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KPR IAS Academy

Institute for IAS, IPS, IFS and TNPSC Exams

No. 5, AKS Nagar, Near Gandhi Park, Coimbatore - 641 001

GS Paper I – Geography

Date: 14.05.26

What has the IMD announced ahead of this year's monsoon?

Why are the 15 States in the monsoon core zone the first to receive block-level forecasts?

Jacob Koshy

The story so far:

The India Meteorological Department on Tuesday unveiled a new forecast system that, for the first time, will generate block-level forecasts of the monsoon's arrival. The system covers 15 States and one Union Territory, taking in 3,196 blocks – roughly half of India's 7,200-odd blocks. Until now, monsoon onset estimates have been available at best at the State or district scale.

Why does this granularity matter?

The conventional district-scale forecast obscures a basic feature of the Indian monsoon: its patchiness. The arrival dates familiar to most people – around June 10 for Mumbai, June 29 for Delhi – describe the monsoon reaching a city or a district boundary. But within the same district, several blocks and villages can remain rainless even after the monsoon has

officially "arrived." For a farmer deciding when to sow, knowing that the monsoon has reached the district headquarters is of limited use if her own block is still dry. Hyper-local forecasts have been a long-standing aim of the IMD precisely to close this gap and help farmers time their sowing.

How does the new system work?

At its core are two forecasting models whose outputs are "blended" to sharpen accuracy. From the date of the monsoon's onset over Kerala, the system draws on AI-based analysis, the IMD's trove of nearly a century of meteorological data, and global weather models to project the monsoon's itinerary at a much finer scale than before.

The blending framework was developed by the Indian Institute of Tropical Meteorology, a Pune-based research institute under the Ministry of Earth Sciences. It issues probabilistic forecasts for the next four weeks.

Why these particular 15 States?

The States covered are part of what meteorologists call the monsoon core zone. As M. Ravichandran, Secretary in the Ministry of Earth Sciences, put it at a press briefing, these are "the regions that are largely rainfed and are most sensitive to southwest monsoon dynamics." They are also the regions where forecast errors translate most directly into crop losses. The ambition is eventually to extend block-level forecasts across all of India, but Mr. Ravichandran said this would require a denser network of observational data than is currently available in many States.

How well will it work in its first season?

The system has cleared two trial runs, but this year will be a stiff test. The IMD and global models are expecting "below normal" rainfall from July onwards, in the light of a developing El Niño – a pattern in the Pacific Ocean that has frequently

coincided with weak monsoon rains in India. Forecasting a weak, erratic monsoon at block resolution can be harder than forecasting a robust one.

What is the separate announcement about Uttar Pradesh?

The IMD also launched a 10-day monsoon forecast model specifically for Uttar Pradesh at a resolution of 1 km – meaning the model resolves weather features down to that scale. This was possible because of Uttar Pradesh's unusually extensive network of automatic weather stations, whose observations allowed a weather model called Mithuna, which natively runs at 12.5 km, to be "downscaled" to 1 km. Mr. Ravichandran said other States were being encouraged to share their station data with the IMD so that similarly high-resolution forecasts could be produced for them.

What is the broader picture?

Two trends are converging. One is a push, driven by the agriculture ministry, to make forecasts agriculturally actionable rather than merely meteorologically accurate. The other is the IMD's increasing willingness to combine traditional physics-based models with AI and to lean on State-level observational networks where they exist. Block-level forecasting is the first concrete product of that combination – and the 2026 monsoon, El Niño and all, will be its proving ground.

THE GIST

The IMD has launched a new block-level monsoon forecast system using AI-based analysis, meteorological data and global weather models to provide hyper-local forecasts for farmers in the monsoon core zone.

The 2026 monsoon will test the new blended forecasting framework as India faces the possibility of below-normal and erratic rainfall linked to a developing El Niño.





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GS Paper II – Governance

Why did NTA's 'Zero Error' policy fail?

Why has NEET landed in controversy again? How has NEET faced repeated paper leak allegations? Why are paper leak concerns persisting despite NTA's safeguards? What reforms were proposed after the 2024 row? Can NEET shift to a computer-based format?

EXPLAINER

Maitri Porecha
Srinidhi Madurai K.

The story so far:

Nine days after nearly 22 lakh medical aspirants wrote the National Eligibility cum Entrance Test (NEET), which paves the way for admission to medical colleges, they were in for a rude shock. On May 12, the National Testing Agency (NTA) stated that the exam had been 'compromised', and that there would be a re-test.

The decision has created a furore among students across the country, with the Federation of All India Medical Association (FAIMA) moving the Supreme Court with a plea to either replace NTA or conduct major restructuring reforms.

What controversies has NEET faced over the years?

The decision to conduct re-examination for nearly 22 lakh students is unprecedented in NEET's history, but concerns over paper leaks are not new. In 2024, the declaration of the NEET-UG results coincided with the announcement of national election results. For the first time, 67 out of the top 100 scorers received full marks. In comparison, only two students achieved full marks in 2023, while none did so in 2022. A high concentration of students achieving full marks led to massive rank inflation, with multiple aspirants who had scored high marks competing for a single seat in reputed medical colleges.

In 2024, 13 lakh students qualified and were competing for approximately 1.1 lakh MBBS seats across government and private medical colleges. Allegations of a paper leak later surfaced, with investigations revealing that 155 students had allegedly benefited from leaked question papers. Students had then demanded a re-examination, but their request fell on deaf ears.



Nearly 22 lakh medical aspirants wrote the National Eligibility cum Entrance Test. KV.S. GRI

Why has NTA's 'Zero Error' promise fallen short?

With repeated cases of paper leaks surfacing year after year, the NTA appears not to have learnt from its chequered past. The overhaul of NTA merely remained lip service. After the 2024 debacle, IAS officer Subodh Kumar Singh, then Director General of the NTA, was removed from the post and transferred to the Ministry of Steel as Additional Secretary. He is currently serving as Principal Secretary to the Chief Minister of Chhattisgarh.

Following his transfer, the NTA remained without a full-time chief for over a year, with retired 1985-batch IAS officer Pradeep Singh Kharola holding 'additional interim charge'. In March this year, former IndiaAI Mission CEO Abhishek Singh took charge of NTA and declared that there would be a 'Zero Error, Zero Tolerance' policy.

After the NEET-UG 2026 examination was conducted on May 3, the NTA underscored on social media the "smooth manner" in which the exam had been held across 5,432 centres, with 22.79 lakh candidates appearing. It stated that more

than two lakh personnel were involved in conducting the examination.

The agency also claimed that there was end-to-end secure handling of confidential materials under sealed protocols, GPS-enabled vehicles with police escorts for the movement of examination material, CCTV surveillance at all examination centres (up to 1,50,000), with feeds linked to centralised control rooms, mandatory frisking through high-sensitivity metal detectors before entry, with strengthened manpower and equipment at every centre, Aadhaar-based biometric authentication to prevent impersonation and real-time monitoring through centralised control systems.

Mr. Abhishek Singh told *The Hindu* that the NTA had blocked 120 Telegram channels for circulating fake question papers and rumours, aimed at defrauding candidates.

Despite these measures, investigations by the Rajasthan Police revealed that a "guess paper" containing 120 out of 410 questions from the final examination had allegedly been circulating for nearly a month before the exam, a massive

oversight by the NTA.

What did the Radhakrishnan panel recommend?

Following the NEET-UG 2024 controversy, the Ministry of Education formed a high-level committee headed by former ISRO chairman K. Radhakrishnan.

However, the committee's recommendations were not followed in letter and spirit by either the NTA or the Ministry.

The report, submitted in October 2024, highlighted the pen-and-paper testing (PPT) model as 'a major security risk'. It recommended a transition to Computer-Based Testing (CBT) format, similar to the Joint Entrance Examination (JEE) Main, which is also conducted by NTA.

The committee also recommended Computer-assisted Secure PPT, where encrypted papers are delivered digitally to exam centres and printed locally just before the test. NTA has made no claim of implementing it. Instead, it relied on GPS vehicles and police escorts.

Mr. Abhishek Singh said that the NTA has the capacity to conduct CBT tests for only about 1.5 lakh students in a day. He added that shifting NEET to CBT mode is a 'high-level ministry call' involving both the Ministries of Health and Education.

In 2024, the NTA floated a tender to increase its capacity of computer labs, but the process could not be finalised. In 2026, the NTA has around 552 CBT centres, which are primarily used for JEE and CUET examinations. Since the Radhakrishnan Committee report came out in 2024, the NTA has not been able to augment its infrastructure to add more centres.

Multiple proposals to administer NEET-UG exams online were sent to the Ministry of Education, but in vain, officials at the NTA told *The Hindu*. "Talks for administering the NEET-UG in CBT mode have been ongoing for at least five years now. The recent paper leak fiasco should serve as an eye-opener to change the format of the exams," an official said.

THE GIST

▼ The NTA announced a re-test for nearly 22 lakh NEET aspirants after the exam was found to be "compromised", triggering outrage and fresh concerns over paper leaks.

▼ Despite "Zero Error, Zero Tolerance" claims and multiple security measures, a "guess paper" containing 120 of 410 questions allegedly circulated before the exam, renewing calls for reforms and a shift to computer-based testing.



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GS Paper II – Polity

CBI Director Praveen Sood gets another one-year extension

Tenure to extend for a year beyond May 24; Centre's decision comes after panel meeting on Tuesday; Rahul accuses govt. of 'institutional capture'

The Hindu Bureau
NEW DELHI

The Central Bureau of Investigation (CBI) Director, Praveen Sood, has been given another one-year extension, as approved on Wednesday by the Appointments Committee of the Cabinet (ACC) based on the recommendations of the Selection Committee.

The ACC order stated that Mr. Sood's tenure has been extended for a year beyond May 24, 2026. The 1986-batch Indian Police Service (IPS) officer was earlier granted one-year extension in May 2025 after completion of his two-year term as CBI chief.

On Tuesday, a high-powered committee chaired by Prime Minister Narendra Modi met to decide on the appointment of the next CBI Director. During the meeting, Leader of Opposition in Lok Sabha Rahul Gandhi submitted a dissent note, accusing the government of "institu-



Praveen Sood was earlier granted one-year extension in May 2025 after completion of his two-year term as CBI chief. PTI

tionnal capture" of the agency to target political opponents, journalists, and critics.

Mr. Gandhi shared his dissent note on his X handle. "Your government has repeatedly misused the CBI, intended to be India's premier investigative agency, to target political opponents, journalists, and critics. It is to prevent such institutional capture that the Leader of Opposition is included in the Selection Committee. Regrettably, you have continued to deny me any meaningful role

in the process," he said.

He said despite repeated written requests, he was not provided with the self-appraisal or 360-degree reports of eligible candidates.

"Instead, I was expected to examine the appraisal records of 69 candidates for the first time during the Committee meeting. The 360-degree reports were denied to me outright. A detailed review of these records is crucial to assess each candidate's history and performance," said Mr. Gandhi.



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GS Paper III – Economy

Government doubles duty on imports of gold, silver

T.C.A. Sharad Raghavan
NEW DELHI

The Centre has doubled the effective tax paid on the import of gold and silver to a total of 18.4% from the previous 9.2%. The changes, which came into effect on Wednesday, were made through two separate notifications issued late on Tuesday night.

According to sources in the government, the decision was taken against the backdrop of the impact of the West Asia crisis on India's current account deficit (CAD). The CAD is the margin by which a country's total imports of goods, services, and transfers exceeds its exports.

However, industry players and experts, said this "retrograde" and "blunt" decision is not likely to impact Indians' demand for gold.

It will not only encourage a shift to smuggling, since the Indian appetite for gold is largely cultural, but will also have other negative effects on employment, they said.

The Ministry of Finance has not yet released an official statement on the duty hikes or its justifications.

Previously, the basic customs duty on gold and silver stood at 5%, with a 1% Agriculture Infrastructure and Development Cess (AIDC), and a 3% Integrated Goods and Services

Bullion burden

The decision comes soon after Prime Minister Modi's austerity appeal to the public to reduce gold purchases

Tax	Earlier	Now
Basic customs duty	5%	10%
Agriculture Infrastructure and Development Cess	1%	5%
Integrated Goods and Services Tax*	3%	3%
Total	~9.2%	~18.4%



Note: IGST is applicable on the assessable value of the gold, which includes the Cost, Insurance, and Freight (CIF) value and the basic customs duty

Tax (IGST) rate on the total assessable value of the imports, which includes the cost, insurance, and freight price, and the applicable basic customs duties, taking the effective import tax to about 9.2%. Now, the customs duty has been hiked to 10%, and the AIDC has become 5%, taking the effective tax rate, including the IGST, to about 18.4%.

The decision comes soon after Prime Minister Narendra Modi's exhortations to the public to reduce gold purchases for at least a year, among other actions, to help protect India's foreign exchange reserves and the rupee exchange rate.

'Prudent management'

"The current geopolitical situation has created significant volatility in global crude oil markets and international shipping routes," a government source explained. "As a large importer of crude oil,

India remains vulnerable to elevated energy prices and supply-side disruptions, which can increase the import bill, exert pressure on inflation, and the CAD."

"In such circumstances, prudent management of the country's external sector becomes essential," they added.

They further said that the government was prioritising India's foreign exchange resources towards essential imports such as crude oil, fertilizers, industrial raw materials, defence requirements, critical technologies, and capital goods. "In contrast, precious metals, while culturally and financially significant, are predominantly consumption and investment driven in nature," they said. "Such imports involve substantial outflow of foreign exchange."

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GS Paper III – Economy

MSP for kharif crops hiked; farm groups flag trade deal impact

The Hindu Bureau

NEW DELHI

The Cabinet Committee on Economic Affairs on Wednesday announced the minimum support price (MSP) for kharif crops for the 2026-27 season, with the MSP for paddy increased by ₹72 per quintal to ₹2,441 for the common variety.

Union Minister Ashwini Vaishnaw said the revised

MSPs would ensure returns of about 50% over the cost of production of each crop.

For A-grade paddy varieties, the revised MSP is ₹2,461 per quintal.

Farmer organisations criticised the new rates, saying they do not factor in the possible “disastrous impact” of the India-U.S. trade deal and other free trade agreements on the agriculture sector.



GS Paper III – Science & Technology

provided by the U.S. NIH shows a human T cell (blue) under attack by HIV (yellow). AP

Revvig up immune cells might help fight HIV: study

Associated Press

Scientists are tweaking a powerful cancer therapy in hopes it could fight HIV instead, by supercharging patients' own immune cells.

On Tuesday, researchers said a single dose of those revved-up cells strongly suppressed HIV in two people – one for nearly a year and the other for nearly two years – without requiring their usual medicines.

Larger and longer studies are needed to prove if what's called CAR-T cell therapy might really offer long-lasting help for HIV, cautioned Dr Steven Deeks of the University of California, San Francisco, who led the research.

"We find the fact that two people have had such a really sustained response provocative," he said. "There is a real need for a one-and-done, safe and scalable cure ... and this is one of the

Researchers have long hunted an elusive cure, pursuing such clues as a rare gene mutation that makes some people naturally resistant to HIV

strategies that we're pursuing." The data is being presented at a meeting of the American Society of Gene and Cell Therapy in Boston.

There are nearly 40 million people living with HIV around the world. Today's medicines have turned the virus that causes AIDS from a fast killer into a manageable chronic disease, often keeping the virus at undetectable levels, but only if people can afford the drugs and stick with them. The virus hides out in reservoirs in the body and rebounds fast if people stop treatment.

Researchers have long hunted an elusive cure, pursuing such clues as a rare gene mutation that makes some people naturally resistant to HIV or how a handful of HIV patients who also had certain cancers were declared cured or in long-term remission after receiving a stem cell transplant, something too risky for most people.

CAR-T therapy involves taking immune soldiers called T cells out of a person's blood, genetically engineering them into "living drugs" and infusing them back into the patient. They're widely used to cure certain types of cancer and are being studied for other diseases.

For HIV, scientists at the nonprofit drug developer Caring Cross created CAR-T cells with dual features. They're programmed to better find and kill HIV-infected cells – and engineered with protection against infection by the very virus they're supposed to fight.

With that added armor, they should be able to reproduce enough to keep HIV in check, said Caring Cross executive director Boro Deopuric.

Deeks' early-stage experiment tested different dosing strategies in people who stopped their HIV medicine the day they received their CAR-T cells. There were no serious side effects. The first three recipients showed no response and resumed their usual medicines.

Six others received a small amount of chemotherapy to make space for the new T cells. Those two strong responders saw their HIV drop to undetectable levels, inching up only occasionally when the CAR-T cells presumably got to work again. A third patient had a temporary response and resumed regular HIV treatment.

Those three patients all had started their original HIV treatment soon after they'd been infected, Deeks said. That makes sense because people treated early tend to have less HIV hiding in the body and a healthier immune system.

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