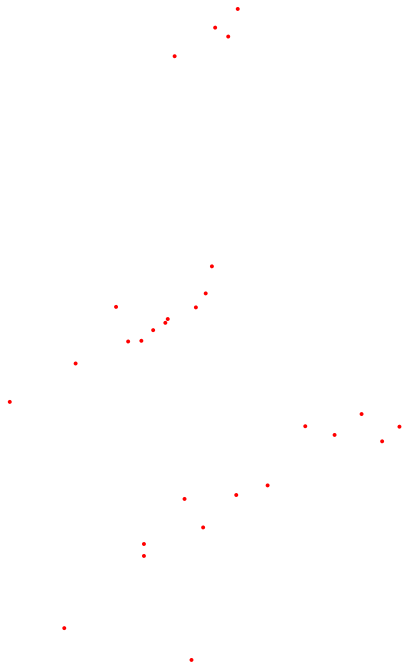


Daily Current Affairs





Download class24



PDF



10 MCQ QUIZ

- “Blessed is he who expects nothing, for he shall never be disappointed.”
— **Alexander Pope**

Home » Business » Politics » National » India » International » Environment » Sports » Health » Education » Technology » Arts & Culture » Religion » Entertainment » Science & Nature » Lifestyle » Travel » Opinion » Books & Movies » India » World » News » Local » More



RUNAWAY VICTORY
Milei wins Argentina
midterm elections
NEWS » PAGE 14



SC pulls up States for not complying with order
NEWS » PAGE 6



Centre to reconsider AGR dues issue
BUSINESS » PAGE 12



Big Tech's contempt for public health
Tackling its violations of Indian law is vital
EDITORIAL » PAGE 5



Shafai approved as Pratika's replacement
SPORT » PAGE 16



Amazon crosses \$20 bn in exports with e-commerce

NEW DELHI E-commerce giant Amazon on Monday said it has surpassed \$20 billion in cumulative e-commerce exports from India between 2015 and 2020 through its 'Global Selling' program and affirmed it is on track for the \$30 billion target by 2025. **» PAGE 14**

Afghans call for 'understanding' at truce meeting

KABUL Afghanistan and Pakistan entered a third day of negotiations on Monday to secure a lasting ceasefire, with Kabul urging "dialogue and understanding" after Islamabad earned war if talks collapse. **» PAGE 18**

'Digital arrest' a dreaded threat today: President

NEW DELHI President Ram Nath Kovind on Monday said that "digital arrest" has become a major threat for citizens today, even as technology continues to reshape the landscape of policing. He emphasised that India's growing digital space poses new challenges for law enforcement. **» PAGE 8**

CPI to boycott Kerala Cabinet over SRII pact

THIRUVANANTHAPURAM Unrelenting in their stance that the Kerala government either withdraw from the memorandum of understanding (MoU) signed with the Centre for the contentious PM SRII (Prime Minister's School for Rising India) scheme or place the pact in cold storage, the Communist Party of India (CPI) on Monday decided to boycott the Cabinet until the first week of November. **» PAGE 3**



Punjab records 122 instances of stubble burning

CHANDIGARH Punjab witnessed 143 stubble burning incidents from Sept. 15 till Oct. 26, with 122 cases on Sunday marking the highest single day since the season's official data showed. The State has seen a sharp jump in cases in the past week. **» PAGE 5**

EC kicks off SIR 2.0 in 12 States and U.T.s

EC says exercise will be held in poll-bound Tamil Nadu, West Bengal, Kerala, and Puducherry | The commission says no SIR in Assam for now, because of separate provisions for citizenship | There is likely to be controversy in West Bengal and T.N. as ruling parties have raised concerns

Supreme Court orders

THE Election Commission on Monday kicked off the second phase of the special intensive revision of voter lists in 12 States and Union Territories, including in poll-bound Tamil Nadu, West Bengal, Kerala, and Puducherry. The revision will cover 81 crore people. With the announcement of the second round, the voter lists of the States and Union Territories were set to be frozen from Monday midnight.

For now, there will be no SIR in Assam, scheduled to go to the polls in April, and in order will be issued later. Under the Citizenship Act, there are separate provisions for citizenship in

Rolls revision

Phase 2 of the special intensive revision of electoral rolls will be held between November 2020 and February 2021 across 12 States and Union Territories, covering 81 crore voters.

THEIR ■ Enumeration starts November 4, 2020
■ Enumeration ends December 3, 2020

The first phase of SIR was held in Bihar, Jharkhand, and Puducherry.

UNION TERRITORIES: Andaman & Nicobar Islands, Lakshadweep, Puducherry

STATES: Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, West Bengal, India

Assam. Under the supervision of the Supreme Court, the exercise of checking citizenship is about to be completed. The June 24 SIR order was for the entire country. Under such circumstances, this would

not have applied to Assam," Chief Election Commissioner Gyanesh Kumar said at a press conference. The exercise will be in Bihar, Jharkhand, Chhattisgarh, Goa, Gujarat, Andaman and Nicobar Islands, and Lakshadweep.

EC modifies some rules based on Bihar lesson

NEW DELHI Certain modifications have been made to the process for the SIR, based on the lessons from Bihar. The first phase of SIR, concluded in Bihar, was a success. The EC said no documents were to be collected from voters during the enumeration phase. **» PAGE 4**

The first phase of the SIR was held in Bihar following which more than 60 lakh voters were added to the electoral rolls. Most States had the first SIR of the voter lists done between 2002 and 2004, and they have nearly completed the mapping of current electors according to the last exercise. Voter mapping involves standardising addresses and correcting discrepancies. In this phase of the SIR, the issue to be examined will be taken place for a month from November 4 to December 4, and the draft rolls will be published on December 9. Claims and objections can be raised from December 9 to January 8. Notices will be issued, and hearings and verifications will take place between December 9 and January 31. Booth-level officers will be trained, and forms will be printed between October 26 and November 3. The final electoral rolls will be published on February 7.

the poll body said. To a question on the demands for putting off the SIR exercise in Kerala where local body elections are scheduled, Mr. Kumar said the poll notification was yet to be issued. On the SIR in West Bengal, where the ruling Trinamool Congress has raised concerns about the exercise, the CEC said the commission was doing its constitutional duty by carrying out the SIR, and the state government will perform its duties by giving all support to the process. Asked whether the poll body will give new EPIC cards to all voters as stated during the SIR in Bihar, Mr. Kumar said fresh voter IDs will be given to only those who have any change in their particulars.

Justice Kant, part of key verdicts, to become next CJI

Kelabhadra Bhargava

NEW DELHI The Chief Justice of India (CJI), N.R. Gavai, on Monday recommended Justice Surya Kant, the senior-most judge of the Supreme Court, as his successor to office, and the 33rd Chief Justice of India. The government had in the previous week written to Chief Justice Gavai seeking his recommendation. However, the CJI was on an official visit to Bhutan. Chief Justice Gavai gave his recommendation letter on Monday, the first working day of the court after the Deepavali holidays.

Chief Justice Gavai is scheduled to retire on November 24. Under the Memorandum of Procedure for the appointment of the Chief Justice of India, and Supreme Court Judges, the Union Law Ministry seeks the recommendation of the outgoing Chief Justice for the next appointment, following which the latter replies to the government. The letter from the government kickstarts the appointment process for the next Chief Justice of India.

Key cases

Justice Kant has been a part of several impactful decisions of the apex court, including the abrogation of Article 370 of the Constitution which removed the special status to the erstwhile State of Jammu and Kashmir. Justice Kant was also part of the bench which held the electoral bonds scheme unconstitutional. He was a member of the benches which heard the Pegasus spyware case, and the suspension of the sedition law. He was born on February 10, 1962 at Hissar in Haryana. After completing his graduation from his hometown, Justice Kant earned his Bachelor's degree in Law in 1984 from Mahatma Jyotiba Phule University, Raichur. He started his legal practice at the Hissar district court and shifted to Chandigarh in 1985 to practice in the Punjab and Haryana High Court. He was the youngest Advocate General of Haryana on July 7, 2000, and designated as senior advocate in March 2001. He was elevated as a judge of the Punjab and Haryana High Court on January 9, 2004. Justice Kant was appointed as the Chief Justice of the High Court of Mizoram in October 2016. He was appointed as a Supreme Court judge on May 24, 2019. He is due to retire on February 9, 2027.



Warning signs: Fishermen on the Kollam coast beach in Puthalam district bringing their boats in on Monday as Cyclone Montha approaches the coastline. Kollam district

Cyclone set to cross the Andhra coast on Tuesday evening; red alert in 16 districts

Nellore, Rayachoti, Vijayanagara

Cyclone Montha is very likely to cross the Andhra Pradesh coast between Machilipatnam and Kalingapatnam around Kakinada on Tuesday evening or night as a severe cyclonic storm with a maximum sustained wind speed of 100-150 kmph gusting to 110 kmph. The India Meteorological Department said on Monday. A red alert has been issued for 16 districts in the State on Tuesday. The cyclonic storm triggered heavy rainfall in three north coastal districts and moderate rainfall in other stations of the State on Monday. Visakhapatnam, Srikalahasti, and Anakapalle received moderate to heavy rainfall between 6.30 a.m. and 7 p.m. on Monday. Stations in the central and south coastal parts of the State received light showers. Chief Minister N. Chandrababu Naidu directed officials to ensure that aid reaches without delay.

At a review meeting, Naidu directed officials to issue hourly bulletins and real time updates on Cyclone Montha

isolated extremely heavy rainfall is likely, with the cyclone storm likely to intensify into a severe cyclonic storm by Tuesday morning, the IMD added. It said the cyclonic storm over west-central and adjoining southwest Bay of Bengal moved northwards at a speed of 13 kmph and remained over the same region at 8.30 p.m. It was positioned at 400 km east-northeast of Chennai in Tamil Nadu, 410 km south-southeast of Kakinada, and 460 km south-southeast of Visakhapatnam in Andhra Pradesh and 640 km south-southwest of Copalgarh in Odisha. It is likely to move north-northwestwards and intensify into a severe cyclonic storm by Tuesday morning. Continuing to

move further north-northwestwards, it is very likely to cross Andhra Pradesh coast in the evening of night. Meanwhile, the Indian National Centre for Ocean Information Services (INCOIS) has issued an alert for the state as high waves, in the range of 2.0-4 metres, are forecast between 8.30 p.m. and 11.30 p.m. on Monday, off the coast of Andhra Pradesh from Nellore to Srikalahasti. Storm surge of height about 1 metre above the astronomical tide is likely to cause inundation over low-lying areas of coastal Andhra Pradesh, it said.

Mr. Naidu ordered the deployment of satellite phones and additional mobile towers, and directed officials to keep 2,241 generators ready across 110 mandals for power backup at 2,707 villages. The Chief Minister instructed that National Disaster Response Force (NDRF) and SDRF teams remain on standby, and that the Fire Services, Electricity, Roads and Building, and Panchayat Raj departments stay fully alert. Officials were told to act swiftly to restore infrastructural in case of road breaches, fallen trees, or power line damage. He directed that sanitation be given high priority post-cyclone to prevent disease outbreaks, and that 106 and 824 medical vehicles remain on standby, ensuring medical care for pregnant women and new mothers. He also directed officials to evacuate residents in coastal areas and direct the cyclone to designated rehabilitation centres.

EC kicks off SIR 2.0 in 12 States and U.T.s

EC says exercise will be held in poll-bound Tamil Nadu, West Bengal, Kerala, and Puducherry

The commission says no SIR in Assam for now, because of separate provisions for citizenship

There is likely to be controversy in West Bengal and T.N. as ruling parties have raised concerns

Sreeparna Chakrabarty
NEW DELHI

The Election Commission on Monday kicked off the second phase of the special intensive revision of voter lists in 12 States and Union Territories, including in poll-bound Tamil Nadu, West Bengal, Kerala, and Puducherry. The revision will cover 51 crore voters.

With the announcement of the second round, the voter lists of the States and Union Territories were set to be frozen from Monday midnight.

For now, there will be no SIR in Assam, scheduled to go to the polls next year, and a separate order will be issued later.

"Under the Citizenship Act, there are separate provisions for citizenship in

Rolls revision

Phase 2 of the special intensive revision of electoral rolls will be held between November 2025 and February 2026 across 12 States and Union Territories, covering 51 crore voters

TIMELINE

- Enumeration start: November 4, 2025
- Enumeration end: December 4, 2025

- Draft electoral rolls release: December 9, 2025
- Final electoral rolls publication: February 7, 2026

UNION TERRITORIES:
Andaman & Nicobar Islands, Lakshadweep, Puducherry

STATES:
Chhattisgarh, Goa, Gujarat, Kerala, Madhya Pradesh, Rajasthan, T.N., U.P., Bengal

The first phase of SIR was held in Bihar.
FILE PHOTO



DOCUMENT PROCESS

- No documents are to be collected from electors during the enumeration phase
- For electors who have not returned enumeration forms, the booth-level officer may identify a probable cause, such as death or duplication based on an enquiry from nearby electors and note the same
- These names will be displayed on boards of all panchayat and urban local body offices

EC modifies some rules based on Bihar lesson

NEW DELHI

Certain modifications have been made to the process based on the learnings from the just-concluded process in Bihar. In a notice issued to the Chief Electoral Officers of all 12 States and Union Territories, the EC said no documents were to be collected from electors during the enumeration phase. » PAGE 4

The first phase of the SIR was held in Bihar following which more than 68 lakh names were deleted from the electoral rolls.

Most States had the last SIR of the voter lists done between 2002 and 2004,

and they have nearly completed the mapping of current electors according to the last exercise.

Voter mapping involves standardising addresses and correcting discrepancies.

In this phase of the SIR, the house-to-house enumeration will take place for a month from November 4 to December 4, and the draft rolls will be published on December 9.

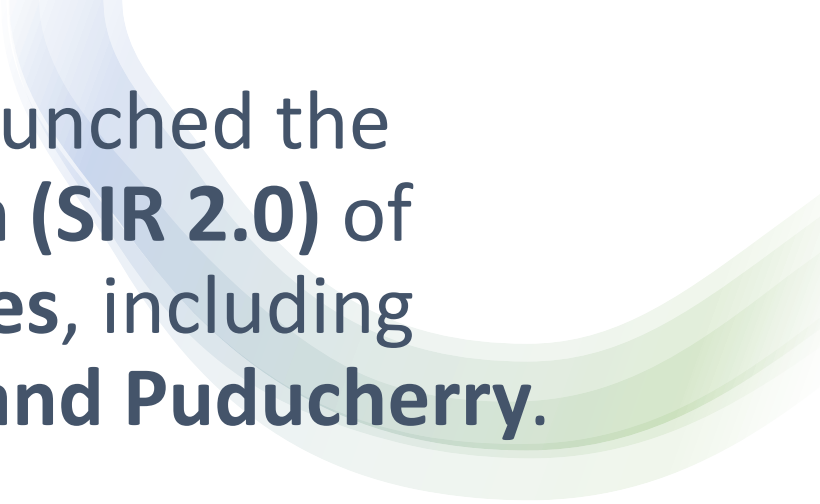
Claims and objections can be raised from December 9 to January 8. Notices will be issued, and hearings and verifications will take place between December 9 and January 31. Booth-level officers will be trained, and forms will be printed between October 28 and November 3. The final electoral rolls will be published on February 7,

the poll body said.

To a question on the demands for putting off the SIR exercise in Kerala where local body elections are scheduled, Mr. Kumar said the poll notification was yet to be issued.

On the SIR in West Bengal, where the ruling Trinamool Congress has raised concerns about the exercise, the CEC said the Commission was doing its constitutional duty by carrying out the SIR, and the State government will perform its duties by giving all support and manpower needed.

Asked whether the poll body will give new EPIC cards to all voters as stated during the SIR in Bihar, Mr. Kumar said fresh voter IDs will be given to only those who have any change in their particulars.



- The **Election Commission of India (ECI)** has launched the **second phase** of the **Special Intensive Revision (SIR 2.0)** of voter lists across **12 States and Union Territories**, including **poll-bound Tamil Nadu, West Bengal, Kerala, and Puducherry.**

-

The exercise, covering **51 crore voters**, will take place between **November 2025 and February 2026.**



Parameter**Details****Name of Exercise**

Special Intensive Revision (SIR) 2.0

Conducted by

Election Commission of India (ECI)

Coverage

12 States and Union Territories

Voter Base

~51 crore voters

Timeline

November 2025 – February 2026

Enumeration Period

November 4 – December 4, 2025

Draft Rolls Publication

December 9, 2025

Final Rolls Publication

February 7, 2026

No SIR inAssam (due to citizenship-related provisions under
Citizenship Act)

States & UTs Covered

States

Chhattisgarh, Goa, Gujarat, Kerala, Madhya Pradesh, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal

Union Territories

Andaman & Nicobar Islands, Lakshadweep, Puducherry

Objective of SIR 2.0

1. To update and verify electoral rolls with accurate voter details.
 2. To remove duplicate, deceased, and shifted voters.
 3. To incorporate new eligible voters who turned 18.
 4. To standardize voter addresses and correct discrepancies through voter mapping.
-

Why Assam is Excluded

- Assam has **separate provisions under the Citizenship Act**.
- Citizenship verification is already ongoing under the **supervision of the Supreme Court** (linked to NRC exercise).
- Hence, a **separate order** will govern voter list revision there.

Document Process

- **No documents** will be collected during enumeration.
 - **Booth-level officers (BLOs)** may identify missing electors based on local verification.
 - Probable causes (e.g. death, duplication) will be recorded after local enquiry.
 - Lists will be **displayed publicly** at panchayat and municipal offices.
-

Modifications Based on Bihar Lessons

- The **first phase** of SIR was conducted in **Bihar** earlier, where **68 lakh names were deleted** from rolls.
 - Based on that, ECI has:
 - Simplified the enumeration process.
 - Clarified that **no fresh documents** will be demanded.
 - Issued improved verification norms to avoid mass deletions without scrutiny.
-

Administrative Steps

- **House-to-house enumeration:** November 4–December 4, 2025.
- **Publication of draft rolls:** December 9, 2025.
- **Claims and objections:** December 9–January 8, 2026.
- **Hearings and verifications:** December 9–January 31, 2026.
- **Final publication:** February 7, 2026.

Aspect

Impact

Transparency

Boosts confidence in electoral integrity before 2026 elections.

Inclusivity

Ensures new eligible voters (18+) are added.

Efficiency

Prevents ghost and duplicate entries.

Digital Governance

Enhances voter mapping using data tools.

Topic	Key Points
Constitutional basis	Article 324 : superintendence, direction and control of elections vested in an Election Commission. (<u>Constitution of India</u>)
What elections ECI runs	Lok Sabha, Rajya Sabha, State Legislative Assemblies, and the offices of President & Vice-President . (<u>Election Commission of India</u>)
Composition	A multi-member body: Chief Election Commissioner (CEC) + such number of Election Commissioners (ECs) as fixed by the President (presently CEC + 2 ECs). (<u>MEA India</u>)
Appointment (since 2023 law)	Appointed by the President on recommendation of a Selection Committee : (i) Prime Minister (Chairperson) , (ii) Leader of Opposition in Lok Sabha , (iii) a Union Cabinet Minister nominated by the PM . A Search Committee (Law Minister + 2 Secys) prepares a panel.

Tenure & re-appointment

6 years or till **age 65**, whichever earlier; **not eligible for re-appointment**.
If an EC becomes CEC, total combined tenure capped at **6 years**.

Removal protections

CEC: removable only in the same manner & on the same grounds as a **Supreme Court Judge**. **ECs**: removable only on **CEC's recommendation**.

Salary/conditions

Salary **equal to a Supreme Court Judge**; DA and other conditions per the Act.

Core functions

Conduct & supervise elections; maintain electoral rolls; recognize parties & **allot symbols** (under the **Election Symbols (Reservation & Allotment) Order, 1968**) ; issue & enforce **Model Code of Conduct**; deploy observers; monitor expenditure. (Election Commission of India)

Powers/authority

Plenary powers under **Art. 324** to act where law is silent to ensure free & fair polls; frames procedures, can act by **majority** if members differ.
(Constitution of India)

Justice Kant, part of key verdicts, to become next CJI

Krishnadas Rajagopal
NEW DELHI

The Chief Justice of India (CJI), B.R. Gavai, on Monday recommended Justice Surya Kant, the senior-most judge of the Supreme Court, as his successor to office, and the 53rd Chief Justice of India.

The government had in the previous week written to Chief Justice Gavai seeking his recommendation.

However, the CJI was on an official visit to Bhutan. Chief Justice Gavai gave his recommendation immediately on his return and met Justice Kant with the recommendation letter on Monday, the first working day of the court after the Deepavali holidays.

Chief Justice Gavai is scheduled to retire on November 24.

Under the Memorandum of Procedure for the appointment of the Chief Justice of India, and Supreme Court Judges, the Union Law Ministry seeks the recommendation of the outgoing Chief Justice for the next appointment, following which the latter replies to the government. The letter from the government kickstarts the appointment process for the next Chief Justice of India.

Key cases

Justice Kant has been a

part of several impactful decisions of the apex court, including the abrogation of Article 370 of the Constitution which removed the special status to the erstwhile State of Jammu and Kashmir. Justice Kant He was also part of the Bench which held the electoral bonds scheme unconstitutional. He was a member of the Benches which heard the Pegasus spyware case, and the suspension of the sedition law.

He was born on February 10, 1962 at Hisar in Haryana. After completing his graduation from his hometown, Justice Kant earned his Bachelor's degree in Law in 1984 from Maharishi Dayanand University, Rohtak. He started his legal practice at the Hisar district court and shifted to Chandigarh in 1985 to practice in the Punjab and Haryana High Court.

He was the youngest Advocate-General of Haryana on July 7, 2000, and designated as senior advocate in March 2001. He was elevated as a judge of the Punjab and Haryana High Court on January 9, 2004. Justice Kant was appointed as the Chief Justice of the High Court of Himachal Pradesh in October 2018.

He was appointed as a Supreme Court judge on May 24, 2019. He is due to retire on February 9, 2027.



Chief Justice Gavai with his successor, Justice Kant, in New Delhi on

Justice Surya Kant, presently the second senior-most judge of the Supreme Court, has been recommended by outgoing Chief Justice of India (CJI) B.R. Gavai as his successor.

The formal communication has been sent to the Centre, paving the way for Justice Kant's appointment as the 53rd Chief Justice of India. His tenure will commence on 24 November 2025, a day after CJI Gavai's retirement.

Parameter	Details
Name	Justice Surya Kant
Current Position	Senior-most Judge, Supreme Court of India
Next Designation	Chief Justice of India (53rd)
Recommended By	Chief Justice of India B.R. Gavai
Date of Recommendation	October 27, 2025 (first working day after Deepavali)
CJI Gavai's Retirement Date	November 24, 2025
Justice Kant's Retirement Date	February 9, 2027
Born	February 10, 1962 – Hisar, Haryana
Educational Background	LL.B. (1984) from Maharishi Dayanand University, Rohtak
Previous Roles	Advocate-General of Haryana (2000–2004), Chief Justice of Himachal Pradesh High Court (2018–2019)

Year	Milestone
1985	Began legal practice at Punjab & Haryana High Court
2000	Appointed as Advocate-General of Haryana (youngest to hold the post)
2004	Elevated as Judge, Punjab & Haryana High Court
2018	Chief Justice, Himachal Pradesh High Court
2019	Elevated to Supreme Court (May 24, 2019)

Case

Verdict / Role

Abrogation of Article 370 (2023)

Upheld the abrogation of Jammu & Kashmir's special status.

Electoral Bonds Scheme (2024)

Part of the Bench that declared the scheme **unconstitutional** for violating transparency.

Pegasus Spyware Case (2021)

Part of the Bench ordering a probe into allegations of state surveillance.

Sedition Law Suspension (2022)

Member of Bench that suspended the colonial-era **Section 124A** pending review.

Topic	Key Points
Constitutional basis	Supreme Court established under Art. 124 ; CJI heads it. Related powers: Art. 145 (Court rules), Art. 146 (SC staff), Art. 126 (Acting CJI). (<u>Constitution of India</u>)
Appointment	President appoints under Art. 124(2) , as per the Collegium system (judicially evolved in the Second Judges (1993) & Third Judges (1998) cases; NJAC struck down in 2015). Convention: senior-most SC judge becomes CJI. (<u>Department of Justice</u>)
Oath	Per Third Schedule (before the President). (<i>Know the schedule for prelims.</i>) (<u>Wikipedia</u>)
Tenure / Retirement	No fixed term; retires at 65 years (Art. 124). Average tenure ≈ 1.5 years due to seniority + retirement age. (<u>Supreme Court Observer</u>)
Removal	Same as SC judges: by President after a special-majority address of both Houses on grounds of proved misbehaviour or incapacity (Art. 124(4) ; Judges (Inquiry) Act, 1968). (<u>Constitution of India</u>)

Powers / Roles

Master of the Roster—allocates cases & constitutes benches (Shanti Bhushan v. SC, 2018); administrative head of SC; chairs **SC Collegium** for constitutional-court appointments/transfers. ([Sci API](#))

Salary (pay only)

₹2,80,000 per month (current pay level; separate perks per statutes). ([Bar and Bench - Indian Legal news](#))

Order of Precedence

Rank **6th**. (*Useful factual pick.*) ([Wikipedia](#))

First CJI

H. J. Kania (26 Jan 1950 – 6 Nov 1951). ([Wikipedia](#))

Current & Next (as of Oct 28, 2025)

Current: CJI **B. R. Gavai** (till **Nov 23, 2025**). **Next (expected):** Justice **Surya Kant** from **Nov 24, 2025** (recommendation sent by incumbent). ([Wikipedia](#))

Buybacks take backseat as AI drives record U.S. capex



Headwinds (left) dividends and buybacks, alone have failed to draw long-term investors. 2023/10/26

Investors

Investors are increasingly favouring U.S. companies that channel capital toward AI innovation over those offering traditional shareholder payouts such as dividends and buybacks, even as the debate over soaring valuations and an AI bubble rages on.

The priority for investors is long-term growth over immediate profits, recognising companies neglecting AI investment risk falling behind in what many consider the most transformative technological shift of our time. Goldman Sachs lowered its forecast for U.S. share buyback growth to 3%, down from 12% previously, as it expects the wave of artificial intelligence-driven investment to extend well into 2025.

"This is an AI-led bull market, and the market continues to reward companies' growth outlook around AI. It is less about shareholder returns at this moment than whether they can develop AI and monetise on the opportunity," said Choung Kwon, chief equity strategist at Wells Fargo.

Capex plans halloo

Capital expenditure plans reported by S&P 500 companies hallooed to \$1.2 trillion this year — the highest since Privateate Research started recording the data in 1999, with the biggest nine companies making up nearly 30% of the share.

Record shareholder payouts

Total shareholder returns for the 12 months ending in June this year also hit a record \$1.65 trillion, according to S&P Global data, with dividends and share buybacks at \$805.86 billion and \$807.63 billion, respectively.

However, hefty dividends and buybacks alone have failed to draw long-term investors. Apple led the S&P 500 in capital returns during the second quarter, according to S&P Global, with buybacks and indicated dividends more than double Meta's. And yet the maker's shares have lagged the rest of the "Magnificent Seven" on concerns over its lack of bold AI innovation.

On the flip side, shares of AI hyperscalers such as Alphabet, Meta, Microsoft and Oracle have logged double-digit price returns this year, surpassing broader market gains, including Amazon.com and Google. The group recorded a cumulative \$406 billion in capex spending in 2025, Salesforce, Accenture and Cognizant have also ramped up shareholder payouts, but Salesforce and Accenture have fallen more than 25% this year, while Cognizant lost 12%, reinforcing the view capital returns alone won't cut it without a compelling AI story.

For those companies considered to be growth stocks, you absolutely want to see an investment in the future and a little bit less concern about share buybacks and dividends," said Chris Zaccarelli, chief investment officer for Northlight Asset Management. But AI innovation is no longer confined to just Silicon Valley, sectors from banking to healthcare and consumer staples are also betting big on the tech to trim costs.

The 2:17 AM decision: why AI auditing is banking sector's new oversight

Today's systems read documents, learn from feedback, run on vendor platforms, and can fail differently across languages and segments. Artificial Intelligence auditing is an independent, evidence-based review of an AI system through its life, design, testing, deployment, and monitoring

NEWS ANALYSIS

Pramod C. Mans
Siddharth Mahapatra

A loan gets approved at 2:07 a.m., no human on shift, no second pair of eyes. An AI model read the bank statements, guessed income, priced risk, and moved money. That speed is powerful, but dangerous. When models drift or learn the wrong lesson, the damage is instant: unfair denials, bad assets, and angry regulators. AI auditing is the control that proves these systems are fit to decide — how they're built, what data they learn from, what tests they pass, and how they're watched in production. The question is simple: If this model were a trader, would we let it trade without a rulebook and a supervisor?

An AI rulebook

That 2:17 a.m. decision needs a rulebook and a supervisor, and that is what AI auditing provides. Think of it as model-risk management upgraded for learning systems. It begins with simple scorecards (document the data, test the model, log overrides). Today's systems read documents, learn from feedback, run on vendor platforms, and can fail differently across languages and segments. So, AI auditing is an inde-

pendent, evidence-based review of an AI system through its design, testing, deployment, and monitoring. It asks five plain questions: (1) What is the system for, and who uses it? (2) What data was used, with what provenance and consent? (3) What tests prove it works accurately with uncertainty, robustness, and data shifts and attacks, privacy and fairness by segment? (4) How are decisions explained to risk teams, front-line staff, and customers? (5) How is it watched in production, paused safely, and improved?

The essential blueprint set against those five questions, the familiar Indian rulebooks show clear gaps. For instance, the DPDP Act

looks for a playbooks, do we really need to reinvent the wheel?

The answer is no: a complementary playbook already exists in the triad of RBI's FREE-AI Framework, NIST AI RMF, and CSA's AICM. FREE-AI establishes the 'why' (ethical principles) and the vision for what banks must achieve: a fair, ethical, and responsible structure.

Why, what, how The NIST AI RMF suggests the 'how' by proposing a continuous risk management cycle (GOVERN, MEASURE, MANAGE, ASSESS). The CSA's AICM delivers the 'what' by listing expected, vendor-assigned tech-

rical controls across key domains like data, security, and governance. Collectively, these frameworks provide banks with the necessary principles, processes, and checklists to translate AI trust into auditable checks. In our view, these three frameworks together fit hand in glove.

Who leads, who follows We believe establishing AI auditing controls in the Indian banking sector will be a critical, multi-stakeholder effort. The FREE-AI already set the guidelines, essentially defining the 'what' and it demands that all AI systems demonstrate assurance, fairness, and clear explainability. We believe, the real heavy lifting, the 'how', falls to the regulated banks, NBFCs and their auditors. Their challenge, and their contribution, is in verifying these mandates into practical, daily operational checks. This involves constantly checking AI-driven decisions for ethical fairness and, frankly, getting a firm grip on the inherent risks that complex models bring.

Critically, the bank's internal technical units will serve as the technical backbone. They are tasked with implementing the actual control systems. This includes ensuring that AI data is meticulously tracked and secured, thereby preserving the complete audit

trail. This collective effort, in our view, is what will ensure that AI adoption is fully auditable.

So, the immediate issue is practical and let's be frank, some controls we want aren't hard to achieve today. For instance, deep models won't be fully explainable; GenAI won't be hallucination-free. Bias cannot be zero; provenance and vendor transparency are patchy.

Pragmatic guardrails

The workable path, therefore, isn't about chasing perfection; it's about establishing pragmatic guardrails. This demands that banks prioritise interpretability models for high-stakes use, cap and constantly monitor model behaviour by segment, and meticulously document any data gaps. Banks must also establish pragmatic guardrails by aggressively testing and staged model updating for stability and security.

Defensively, they must use targeted data privacy methods and demand vendor accountability. We conclude the minimum standard for today's deployment is continuous monitoring, always backed by a tested 'kill switch' capability.

(Pramod C. Mans is with National Institute of Bank Management. Siddharth Mahapatra with Data Analytics Centre (DAC), Canara Bank, Bengaluru)

How China could use DeepSeek for an era of war

REUTERS
BEIJING/SINGAPORE

China's State-owned defense giant Norinco in February unveiled a military rulebook capable of continuously conducting combat support operations at 50 kilometres per hour. It was powered by DeepSeek, the company whose artificial intelligence model is the pride of China's tech sector. The Norinco press release was touted by Communist Party leaders in press statements as an early showcase of how Beijing is using DeepSeek and AI to catch up in its arms race with the United States.

For those companies considered to be growth stocks, you absolutely want to see an investment in the future and a little bit less concern about share buybacks and dividends," said Chris Zaccarelli, chief investment officer for Northlight Asset Management. But AI innovation is no longer confined to just Silicon Valley, sectors from banking to healthcare and consumer staples are also betting big on the tech to trim costs.

A Reuters review of hand-drawn research papers,



New DeepSeek Unleash robot dogs climb a flight of stairs during a demonstration to Reuters at a park in Hangzhou, China. REUTERS

don't necessarily indicate operational technology.

The People's Liberation Army (PLA) and affiliates continue to use and look for stealth chips, including models under U.S. export controls, according to the papers, lenders and parents.

Nvidia chips

Reuters could not determine if those chips were stockpiled before Washington imposed restrictions on the devices. The U.S. Commerce Department said when the hardware was exported. Patents filed as recently as June show their use by military units and real-time battlefield decision support in a way that mirrors U.S. efforts.

Reuters couldn't establish if the products had been built and patented

Rizzo said in a statement to Reuters that while the firm can't track individual resellers or previously sold products, "recycling small quantities of old, second-hand products doesn't enable anything new or raise any national security concern. Using restricted products for military applications would come with a price tag, without support."

The U.S. Treasury and Commerce Department did not respond to questions about Reuters' demand for and use of contractors.

The Chinese military has also in 2023 increased its use of contractors, but claim to exclusively use domestically-made hardware like Huawei AI chips,

said Sunny Choung, a fellow at the Washington-based Jamestown Foundation defence policy think tank, who analysed several hundred tenders issued from the PLA Procurement network over six months and Reuters' analysis independently confirm his assertion that the shift would come with a public pressure campaign by Beijing on domestic firms to use China-made technology. The new agency's review of procurement notices and patents filed to China's patent office found demand for and use of contractors.

China's patent office found demand for and use of contractors. The new agency's review of procurement notices and patents filed to China's patent office found demand for and use of contractors.

China's patent office found demand for and use of contractors. The new agency's review of procurement notices and patents filed to China's patent office found demand for and use of contractors.

Europe's new space merger explores the FOMO frontier

NEWS ANALYSIS

Reuters

PARIS/LONDON

Between the brink by Elon Musk's SpaceX, Europe's biggest satellite firms are getting aside longtime rivals in a do-or-die \$7 billion merger that some observers are already calling Project FOMO.

A rift on Project Broom, the code name for talks that led to Thursday's deal between Airbus, Thales and Leonardo, their fear of missing out on the next big thing in space has not been dominated by SpaceX and its Starlink army as well as new money from the European Commission and political and industrial appetite for a deal was less pressing. Two people involved in those

have been unthinkable 10 years ago, but competition between Airbus and Thales is much less significant than competition between Europe, U.S. and China's and Calespion, French director at advisory firm Quilly Space.

Compete globally

The merger unites two joint ventures between Thales and Leonardo — Thales Alenia Space and Telespazio — with Airbus' satellite business as well as various smaller activities. Airbus and Thales had interests in the past but received discouraging signals as the European Commission and political and industrial appetite for a deal was less pressing. Two people involved in those



Space for competition: Engineers perform checks on Europe's new Ariane 6 satellite in France. REUTERS

talks said. Since the last attempt more than five years ago, they have watched Europe's traditional market for geostationary satellites cut in half, as cheaper as-

tronomical flood low Earth orbits. Russia's invasion of Ukraine and a security rift with the United States accelerated Europe's drive to support such sensitive assets as satellites, which in-

creasingly overlap with defence. A tipping point came with mounting losses on cutting-edge programs for multiple satellites such as the Airbus OneSat

programme. Airbus CEO Guillaume Faury, tasked by the board with reforming defence and space strategy, sound internal alarms nearly two years ago that the losses were unacceptable.

By mid-2024, Airbus was hit by spiralling charges as mainly related to OneSat and Thales was grappling with overcapacity, pushing them into landmark talks reported by La Tribune.

Painful talks One person with direct knowledge of the decision, asking not to be named, said Airbus and two satellite vendors joined the talks. A tipping point came with mounting losses on cutting-edge programs for multiple satellites such as the Airbus OneSat

programme. Airbus CEO Guillaume Faury, tasked by the board with reforming defence and space strategy, sound internal alarms nearly two years ago that the losses were unacceptable.

By mid-2024, Airbus was hit by spiralling charges as mainly related to OneSat and Thales was grappling with overcapacity, pushing them into landmark talks reported by La Tribune.

Painful talks One person with direct knowledge of the decision, asking not to be named, said Airbus and two satellite vendors joined the talks. A tipping point came with mounting losses on cutting-edge programs for multiple satellites such as the Airbus OneSat

programme. Airbus CEO Guillaume Faury, tasked by the board with reforming defence and space strategy, sound internal alarms nearly two years ago that the losses were unacceptable.

By mid-2024, Airbus was hit by spiralling charges as mainly related to OneSat and Thales was grappling with overcapacity, pushing them into landmark talks reported by La Tribune.

Painful talks One person with direct knowledge of the decision, asking not to be named, said Airbus and two satellite vendors joined the talks. A tipping point came with mounting losses on cutting-edge programs for multiple satellites such as the Airbus OneSat

Painful talks One person with direct knowledge of the decision, asking not to be named, said Airbus and two satellite vendors joined the talks. A tipping point came with mounting losses on cutting-edge programs for multiple satellites such as the Airbus OneSat

Painful talks One person with direct knowledge of the decision, asking not to be named, said Airbus and two satellite vendors joined the talks. A tipping point came with mounting losses on cutting-edge programs for multiple satellites such as the Airbus OneSat

Europe's new space merger explores the FOMO frontier

NEWS ANALYSIS

Reuters

PARIS/LONDON

Driven to the brink by Elon Musk's SpaceX, Europe's biggest satellite firms are setting aside longtime rivalries in a do-or-die \$7 billion merger that some insiders are already calling Project FOMO.

A riff on Project Bromo, the code name for talks that led to Thursday's deal between Airbus, Thales and Leonardo, their fear of missing out reflects a market dominated by SpaceX and its Starlink array as well as new mega-constellations in China.

"This kind of merger of the three biggest European space companies would

have been unthinkable 10 years ago, but competition between Airbus and Thales is much less significant than competition between Europe, U.S. and China," said Caleb Henry, research director at advisory firm Quilty Space.

Compete globally

The merger unites two joint ventures between Thales and Leonardo - Thales Alenia Space and Telespazio - with Airbus' satellite business as well as various smaller activities.

Airbus and Thales had tentatively explored co-operation in the past but received discouraging signals from the European Commission and political and industrial appetite for a deal was less pressing, two people involved in those



Space for competition: Engineers perform checks on Europe's new MTG-11 satellite in France. REUTERS

talks said.

Since the last attempt more than five years ago, they have watched Europe's traditional market for geostationary satellites cut in half, as cheaper sa-

telites flood low Earth orbit. Russia's invasion of Ukraine and a security rift with the United States accelerated Europe's drive to support such sensitive assets as satellites, which in-

creasingly overlap with defence.

A tipping point came with mounting losses on cutting-edge, reprogrammable satellites such as the Airbus OneSat

programme.

Airbus CEO Guillaume Faury, tasked by the board with reforming defence and space strategy, sounded internal alarms in early 2024, telling staff that the losses were unacceptable.

By mid-2024, Airbus was hit by spiralling charges mainly related to OneSat and Thales was grappling with overcapacity, pushing them into landmark talks first reported by La Tribune.

Painful talks

One person with direct knowledge of the decision, asking not to be named, said Airbus and two satellite ventures jointly owned by Thales and Leonardo seized the moment "to say we are suffering and have to compete globally, not

against each other".

Another person involved in the talks said there had been "an overriding consensus that this is badly needed, for everybody".

The pragmatic agenda helped to contain political tensions that often go hand in hand with European aerospace, but that did not prevent painful negotiations on valuations, sources said. "For once logic prevailed; it was get on with it or die," a separate person close to the talks told Reuters. By contrast, Europe's fragmented defence industry is struggling to coordinate a response to growing threats.

And Europe's space launch sector is growing further apart with Italy peeling off from Ariane

space, a partly Airbus-owned operator of Ariane rockets. The integration of Musk's rockets, satellites and Starlink services is credited with driving down costs but Europe's new combination does not include launchers.

Some analysts say the collaboration will fail to reverse the impact of years of prevarication that left Europe ill-placed to compete, just as it embarks on the challenging task of building Europe's new secure satellite network, IRIS².

"I believe it comes far too late. The company will be tied up with consolidation for at least the next two years: the same period during which it is expected to design IRIS²," said satellite consultant Christian von der Ropp.

- 
- Europe's top aerospace and satellite giants — **Airbus, Thales, and Leonardo** — have announced a historic **\$7 billion merger** to consolidate their satellite operations. The initiative, dubbed “**Project FOMO**” (**Fear of Missing Out**), aims to counter the growing dominance of **Elon Musk's SpaceX and Starlink**, as well as China's emerging satellite constellations.
- 

Parameter	Details
Merger Participants	Airbus, Thales, Leonardo
Project Nickname	“Project FOMO” (Fear of Missing Out)
Nature of Deal	\$7 billion merger to integrate satellite manufacturing and services
Objective	To strengthen Europe’s competitiveness in the global space industry dominated by SpaceX
Main Challenge	Overcapacity, falling profitability, and shrinking markets for European geostationary satellites
Timeline	Initiated in 2024 after mounting losses across firms
Core Motivation	Rapid growth of SpaceX’s Starlink and American/Chinese dominance in space infrastructure

What Led to the Merger

SpaceX's Disruption

- SpaceX's **reusable rockets** and **Starlink constellation** have drastically reduced satellite launch costs and reshaped the global satellite market.
- Europe's older model of large, costly **geostationary satellites** became unsustainable.

Mounting Financial Pressure

- **Airbus's OneSat** and **Thales's overcapacity** triggered severe financial losses by 2024.
- Airbus CEO **Guillaume Faury** called for urgent reforms to defense and space strategies.

Geopolitical Factors

- The **Russia-Ukraine war** and **US–EU security tensions** accelerated Europe's need to strengthen its **strategic autonomy** in space.

Goals of the Merger

Compete Globally:

Match the industrial and cost efficiency of SpaceX and U.S. firms.

Boost R&D:

Develop new-generation **reprogrammable satellites** (like OneSat).

Consolidate Market Share:

Reduce duplication among European players and build a unified brand.

Enhance Defense Integration:

Align Europe's civilian and defense satellite capabilities.

Challenge

Impact

Political Rivalries

Tensions between France (Airbus), Italy (Leonardo), and the EU bureaucracy delayed consensus.

Overcapacity

Redundant satellite units and slow restructuring may hinder efficiency.

Fragmented Defense Strategy

EU's defense and space sectors operate under different governance structures.

Timing Issue

Analysts warn it may be “too late” as SpaceX already dominates the launch and broadband segments.

Region	Strength	Impact of Europe's Merger
USA (SpaceX, Amazon Kuiper)	Reusable rockets + mega-constellations	Europe aims to cut dependency on U.S. launch tech.
China (BeiDou, Starlink-style constellations)	State-backed rapid expansion	EU seeks coordinated industrial strategy.
India (ISRO + IN-SPACe)	Emerging commercial ecosystem	Opens new collaboration opportunities with European firms.

Eighth Pay Commission may be set up next week

PRASANTA SAHU
New Delhi, October 27

THE CENTRE IS expected to form the 8th Pay Commission next week, just ahead of the Bihar assembly elections, and 10 months after it was approved by the Cabinet, according to sources.

The panel will recommend the revised pay and pension norms for over 11.8 million central government employees and pensioners.

The government is understood to have finalised the terms of reference (ToR), along with the chairman and members of the commission, to oversee the decadal revision of pay and pensions for central government staff.

The move comes at least a year behind schedule compared to historical precedents. The panel is likely to take 6–12 months to submit its report, with implementation expected to apply retrospectively from January 1, 2026.

Prime Minister Narendra Modi had approved the constitution of the 8th Pay Commission on January 16, 2025, shortly before the Delhi assembly elections. Inputs have also been gathered from key stakeholders, including state governments and PSUs.

While Pay Commission

PAY BOOST

■ Centre set to form 8th pay panel ahead of Bihar polls

■ Panel to revise pay and pensions for 11.8 mn central staff, pensioners

■ Previous pay hikes added 0.65% of GDP to fiscal outgo

■ Recommendations influence salaries, pensions, and allowances

■ PM Modi approved constitution of 8th pay panel



awards significantly boost consumption through salary hikes, they impose a substantial financial burden on state governments, public sector undertakings (PSUs), and central universities, which typically align their pay revisions with central recommendations.

The recommendations of the Pay Commission are not binding on the central government. However, they are generally accepted with minor modifications. The commission advises on salary structures, allowances, pensions, and benefits for central government employees (civilian and defence) and pensioners.

For context, the 7th Central Pay Commission (CPC) was constituted on February 28,

2014, with an 18-month deadline. Implemented from January 1, 2016, it granted a 23.55% increase in pay and pension, resulting in an additional annual outgo of ₹1.02 lakh crore (0.65% of GDP in FY17). This made it challenging to reduce the fiscal deficit from 3.9% in FY16 to 3.5% in FY17.

The fiscal impact of the 8th CPC is expected to be factored into the new medium-term fiscal consolidation road map and the recommendations of the 16th Finance Commission, which will determine tax devolution and grants to states for FY27–FY31.

State government staff are likely to get benefit, as states follow the Centre's lead.

Earnings	Amount	Deductions	Amount
Basic Pay	...	NPS (Employee 10% of Basic+DA)	...
DA (% of Basic)	...	CGEGIS	...
HRA (X/Y/Z)	...	CGHS	...
TA (as per slab)	...	TDS (Income Tax)	...
DA on TA	...	Other recoveries (if any)	...
Other allowances (if any)	...		
Gross	...	Total Deductions	...
		Net Pay	...

Head	Basis (how calculated)	Notes
Basic Pay	Pay Matrix Level × Cell	All % allowances ride on Basic
DA (Dearness Allowance)	% of Basic	Revised twice a year (Jan/Jul)
HRA (House Rent Allowance)	% of Basic by city class (X/Y/Z)	% steps up when DA crosses 25% & 50%
TA (Transport Allow.)	Slab by Level & city	DA is paid on TA (shown as “DA on TA”)
DA on TA	DA% × TA	Auto with DA revision
Special/Other Allowances	Dept./post-specific (Risk/Hardship, NPA, Night duty, etc.)	Varies by ministry/post
Arrears (if any)	Difference due to revision/fixation	One-off lines when applicable
Gross Earnings	Sum of all above	

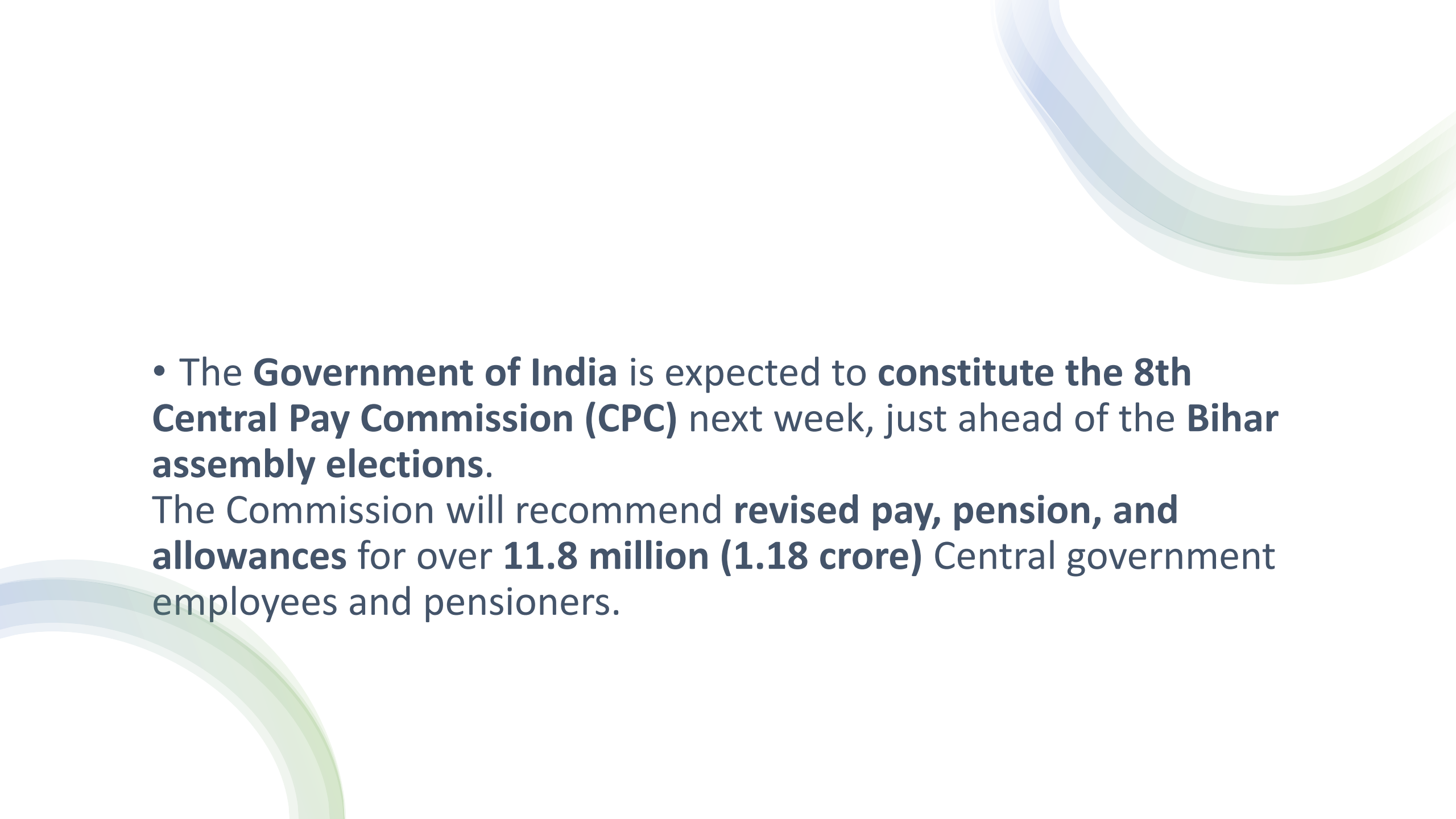
Head	Basis (how calculated)	Notes
NPS (Employee)	10% of (Basic + DA)	Employer 14% is not a deduction (shown separately in info)
CGEGIS	Fixed by group	Group Insurance
CGHS	By Pay Level	Health subscription
GPF (old pensioners only)	Employee's chosen %	Pre-2004 entrants
TDS (Income Tax)	As per slab after declarations	Changes with investments
Other Recoveries	HBA/Computer/Festival advance, Licence fee, Society/LIC, Audit recoveries	As applicable
Total Deductions	Sum of all above	

4) Net Pay

Field	Meaning
Net (Take-home) Pay	Gross Earnings – Total Deductions

5) DA vs DR (important distinction)

Term	Paid to	Base	Appears in
DA (Dearness Allowance)	Serving employees	% of Basic Pay (and on TA)	Employee pay slip
DR (Dearness Relief)	Pensioners/family pensioners	% of Basic Pension	Pension slip (not employee pay slip)

- 
- The **Government of India** is expected to **constitute the 8th Central Pay Commission (CPC)** next week, just ahead of the **Bihar assembly elections**.

The Commission will recommend **revised pay, pension, and allowances** for over **11.8 million (1.18 crore)** Central government employees and pensioners.

Parameter	Details
Commission Name	8th Central Pay Commission (CPC)
Approved By	Union Cabinet (January 16, 2025)
Expected Formation	Late October 2025
Coverage	11.8 million Central government employees and pensioners
Expected Timeline	6–12 months for report submission
Implementation	Likely from January 1, 2026 (retrospectively)
Head of Commission	Yet to be announced
Terms of Reference (ToR)	Finalized; includes revision of pay, pensions, and allowances

Pay Commission	Constituted	Implementation Year	Increase Granted	Fiscal Impact
6th CPC	2006	2008	40% hike	~0.77% of GDP
7th CPC	Feb 28, 2014	Jan 1, 2016	23.55% hike	₹1.02 lakh crore (0.65% of GDP)
8th CPC	2025 (expected)	Jan 1, 2026	TBD	Expected to be part of fiscal roadmap FY27–FY31

-
- The **Pay Commission** reviews and recommends:
 - Salary structure for Central Government employees (civilian & defense).
 - Pension revisions and Dearness Allowance (DA).
 - Pay scales, grade pay, and allowances (HRA, transport, etc.).
 - Periodic adjustments considering inflation and fiscal capacity.

Economic Implications

1. Boost to Consumption

- Salary and pension hikes increase household income → higher demand for goods and services → **short-term economic stimulus.**

2. Fiscal Burden

- Higher outgo strains government finances; affects fiscal deficit targets.
- Ripple effect on **state governments**, PSUs, and universities (which align pay scales).

3. Inflationary Concerns

- Demand surge can raise inflationary pressures in the short run.

4. Impact on Fiscal Deficit

- The 7th CPC increased the fiscal deficit from **3.9% in FY16 to 3.5% in FY17**, even after adjustments.



Aspect

For Employees

For Economy

For Government

For States

Impact

Higher salaries and pensions, DA revisions, and improved allowances

Increased consumption and liquidity in the market

Fiscal stress and pressure on deficit management

Likely to follow Centre's lead, amplifying financial burden



A background image showing a large industrial facility with numerous smokestacks emitting thick, dark smoke that fills the sky. The scene is hazy and atmospheric, with the smoke creating a layered, golden-brown glow. The text is overlaid in the center.

India's First National Policy on Geothermal Energy

- The **Ministry of New and Renewable Energy (MNRE)** has launched **India's first National Policy on Geothermal Energy 2025**, aiming to tap India's vast but underutilized geothermal potential to advance the nation's **Net Zero 2070 commitment**, ensure energy security, and diversify its renewable energy mix.

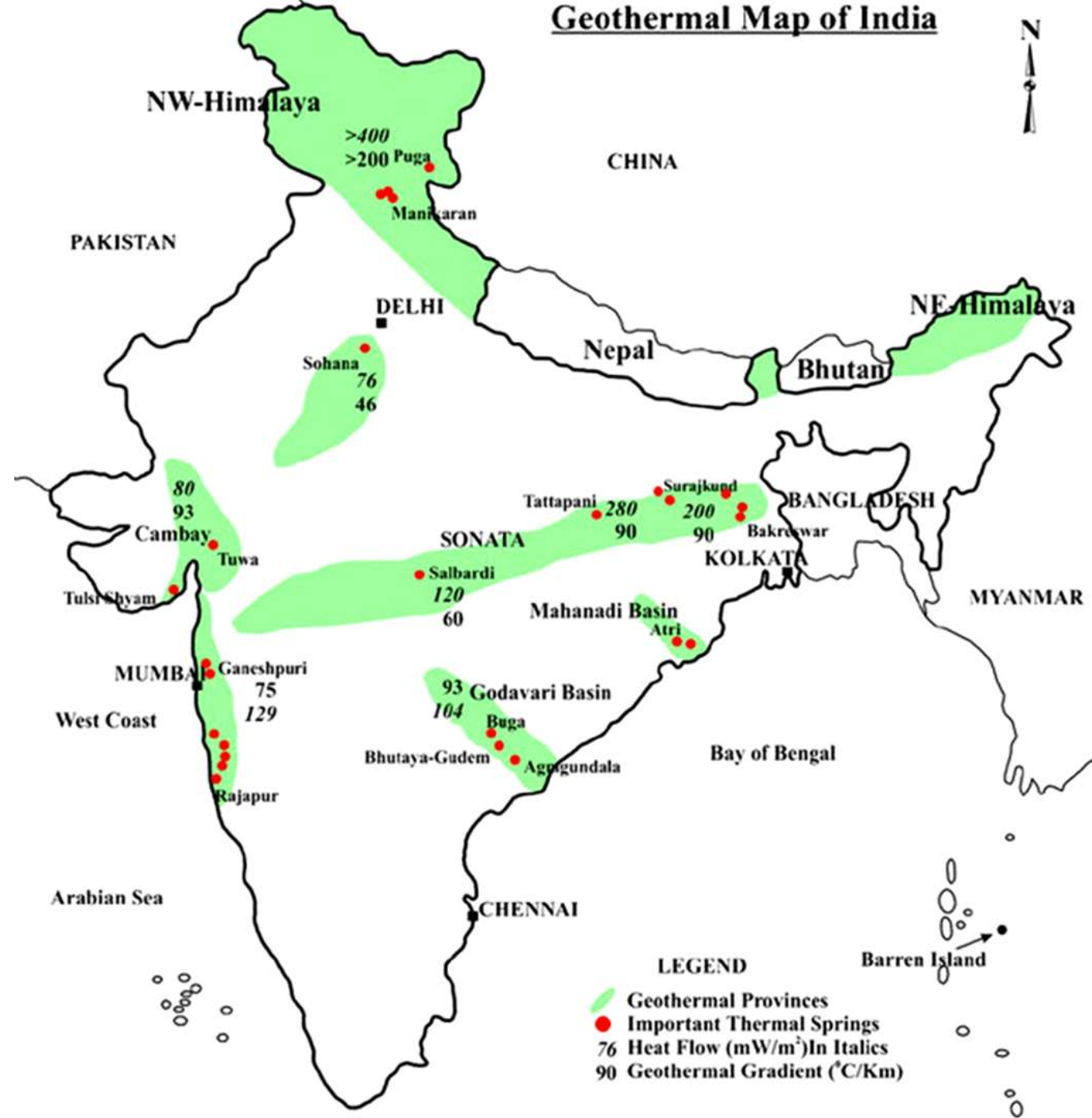


- **Broad Scope of Application:** The policy encompasses all major aspects of geothermal energy development including:
 - Geothermal Resource Assessment
 - Power Production Systems
 - Direct-use Applications
 - Ground (Geothermal) Source Heat Pumps (GSHP)
 - Utilization of **abandoned oil and gas wells** for geothermal energy extraction is encouraged.
 - **Extraction of valuable mineral** by-products like silica, borax, cesium, and lithium will be regulated under the **Mines and Minerals (Development and Regulation) Act (MMDR Act)**, 1957 with applicable royalties.
- **Promotion of Emerging Tech:** It also promotes **emerging and innovative technologies** such as:
 - Enhanced Geothermal Systems (EGS)
 - Advanced Geothermal Systems (AGS)
 - Geothermal energy storage
 - Offshore geothermal wells

What is Geothermal Energy?

- **About:** Geothermal energy refers to the **heat derived from the Earth's interior**, which can be used for heating buildings, and generating electricity.
 - It is considered a renewable energy source because the Earth continuously produces heat within its core.
- **India's Geothermal Potential:**
 - India's geothermal potential-spread across **381 hot springs and 10 geothermal provinces including Ladakh(Puga valley), Himachal Pradesh, Gujarat, Odisha, and Chhattisgarh.**
 - A potential of about **10,600 MW of geothermal power** has been estimated in the country.
 - Globally, geothermal energy contributes 15.4 GW (2019), led by the U.S., Indonesia, and the Philippines.
- **Sources:**
 - **Deep reservoirs:** Hot water or steam found deep within the Earth is accessed through drilling.
 - **Surface reservoirs:** Geothermal reservoirs located near the surface, especially in western U.S., Alaska, and Hawaii, are more easily accessible.
 - **Shallow ground:** The shallow layers of the Earth maintain a constant temperature (50–60°F), which can be used for direct heating and cooling applications.

Geothermal Map of India



The background features two large, overlapping, curved lines. One line is a light blue color and the other is a light green color. They are positioned in the top right and bottom left corners, framing the central text.

Odisha's Preetismita Bhoi Wins Gold and Sets World Record at Asian Youth Games 2025

Odisha's rising weightlifting star Preetismita Bhoi has brought glory to India by winning the gold medal in the 44 kg category at the 3rd Asian Youth Games held in Bahrain.

The 16-year-old from Dhenkanal not only secured the top podium finish but also created new Asian and World records in the clean and jerk event.

The background features two large, overlapping, curved lines. One line is a light blue color and the other is a light green color. They are positioned in the top right and bottom left corners of the image, framing the central text.

East Timor Becomes ASEAN's 11th Member

East Timor, also known as Timor-Leste, has officially joined the Association of Southeast Asian Nations (ASEAN) as its 11th member, concluding a long journey of aspiration and diplomacy that began nearly five decades ago.



The announcement was formalised during the ASEAN annual summit held in Kuala Lumpur, where the nation's flag was ceremonially placed among those of its regional partners.





The background of the image is a dramatic sky filled with large, dark, and textured clouds. The clouds are illuminated from below, creating a strong contrast between the dark upper portions and the lighter, orange-tinted lower portions. At the bottom of the frame, two dark, cylindrical industrial smokestacks are visible, one on the left and one on the right, both emitting thick plumes of smoke that merge into the larger cloud formations above. The overall atmosphere is somber and industrial.

Russia Unveils Nuclear-Powered Burevestnik Missile with 'Unlimited Range'

Russia has confirmed the successful final test of the Burevestnik, a nuclear-powered cruise missile claimed to have “unlimited range” and the ability to evade missile defence systems.

President Vladimir Putin hailed the weapon as a “unique creation that no one else in the world possesses,” marking a major step in Moscow’s advanced weapons programme amid continued tensions over the Ukraine conflict

- **Breakthrough Nuclear Propulsion Technology**

- The Burevestnik — also known in Russia as the 9M730 and by NATO as the SSC-X-9 Skyfall — uses a miniature nuclear reactor as its power source, granting it potentially limitless operational range.

- This system allows the missile to fly at low altitudes for extended durations, manoeuvring unpredictably to bypass air defences.

- According to the Russian Ministry of Defence, the propulsion unit becomes active only after launch, once a liquid-fuel booster rocket accelerates the missile to cruising speed.

- **Operational Tests and Strategic Implications**

- During its most recent test on October 21, the Burevestnik reportedly flew for 15 hours and covered 14,000 kilometres — not its maximum capacity, according to Russian military chief Valery Gerasimov.

- The missile's ability to carry nuclear warheads and operate indefinitely poses new challenges for global missile defence frameworks. Putin has instructed the Russian Armed Forces to begin constructing deployment infrastructure, signalling imminent operational readiness.

The background of the image is a deep blue underwater scene filled with numerous jellyfish of various sizes and species. Some jellyfish have prominent, translucent bells, while others are more delicate with long, trailing tentacles. The lighting is soft, creating a serene and mysterious atmosphere. The text is centered over this background.

China Unveils 'Ghost' Jellyfish Drone for Stealth Underwater Surveillance

Chinese researchers have developed a fully transparent, jellyfish-shaped bionic robot designed for stealthy underwater observation and data collection.

This new robotic innovation, often described as a “ghost” drone, demonstrates China’s growing expertise in biomimetic engineering and underwater robotics.



China's CR450 Becomes World's Fastest High- Speed Train

The background image shows a high-speed train track curving through a cityscape at dusk. The tracks are multiple parallel lines that curve into the distance. The city buildings are visible in the background, and the sky is a mix of orange and blue, suggesting sunset or sunrise. The overall scene conveys a sense of speed and modern infrastructure.

China has achieved another milestone in rail technology as its newly developed CR450 bullet train set a world record by reaching a staggering speed of 453 km/h during pre-service testing.

The CR450, unveiled on the Shanghai–Chengdu high-speed corridor, represents a major leap forward for China's already dominant high-speed rail industry and is expected to enter commercial service in 2026 with an operating speed of 400 km/h.

Uttarakhand to Impose Green
Tax on Vehicles from Outside
States from December 2025

Uttarakhand is set to introduce a green tax on all vehicles entering the state from December 2025 as part of its broader environmental conservation and pollution control efforts.



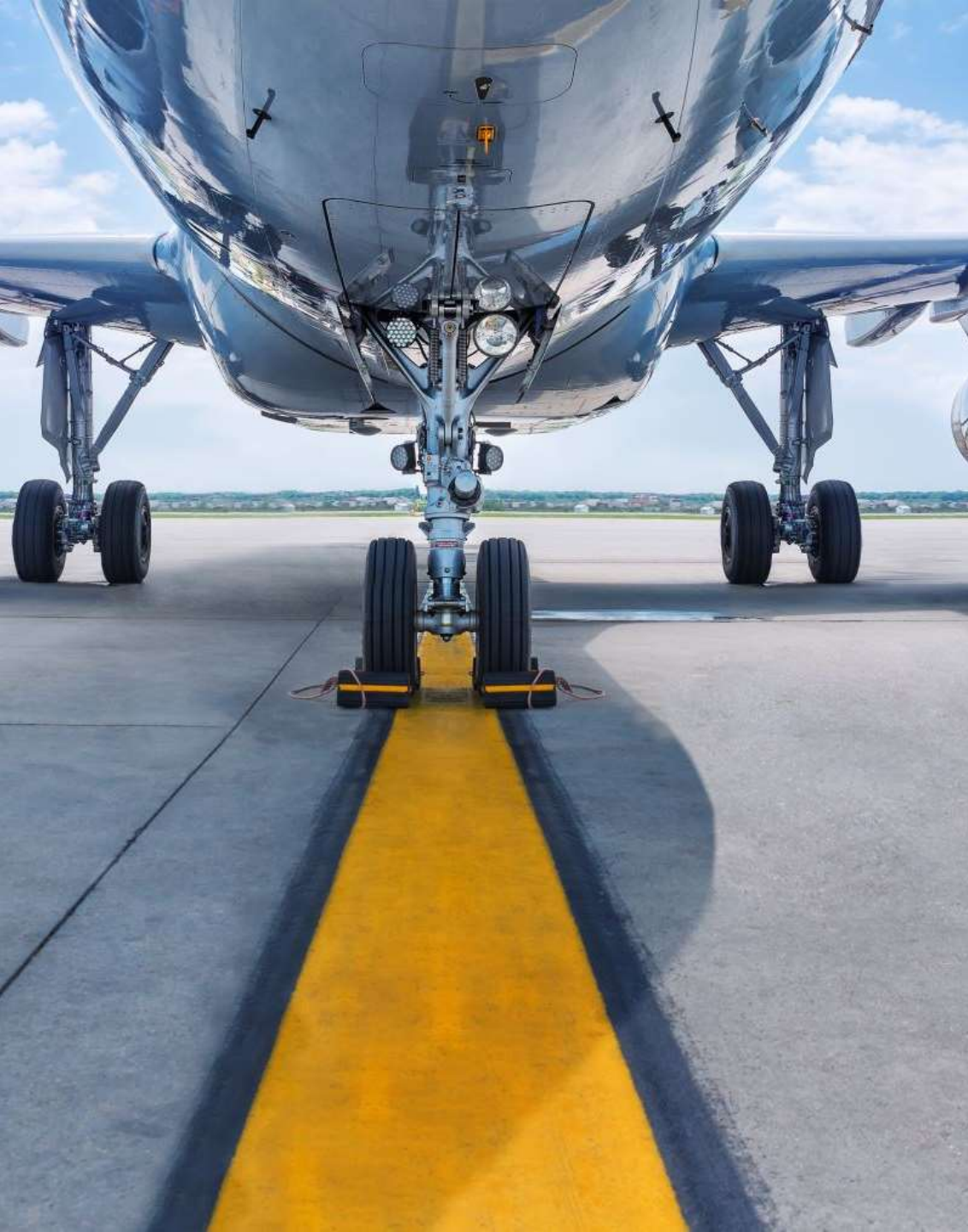
The initiative, led by the state transport department, aims to protect the Himalayan ecosystem and maintain cleanliness across popular tourist destinations.

-
- According to state officials, varying rates have been fixed for different categories of vehicles: ₹80 for small vehicles, ₹250 for small cargo vehicles, ₹140 for buses, and between ₹120 and ₹700 for trucks depending on their weight.
 - The collection process will be fully automated, using Automatic Number Plate Recognition (ANPR) cameras installed at 37 entry points along the state borders.
 - These cameras will capture vehicle registration numbers and transmit the data to a vendor appointed by the transport department.
 - From there, the vendor's system will cross-check the information with the National Payments Corporation of India (NPCI) database, identify the owner's wallet, and automatically deduct the tax amount, which will then be credited to the state's transport department account.

India Becomes First Non-NATO
Nation to Participate in Spain's
Ocean Sky 2025

The Indian Air Force (IAF) has made history by becoming the first non-NATO nation to participate in Exercise Ocean Sky 2025, a high-intensity multinational air combat drill hosted by the Spanish Air Force at Gando Air Base, Spain, from October 20 to 31, 2025.

The exercise underscores India's growing global military footprint and reinforces its role as an emerging aerospace power.



- India's procurement of 56 C-295 aircraft from Airbus Spain marks the first-ever 'Make in India' initiative in the defence aviation sector. The first aircraft was formally handed over on September 13, 2023, in Seville, in the presence of Air Chief Marshal VR Chaudhari.
- The growing bilateral partnership extends beyond procurement, with the 5th Joint Working Group on Defence Cooperation held earlier this year in New Delhi to expand joint projects.

Cloud Seeding



Cloud seeding is the process of spreading either dry ice or more commonly, silver iodide aerosols, into the upper part of clouds to try to stimulate the precipitation process and form rain.

It uses planes to spray clouds with chemicals to condense smaller particles into larger rain droplets.



Cloud Seeding Methods:

Hygroscopic Cloud Seeding:

- › Disperses salts through flares or explosives in the lower portions of clouds. The salt grows in size as water joins with them.

Static Cloud Seeding:

- › It involves spreading a chemical like silver iodide into clouds. The silver iodide provides crystal around which moisture can condense. Silver iodide essentially makes rain clouds more effective at dispensing their water.

Dynamic Cloud Seeding:

- › It aims to boost vertical air currents, which encourages more water to pass through the clouds, translating into more rain.

Applications:

Agriculture:

- › It creates rain, providing relief to drought-stricken areas. 'Project Varshadhari' in Karnataka is an example.

Power Generation:

- › Augment production of hydroelectricity during the last 40 years in Tasmania, Australia.

Water and Air Pollution Control:

- › Settle down toxic air pollutants through the rain.

HOW CLOUD SEEDING WORKS

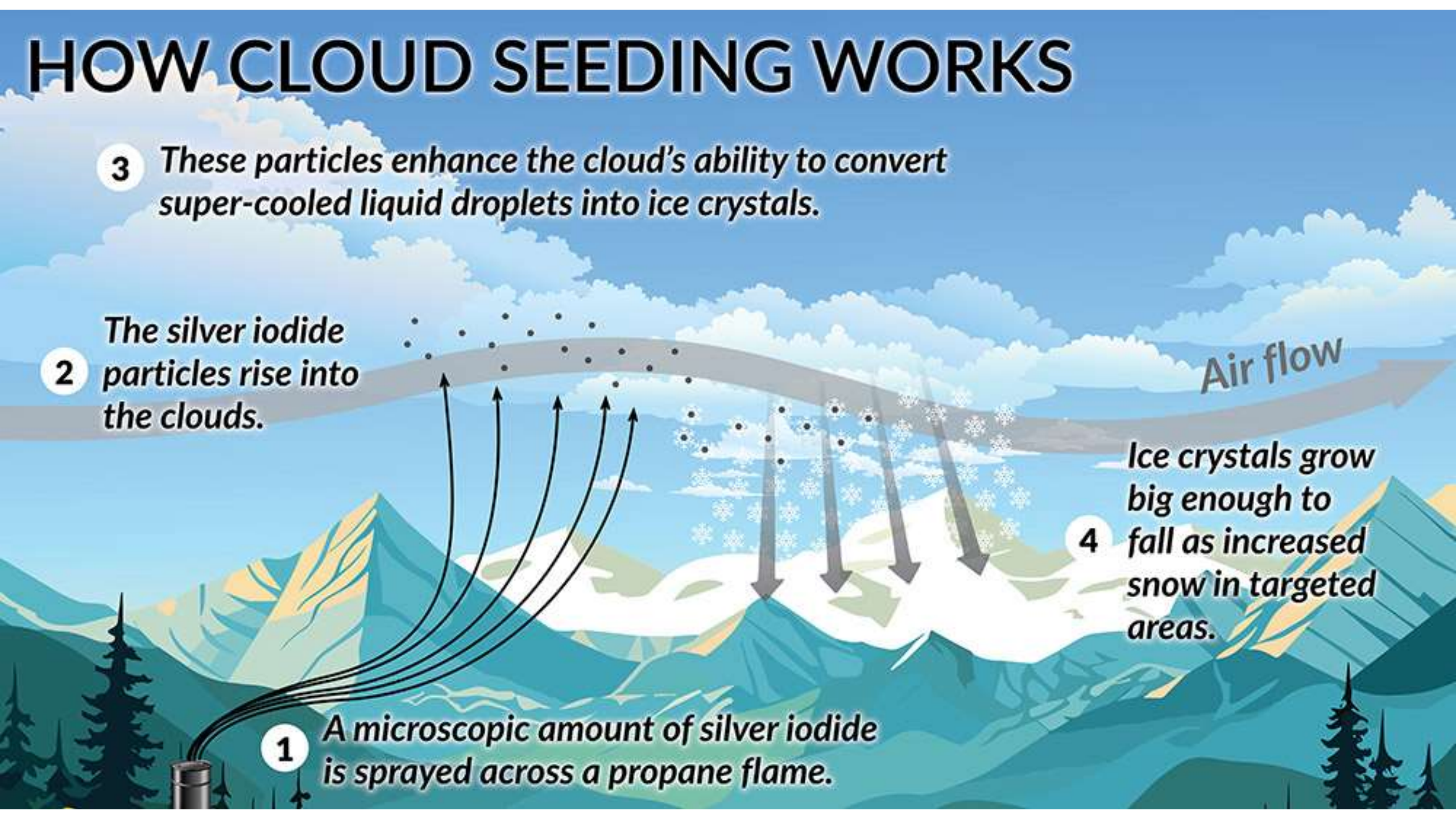
3 These particles enhance the cloud's ability to convert super-cooled liquid droplets into ice crystals.

2 The silver iodide particles rise into the clouds.

4 Ice crystals grow big enough to fall as increased snow in targeted areas.

1 A microscopic amount of silver iodide is sprayed across a propane flame.

Air flow



Cloud seeding works if done correctly

Cloud seeding experiments were carried out in Solapur city, which gets less rainfall, from June to September in 2018 and 2019

- There was 18% increase in rainfall over a 100 sq.km area in Solapur city due to cloud seeding

- Approximate cost of producing water through cloud seeding was 18 paise per litre. The cost can drop by over 50% if indigenous seeding aircraft are used

- 20-25% of cumulus clouds produce rainfall if cloud seeding is done correctly

- Cloud seeding alone cannot mitigate droughts but can help produce additional rainfall that can partially address water requirements

- Calcium chloride flare was used for seeding the clouds. The seeding was done at the base of the warm convective clouds and at a time when the clouds were growing

- The study was carried out for two years to understand the microphysics and characteristics of convective clouds that can be targeted to enhance rainfall

- The work provides elaborate protocols and technical guidance to plan and conduct cloud seeding in India

Not all:
As microphysics of clouds vary widely, not all clouds produce rainfall through cloud seeding



Word of the day

Overture:

orchestral music played at the beginning of an opera or oratorio; something that serves as a preceding event or introduces what follows; a tentative suggestion designed to elicit the reactions of others

Synonyms: preliminary, prelude, approach

Usage: *The talks were an overture to a long sermon.*

Pronunciation: newsth.live/overturepro

International Phonetic

Alphabet: /əʊvətʃʊə/, /əʊvətʃ(ʊ)ə/



Thank you 😊

