
भारत में इसे 1952 में विलुप्त घोषित किया गया था, जिसका कारण शिकार और आवास हानि था, और एक सदी पहले यह सऊदी अरब से भी लुप्त हो गया।
- **Asiatic cheetahs (Acinonyx jubatus venaticus)**, unlike those in **Africa**, which that tenuously hold on, are the most **critically endangered**: just around **50 individuals** Asiatic cheetahs remain in the wild, a small population in **Iran**.
एशियाई चीता (Acinonyx jubatus venaticus), जो अफ्रीका के चीतों से अलग हैं और किसी तरह जीवित हैं, सबसे अधिक गंभीर रूप से संकटग्रस्त हैं: जंगल में केवल लगभग 50 चीते बचे हैं, जो ईरान में एक छोटी आबादी के रूप में हैं।
- Amidst this dire scenario came a **"serendipitous discovery"** recently in the **caves of Saudi Arabia** of the **"long-term presence"** of cheetahs.
इस गंभीर स्थिति के बीच हाल ही में सऊदी अरब की गुफाओं में चीतों की "दीर्घकालिक उपस्थिति" की एक "संयोगवश खोज" सामने आई।
- Scientists discovered **seven naturally mummified animals** and **skeletal remains of 54**, reported in the latest edition of **Nature Communications Earth and Environment**.
वैज्ञानिकों ने सात प्राकृतिक रूप से ममीकृत जानवर और 54 के कंकाल अवशेष खोजे, जिसकी रिपोर्ट **Nature Communications Earth and Environment** के नवीनतम संस्करण में दी गई।
- The remains, unearthed from the **Lauga cave network** in the **Arar area** of **northern Saudi Arabia**, dated back to **4,223 years ago** and some to just over a **century ago**, giving scientists a valuable opportunity to understand the **evolutionary history** of cheetahs in their former range.
ये अवशेष उत्तरी सऊदी अरब के अरार क्षेत्र में स्थित लौगा गुफा नेटवर्क से मिले, जो 4,223 वर्ष पुराने और कुछ एक सदी से अधिक पुराने हैं, जिससे वैज्ञानिकों को चीतों के विकासीय इतिहास को समझने का महत्वपूर्ण अवसर मिला।
- They concluded that **"rewilding"** of cheetahs in **Saudi Arabia** can be sourced from the **closest subspecies** of the discovered cheetahs, potentially paving the way for their **'return'**.



उन्होंने निष्कर्ष निकाला कि सऊदी अरब में चीतों का “पुनर्वन्यकरण” खोजे गए चीतों की निकटतम उपप्रजाति से किया जा सकता है, जो उनके संभावित ‘वापसी’ का मार्ग प्रशस्त कर सकता है।

Treasures from caves गुफाओं से खजाना

- **Genomic data** of these specimens showed the presence of two subspecies, the **Asiatic cheetah (A. j. venaticus)** and the **north-western African cheetah (A. j. hecki)**, neither of which occur in the **Arabian Peninsula** any more.
इन नमूनों के **जीनोमिक डेटा** से दो उपप्रजातियों की उपस्थिति दिखी, **एशियाई चीता (A. j. venaticus)** और **उत्तर-पश्चिमी अफ्रीकी चीता (A. j. hecki)**, जो अब **अरब प्रायद्वीप** में नहीं पाए जाते।
- The many **caves** in the region could have been used as **denning sites** for the creatures. इस क्षेत्र की कई **गुफाएँ** इन जीवों के लिए **आवास स्थल** के रूप में उपयोग की गई होंगी।
- The study used **palaeo-chronological dating** to establish the time period, **genomic sequencing** to identify subspecies, and **radiographic analysis** to determine age. अध्ययन में समय अवधि निर्धारित करने के लिए **पैलियो-क्रोनोलॉजिकल डेटिंग**, उपप्रजाति पहचान के लिए **जीनोमिक सीक्वेंसिंग**, और आयु निर्धारण के लिए **रेडियोग्राफिक विश्लेषण** का उपयोग किया गया।
- Although records indisputably suggest the historical presence of the species in the areas designated **Saudi Arabia, Oman, Yemen, Kuwait, Iraq, Jordan, and Palestine** today, some point to the **scarcity of evidence** to adequately represent the true historical distribution of the cheetah.
हालाँकि अभिलेख स्पष्ट रूप से दर्शाते हैं कि यह प्रजाति ऐतिहासिक रूप से **सऊदी अरब, ओमान, यमन, कुवैत, इराक, जॉर्डन और फिलिस्तीन** क्षेत्रों में मौजूद थी, कुछ लोग चीतों के वास्तविक ऐतिहासिक वितरण को दर्शाने के लिए **साक्ष्यों की कमी** की ओर संकेत करते हैं।
- While the primary reasons for the **Arabian Peninsula’s vanishing cheetah** are poorly documented, they are thought to be **habitat loss and fragmentation, prey depletion, human-wildlife conflict, unregulated hunting, and trade in cheetah as pets or game hunting**, said the research paper.
हालाँकि **अरब प्रायद्वीप से चीतों के गायब होने** के प्रमुख कारण ठीक से दर्ज नहीं हैं, लेकिन माना जाता है कि ये **आवास हानि और विखंडन, शिकार की कमी, मानव-वन्यजीव संघर्ष, अनियंत्रित शिकार, और पालतू या शिकार के लिए चीतों का व्यापार** हैं, शोध पत्र के अनुसार।
- Over the past **50 years, Saudi Arabia** has significantly changed **wildlife management policy** and one of its **biodiversity goals** includes the **re-establishment of animals to their former biogeographic ranges**.
पिछले **50 वर्षों** में **सऊदी अरब** ने **वन्यजीव प्रबंधन नीति** में महत्वपूर्ण बदलाव किए हैं और उसके **जैव विविधता लक्ष्यों** में से एक **जानवरों को उनके पूर्व जैव-भौगोलिक क्षेत्रों में पुनर्स्थापित करना** शामिल है।
- The kingdom has already successfully restored **ungulates** to landscapes where they had disappeared or dwindled, e.g. **Arabian oryx, Arabian gazelles, and the Nubian ibex**.
राज्य ने पहले ही **खुरदार जानवरों** को उन परिदृश्यों में सफलतापूर्वक पुनर्स्थापित कर दिया है जहाँ वे गायब हो गए थे या कम हो गए थे, जैसे **अरबियन ओरिक्स, अरबियन गज़ेल, और न्यूबियन आइबेक्स**।
- As **ungulate populations** recover here, “it is timely for the **reestablishment of extirpated apex carnivores — among them cheetah**,” said the paper.
जैसे-जैसे यहाँ **खुरदार जानवरों की आबादी** पुनः बढ़ रही है, “यह **लुप्त शीर्ष मांसाहारी — जिनमें चीता भी शामिल है** — के पुनर्स्थापन का सही समय है,” पेपर में कहा गया।
- **DNA studies** showed that the **prehistoric Saudi Arabia cheetahs** are genomically closest to the **west African subspecies A. j. hecki**.
डीएनए अध्ययनों से पता चला कि **प्रागैतिहासिक सऊदी अरब के चीते** आनुवंशिक रूप से **पश्चिम अफ्रीकी उपप्रजाति A. j. hecki** के सबसे करीब हैं।
- The results also highlight the important role that **caves** play “as **repositories of ancient biodiversity informing**.”
परिणाम यह भी दिखाते हैं कि **गुफाएँ** “**प्राचीन जैव विविधता के भंडार**” के रूप में महत्वपूर्ण भूमिका निभाती हैं।
- **Natural mummies** can remain well preserved for **thousands of years**, especially in **arid soil caves** where **desiccation** was made possible by **dry microclimates** where **bacterial action** is diminished.



प्राकृतिक ममी हजारों वर्षों तक अच्छी तरह संरक्षित रह सकती हैं, विशेषकर शुष्क मिट्टी वाली गुफाओं में जहाँ सूखापन सूखे सूक्ष्म-जलवायु के कारण संभव होता है और जहाँ जीवाणु क्रिया कम होती है।

- **Africa's cheetahs** are in peril too: **90%** of the animals live outside **protected areas** and on **private farmlands**, and **conflict with people** is not infrequent.
अफ्रीका के चीते भी खतरे में हैं: **90%** जानवर **संरक्षित क्षेत्रों** के बाहर और **निजी खेतों** पर रहते हैं, और **मनुष्य-वन्यजीव संघर्ष** अक्सर होता है।
- The cats **prey on livestock** quite visibly during the day, and farmers, to save their animals, often **trap or shoot cheetahs**, per the paper.
ये बिल्लियाँ दिन में स्पष्ट रूप से **पशुधन का शिकार** करती हैं, और किसान अपने जानवरों को बचाने के लिए अक्सर **चीतों को पकड़ लेते हैं या गोली मार देते हैं**, पेपर के अनुसार।
- **Larger carnivores** such as **lions, leopards, and hyena** also kill cheetahs when competing for **prey or territory**.
बड़े मांसाहारी जैसे **शेर, तेंदुआ और लकड़बग्घा** भी **शिकार या क्षेत्र** के लिए प्रतिस्पर्धा में चीतों को मार देते हैं।
- As a result, in **Saharan Africa**, the spotted cats are as few as **0.0002/km**.
परिणामस्वरूप **सहारा अफ्रीका** में धब्बेदार बिल्लियों की संख्या केवल **0.0002 प्रति किमी** तक रह गई है।

An adequate habitat?

पर्याप्त आवास?

- **Ravi Chellam**, wildlife biologist and CEO, **Metastrang Foundation, Bengaluru**, has been tracking **Project Cheetah in India**, as part of which several **African cheetahs** have been introduced to **Madhya Pradesh**.
रवि चेल्लम, वन्यजीव जीवविज्ञानी और CEO, **मेटास्ट्रिंग फाउंडेशन, बेंगलुरु**, भारत में **प्रोजेक्ट चीता** को ट्रैक कर रहे हैं, जिसके तहत कई **अफ्रीकी चीते मध्य प्रदेश** में लाए गए हैं।
- The Hindu asked him about the prudence of reintroducing cheetahs to **Saudi Arabia**: "This is a **sovereign decision** for each country to take."
द हिंदू ने उनसे **सऊदी अरब** में चीतों को पुनः स्थापित करने की समझदारी के बारे में पूछा: "यह प्रत्येक देश का **सार्वभौमिक निर्णय** है।"
- "From an **ecological perspective** it is important to ensure that **adequate good quality habitats** are available before sourcing the cheetahs for the **reintroduction effort**," he said.
"पारिस्थितिक दृष्टिकोण से यह सुनिश्चित करना महत्वपूर्ण है कि **उच्च गुणवत्ता वाला पर्याप्त आवास** उपलब्ध हो, इससे पहले कि **पुनःप्रवेश प्रयास** के लिए चीते लाए जाएँ," उन्होंने कहा।
- Based on the evidence, at least **1 lakh sq. km.** of habitat is required to establish a **viable and self-sustaining population** of cheetahs in the **semi-desert and desert landscapes of Saudi Arabia**.
साक्ष्यों के आधार पर **सऊदी अरब के अर्ध-मरुस्थलीय और मरुस्थलीय परिदृश्यों** में चीतों की **जीवित और आत्मनिर्भर आबादी** स्थापित करने के लिए कम से कम **1 लाख वर्ग किमी** आवास आवश्यक है।
- The chosen habitats should support a reasonable **density and diversity of prey species** and be relatively free of **human activities especially road traffic**.
चयनित आवास में **शिकार प्रजातियों की पर्याप्त घनत्व और विविधता** होनी चाहिए और वह **मानवीय गतिविधियों विशेषकर सड़क यातायात** से अपेक्षाकृत मुक्त होना चाहिए।
- As for whether **Asian cheetahs** should have been introduced to **India**, Dr. Chellam said with the **highly endangered status** of Asiatic cheetahs in **Iran**, "it is not advisable to remove any cheetahs from this very small population."
जहाँ तक **एशियाई चीतों** को **भारत** में लाने का प्रश्न है, डॉ. चेल्लम ने कहा कि **ईरान** में एशियाई चीतों की **गंभीर संकटग्रस्त स्थिति** को देखते हुए "इस बहुत छोटी आबादी से किसी भी चीते को हटाना उचित नहीं है।"
- For the same reason, cheetahs reintroduced to **Saudi Arabia** would have to be the **northwest African subspecies A. j. hecki**.
इसी कारण **सऊदी अरब** में पुनःस्थापित किए जाने वाले चीते **उत्तर-पश्चिम अफ्रीकी उपप्रजाति A. j. hecki** के होने चाहिए।
- But even this subspecies is **endangered in the wild in western and northern Africa**.
लेकिन यह उपप्रजाति भी **पश्चिमी और उत्तरी अफ्रीका** में **जंगली अवस्था में संकटग्रस्त** है।
- So "the only realistic options are to source the required cheetahs from either **A. j. raineyi (east Africa)** or **A. j. jubatus (southern Africa)**," Dr. Chellam said.



इसलिए “एकमात्र वास्तविक विकल्प यह है कि आवश्यक चीते **A. j. raineyi (पूर्वी अफ्रीका)** या **A. j. jubatus (दक्षिणी अफ्रीका)** से लाए जाएँ,” डॉ. चेल्लम ने कहा।

- There is little clarity about the **funding for India’s Project Cheetah** but, he added, “it will be one of the **most expensive projects** in India’s conservation history.”
भारत के प्रोजेक्ट चीता के वित्तपोषण के बारे में बहुत कम स्पष्टता है, लेकिन उन्होंने कहा, “यह भारत के संरक्षण इतिहास की **सबसे महंगी परियोजनाओं** में से एक होगी।”
- **Liz Kierepka**, a molecular ecologist, told **ScienceNews** that the discovery is “quite the **rarity**,” outside of **permafrost areas** where several **natural mummies of megafauna from the Ice Age** exist.
लिज़ कियरप्का, एक आणविक पारिस्थितिकीविद, ने **ScienceNews** को बताया कि यह खोज “वास्तव में दुर्लभ” है, **पर्माफ्रॉस्ट क्षेत्रों** के बाहर जहाँ **आइस एज के मेगाफौना की प्राकृतिक ममियाँ** पाई जाती हैं।
- She also said relocating cheetahs from already **tiny populations** has the potential to cause “**new problems for the donor pools**.”
उन्होंने यह भी कहा कि पहले से ही **छोटी आबादी** से चीतों को स्थानांतरित करने से “**डोनर समूहों के लिए नई समस्याएँ**” उत्पन्न हो सकती हैं।
- It requires **more data**, but Dr. Kierepka said she is curious what shows up in **genetic analyses** to help select **donor cheetahs**.
इसके लिए **अधिक डेटा** की आवश्यकता है, लेकिन डॉ. कियरप्का ने कहा कि वे जानना चाहती हैं कि **आनुवंशिक विश्लेषण** में क्या सामने आता है जो **डोनर चीतों** के चयन में मदद करेगा।
- “If they really want to pursue **rewilding**,” she said, that could make **reintroduction more likely to succeed**.
“यदि वे वास्तव में **पुनर्वन्यकरण** करना चाहते हैं,” उन्होंने कहा, तो इससे **पुनःप्रवेश की सफलता की संभावना बढ़ सकती है**।

PATRIOTIC IAS