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INTERNATIONAL

NEPAL WANTS CLIMATE COMPENSATION, PUTTING MAJOR EMITTERS ON THE HOOK

"We are paying the ultimate price for a global crisis we did not create," Nepal's Foreign Minister Shisir Khanal declared on September 1, after a catastrophic glacial collapse that killed over 1,200 people. But in the aftermath of this "Himalayan tsunami", Nepal is doing something that is quite unprecedented. Instead of just issuing the usual appeals for humanitarian aid, Kathmandu has launched a diplomatic offensive. They are demanding direct climate compensation from the world's three biggest emitters: the United States, China, and India. By shifting foreign policy from seeking charity to enforcing legal liability, Nepal has turned a devastating tragedy into a global test of climate justice, which forces the international community to confront the harsh limits of adaptation.

The third pole paradox

The immediate challenge before these major emitters is reconciling the glaring climate injustice that Nepal actually represents. Nepal only contributes a negligible 0.1% of global greenhouse gas emissions, and generates almost all of its electricity from renewable hydropower sources. And yet, its geography places it at the absolute ground zero of global warming. The Hindu Kush Himalayas, often referred to as the "Third Pole", are warming at nearly twice the global average, melting the glaciers at 10 times their historical norms.

This accelerated melt is not occurring in a vacuum, however. It is driven by global "teleconnections", meaning that warming in the North Eurasian Arctic disrupts planetary waves and the stratospheric polar vortex, which directly destabilises the South Asian monsoon. The August 26 disaster, which was triggered by a massive glacial collapse on the Nepal-China border, demonstrated how extreme events in the cryosphere can cascade down into densely populated valleys. The major powers basically mistook Nepal's crisis for a localised weather event that could be managed with temporary relief. But the Himalayan ecosystem is sustained by a delicate climatic balance that is now failing under the weight of Northern Hemisphere pollution.

Nepal's strategy for economic sovereignty rested heavily on harnessing its 43,000 MW of commercially viable hydropower to become a regional energy exporter. It had only recently achieved a net-exporter status. The August floods, however, crippled approximately 10% of the country's installed capacity, wiping out older, surface-level plants like Devighat while completely burying under-construction projects in mud. Overnight, a nation that was banking on energy exports to narrow its trade deficit with India was forced to halt its exports and instead import power to survive the winter.

Rebuilding is going to require climate-resilient, underground engineering, driving up future project costs by 10% to 12%. The total damages are estimated between \$4 billion and \$7 billion, which amounts to roughly a tenth of Nepal's entire GDP.

In its pursuit of climate justice, Nepal has explicitly named the United States, China, and India as the primary architects of its misery. The case against the U.S. is anchored in historical liability, because America accounts for over 20% of cumulative global emissions since 1850.

China, which is the current top annual emitter, faces a different sort of indictment: geographic proximity and upstream negligence. During a bilateral meeting in Kathmandu back in May 2026,



Nepali officials pleaded for real-time data-sharing on glacial lakes and avalanches from the Tibetan region. Beijing provided only heavy rain forecasts in response. When the glacial lake burst on August 26, the lack of transboundary early-warning systems proved to be fatal.

India, meanwhile, presents an “equity paradox”. For decades now, New Delhi has shielded itself in global forums by citing its low per-capita emissions and demanding “common but differentiated responsibilities” from the West. Nepal is now taking that exact logic and applying it regionally: as South Asia’s economic and emitting giant, India owes a differentiated responsibility to its smaller, vulnerable neighbours. Yet, India’s geopolitical manoeuvring, such as refusing to buy power from Nepali projects built by Chinese contractors, has only complicated Nepal’s recovery efforts, expanding the friction horizontally across the region.



DreamIAS



NATIONAL

STATE OF EXCEPTION

India must not normalise a culture of discrimination

In its first review by the U.N. Committee on the Elimination of Racial Discrimination (CERD) since 2007, India has elicited an expression of “grave concern” about reports of the law enforcement apparatus resorting to violence — physical and otherwise — against minority ethnic and ethno-religious groups, Dalits, and non-citizens over the years. The Committee also noted that India, which ratified the International Convention on the Elimination of All Forms of Racial Discrimination in 1968, has not provided detailed and updated information about the state’s inquiries and sanctions arising from allegations of such violence. While the government has told CERD that caste bias falls outside Article 1 of the convention because caste is not synonymous with race, CERD has allowed all forms of discrimination based on inherited status. The Committee’s concerns also span the practice of manual cleaning of sewers despite a law banning it; hate speech against, poor living conditions of, and the mass refoulement of Rohingya Muslims; the mass deprivation of citizenship via the National Register of Citizens; large-scale deletions from the Special Intensive Revisions of electoral rolls; the government’s use of the FCRA, UAPA, AFSPA, and PMLA instruments to hamper the work of civil society organisations; the Bharatiya Nyaya Sanhita not expressly criminalising racist hate speech; and the Forest (Conservation) Amendment Act exempting “national security” projects from consultative decision-making.

Given these issues and the fragmented recourse available, the lack of suitably disaggregated data on disenfranchised communities, including due to a much-delayed Census and the slow release of NCRB data, has transcended the bounds of administrative lethargy to actively impeding independent checks of India’s claims about fighting caste- and faith-based discrimination. In fact, India has been implementing “special measures” based on 2011 Census data, which could mask a regression in the socioeconomic status of Scheduled Tribes and Adivasis. Together with the Global Alliance of National Human Rights Institutions recommending the downgrade of the NHRC last year, following the government appointing police officers to investigative roles and a lack of pluralism, CERD is effectively stepping into a vacuum. The road ahead remains clear, from restoring the NHRC’s independence and criminalising hate speech to supportive affirmative action, collecting and publishing disaggregated data, and improving the transparency of the electoral roll revisions, and strengthening enforcement overall. But if the government’s attempted use of a technicality to keep the issues of 200 million Dalits a “domestic matter” and avoid international accountability — and its dismissal of CERD’s concerns as politically motivated — is any guide, the task continues to fall to civil society to exert influence in multilateral fora and sustain political, legal, and administrative resistance to government choices that normalise India’s sadly widespread culture of discrimination of all sorts.

WITH INDIA REJECTING HAGUE COURT ORDER, THE ROAD AHEAD

The Permanent Court of Arbitration, adjudicating on a dispute raised by Pakistan on the Indus Waters Treaty, has passed two more orders against India. It has ruled that India’s decision to put the Treaty in ‘abeyance’ was “not permissible under the Treaty or other applicable rules of international law”, and therefore the Treaty — which governs the sharing of six transboundary river waters between the two countries — remained “fully in force” and India continued to be bound by it.

**Key Takeaways:**

— Additionally, the Court also directed India to halt construction work at the Ratle Hydroelectric Project, as requested by Pakistan, till the technical dispute over it is finally settled.

— The two orders were expected by the Indian government. India has not been participating in this arbitration process, underway for four years, having maintained that the Court was constituted in violation of the provisions of the Treaty.

— A neutral expert had already been appointed to adjudicate on the same issue, and the Treaty does not allow parallel resolution processes on the same dispute. As such, India said the Court lacked legitimacy and refused to recognise its existence or proceedings. It did not appoint its two arbitrators on the Court.

— Nonetheless, having been constituted, the Court went ahead with its proceedings, with two arbitrators appointed by Pakistan, and three ‘umpires’ nominated by institutions mentioned in the Treaty.

— India’s reaction to the two orders on Monday was, therefore, on expected lines. “This so called Court was constituted by the World Bank in patent breach of the terms of the Treaty and India categorically rejects its so-called award... India has never recognised the existence in law of this illegally-constituted and so-called Court of Arbitration... India’s decision to hold the Indus Waters Treaty in abeyance remains in force,” the Ministry of External Affairs said.

Do You Know:

— India and Pakistan signed the Indus Water Treaty on September 19, 1960 to ensure the distribution of waters of the Indus and its tributaries. It was signed in Karachi by then Prime Minister Jawaharlal Nehru and then Pakistan President Ayub Khan.

— A river, along with its tributaries, is called a river system. The Indus River system comprises six rivers: Indus, Jhelum, Chenab, Ravi, Beas, and Sutlej. The Indus and Sutlej are antecedent rivers, meaning they existed even before the formation of the Himalayas and cut deep gorges after originating in the Tibet region. The other four rivers – Jhelum, Chenab, Ravi and Beas – originate in India.

HC NAME TO STAY, DESPITE KERALA BECOMING KERALAM

The name High Court of Kerala (HCK) would stay despite the name of the State changing from “Kerala” to “Keralam”.

Keralam’s Chief Secretary had on Saturday issued a road map to rename government institutions after the Union government notified the name change.

Now, “Kerala” has to be renamed “Keralam” in millions of official records, documents, seals, publications, covers, letterheads, files and registers.

However, the changes will leave no impact on the High Court in the State. The name of the High Court can be changed only through a High Court Name Amendment Act to be passed by Parliament.



Needs legal procedure

The amendment process has to be initiated by Parliament on a recommendation by the State executive and after ascertaining the views of the State judiciary, said a senior judge of the High Court. Moreover, the judiciary is not part of the State government and has an independent footing.

The name changes introduced by the State government need not reflect on the name or character of the High Court.

The judge also pointed out the instances of High Courts of Bombay, Calcutta, Madras and Orissa where the original names of the courts were retained despite the changes in the names of the respective States.

CAN JURISTS BE APPOINTED AS SUPREME COURT JUDGES?

The story so far:

Supreme Court judge Justice Ujjal Bhuyan on Sunday questioned why a constitutional provision allowing a “distinguished jurist” to be appointed as a judge of the Supreme Court has remained unused for more than 76 years. Addressing the 13th convocation of National Law University, Delhi’s LL.M. programme, Justice Bhuyan pointed out that Article 124(3) of the Constitution permits the appointment of a person who, in the President’s opinion, is a “distinguished jurist” as a Supreme Court judge. However, no legal academic has so far been elevated to the top court under this provision.

What does the Constitution stipulate?

Article 124(3) of the Constitution lays down three routes through which a person may qualify for appointment as a Supreme Court judge — a person must have served as a High Court judge for at least five years, practised as an advocate of a High Court for at least 10 years, or be, in the opinion of the President, a “distinguished jurist”.

The provision, however, does not define who qualifies as a “distinguished jurist” or prescribe any minimum period of professional experience for such a person. Its inclusion as a separate category nevertheless indicates that the framers contemplated a route to the Supreme Court beyond the conventional pathways of judicial service and legal practice, potentially opening the door to eminent legal scholars and academics.

What do Constituent Assembly debates reflect?

The “distinguished jurist” category was added to the list of persons eligible for appointment to the Supreme Court in the draft Constitution. The Constituent Assembly debates reflect that this was intended to bring diversity in professional backgrounds among those appointed to the Bench of the Supreme Court.

Moving the amendment on May 24, 1949, Constituent Assembly member H.V. Kamath said it sought “to open a wider field of choice” for Supreme Court appointments. He noted that persons with “outstanding legal and juristic learning” were “not necessarily confined to judges or advocates”, pointing to the selection of judges of the International Court of Justice on similar terms.



The Constituent Assembly debates also referred to the appointment of Felix Frankfurter to the U.S. Supreme Court. In 1939, President Franklin D. Roosevelt appointed Frankfurter, who had been a professor at Harvard Law School for 25 years, as an Associate Justice of the U.S. Supreme Court. Justice Frankfurter went on to become a noted advocate of the doctrine of judicial restraint — the principle that courts should respect the domain of the elected legislature and the executive, and exercise restraint in interfering with their decisions.

Assembly member M. Ananthasayanam Ayyangar cited Justice Frankfurter's appointment as a "novel experiment" that had worked well, noting that legal expertise was not confined to practising lawyers or judges.

Can a 'distinguished jurist' be appointed as a High Court judge?

The Constituent Assembly had also considered allowing "distinguished jurists" to be appointed as High Court judges. On June 7, 1949, Professor Shibban Lal Saksena moved an amendment proposing their inclusion among those eligible for appointment to a High Court. The proposal, however, was not accepted.

Nearly three decades later, the Constitution (Forty-second Amendment) Act, 1976, enacted during the Emergency, amended Article 217, which lays down the qualifications for appointment as a High Court judge. The amendment allowed a person who was, in the opinion of the President, a "distinguished jurist" to be appointed to a High Court. The provision came into force in January 1977 but was omitted by the Constitution (Forty-fourth Amendment) Act, 1978.

What limits the use of this provision?

Despite being part of the Constitution since its inception, the provision has never been invoked. Supreme Court judges have overwhelmingly been appointed from among High Court judges, with only 11 advocates directly elevated from the Bar.

The appointment process itself may also help explain why the provision has remained unused, since a jurist would first have to be recommended by the Supreme Court Collegium. Legal scholar Upendra Baxi, whose possible appointment to the court never materialised, described the provision as a "dead issue" in a 2015 interview with LiveLaw.

Another concern is that legal academics may lack courtroom and procedural experience. However, full-time law teachers themselves face restrictions on practising as advocates. Under Rule 49 of the Bar Council of India Rules, an advocate who takes up full-time salaried employment must cease to practise while such employment continues. In 2019, the Consortium of National Law Universities sought a relaxation of this restriction to allow full-time faculty to practise in courts and bridge the divide between "law in books" and "law in action".

APEX COURT: BAR COUNCILS HAVE NO DISCIPLINARY POWERS OVER LAW STUDENTS

The Supreme Court held Thursday that the Bar Council of India (BCI) and State Bar Councils have no power to take disciplinary action against law students before they are enrolled as lawyers, holding that such matters fall exclusively within the domain of their educational institutions.

Key Takeaways:

— "We are of the opinion that the Advocates Act, 1961, where under BCI has been statutorily created, does not confer any express or implied power upon the BCI or any State Bar Council to

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



take any disciplinary action against the students of law; such a power is preceded by registration of a law graduate as an advocate under the said Act,” a three-judge bench presided by Chief Justice of India Surya Kant said.

— “So far as students are concerned, it is their parent institution or the authority prescribed under the regulations/bye laws of such institution who alone are competent to take disciplinary action,” said the bench, also comprising Justices Joymalya Bagchi and V Mohana.

— The bench made the observation while declaring that all communications issued by the BCI on August 13, following opposition by a group of NALSAR University of Law students to inviting Chief Justice of India Surya Kant to the university’s annual convocation, were “without any authority of law”.

Do You Know:

— The Bar Council of India is a statutory body established by the Parliament under the Advocates Act, 1961 to regulate and represent the Indian Bar.

— The Advocates Act, 1961 creates a two-tier structure: State Bar Councils under Section 3 and the Bar Council of India under Section 4.

— The BCI consists of members elected from each State Bar Council, the Attorney General of India, and the Solicitor General of India who is an ex-officio member. The members from the State Bar Councils are elected for a period of five years.

— The Council elects its own Chairman and Vice-Chairman for a period of two years from among its members. Presently, Manan Kumar Mishra is the Chairman of the BCI.

CAN AN ACCUSED BE DENIED A COPY OF THE FIR?

The story so far:

The Supreme Court on August 25 ordered the Ghaziabad Police to provide independent journalist Abhishek Upadhyay with a copy of the FIR and CCTV footage in a road-rage case registered against him. Mr. Upadhyay, who had reported on alleged irregularities in donations to the Ram Mandir in Ayodhya, claimed that he was being falsely implicated over his reportage and that the police had failed to provide him with the FIR despite repeated requests.

Why did the court have to intervene?

On August 20, Mr. Upadhyay alleged that a police team arrived at his residence and informed him that a case had been registered at the Indrapuram police station over road rage and abusive behaviour. In a post on X, he claimed that despite repeatedly seeking a copy of the FIR, the police initially sent him a page containing neither the sections invoked nor details of the alleged offence, and later shared an older FIR registered against him in Lucknow.

Mr. Upadhyay then approached the Supreme Court, alleging that the case was based on concocted allegations and intended to harass him for his journalism. He sought a copy of the FIR and quashing of the proceedings or, alternatively, transfer of the probe to an independent agency.

A three-judge Bench headed by Chief Justice of India Surya Kant directed the Ghaziabad Police Commissioner to provide him with the FIR and CCTV footage and file a compliance report by



September 7. It also protected him from arrest and allowed him to approach the jurisdictional High Court for further relief.

What do statutory provisions stipulate?

The Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS), does not require the police to furnish the accused with an FIR immediately upon registration. Section 173(2) requires a copy to be given “forthwith” and free of cost to the informant or victim, but does not mention the accused. The statute provides for the accused to receive the FIR only at a later stage, after the investigation culminates in the filing of a chargesheet before the magistrate. Section 230 requires the magistrate to furnish the accused with copies of documents relied upon by the prosecution, including the FIR and chargesheet, within 14 days of their appearance or production before the court. The BNSS does not address an accused person’s right to access the FIR before this stage, including during the investigation. Judicial precedents have, however, recognised the right of an accused to obtain the FIR soon after its registration.

What have courts held on access to FIRs?

In *Court on its Own Motion through Mr. Ajay Choudhary v. State* (2010), the Delhi High Court laid down a mechanism for an accused to obtain an FIR during the investigation, before the stage contemplated under Section 230 of the BNSS. The court also directed the Delhi Police to upload FIRs on its website within 24 hours of registration. FIRs involving sensitive offences can, however, be withheld through a reasoned decision by an officer not below the rank of DCP.

In *Rama Nand Rathore v. State of Himachal Pradesh* (2014), the Himachal Pradesh High Court held that a person who suspects that they have been named in an FIR can seek a certified copy from the police, which must supply it within 24 hours. It also directed FIRs to be uploaded online within the same period, barring sensitive cases.

In *Youth Bar Association of India v. Union of India* (2016), the Supreme Court gave these directives pan-India effect and reiterated that an accused is entitled to access the FIR before the stage prescribed under Section 207 of the CrPC (now Section 230 of the BNSS). The Court directed that FIRs be uploaded on police websites within 24 hours of registration or, where no such website exists, on the official website of the State government. Where unavoidable difficulties delay publication, the 24-hour deadline may be extended to 48, or up to 72 hours for geographical connectivity issues.

The court, however, carved out an exception to the online publication requirement for FIRs involving offences “sensitive in nature”.

What is the ‘sensitive offence’ exemption?

The apex court identified sexual offences, cases under the Protection of Children from Sexual Offences Act, 2012, and terror offences as examples of “sensitive” offences, while clarifying that the list was not exhaustive.

The decision cannot be taken by a police officer below the rank of Deputy Superintendent of Police or its equivalent. A person aggrieved by it can approach the Superintendent of Police or an equivalent officer, who must constitute a three-member committee to decide the grievance within three days.



Even where an FIR is withheld on grounds of sensitivity, the accused or an authorised representative can apply for a certified copy to the magistrate to whom the FIR has been forwarded, who must provide it in three days.

What are the implications?

Delhi-based advocate Nipun Saxena says police officials routinely fail to comply with the Supreme Court's directive to upload FIRs through the Crime and Criminal Tracking Network and Systems. "Once an FIR is registered and the criminal law is set in motion, the accused is entitled to seek pre-trial remedies such as quashing of the FIR or anticipatory bail. Without access to the FIR, these remedies cannot be effectively pursued," he says.

Mr. Saxena adds that the Supreme Court's ruling recognised that an accused cannot be made to wait until the framing of charges to know the offences alleged against them, as this would undermine the right to a fair trial and the principles of natural justice.

OBC CREAMY LAYER AND THE INCOME TEST

The story so far:

The Supreme Court has said it will consider setting up a Bench to hear the Centre's application seeking clarification over its March 11 judgment on the income test component of the OBC creamy layer exclusion criteria. Retrospectively implementing the judgment on the income/wealth test for OBC creamy layer determination is "extremely difficult" and will cause a "cascading effect" in the settled services from 2012 till now, with the impact extending to "all categories, including the Unreserved category", the Centre said in a batch of applications.

Why does the Centre call the ruling 'extremely difficult' to implement?

The Supreme Court on March 11 delivered its judgment in a batch of cases pending for close to a decade, relating to how the Department of Personnel and Training (DoPT) should interpret the crucial income/wealth test, which is one of the layers through which the "creamy layer" (or relatively socially and economically forward) among the Other Backward Classes communities is excluded from availing the benefit of reservation.

The cases that eventually came before the court involved claims by at least 50 OBC candidates who had appeared in Civil Services Examinations (CSE) since 2015 and were excluded from consideration for an OBC-reserved post after the DoPT classified them as part of the creamy layer solely based on their parents' income.

The Supreme Court found that the DoPT was incorrectly applying the income test for this category of OBC candidates and directed the government to create supernumerary posts for the OBC candidates to whom the income test had been applied with what it called "hostile discrimination," and allot them services according to their ranks in their respective CSE years.

What are the criteria for exclusion?

The creamy layer concept among OBCs emerged from the Supreme Court's 1992 ruling in the Indra Sawhney case, which paved the way for the implementation of OBC reservations. The idea was to exclude OBC candidates whose families had accumulated social and economic privileges over the years from the benefits of reservation. Such candidates came to be described as belonging to the "creamy layer".



To clarify which categories of OBC candidates would fall under the creamy layer, the DoPT issued an Office Memorandum [(OM), a guiding charter] in September 1993, laying down the criteria for exclusion.

The OM prescribed several categories of exclusion, including children of senior constitutional, judicial, government and armed forces officers.

Besides this, the DoPT also prescribed a crucial income or wealth test, applicable to people in the salaried professional class or engaged in trade; people holding plantations, vacant land and/or buildings in urban areas; and people whose parents held posts in Central or State PSUs where the equivalence of these posts with government service posts had not yet been established. It is this last category, that is, children of parents holding posts in Central or State PSUs or in private employment, that the court delivered its March 11 judgment.

What was the problem with the 1993 OM and 2004 letter?

Under the 1993 DoPT OM on the income/wealth test for OBC reservations, a candidate would be considered part of the creamy layer if their parents' gross family income exceeded the prescribed limit for three consecutive years, or if they possessed wealth above the exemption limit prescribed under the Wealth Tax Act, 1957. The income limit, which was ₹1 lakh when the 1993 OM was issued, was revised several times and now stands at ₹8 lakh, with the last revision having come in 2017. Importantly, the 1993 DoPT OM specified that income from salaries and agricultural land should be excluded when applying the income/wealth test, with income from other sources such as property, business, or capital gains being considered.

However, in October 2004, the DoPT issued a letter meant to clarify issues that had arisen in interpreting the 1993 OM. In paragraph 9 of this letter, the DoPT took up the issue of how to calculate income for the income/wealth test for OBCs whose parents were in Central or State PSUs where equivalence of posts had not yet been established. The DoPT seemed to suggest that income from salaries was to be counted to determine if the income was above the prescribed threshold for three consecutive years. The threshold was subsequently revised to ₹8 lakh per year in 2017.

In the 2026 ruling, the Division Bench noted that until the government establishes equivalence between the posts of Central or State PSUs and government services, the income/wealth test must continue to apply equally.

How did the Supreme Court interpret the income test?

The March 11 Union of India vs Rohith Nathan judgment said that OBC candidates whose parents work in PSUs or the private sector, where the government has yet to establish equivalence of posts with government services, cannot be treated differently from OBC candidates in other categories under the creamy layer exclusion criteria.

Significantly, the Supreme Court ruled that the income/wealth test component of the exclusion exercise must be seen and operated as a "residual filter", adding that salaries and agricultural incomes had been consciously left out while applying this test under the 1993 OM. The court found that while the 1993 OM was clear about excluding income from salaries from the calculation of the income/wealth test, the 2004 letter appeared to call for its inclusion in circumstances that were not clearly specified.



The court went on to note that the interpretation of the 1993 OM, read with the 2004 letter, had led to “hostile discrimination” between the children of those in government service and those in PSUs or private employment.

Without establishing equivalence of posts, the income test, including salaries, was being applied to rule out OBC candidates whose parents were not in government service, while OBC candidates whose parents were in government service were being subjected to a test that did not include salaries. This is what the court had described as “hostile discrimination”.

The court said, “Treating the children of those employed in PSUs or private employment, etc., as being excluded from the benefit of reservation only on the basis of their income derived from salaries, and without reference to their posts (whether Group A or B, or Group C or D) would certainly lead to hostile discrimination between parties who are similarly placed and would amount to equals being treated unequally.”

The court had directed the Centre to implement this reading of the income test within six months by creating supernumerary posts for the petitioners, who were OBC candidates in the Civil Services Examinations and had been excluded from the creamy layer on account of their parents’ salaries alone. The parents were working in public sector undertakings or the private sector.

Did the Centre try to implement the Supreme Court’s directions?

The Supreme Court’s ruling in the Rohith Nathan case was a watershed moment for this category of OBCs, who had said that the issue had been pending for more than a decade. As per the Supreme Court’s direction, the Union government was supposed to issue further instructions in pursuance of the court’s reading of the income test component — on how the supernumerary posts must be created and how the existing strength of the services must be adjusted to accommodate them.

According to government records, the Union Ministry of Personnel, Pensions and Public Grievances wrote to the Ministry of Social Justice and Empowerment on June 3, seeking advice on implementing the directions of the Rohith Nathan judgment. The Personnel Ministry told the Social Justice Secretary that the Allocation of Business Rules provide for the Social Justice Ministry to formulate policy on reservations and that it was therefore seeking “clarification/action” in this regard. The Personnel Ministry further sought “advice on instructions to be adopted or notified” by the DoPT.

As of August 19, the Centre’s position before the Central Administrative Tribunal in a matter identical to that of the aggrieved OBC candidates in the Rohith Nathan case was that it was in the process of implementing the March 11 judgment.

However, a few days later, the DoPT filed an application highlighting why it was seemingly impossible to follow the Supreme Court’s directions and the issues that were arising in implementing them retrospectively. In this application, the Centre said that despite its efforts to create the supernumerary posts as called for in the Rohith Nathan judgment, it was facing an increasing number of claims for adjustment, issues of seniority arising from such adjustments, and concerns that even this exercise could be “unfair” to a different category of OBC candidates and candidates of “all categories, including the unreserved category”.

The Centre noted that since the March 11 judgment, 22 other judgments have been issued by courts applying the principles laid out in Rohith Nathan. In addition, the DoPT said that 12 new



cases have been filed seeking reconsideration of OBC non-creamy layer status under the Rohith Nathan principles, by candidates who had not previously approached the courts.

However, OBC candidates who spoke to The Hindu argued that the Centre's reluctance to implement the directions does not appear to make sense. These candidates have asked why the DoPT had not mentioned these larger issues with implementation earlier.

These candidates have noted that the older reading of the income test — the one that the court said practised “hostile discrimination” — was being applied only by the DoPT, and that too arbitrarily.

What happens next?

Along with the application that the DoPT has filed setting out the difficulties it was facing in implementing the Rohith Nathan judgment's directions, especially retrospectively, the Union government had filed a separate application, seeking that it be allowed to continue allotting services as per the old reading of the income test for CSE 2025 candidates, and seeking clarification on how to implement the directions. The Centre said that more than 950 CSE 2025 candidates were about to start their Foundation Course and that they had been recommended based on the old reading of the income test.

The DoPT argued, in this application, that the retrospective application of the judgment was specifically running into the issues mentioned above.

The Supreme Court has now said it will consider setting up a Bench to hear the Centre's request for clarification on how to implement its directions and its request to allow the allotment of services to CSE 2025 candidates to continue as settled for the time being.

However, in the other application filed along with this, the Centre has asked for clarification on how to implement the direction overall. It has further argued that there might be some value in including income from salaries, as in some cases it might be the “sole intelligible differentia” between two OBC candidates from “similar social backgrounds”. It has also argued that, in the absence of salary consideration, some cases might lead to OBC candidates with parents earning up to ₹1 crore being considered non-creamy layer.

Now, the question is: how far will the Supreme Court's March 11 verdict reach?

CENTRE'S RATIONALE FOR NOT USING OBC LISTS FOR CASTE ENUMERATION IS FLAWED, SAY ASSOCIATIONS

The argument that Other Backward Classes (OBC) lists cannot be used for caste enumeration because they list “classes, not castes” is “fundamentally flawed”, associations representing the interests of OBC communities said on Friday, a day after The Hindu reported that this was part of the rationale for the Union government to not draw caste names and codify them from the readily available Central and State OBC lists for the caste enumeration component of the 2027 Census.

The OBC groups have said that if existing OBC lists were inadequate or had inconsistencies for the purpose of caste enumeration, the government should ideally use experts to draw and rationalise the caste names from these lists and not “drop them altogether”.

The government's justification for not relying on the OBC lists came even as associations representing these communities and senior Opposition leaders such as Mallikarjun Kharge and



Rahul Gandhi have questioned the utility of using the “open-column” methodology to enumerate all castes apart from Scheduled Castes and Scheduled Tribes. One of the principal arguments that has historically driven the demand for a caste Census has been the need to enumerate the population of OBCs across the country, a figure that has only been estimated in India so far, based on the caste Census data from 1931.

‘Artificial distinction’

On Friday, the All India OBC Students’ Association (AIOBCSA) said, “If the Government recognises these communities as OBCs for reservation and other affirmative-action measures, it cannot suddenly disregard their caste identities when it comes to collecting population data... The purpose of a Census is to accurately capture the social realities of India, not to avoid caste enumeration on the basis of an artificial distinction between ‘class’ and ‘caste’.”

V. Srinivas Goud, the National Chairperson of the OBC Public Representatives Forum, added that such justifications from the Union government add to the perception that they had agreed to enumerate castes with no “real intention” of doing it properly.

T. Chiranjeevulu, a retired IAS officer and the Chairman of the Backwards Classes Intellectual Forum, also concurred, arguing that the Government’s refusal to codify all existing caste names and enumerate the populations of caste groups (as they usually do for SCs and STs) was intended to “cover up the misdeeds” of the justification they had used for bringing in the Economically Weaker Section reservations.

“We know that when EWS was introduced, the government tried to estimate that the non-SC/ST/OBC population was about 35%-40%. This government knows that if OBC populations are enumerated scientifically as part of a rigorous caste Census, their initial idea of the EWS population would prove to be an overestimation, and that is why they are not sincere about the caste enumeration in the 2027 Census,” Mr. Chiranjeevulu told The Hindu.

In their statement countering the argument of the government on why it did not use the OBC lists, the AIOBCSA said this logic becomes “even more questionable when certificates and official records routinely identify communities by their specific social and caste identities. Even EWS certificates identify the beneficiary through prescribed social/category criteria, demonstrating that administrative classification and social identity can coexist”.

THE FISSURES DRIVING THE NRC DEMAND IN MANIPUR

The Union government Monday (September 1) decided to defer the 2027 Census in Manipur after a meeting of Union Home Minister Amit Shah, Manipur Governor Ajay Kumar Bhalla, Chief Minister Yumnam Khemchand Singh and Union Home Secretary Govind Mohan.

Key Takeaways:

- The Manipur government said the decision followed discussions on the demand that the Census be held only after implementation of the National Register of Citizens (NRC). The decision has brought into focus a demand that has been building in the state for several years.
- There are three overlapping concerns. The first is citizenship and demographic change. Civil society groups in the valley and the hill districts dominated by Nagas have long alleged that migration from Myanmar and elsewhere has altered Manipur’s demographic composition. They



want an exercise to distinguish Indian citizens from illegal immigrants before population figures are recorded.

— The second is displacement caused by the ethnic conflict since May 2023. More than three years after the violence began, thousands remain displaced. Meitei groups argue that a Census conducted while people are living away from their original homes could record the demographic consequences of displacement rather than the state's underlying population pattern. The Meitei Alliance, for instance, has said the Census should wait until internally displaced people return home.

— The third is political representation. Population figures from the Census will eventually be important for delimitation, and Manipur has not had a fresh delimitation implemented since the 1970s. Given the gap, it has the potential to change equations in the Manipur Assembly.

— The demand predates the May 2023 violence, although the influx of people from Myanmar and the conflict subsequently gave it a sharper political and security dimension.

— In June 2022, the Coordinating Committee on Manipur Integrity (COCOMI), representing Meitei civil society, and the United Naga Council (UNC) submitted a joint memorandum demanding an NRC and a State Population Commission, citing concerns over immigration and demographic change.

— On August 5 that year, the Manipur Assembly adopted a resolution seeking both. The resolution was reaffirmed on March 1, 2024.

Do You Know:

— Manipur has 60 Assembly seats: 40 in the valley and 20 in the hills. The valley is predominantly Meitei, while the hills are predominantly inhabited by Naga and Kuki-Zomi communities. The present political map goes back to the 1973 delimitation, based on the 1971 Census.

— A delimitation exercise based on the 2001 Census was undertaken nationally between 2002 and 2008, but Manipur, along with Assam, Arunachal Pradesh and Nagaland, was excluded after the Centre deferred the exercise in 2008 citing security concerns and amid challenges to the credibility of the 2001 Census data in the region.

BEHIND FORM 7: DELETION BUT ONLY AFTER PROBE

In Godda, Booth Level Officers (BLOs) of at least four booths have said that BJP workers have submitted Form 7s seeking deletion of multiple names. They have also claimed that these forms were not in the proper format, and many of these were rejected, as instructed by the Block Development Officer, Sriman Marandi.

Key Takeaways:

— Electoral Registration Officers (EROs) are empowered by Section 22 of the Representation of the People (RP) Act, 1950, to make corrections and deletions to the electoral roll either on their own or acting on applications made to them. In each case, they must conduct an inquiry, give the elector concerned time to respond and then pass an order.



— The ERO can delete an entry from the electoral roll in case the person has died, or is no longer ordinarily resident in that constituency, or has been found ineligible – meaning, they are not a citizen or are under the age of 18 years.

— Under the Registration of Electors Rules, 1960, Form 7 must be used for making “objection for proposed inclusion / deletion of name in existing roll”. Electors can file a Form 7 if they want to delete their own name or if they want to object to any other elector in their constituency.

— The form can be downloaded from the ECI’s voter portal (voters.eci.gov.in) and handed to the BLO concerned or submitted online. The ECINet app can also be used to submit forms online.

— Form 7 requires the applicant to provide their own name, EPIC number and phone number, as well as the name, EPIC number (if available) and address of the person against whom they are objecting.

— The applicant has to select one of five reasons for objecting against an elector: “death”, “under age”, “absent/permanently shifted”, “already enrolled”, or “not Indian citizen”.

— The form does not require any evidence. However, the applicant has to sign a declaration that says: “I HEREBY DECLARE that to the best of my knowledge and belief that I am aware that making a statement or declaration which is false and which I know or believe to be false or do not believe to be true, is punishable...”

— Once the form is completed, it can be printed for offline submission to the BLO or submitted online. Since 2018, the ECI has had a centralised portal for EROs across the country, known as ERONet. Before that, states had their own applications for processing forms. The ERONet portal standardised the process. However, each form is processed at the level of the ERO concerned and not centrally.

— In 2025, the ECI launched a new version of this portal, combining about 40 of its existing apps and portals for voters and officers. Voters who log on to the voters’ portal or officers who access ERONet are all redirected to the new ECINet portal.

— The portal itself does not require any proof at the time of filing a form for deletion. There is also no verification of whether applicants’ EPICs and phone numbers actually belong to them.

— But, ECI officials point out, safeguards are built into the system through the provisions of the RP Act and Registration of Electors Rules.

WELCOME MOVE

The relief granted to the Gen Z protesters must not stop with them

In what should be termed a salutary gesture, the Supreme Court of India, at the request of the Union government, invoked its powers under Article 142 of the Constitution to quash criminal cases against the youth who had taken part in nationwide protests seeking examination reforms and government accountability. Led by a group, the Cockroach Janta Party (CJP), in response to Chief Justice of India’s “unemployment” and “cockroaches” remark — these protests swelled in numbers and reach, forcing the then Union Minister of Education, Dharmendra Pradhan, to resign. Among the demands for halting the agitations was the CJP’s call to withdraw the FIRs against protesters in Delhi and other States/Union Territories, which the Court has granted, while directing the Centre to ensure that no fresh FIRs are registered over the protests in July. That the

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



Centre asked for this step by the Court shows how the CJP's agitations resonated with the youth of the country, who agreed with the movement's core demands. It is also an acknowledgment by the Bharatiya Janata Party (BJP)-led government that this is a pressing issue that revealed its failings, particularly the series of paper leaks across India over the years, compounded by an employment deficit for youth.

The Centre's stand in the CJP matter is in stark contrast to how it has dealt with dissent on other issues that have driven thousands to protest in recent years. The most prominent among these were the farmer-led protests in and around Delhi, and the agitations against the communally motivated Citizenship (Amendment) Act. Both were largely peaceful, but this did not prevent the government from foisting serious charges including those related to terrorism and sedition, on peaceful protesters, many of whom remain in jail without trial or bail. Legitimate protest has long been a means of defusing pent-up discontent with government policies in India. The Centre has instead sought to criminalise it, branding dissent and disaffection as sedition to create a chilling effect. The CJP managed to overcome that ploy not only through the justness of its demands but also because the protesters' identities as youth and students transcended the limited categories of religion, caste and even class ("richer farmers") that the BJP sought to use to sow discord and delegitimise them. Even if it is too much to expect the Centre to seek similar relief for those held in earlier cases, the Court would do well to apply to them the standard it has now set for the CJP. Until it does, the relief granted to the CJP and its sympathisers will remain an exception rather than a principle.

T.N. TO SET UP SAFE HOUSES FOR VULNERABLE INTER-CASTE COUPLES

When a couple goes against their parents' wishes to get married, they often need immediate refuge, especially if they cross caste or religious lines. The Tamil Nadu government's recent plan to set up a 'safe house' in each district offers a lifeline for individuals and families vulnerable to caste killings and related types of violence. "If only we had such a safe house earlier, I would not have lost my husband Shankar," said activist Kausalya Shankar, welcoming the "historic" decision.

Announcing the plan in the State Assembly on Friday, Social Justice Minister Vanni Arasu said it was in line with the Supreme Court's ruling in the Shakti Vahini vs. Union of India case, and followed representations from survivors of caste-related killings and activists.

"When a groom is murdered in an 'honour' killing and the bride survives, she is thrust into a state of utter devastation and helplessness," said anti-caste activist and filmmaker Geeta Ilango. "While a surviving groom in a similar tragedy might eventually find a way to move on, a surviving bride faces a harrowing reality," she said, noting that a safe house would let her "rebuild her livelihood, and fearlessly pursue her legal battle for justice."

Activist Evidence Kathir offered a note of caution. "It should be ensured that the space is not used to hold talks with the couples to persuade them to end their marriage. The safe house should be under the direct monitoring of the courts," he said. He noted that the State had set up special cells with a helpline to file complaints in this regard as early as 2018. However, they were not functioning properly, he said.



UNTOUCHABILITY AND THE IDEA OF 'PURITY'

The story so far:

A shuddhikaran (purification) ritual was performed at Haldwani's Ramlila ground on August 10, two days after Congress president Mallikarjun Kharge addressed a rally there. Mr. Kharge said the ritual made him feel the "sting of untouchability" and sought legal action, while the organisation that performed it offered a different explanation, citing slogans allegedly raised during the rally and Mr. Kharge's earlier political remarks. The dispute raises a legal question beyond the immediate controversy: what does Indian law regard as untouchability when the alleged wrong is not denial of entry, but the "purification" of a place after a Dalit person has used it?

What does the law prohibit?

Article 17 of the Constitution declares that "'untouchability' is abolished", forbids its practice "in any form", and says that enforcing any disability arising from untouchability shall be an offence punishable in accordance with law. The Supreme Court has recognised that Article 17 is enforceable against non-State actors as well.

The Constitution does not define "untouchability".

Parliament gave effect to Article 17 through the Untouchability (Offences) Act, 1955, which was substantially amended and renamed the Protection of Civil Rights Act, 1955 in 1976. The Act punishes the preaching and practice of untouchability and the enforcement of disabilities arising from it.

Some of its provisions address familiar forms of untouchability: preventing entry into a place of worship, imposing social disabilities, or discriminating in access to public facilities and services. But the law is not confined to physically keeping somebody out. Section 7(1)(d) also punishes a person who "insults or attempts to insult, on the ground of 'untouchability', a member of a Scheduled Caste".

The law can reach conduct beyond denial of access, but the fact that an act affects or humiliates a Scheduled Caste person does not by itself answer whether Section 7(1)(d) is attracted. The provision requires the insult to be "on the ground of 'untouchability'".

How has the Supreme Court interpreted Article 17?

The Supreme Court addressed the scope of Article 17 in *Sukanya Shantha v Union of India* (2024), while striking down caste-discriminatory provisions in prison manuals and reviewing its earlier Article 17 jurisprudence.

The court described untouchability as connected to the caste system and its interconnected notions of "purity and pollution". These ideas, it said, have been used to reinforce caste hierarchy and influence whom people associate with and how they treat one another. Article 17 rejects such notions.

The judgment also explains why the absence of a definition does not necessarily confine the scope of Article 17. It noted that even a broadly worded definition could become restrictive because discrimination can manifest itself through the "manifold complexities" of social life. Article 17 must therefore be capable of reaching untouchability in its different forms and manifestations.



The court then stated the principle directly: “There cannot be any stigma attached to the existence, touch or presence of any person.”

The court’s reasoning is therefore not confined to familiar forms of exclusion. It also addresses the underlying caste idea of pollution: discriminatory treatment based on a person’s touch or presence.

What has the court said about such practices?

In *Surya Narayan Choudhary v State of Rajasthan* (1988), the Rajasthan High Court considered discrimination against Dalit devotees at the public Shrinathji temple in Nathdwara.

The court was told that Dalit devotees were permitted to enter only after undergoing a process of purification.

Crucially, the High Court held that Dalit devotees could not be subjected to an additional condition for temple entry that did not apply to other devotees, and specifically directed that the reported purification practice be discontinued, holding it discriminatory and violative of Articles 14, 15 and 17.

At Nathdwara, purification was imposed on Dalit devotees before they could enter a temple on equal terms. At Haldwani, the ritual occurred after Mr. Kharge had already used the venue, and the reason for it is disputed. The *Surya Narayan Choudhary* case therefore does not decide the present controversy; it establishes the narrower proposition that caste-specific ritual purification imposed on Dalits as a condition of equal access can violate Article 17.

Where is the legal boundary?

Article 17 and the Protection of Civil Rights Act must also be distinguished from the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989, which creates separate criminal offences with their own ingredients.

Section 3(1)(r), for example, deals with intentionally insulting or intimidating an SC/ST member with intent to humiliate them in a place within public view, when committed by a person who is not an SC or ST. In *Hitesh Verma v State of Uttarakhand* (2020), the Supreme Court said that not every insult to an SC/ST person attracts the provision: the insult or intimidation must be connected to the victim belonging to the protected community. More recently, in *Gunjan @ Girija Kumari v State (NCT of Delhi)* (2026), the Supreme Court reiterated that “public view” is an essential requirement for the offence.

What would establish untouchability?

If evidence were to show that the venue was regarded as requiring cleansing because caste-based notions of pollution were attached to Mr. Kharge’s touch or presence, the reasoning in *Sukanya Shantha* case and the caste-specific purification considered in *Surya Narayan Choudhary* case would become directly relevant. If, on the other hand, the ritual was undertaken for reasons unconnected with caste, including the reasons cited by the organisers, its timing after Mr. Kharge’s rally would not by itself establish untouchability.

The word *shuddhikaran* cannot answer that question. The legal issue is the connection, if any, between the ritual and caste-based notions of pollution.



ORTHODOXY REDUX

Religion is oft used as a tool to suppress women in the public sphere

Veteran Islamic cleric Kanthapuram A.P. Aboobacker Musliar's directive to restrict Muslim women's participation in public celebrations has unsettled Keralam because it strikes at a fundamental question: women's right to participate in public life. This is not merely a quarrel over how Muslims should mark Prophet Muhammad's 1,501st birth anniversary. It is a test of how far religious authority can intrude into the lives of women in a State that takes pride in its progressive social history. Kanthapuram says he is merely reminding followers of established religious norms. His supporters argue Milad celebrations have moved beyond mosques and madrasas into large public events, and that scholars have a duty to caution against such departures. That argument holds no weight. Communities have the right to preserve traditions and regulate religious practices, but they have to conform to the values enshrined in the Constitution. When women are told to remain at home because their presence could cause "chaos", the issue is no longer about religious observance; it is at variance with constitutional equality and Keralam's long struggle to expand the space in public life for women disadvantaged by social customs and religious traditions.

The Muslim community is not a monolith. It contains both orthodox and progressive currents. More Muslim women are breaking barriers in education, employment, politics and public life, but that progress is encountering a counter-current of renewed orthodoxy and social control. The CPI(M), Keralam's main Opposition party and a decades-old ally of the Kanthapuram-led faction of Samastha Kerala Jamiyyathul Ulama, a body of Sunni scholars, has responded sharply. The Congress, which leads the ruling coalition, was largely guarded until Chief Minister V.D. Satheesan rubbished the decree as antediluvian. The Indian Union Muslim League's silence is harder to defend. A party with an active women's forum and a woman legislator for the first time in the State Assembly cannot equivocate when women's right to public participation is open to challenge. Its caution may reflect political pressure over Waqf, Vande Mataram and PM-SHRI, or an attempt to improve ties with the Kanthapuram faction amid strained relations with the rival Samastha faction. Whatever the political calculation, silence carries a cost. Religious freedom does not confer on religious authorities the right to regulate women's freedom of movement, association and degree of participation in society. During Onam, social media were awash with videos of young Muslim girls celebrating the harvest festival. Kanthapuram's remarks drew criticism from a section of Muslim women on social media. Keralam cannot claim to be progressive while making exceptions for orthodoxy.

MATERNITY LEAVE CAN'T LEAD TO LOSS OF ROLE OR CAREER PROSPECTS, SAYS DELHI HC

The Delhi High Court has ruled that a woman returning from maternity leave at a private company is ordinarily entitled to resume her previous position and cannot be placed at a professional disadvantage by reducing her responsibilities, managerial authority or prospects of career advancement.

Justice Sachin Datta, in the August 31 judgment, held that the protection under Section 12 of the Maternity Benefit Act is not limited to safeguarding continuity of employment or wages.

The Court held that if a woman's previous post is no longer available for bona fide and demonstrable organisational reasons, she must be placed in a position as nearly equivalent as



possible in terms of pay, grade, status, responsibilities, managerial authority and prospects of advancement.

The court was dealing with a petition by chartered accountant Rakhi Bisht, who alleged that she was sidelined by a private company after returning from maternity leave. Ms. Bisht went on maternity leave in December 2023 while working as Manager, Accounting, and supervising a team.

Advocate Parul Singh, representing her, alleged that on her return, she was told that her earlier position was no longer available and was assigned to the Treasury department. She said that the new role was substantially inferior.

“In the present case, the petitioner [woman] does not seek to enforce any term of her employment contract; rather, she seeks to enforce Section 12 of the Maternity Benefit Act, 1961, which imposes an obligation upon every employer to whom the Act applies and which remains unaffected by the terms of the employment contract between the parties,” the Court said. Justice Datta further held that a woman seeking an adjustment in her duties, working hours, workplace or role because of post-maternity circumstances should not be treated as having waived her statutory protection.

THE POLITICS OF CALLING MINDS ‘NAXAL’

In his Independence day address this year, Prime Minister Narendra Modi declared that his government had eliminated the threat of armed Naxals/Maoists, but added that ‘dimaagi Naxals (brainy Naxals)’ remain. These dangerous individuals, he said, had been elevated to policy advisers by his predecessors. Now, they look for opportunities to ‘drag society onto the wrong path’ and ‘steer the nation’s youth’ away from the ‘mainstream effort’ to turn India into ‘a developed nation.’ He asked Indian citizens to ‘identify and isolate’ such individuals among them.

Defining the enemy

Is Mr. Modi the first leader of a democratic nation to declare thoughts to be crimes, without resort to innuendo or euphemism, in a formal address to the nation? A search for other instances came up empty.

But has he not used terms such as ‘urban Naxal’ before? Is ‘dimaagi Naxal’ any different? I believe it is a significant escalation.

First, while he has used the term ‘urban Naxal’ in campaign speeches and in Parliament, he has not previously used it in an Independence Day address to the nation.

Second, ‘urban’ implies an alleged connection to ‘rural’ Naxals: urban individuals are alleged to be facilitating crimes attributed to Maoist insurgents. The actual charges may be fabricated, and individuals might in fact be criminalised for their ideology, that is, for thought crimes. But the government did not admit this. In this case however, Mr. Modi declared the end of rural Naxals, and then formulated the category of ‘dimaagi Naxals’. It is their ‘dimaag’ alone, cut off from any alleged ties to armed Maoist insurgents, that he declares to be criminal.

Had Mr Modi chosen to say ‘Naxali dimaag’ or ‘Naxali soch’ (thinking), it might be taken to mean Maoist ideology. But ‘dimaagi Naxal’ does not identify a specific ideology as dangerous.

‘Dimaag’ itself is the deadly weapon. In Hindi/Urdu, dimaag is used to mean the brain, head, mind, consciousness, intellect, and intelligence. To use your dimaag is to ‘use your head’ — that is, to



think out of the box, to reason, to think critically, to use your intelligence for resourceful problem-solving.

Mr. Modi is notorious for asking Indians to identify terrorists by what they wear – ‘kapde se pehchano’ (Identify/judge someone by their clothes) – a dog whistle for Muslims wearing lungis, skullcaps or hijabs. Now, he is saying ‘dimaag se pehchano’ — identify anti-nationals by how they think.

Operation Demonise Dimaag began a decade ago in 2016, with the attempt to incite hatred and violence against Jawaharlal Nehru University students and teachers. For six years the regime has declared student protesters (such as Umar Khalid, Sharjeel Imam, Gulfisha Fatima, Natasha Narwal, Devangana Kalita) to be terrorists, without a trial, without much push-back from the judiciary and the press. Emboldened, it deployed the same tactic against students protesting examination paper leaks, calling them ‘dehshatgarh’ (terrorists). But stretched to such lengths, this tactic snapped — and backfired. It ‘leaked’ the key to the regime’s propaganda codes. All of a sudden, all too many people could see the pattern plainly. The government rewarded mindless obedience, reverence and adulation for Power. Apply your mind, your dimaag, to demand democratic accountability from Power, and it would “identify and isolate” you as a terrorist, an andolanjeevi (parasite feeding on protests), a cockroach.

Echoes of an old template

The timing is telling. Mr Modi is attacking Dimaag when he is still smarting from his debacle at the hands of young students armed only with wit and imagination. He wants to prevent a recurrence. Ironically, since he calls his critics ‘Naxals’ (Maoists), he seems to be embracing the Chinese template for thought crimes.

A Chinese Communist Party memorandum, of 2013, warns that Internet forums, “lectures, seminars, university classrooms, class discussion forums, civilian study groups” as well as “open letters and... petition-signings to vocalise requests for political reforms, improvement of human rights” represent a threat to the nation. Why? Because “if we allow any of these ideas to spread, they will disturb people’s existing consensus on important issues like which flag to raise, which road to take, which goals to pursue”.

That is what the student protests did: demolish Mr. Modi’s claim to represent a monolithic popular consensus, challenged only by a tiny gang of unpopular critics. That consensus must be restored.

Mr. Modi identified ‘dimaagi Naxals’ as the foremost internal threat to national security. Is his plan for “a huge voluntary force of civil defence” intended to deal with them?

The examples Mr. Modi cites are unconvincing. Defending refineries from aerial bombardment and banks from cyber attacks cannot be left to ‘civilian volunteers’ — these would need enhanced air defence and cyber-security systems comprising experts. We already have the Civil Defence Act 1968 and the Home Guards to organise civilians for non-combat roles. Is Mr. Modi’s proposal inspired by his ideological gurus from a century ago?

In 1931, Dr. B.S. Moonje, Hindu Mahasabha leader and close associate of Rashtriya Swayamsevak Sangh (RSS) founder K.B. Hedgewar, visited Italy to meet the fascist leader Benito Mussolini. Mussolini was notorious for civilian militias such as the ‘Voluntary Militia for National Security’, colloquially known as the Blackshirts, which unleashed violent terror against political rivals, union leaders, journalists and writers. In 1934, Moonje and Hedgewar met to discuss the need for



a Hindu-supremacist militia to achieve the “ideal” of “a Hindu as a dictator... like Mussolini or Hitler of the present day Italy and Germany”. In 1935, Moonje explained that his aim was to also militarise Hindu society so as to completely choke off any other expressions of social life — “There will thus be no longer any distinction between the citizen and the soldier, between the civilian and the man in uniform.”

In 1939, Moonje expressed the hope that the RSS “might be useful and handy” in the task of preparing such a Hindu-supremacist militia. Who would it fight? Not so much the British Raj or potential Japanese invaders, but “internal enemies” — i.e., Muslims and the Congress wing of the freedom struggle. Moonje specifically visualised a conflict between “the mutually antagonistic and clashing ideologies”, i.e., between “the Rifle” (symbolising the Hindutva militia) and “the Charka” (symbolising Gandhi). Nearly a decade later, Nathuram Godse wielded the Rifle that killed Gandhi.

The road ahead

Today, a woman who proudly declared herself a ‘fan of Godse’ and said the very name ‘Gandhi’ is like a ‘gaali’ (a swear word), has been elevated to the leadership of the Bharatiya Janata Party’s social media cell. As has a man who used foul abuse against Congress Parliamentary Party chairperson Sonia Gandhi, and the “b****y voting right” for Muslims and oppressed castes as the “root cause” of India’s problems. Meanwhile, online and offline pro-Modi mobs as well as police are hounding student protesters, especially girls and women. The pretext is that the students, as a last resort, raised profane slogans at Mr. Modi himself, which turned out to be the only thing to move him to remove his corrupt Minister.

Will these mobs, together with the moral policing mobs and the anti-Muslim lynch mobs, be elevated to the ranks of Mr. Modi’s ‘civilian defence force’? This is a real danger, given that his supporters believe he is the ‘Hindu Hitler’ of Moonje’s and Hedgewar’s dreams.

INSIDE JHARKHAND AND BIHAR’S 25 YEAR SONE DISPUTE

The 25-year-old dispute between Bihar and Jharkhand over the sharing of Sone River water was resolved on Monday with the signing of an inter-state Memorandum of Understanding (MoU) in Delhi, under which Bihar will receive 5.75 million acre-feet (MAF) and Jharkhand 2 MAF of water.

Key Takeaways:

- The agreement is expected to pave the way for long-delayed irrigation, reservoir and river-linking projects in the drought-prone regions of both states.
- The dispute dates back to November 2000, when Jharkhand was carved out of Bihar. It inherited major upper catchment areas and tributaries of the Sone River, while lower riparian agricultural hubs remained in Bihar.
- The core of the dispute traces back to the 1973 Bansagar Agreement, a tripartite agreement involving Madhya Pradesh and Uttar Pradesh, under which undivided Bihar was allocated 7.75 MAF of Sone water out of the total basin yield.
- After Bihar’s division, no binding formula existed to split that 7.75 MAF allocation between Bihar and the newly formed state of Jharkhand.
- Under the pact, the two states agreed that Bihar will receive a water allocation of 5.75 million acre-feet (MAF), while Jharkhand will receive 2 MAF of Sone water.

**Do You Know:**

— Article 246 of the Constitution provides a framework to distribute legislative powers between the states and the Centre through the Seventh Schedule, which includes the Union List, the State List and the Concurrent List.

— Entry 17 of the State List deals with water – covering water supplies, irrigation and canals, drainage and embankments, water storage and water power – subject to the provisions of entry 56 of the Union list.

— Entry 56 of the Union List provides that the regulation and development of inter-State rivers and river valleys is declared by Parliament by law. Article 262 further provides Parliament with powers related to the adjudication of inter-state river water disputes related to its use, control, distribution, etc.

— In addition, under Article 262, Parliament has enacted the Inter-State River Water Disputes (ISRWD) Act, 1956, for the adjudication of disputes relating to waters of inter-state rivers and river valleys. The act has been amended four times, with the last amendment being in 2002.

WILL 'TALKING' CARS REDUCE ROAD ACCIDENT DEATHS?

In 2025, crashes on roads claimed 1.83 lakh lives in India — around 6,000 more than the previous year — raising alarm across different segments of the government. Now, the Union Ministry of Road Transport and Highways (MoRTH) will soon mandate its new road-safety intervention, the Vehicle-to-Vehicle (V2V) communication system, through which cars will essentially talk with each other wirelessly to warn drivers about upcoming accident risks on the road.

Key Takeaways:

— The Ministry had published the draft Central Motor Vehicles (Amendment) Rules, 2026, on July 22 seeking objections and suggestions from the public on the V2V system within 30 days; now, they will be taken into consideration.

— The proposed changes to the Rules mark a significant transition in India's vehicle manufacturing and road infrastructure by moving ahead of onboard safety mechanisms like advanced driver assistance systems (ADAS) and interconnecting two vehicles.

— The draft Rules propose mandating the minimum technical and safety features for V2V-fitted vehicles before they are rolled out on roads, while also setting a deadline for manufacturers to install the V2V system.

— According to the MoRTH notification, the vehicles of categories L (two- and three-wheelers), M (cars, buses), and N (goods vehicles) manufactured on or after October 1, 2027, will be required to comply with AIS-230 standards, if they are fitted with V2V system.

— It also says that vehicles of categories L, M and N, manufactured on or after October 1, 2028, will be required to be fitted with V2V communication systems, meeting specifications as per AIS-230.

— AIS-230, or Automotive Industry Standard-230, is a technical backbone for the V2V system, which specifies a list of requirements like radio performance, frequency stability, receiver



sensitivity, cybersecurity and communication-security provisions, electromagnetic interference and compatibility requirements, Global Navigation Satellite System road safety applications, etc.

— For the V2V system, an On Board Unit (OBU) will be installed in vehicles so that it can exchange information with other vehicles wirelessly. It will use cellular Vehicle-to-Everything (C-V2X) technology in the 5.875 GHz to 5.925 GHz frequency band.

— On June 10, 2026, the Department of Telecommunications exempted the use of this frequency band from licensing requirements. Now, the original equipment manufacturers (OEMs) can use this spectrum to get V2V installed in new vehicles.

— The V2V-fitted vehicles will alert the driver about sudden braking, black spots, unsafe lane changes, obstacles like parked vehicles on roadsides, fog or any potential collision risk.

— The traditional safety features in vehicles — such as the camera-based ADAS — depend on the line of sight of a driver, that is, how far one can see the road. The V2V system, however, works beyond the line of sight such as blind corners or behind large trucks, and it alerts the driver by establishing contact with other vehicles. So, it is expected to complement ADAS and predict forward collision risk. The vehicles will continuously exchange real-time data including speed, position, direction, and acceleration.

Do You Know:

— V2V is only a sub-category of V2X (Vehicle-to-Everything).

V2X includes:

- Vehicle-to-Infrastructure (V2I)
- Vehicle-to-Pedestrian (V2P)
- Vehicle-to-Network (V2N)

INS NIPUN: KEY BOOST TO INDIA'S DEEP-SEA ABILITIES

The Indian Navy on Monday (August 31) commissioned INS Nipun, the second diving support vessel (DSV) of the Nistar-class, at the Naval Dockyard in Mumbai. With a mighty whale and diving helmet on its crest, the vessel will significantly strengthen the Western Naval Command's deep-sea diving, underwater intervention, and submarine rescue capabilities.

Key Takeaways:

— A DSV is essentially a specialised platform that allows a navy to sustain complex underwater operations for extended periods, particularly in deep and challenging waters. Naval operations often require divers and specialised teams to inspect, repair, recover, or intervene around ships, submarines, and other underwater assets.

— A DSV provides the diving systems, equipment, medical facilities, and operational support needed for such missions, reducing dependence on shore-based facilities, and enabling the Navy to respond quickly to underwater contingencies.



— In the past, the Indian Navy operated Russian-origin submarine rescue vessels and relied on a mix of shore facilities along with specialised diving units and suitably equipped naval vessels. But these lacked the multidomain operational capabilities and ability of long deployments at sea.

— In September 2018, a contract was signed by the Indian Navy with Hindustan Shipyard Limited, Vishakhapatnam, for construction of two DSVs. The first of the two vessels, INS Nistar, was commissioned in July last year.

— INS Nipun draws her name from Sanskrit, signifying “one who is adept, capable, and well versed in a particular discipline”. True to the name, the ship is highly specialised and is capable of undertaking deep-sea dive operations and rescue operations at sea, the Navy said.

— According to the Navy, the crest has a whale symbolising sustained deep-sea endurance and a modern diving helmet representing the diver at the core of the mission.

— INS Nipun has a self-propelled hyperbaric lifeboat, which is a pressurised lifeboat that can independently evacuate divers and diving compression chambers. It can undertake diving and salvage operations: recovery of damaged, sunken, or stranded ships and equipment.

— “The ship incorporates modern systems for navigation, platform management and precise station keeping, complemented by specialised facilities for diving, underwater intervention and medical support. These capabilities enable Nipun to function as an integrated platform for complex operations beneath the surface,” the Navy said.

WHY ACCESSIBLE REHABILITATION IS THE NEED OF THE HOUR IN INDIA

When Sidhartha Bandha’s 63-year-old father suffered a stroke, the hospital did what it was supposed to do: it saved his life. But when he came back home, another struggle began.

His father could no longer do things on his own. The doctors told the family that rehabilitation and physiotherapy were important for his recovery. But the physiotherapy service available to them was far away. For a family dependent on daily earnings, travelling repeatedly for treatment meant spending money on transport, losing working days and managing the difficulty of moving a person who could barely move independently.

The family eventually had to give up on regular rehabilitation. Over time, Sidhartha’s father developed contractures, a condition in which muscles and joints become stiff and shortened when a person remains immobile for a long period. Sitting, standing, changing position and doing everyday activities can become a struggle.

Sidhartha remembers a different life of his father, a life where he worked in the fields and helped with household chores. His father is alive now, his life saved. But what kind of a life was it?

Where should healthcare end?

If a person survives a stroke but cannot regain the ability to move, work, participate in family life or live with some independence because rehabilitation was out of reach, is it fair to say that the job of healthcare was completed?

There is no doubt that acute medical care saves lives. But saving a life is only the first part of recovery. Rehabilitation helps a person live the life that has been saved in the way they want to.



In India, while a lot of attention has been rightfully given to improving emergency and critical care, far less has been given to what happens to patients after they leave a hospital. Physiotherapy and rehabilitation are crucial components of recovering after a number of conditions, including damage to the nervous system, heart disease and orthopaedic injuries. The question before the country today, however, is: how many people can physiotherapists actually reach?

Global organisation World Physiotherapy's profile of the Indian Association of Physiotherapists estimates 52,000 practising physiotherapists in India, equivalent to only 0.36 physiotherapists per 10,000 people, whereas, for instance, several countries in Europe have over 10 per 10,000 people.

The number tells only part of the story. The more important question is where these physiotherapists are and how many people each one can realistically reach. Are they available close to the homes of people living in rural areas? Can a person from a low-income family receive regular treatment that can last from days to months without spending a large part of the family's income on travel and treatment?

The problem, therefore, is two-fold: there are not enough physiotherapists, and those that are available are not able to reach the people who need them.

And the need is enormous.

Physiotherapy is not limited to treating back pain or helping an injured athlete. It can make a meaningful difference to people recovering from stroke, heart disease, injury, surgery and many other conditions. It can help a person stand again, walk again, use an affected limb, improve balance, become physically active and return to everyday life.

Growing burden

With India's growing burden of non-communicable diseases, including heart disease and stroke, the need for physiotherapy is increasing. Someone with heart disease may need help becoming physically active safely. An older person may need help maintaining strength and balance.

A person recovering from an injury or surgery may need rehabilitation to return to work. For all of them, physiotherapy can be the bridge between being medically stable and becoming an active, functioning member of the family and community. But that bridge is often missing.

There are a number of measures that can help, ranging from policy change to simple steps hospitals can take.

A model that has worked is community-based learning. This model gives physiotherapy students opportunities to work in rural and underserved communities and understand the barriers people face in accessing rehabilitation.

Students are encouraged to see these communities not just as places for academic postings, but as places where physiotherapists can build meaningful careers and take rehabilitation closer to people's homes. It deserves wider attention across physiotherapy education and healthcare policy.

Another measure is to teach families how to safely continue simple rehabilitation at home. A physiotherapist does not have to be physically present for every exercise. Families can be shown



how to help with safe movement, positioning, walking and everyday activities, while the physiotherapist checks progress and changes the programme when needed.

Technology can help too. Tele-rehabilitation cannot replace hands-on treatment when a person needs physical examination or direct treatment. But it can allow a physiotherapist to follow up, demonstrate exercises, answer questions and keep in touch with patients who find regular travel difficult.

India also needs to think about where physiotherapists work. If most opportunities are concentrated in large cities and private clinics, many people who need rehabilitation will continue to be left behind. Students should have meaningful opportunities to work in villages, smaller towns, primary healthcare centres and underserved communities — not as an afterthought, but as an important part of the profession.

It is high time we treated physiotherapy as an important component of lifesaving care, not as an optional service tacked on after the treatment. No one should be left unable to move simply because rehabilitation was too far away or too expensive.

OUT OF NEGLECT BIN

The perimenopausal policy will ease access to care for women in midlife

Women's health care can be accused of being focused entirely on the reproductive age group. Menopause, for instance, is a natural transition phase, but even when its symptoms are severe and debilitating, women seldom have access to health care, and are forced to 'just endure'. Given the huge care gap that exists here, it is appreciable that Tamil Nadu and Karnataka have taken the step to move ahead with the announcement of a perimenopause/menopause policy. Both the States made the announcement within a short while of each other, in August. The primary benefit, besides retrieving women's mid-life care from the neglect bin it has been languishing in so far, is that the physical and mental-health needs of women in this stage of life will become part of routine government health care, making access to care easier. Tamil Nadu Health Minister K.G. Arunraj made the announcement of a perimenopausal care policy in the Assembly on August 17. He said the aim was to facilitate early identification of physical and mental health needs of perimenopausal women, with screening, counselling and treatment services through PHCs and higher centres. On August 4, Karnataka Health and Family Welfare Minister U.T. Khader, introduced 'Ruthu Thare' as the country's first dedicated women's health policy with a strong focus on perimenopause and menopause, at a meeting in Bengaluru. Menopause is the permanent end of menstrual periods and reproductive ability, confirmed after 12 consecutive months without a cycle. It happens when the ovaries naturally slow down and produce lower levels of the hormones oestrogen and progesterone. The transition time, leading up to menopause, is the perimenopausal period which can bring irregular periods and bodily changes over several years. Common symptoms include hot flashes, sleep trouble, extreme mood changes, joint pain, debility and fatigue, and for many women these can be disruptive.

Both States are planning outreach screening and counselling at the community level, women's-health clinics, district-level well-women screening, and community outreach, besides referrals to district hospitals and government medical colleges. No doubt, this is a progressive measure which will also give legitimacy to the complaints of menopausal women, but the proof of any pudding is in the eating. How effective these policies are will be measured only during implementation. Among the critical points today is that the symptoms of menopause are not treated with adequate



seriousness even by the medical community; so, adequate awareness generation among medical professionals and the beneficiaries and their families as well is a must.

WHY IS FSSAI TIGHTENING THE RULES ON FOOD CLAIMS?

The story so far:

Earlier this month, following a notice from the Food Safety and Standards Authority of India (FSSAI), Mondelez India withdrew certain health and nutrient-comparison claims for Bournvita and removed the related advertisements from e-commerce platforms.

The action is part of a wider regulatory push. FSSAI said it has issued more than 150 notices to food companies in recent months over misleading advertisements, false claims, and labelling non-compliance. The list includes some of the country's biggest packaged-food and beverage companies, such as Nestlé India, PepsiCo, Coca-Cola India, Abbott India, Red Bull India, Danone India, Mondelez India, Ferrero India, and Kenvue.

Why does Bournvita matter?

Bournvita has long been marketed to parents in the context of children's nutrition. The product came under intense public scrutiny in 2023 over its sugar content and claims about nutritional benefits. The latest action does not, by itself, establish that Bournvita is unsafe. The regulatory issue is different — whether particular health or nutrient-comparison claims are adequately supported and whether the way they are presented could give consumers a misleading impression.

That distinction is important. As a senior government official explained, "Food regulation is not limited to checking whether a product contains permitted ingredients. It also governs how a product's nutritional qualities and benefits are communicated." He added that a statement suggesting that a product helps deliver a particular health outcome, for instance, can create expectations beyond what its ingredient composition or available evidence may justify.

Why is FSSAI taking issue with '100%'?

The Bournvita action sits alongside another FSSAI concern — the use of absolute-sounding words such as "100%". In May 2025, FSSAI advised food businesses to stop using "100%" on food labels, packaging, and promotional material. Its reasoning was that such language could convey a "false sense of absolute purity or superiority" to consumers.

The significance goes beyond coconut oil or atta. In a crowded packaged-food market, words such as "pure", "natural", "healthy", "immunity-boosting", and "100%" are powerful marketing devices. They can influence purchasing decisions even before a consumer examines the nutrition panel or ingredient list.

Recent corrective actions show the range of claims under scrutiny. Amway India has removed "100%" from its "100% Pure Coconut Oil" packaging and promotional material, and dropped the "Energy Drink" descriptor from its caffeinated XS products. Kerala-based Juza Foods has agreed to withdraw claims relating to immunity, stronger bones, and comparative calcium benefits from its baby-food products.



Why is e-commerce part of the crackdown?

One important change is that enforcement is no longer confined to the physical package on a supermarket shelf. FSSAI has extended its scrutiny to e-commerce platforms and food-service establishments, issuing notices to online marketplaces as well as restaurants and other food businesses. This matters because online product pages can carry claims, images, and promotional language that differ from what appears on the physical package.

For consumers, the distinction is increasingly blurred — they may decide to purchase a product based on an online banner or product description rather than by reading the label in a shop, the FSSAI said. “Our enforcement reflects how food advertising has changed,” it added.

What is the regulator trying to change?

At its core, the campaign is about moving from broad marketing language to claims that can be demonstrated. This is particularly relevant as India confronts rising concerns over obesity and unhealthy diets. FSSAI itself has linked its recent food-safety messaging with a wider push for healthier eating and action against obesity.

How effective are these corrections?

A company can remove a claim after receiving a notice, but consumers may already have encountered it for years. Advertisements may disappear from one platform but their messaging may be present elsewhere. Online listings can also change rapidly. All this makes sustained monitoring important. FSSAI’s challenge now is to make compliance routine rather than a temporary response to regulatory scrutiny. For consumers, it is important to remember that a health claim on a food packet is a claim, not a guarantee.

SOON, RED HEXAGON LABEL TO WARN OF HIGH-FAT, SUGAR, SALT IN SNACKS

Prompted by the Supreme Court, the Food Safety and Standards Authority of India (FSSAI) has proposed introducing a red hexagonal front-of-pack label to warn consumers if packaged foods are high in salt, added sugar, or added fat.

Key Takeaways:

— “The proposal is intended to provide a simple, prominent and easily comprehensible warning to consumers regarding food products which are high in specified nutrients of concern,” the compliance affidavit filed by Kavitha Ramaswamy, Joint Director, FSSAI, before the SC said. While there is no notification yet — nor a timeline for implementation — the country’s apex food safety regulator has stated in its affidavit that the warning label, in English, will be carried on the front of the packet in a font size one point larger than the one used in the nutritional information table provided at the back of the pack.

— The plan to introduce the Front-of-Pack Nutrition Labelling will be executed in two phases, as per the affidavit. In the first phase, only products with a high content of at least two of the ingredients will carry the warning label. In the second phase, the warning will extend to products high in even one ingredient.

— The FSSAI affidavit proposes the warning label for packaged foods high in two or more ingredients of concern based on thresholds specified under the Dietary Guidelines for Indians, 2024, issued by the Indian Council of Medical Research-National Institute of Nutrition.



— “The label shall indicate the applicable declarations such as ‘high fat’, ‘high sugar’, ‘high salt’ and/or ‘highly sweetened beverage’, as the case may be, to enable consumers to identify products high in the specified nutrients,” the affidavit states.

— Single-ingredient food products and “food products which are inherently rich in fat, sugar or salt, such as ghee, edible oil, salt, sugar, jaggery and honey, subject to the applicability of other requirements under the food safety and labelling regulations”, will be exempted from the labelling requirement, the affidavit stated. The FSSAI said the two-phase plan is “to facilitate consumer acceptability and provide industry adequate time for reformulation”.

— Nutrition experts have welcomed the move to introduce warning labels but have some concerns about the implementation. Dr Arun Gupta, Convener of Nutrition Advocacy in Public Interest (NAPI)- India, said: “In principle, FSSAI has agreed to the warning labels, but they have put in a whole lot of conditions that make it ineffective. Take for example the two or more nutrient thresholds in the phase I of implementation. Many unhealthy products would not need to add the warning label because they are high in just one nutrient.”

— Another challenge is the use of the term “added”. “The food products will have to carry the warning only when there are added sugars or added fats. One, this is difficult to estimate. Two, it is not just the added fat or added sugar that harms the health; high levels of natural sugars can also be bad.” He also said the font size proposed is too small and the message should be carried in Hindi as well.

Do You Know:

— The Food Safety and Standard Act, 2006, provides the legal framework for monitoring the status of food safety, and the Food Safety and Standards Authority of India (FSSAI) is the main authority for ensuring food safety in India.

— Food Safety and Standard Act, 2006 aims to establish a single reference point for all matters relating to food safety and standards, by moving from multi-level, multi-departmental control to a single line of command. The Act established FSSAI and the State Food Safety Authorities for each State.

— FSSAI is an autonomous statutory body established under the Food Safety and Standards Act, 2006. The Ministry of Health & Family Welfare, Government of India is the administrative Ministry of FSSAI. Its headquarters is in Delhi. The FSSAI is responsible for regulating and overseeing food safety. It conducts periodic pan-India surveillance of food products, especially staple food and commodities that are prone to adulteration.

DEADLY SPAN

India’s power infrastructure is emerging as a big threat to vultures

Whereas for many decades the chief concern about vulture safety was centred on chemical threats, the threat of electrocution posed by India’s expanding power infrastructure may supersede it. In the 1990s, India’s vultures suffered one of the world’s worst population crashes, nosediving 99.5% by 2007 from a high of around four crore in the 1980s; the white-rumped, Indian, and slender-billed vultures were nearly wiped out. The culprit was diclofenac, a painkiller for cattle that wrecks vulture kidneys. The government banned the use of diclofenac, with additional bans in 2023 to mitigate threats posed by aceclofenac and ketoprofen, among some



other NSAIDs. The birds' decline left carcasses exposed for longer, supporting feral dog populations and leading to rabies outbreaks; a 2024 study in American Economic Review estimated that human mortality thus rose 4% and the associated damages cost India \$69.4 billion a year. While electrocution has not become as deadly as NSAIDs have been, the fragility of the vulture population and the proliferation of unsafe power infrastructure warrant early action. One official survey reported in 2025 that vultures were nesting at only 50% of their historic nesting sites. It is no trivial detail that the raptors' wide wingspans mean a large individual can contact two conductors at once. They also have a habit of perching on elevated structures, are attracted to open landscapes, and have incentives to congregate where the availability of food is predictable, a risk enhanced by people dumping food waste around electrical installations.

As The Hindu reported based on a recent study in the Journal of Threatened Taxa, "relocating a livestock carcass dump 2.4 km away from high-tension power infrastructure near Uttarakhand's Dehradun may have saved these large scavengers from ... electrocution". An assessment prepared for the State Climate Resilient Power System Development Project also noted an Egyptian vulture and some steppe eagles had been electrocuted on medium-voltage, rather than high-voltage, lines. Research has noted that persistent mortality due to electrocution alone could render a local population extinct. Avian electrocution is also likely under-documented in India since dead birds can be removed by humans or scavenged. As the study indicated, one inexpensive solution is to separate vulture feeding sites from power infrastructure. Other measures to protect raptors, and even other birds, especially near settlements, include insulating conductors, increasing the gap between energised and grounded components or otherwise preventing a bird from bridging them — non-trivial considering vulture wingspans — and installing safe perches.

SHORT NEWS

US CURBS ON CHINA COTTON DRIVE INDIAN YARN PRICES

- Indian apparel exporters have approached the Commerce and Industry Ministry and the Textile Ministry seeking regulation of cotton yarn exports to arrest a sharp surge in prices amid US restrictions on the use of cotton originating from China's Uyghur region, where Washington alleges the use of forced labour.
- The price pressure also comes as China is the world's largest cotton producer, accounting for 29% of global production. India is the second-largest producer.

BISHKEK DECLARATION

- The 26th Shanghai Cooperation Organisation (SCO) Council of Heads of State summit took place from August 31 to September 1, 2026, in Bishkek, Kyrgyzstan.
- It marked the 25th anniversary of the founding of the SCO, with the theme "25 Years of the SCO: Together for Sustainable Peace, Development and Prosperity". Leaders signed the joint Bishkek Declaration, addressing regional security, economic cooperation, and global issues.
- Stressing that "double standards" in the fight against terror are unacceptable, leaders at the SCO summit on September 1 called on the international community to combat terrorism, including the cross-border movement of terrorists.



— This is part of the ‘Bishkek Declaration’ adopted by India, Pakistan, Iran, Russia, China, Belarus and the Central Asian countries in the SCO grouping. The declaration is important since India has always maintained that Pakistan is responsible for cross-border terrorism in the country.

— On the war between US-Israel and Iran, which has been continuing for more than six months now, the Bishkek Declaration said: “Member states express deep concern over developments in the Middle East and around Iran.

— The leaders also welcomed the holding of the SCO Civilization Dialogue Forum in the autumn of 2026 in India. Also, keeping in view India being included in the grouping, the SCO amended the Charter to include English as an official and working language of the SCO.

— The Bishkek Declaration also said that the “SCO presidency will pass to the Islamic Republic of Pakistan, where the next meeting of the Council of Heads of State of the SCO will be convened in 2027”. This will be closely watched by the world as to how India navigates its participation in the grouping.

UNEP REPORT “LIMITING OVERSHOOT”

— A new report by the United Nations Environment Programme (UNEP) suggests the world will likely “overshoot”, or temporarily breach, the 1.5°C target of warming above preindustrial temperatures within the next few years.

— The UNEP report titled “Limiting Overshoot” says crossing the 1.5°C threshold is “unavoidable”, with global temperatures expected to peak at about 1.8°C above pre-industrial levels even under an “optimistic scenario”.

— The 1.5°C target was a key outcome of the Paris Agreement, signed in 2015 by 193 countries and the European Union. Under Article 2 of the Paris Agreement, nations must commit to keep global average temperatures well below 2°C above pre-industrial levels, and ideally capped at 1.5°C.

— The lower threshold matters because climate risks increase with every additional fraction of a degree of warming. The 1.5°C limit was never considered a completely “safe” level of warming, but staying closer to it reduces the severity of risks to people and ecosystems.

— For years, 2°C was the threshold widely used to assess dangerous climate change. It was only with the Cancun Agreements, signed at the UN Climate Change Conference (COP 16), that both 2°C and 1.5°C were formally written into an international climate accord. The 2015 Paris Agreement then established 2°C as the upper limit while identifying 1.5°C as the more desirable goal.

— UNEP acknowledges that even in an optimistic scenario where governments fully implement current climate plans and net-zero pledges, warming is expected to peak at about 1.8°C.

UN ADOPTS EQUAL EARTH MAP

The United Nations has adopted a resolution to formally phase out the 16th-century Mercator map of the world with one that more accurately depicts Africa’s size. At the UN general assembly session, 164 countries (including India) voted to adopt the 2018 Equal Earth design — with the US voting against the resolution, and six countries abstaining. While UN resolutions are not



binding, the vote may result in an update of classroom curriculums and technology. But the important aspect to keep in mind here is that no flat map of the globe can ever be truly accurate.

INDIA AND BELGIUM GIVE TIES A MAJOR BOOST

- India and Belgium agreed to strengthen defence and Intelligence-sharing, establish an investment fast-track mechanism, double bilateral trade, boost partnership on semiconductors and enter a pact on renewable energy, as Prime Minister Narendra Modi met the visiting Prime Minister of Belgium, Bart De Wever, on September 4.
- The two sides signed a Letter of Intent, which provides a clear framework for structural cooperation between the two countries' armed forces.
- Defence delegations from the two sides met and agreed to strengthen cooperation in defence industries, which includes drones, anti-mine systems, rockets, tanks, munitions. Representatives from about 15 Belgian defence companies accompanied the Belgian Prime Minister and interacted with the Indian defence industry players as well.
- The two countries also intend to develop an industrial roadmap. The Belgian Defence College also plans to organise its World Study Trip in India in 2027.
- Belgium is an important economic partner for India in Europe. Bilateral trade reached \$13.01 billion in 2025-26. Diamond trade, with Antwerp as a major global hub, remains a significant component of bilateral commerce. Belgium is also an important source of investment in India. FDI inflows from Belgium amounted to approximately \$4.2 billion between April 2000 and December 2025.

NEW LEGAL METROLOGY (INDIAN STANDARD TIME) RULES, 2026

- India has followed Indian Standard Time (IST) for decades. The new Legal Metrology (Indian Standard Time) Rules, 2026, make it the legally enforceable reference for official and commercial use, requiring systems across sectors to synchronise to time traceable to IST. This can also improve cybersecurity, reduce crime and make critical infrastructure more resilient.
- The larger objective is a common national time reference. "One Nation, One Time" means having one time reference. At present, different organisations may refer to different sources. It is like each person establishing their own starting point; you then cannot properly compare events or measurements.
- Under an Act of Parliament, CSIR-National Physical Laboratory (CSIR-NPL) is the National Metrology Institute mandated to maintain the country's scientific standards.
- Maintaining and disseminating IST has been part of CSIR-NPL's mandate. In fact, IST® (Indian Standard Time) is a registered trademark of CSIR-NPL. It has been a team effort over the years, involving scientists and technical staff at NPL, with the guidance and support of successive Directors.
- Notably, NPL is the standards body, while enforcement comes under the Department of Legal Metrology. They already enforce measurements such as mass and volume: inspectors can check measurements at a petrol pump or verify the weights used by an establishment. The new rules seek to give time a legal status and make it comparable to these physical measurements.



DISTINGUISHED JURIST

— Decades after the Constitution came into force, one route to becoming a Supreme Court judge has never been taken. Delivering the 13th convocation address for the LL.M programmes at National Law University Delhi on August 30, Supreme Court judge Justice Ujjal Bhuyan pointed to Article 124(3), which allows the appointment of a “distinguished jurist” as a Supreme Court judge, and called it an “unused mandate” of the Constitution that “needs our serious attention.”

— Article 124 sets out how the Supreme Court is constituted. Article 124(3) lists who can be appointed as a judge, ie., a citizen of India who has either served as a High Court judge for five years, practised as an advocate for ten years, or “is, in the opinion of the President, a distinguished jurist.”

— The first two routes are how the court has always been staffed. Most judges have been elevated from the High Courts, while a smaller number of lawyers have been appointed directly from the Bar. The third category, the appointment of distinguished jurists, has simply never been used.

— Article 217 lays down the conditions for the appointment of a High Court judge. The 42nd Amendment, enacted during the Emergency, added a provision allowing the appointment of a “distinguished jurist” as a judge of the High Court. However, the provision was eventually repealed by the 44th Constitutional Amendment.

LADAKH CLEARS NEW ‘NAUTOR LAND’ REGULARISATION RULES, PAVES WAY FOR GRANT OF PROPRIETARY RIGHTS

— Ladakh Lieutenant Governor Vinai Kumar Saxena on Friday approved the regularisation rules of ‘nautor lands’, paving the way for the grant of proprietary rights over eligible barren land and resolving a long-pending issue concerning thousands of landholders in the Union territory.

— Nautor land refers to barren or wasteland owned by the government and historically allotted to individuals for cultivation or other productive purposes. More than 60,000 acres of land in Ladakh is presently recorded in revenue records as nautor holdings.

— The new rules in Ladakh Autonomous Hill Development Councils (Nautor Regularisation) Rules, 2026, provide a comprehensive framework for granting proprietary rights over up to 10 acres of eligible nautor land to occupants across all seven districts of Ladakh, an official spokesperson said.

FOR INDIA POLYMER NOTES, BIDDERS CERTIFY NO ANIMAL TALLOW, FIREWALLS AGAINST CHINA, PAK

— Moving a step closer to the introduction of low-denomination plastic banknotes in the country, Indian and foreign firms have bid for the supply of polymer substrate sheets with inbuilt security features.

— Responding to the global Expression of Interest (EOI) issued by Reserve Bank of India subsidiary Bharatiya Reserve Bank Note Mudran (P) Ltd (BRBNMPL), which set an August 18 deadline, at least two foreign polymer currency manufacturers and an Indian substrate manufacturer in partnership with UK banknote manufacturer De La Rue have placed their bids, *The Indian Express* has learnt.



— Given the sensitivity of future supplies of polymer banknotes, the companies have been made to fill an integrity pact; a confidentiality contract; a no-agent pact and an undertaking that they will firewall their operations in India from those they may have in China and Pakistan.

— The bidders have also had to certify that their polymer substrate will not contain any animal tallow content or its DNA for supplies to the BRBNMPL.

— In its EOI documents, the BRBNMPL has underlined an “immediate” requirement and indicated an approximate requirement for 68,000 reams of polymer substrate for printing Indian banknotes. Each ream should consist of 500 sheets of polymer film with samples to be provided with the bids.

— The samples will be tested in various climatic zones and those found eligible will be allowed to apply for the final BRBNMPL tender.

NSE GETS SEBI NOD FOR IPO, MAY EYE LISTING THIS MONTH

— The decks have been cleared for what may be the country’s biggest-ever listing, as the markets regulator has approved the estimated Rs 30,000 crore IPO of the National Stock Exchange (NSE), over two months after it filed the papers, and about a decade after it first tried to hit the primary market.

— The country’s largest stock exchange may get listed as soon as this month, reports suggested. The approval clears a key regulatory hurdle for the exchange after it had first filed its IPO papers back in June. The price band for the issue is likely to be announced on September 15, with plans to list in the week starting September 21, Reuters reported, citing unnamed sources.

FOREX RESERVES SURGE TO NEW ALL TIME HIGH OF \$740.8 BN

— India’s foreign exchange reserves climbed to a fresh all-time high of \$740.8 billion in the week ending August 28, extending a sharp rebuilding of the country’s external buffer after the West Asia conflict had forced the Reserve Bank of India (RBI) to draw down reserves earlier this year.

— The reserves rose \$11.48 billion during the week, after having jumped \$12.42 billion to a then-record \$729.33 billion in the previous week, according to RBI data. The latest level is an all-time high for India’s headline gross foreign exchange reserves in nominal dollar terms.

COLD ALLODYNIA

— A team of researchers from the Indian Institute of Science (IISc), Bengaluru, and Kolkata-based institute TCG-CREST have identified the “brain circuit” that involves the sensations associated with a certain side effect of chemotherapy known as “cold allodynia”.

— Cold allodynia is a condition in which the sufferer may feel pain or distress from even a regular level of cold temperatures. It is one of the side effects that are part of “chemotherapy-induced peripheral neuropathy”, which includes many chemotherapy-induced neural side effects such as temperature sensitivity, a feeling of pins and needles, or pain etc.

— Cold allodynia specifically is known to be one of the side effects of oxaliplatin, a commonly used chemotherapy drug that contains platinum.



NANCY GRACE ROMAN SPACE TELESCOPE

- NASA on August 30 launched a powerful, next-generation space telescope that can search for clues for some of the universe's deepest mysteries, including mysterious phenomena such as dark matter and dark energy.
- The telescope, launched on a SpaceX rocket, is named after the late Nancy Grace Roman — known as the “mother of Hubble” owing to her role in the creation of the Hubble Space Telescope, which has been operating since 1990.
- The Roman Space Telescope, weighing about 8,000 kgs and about the size of a tour bus, will operate from the Lagrange Point 2 — a vantage point between Earth and Sun located approximately 1.2 million kilometres from Earth.
- Roman's field of view is more than 100 times wider than that of NASA's Hubble Space Telescope, still churning out celestial glamour shots after 36 years in orbit.
- In terms of scientific capabilities, the Nancy Grace Roman Space Telescope lies between the Hubble Space Telescope and the James Webb Telescope. It will be able to scan vast swathes of the cosmos and may provide new insights about dark matter, dark energy and exoplanets.
- It has two major science instruments on board:
 - Wide field instrument: This is a 300-megapixel infrared camera that can capture a patch of the sky about 1.5 times bigger than the apparent size of a full Moon. The telescope can also process images 1,000 times faster than the Hubble telescope.
 - Coronagraph: Just like humans cannot look directly into the sun but can see its rounded rim with the help of eye goggles/protective shields, astronomers use coronagraphs to mask the extreme bright light emitted by celestial bodies in order to study its immediate space surroundings. The Roman Space Telescope will deploy one of the most advanced coronagraphs.

Do You Know:

- The prevalent belief is that the universe came into being nearly 13.8 billion years ago with a massive explosion in an extremely small ‘subatomic ball’ with unimaginably small volume and infinite temperature and density, known as the singularity.
- This is widely known as the “Big Bang” — the most acknowledged theory of our existence and the evolution of our universe. All matter that exists today in the universe sprung forth from that single point in an epic explosion.
- Scientists estimate that ordinary matter makes up only about 5% of the universe. The rest is composed of little-understood phenomena called dark matter and dark energy.
- Scientists believe that dark matter, which makes up about 27% of the universe, is an invisible glue that holds galaxies together.
- On the other hand, dark energy, estimated to make up around 68% of the universe, is believed to be a repulsive force that has expedited the universe's expansion since the Big Bang.



INDIA LAUNCHED EOS-05

- In its first launch since January, the Indian Space Research Organisation sent an earth observation satellite, EOS-05, to space early morning on September 4, using a GSLV rocket. The launch breaks a slump after three failed missions in 2025 and 2026 with the satellites unable to reach their intended orbits.
- The EOS-05 is India's first dedicated imaging satellite to be placed in the geosynchronous orbit, about 36,000 km from Earth, from where it can keep constant watch over the country and provide real-time imaging service.
- With a 10-year mission life, the satellite is designed to image large areas of interest at frequent intervals for purposes such as monitoring natural disasters or keeping track of agriculture or forestry. It will also have defence uses.
- India has several other active earth observation satellites in the lower-earth orbits which circle Earth and periodically capture imagery over India. In the geosynchronous orbit, the satellite remains stationary relative to Earth, and is able to watch the same region continuously, without gaps.
- The GSLV-F17 rocket deposited the EOS-05 satellite in a transfer orbit, at an altitude of more than 190 km from Earth, about 18 minutes after the launch.
- From there, the satellite will perform a series of orbit-raising manoeuvres over the next few days to travel to the geosynchronous orbit, its final destination. Weighing more than 2,360-kg, the EOS-05 was the heaviest satellite to be carried by the GSLV rocket until now.

SHARP-TAILED SANDPIPER

- Sharp-tailed sandpiper (*Calidris acuminata*) was spotted in Najafgarh Lake on August 30– a rare sighting that added to the very limited records of the species in Delhi-NCR and the country as a whole. Sighting of *Calidris acuminata* is significant because it was only the fifth recorded sighting of the species in India over a period of almost a century and a half.
- The sharp-tailed sandpiper breeds in northern Siberia, in an area that extends from the Lena river delta on the eastern Arctic Ocean southeastward to the Kolyma region, and migrates south over East Asia to its main non-breeding grounds in Australia and New Zealand.
- Smaller numbers fly to Melanisia, a cluster of islands in the southwestern Pacific Ocean between New Guinea in the west to Fiji in the east. The species is, therefore, an exceptionally uncommon visitor to India.
- The sharp-tailed sandpiper forages in both coastal and inland wetlands, in freshwater and hypersaline habitats. It feeds on seeds, worms, molluscs, crustaceans, and insects after rainfall, and often forages in agricultural pastures and in the shallow-water edges of wetlands.
- Sharp-tailed sandpiper populations are in decline. A conservation assessment by the Australian government has estimated that population has declined by about 45 per cent over three generations, or roughly 15 years, and listed habitat loss and degradation among the major threats to the species, which is classified as 'Vulnerable' in the IUCN Red List.



ANAK KRAKATAU VOLCANO

Indonesia's Mount Anak Krakatau erupted early Sunday (September 6), sending volcanic ash across parts of western Indonesia and forcing the temporary suspension of flight operations at Jakarta's Soekarno-Hatta International Airport. The eruption also disrupted school activities and fishing in areas affected by the ash.

MAGSAYSAY AWARDS

— A Singaporean lawyer and diplomat who led an international conference that adopted the United Nations Convention on the Law of the Sea, a Myanmar activist whose group documents human rights atrocities and a former Bangladeshi teacher who has helped provide aid to her country's poorest were named on August 31 as the winners of this year's Ramon Magsaysay Awards.

— Regarded as Asia's version of the Nobel Prize and named after a popular Philippine president, who died in a 1957 plane crash, the awards honour "greatness of spirit" through selfless service to people across Asia.

— The winners of the award, first given in 1958, will be recognized at the Metropolitan Theatre in Manila on Nov. 15 with a medallion, inscribed certificate and an undisclosed cash prize.

— Singaporean lawyer and diplomat Tommy Koh, 88, was recognized for promoting international dialogue and the rule of law. He is best known for presiding over a U.N. conference of more than 150 countries, which adopted the U.N. Convention on the Law of the Sea in 1982.

— Bo Kyi, the 61-year-old winner from Myanmar, has twice been arrested in the past and spent seven years in prison for a life spent in defense of democracy and resistance against widespread human rights violations by Myanmar's military.

— Runa Khan, 67, of Bangladesh won the award for "her profound empathy for the poorest of the poor in her country."

SARDAR PATEL NATIONAL UNITY AWARD

— Seven years after it was instituted by the Ministry of Home Affairs (MHA), the first Sardar Patel National Unity Award is set to be announced on October 31 this year, The Indian Express has learnt. While the award was instituted in September 2019, no award winners have been announced until now.

— However, a series of deliberations have been held to announce the first tranche of awards this year, coinciding with the conclusion of the two-year celebrations to mark Sardar Vallabhbhai Patel's 150th birth anniversary which began on October 31, 2024.

— Sources said the award will be given by the President alongside the Padma Awards next year. According to those aware of the developments, it will be considered equivalent to the Padma Vibhushan, and there may be two or three recipients this time.

— According to the 2019 notification announcing the award, the candidate "should have made outstanding efforts and notable contribution to promote and further the cause of national unity



and integrity in a manner that may serve as an inspiration to others, and reinforce the value of a strong and united India”.

— The notification said that “the award committee would be constituted by the Prime Minister, and would include the Cabinet Secretary, Principal Secretary to the Prime Minister, Secretary to the President, Home Secretary, as members, and three-four eminent persons selected by the Prime Minister”.

— The award is set to comprise a medal and a citation, but no monetary grant or cash award would be attached to it. According to sources, it would not be conferred posthumously, except in very rare and highly deserving cases.

AIR VICE MARSHAL SHAKTI SHARMA

— Air Vice-Marshall Shakti Sharma has made history as the first woman officer (non-medical) in the Indian defence forces to achieve the rank of Air Vice Marshal (or its equivalent).

— She is the first woman officer in the Indian Armed Forces to break this glass ceiling and reach such a milestone. In the Army and Navy, women officers so far have reached the rank of Colonel and equivalent.

— On August 1, AVM Sharma assumed charge as Assistant Chief of the Air Staff (Education) at Air Headquarters, the Ministry of Defence said in a statement, adding that this landmark achievement marks a new chapter in the journey of women officers in the defence forces.

— Commissioned into the Education Branch of the IAF on June 18, 1994, the senior officer has served across various training establishments, field stations, command headquarters and Air Headquarters in her over three decades of distinguished service.

GLORIA STEINEM

— Gloria Steinem, considered among the most well-known feminist activists of the 20th century, passed away on September 3 at 92.

— Steinem was a pioneering figure of the Second Wave of the Feminist Movement of the 1960s and '70s, which saw women fight for rights in the workplace and in making reproductive choices.

— It followed First Wave feminists of the late 19th century who waged the struggle for voting rights — a key step towards being considered full citizens. The second wave broadened the fight to areas seen as strictly part of private life until then, such as reproduction.

— Coming from humble beginnings, Steinem went on to work as a journalist and even went undercover as a Playboy employee to reveal the exploitative inner workings of clubs run by the men's entertainment enterprise. She also visited India in 1957 in her early 20s as part of a fellowship at Miranda House, the women's college in Delhi University.



BUSINESS AND ECONOMICS

WHY THE US, WORLD'S TOP OIL PRODUCER, WANTS TO CONTROL VENEZUELA'S CRUDE

The US says it will gain majority control over more than 65 billion barrels of Venezuelan oil — or 20% of its proven oil reserves — under an agreement with the South American country.

Key Takeaways:

— US President Donald Trump said this “biggest oil deal in world history” will be implemented through a partnership involving private companies “at no cost to the American taxpayer”.

— Venezuela has the world's largest proven oil reserves, estimated at about 300 billion barrels, but produces and sells only about 1% of the crude the world is using. After the US captured Venezuela's President Nicolás Maduro in January, Trump declared that Washington would take control of Caracas's oil sector and that American majors would invest billions of dollars to revive the Venezuelan oil industry.

— All these months later, it would seem he is getting his wish. The announcement represents an ambitious attempt to combine American capital and technology with Venezuela's massive but dilapidated oil production infrastructure.

— The US is the largest oil producer in the world. It is also a top exporter of the black gold. So why does it want to have a high degree of control of Venezuelan crude?

— Some reasons are self-evident — energy market dominance, reducing international oil prices amid the Strait of Hormuz crisis and building up reserves. But a key reason is the very nature of Venezuelan oil — highly viscous, sticky and “sour”.

— At this stage, the precise legal and commercial structure of the US-Venezuela agreement remains unclear. While Trump said that the US would effectively obtain majority control over 65 billion barrels of Venezuelan oil reserves, Venezuela presented the pact as a major investment programme for reviving its petroleum industry.

— Venezuela has historically maintained strong state control over its oil industry. A deal giving foreign companies significant ownership or operational control of its oil producing assets could become politically contentious.

— Crude oil is not exactly a fungible commodity in practice because of the differences in quality of various types or grades of oil. And which type of crude is likely to be easily available in adequate volumes is a key factor in refinery configurations.

— As mentioned above, a key reason for the US interest is the grade of Venezuela's oil. The bulk of Venezuelan crude is classified as “heavy sour” crude — “heavy” because it is thicker and denser than the lighter crude oil grades, and “sour” because of its high sulphur content. By contrast, the majority of US oil production is “light” and “sweet” — denoting low viscosity and sulphur content.

— However, much of the American refining infrastructure — particularly the US Gulf Coast refineries — were specifically engineered to process heavy crudes from Latin America and Canada.



— The US is also not on the best of terms with other countries that have significant heavy crude reserves, such as Iran and Russia. That was also the case with Venezuela, until January this year. Therefore, the US still has to import heavy sour crudes to feed these refineries, even as it exports massive volumes of its own “light sweet” oil.

— There are also geopolitical considerations. The Trump administration wants a reliable and nearby supply source after its war on Iran prompted Tehran to choke oil supplies through the Strait of Hormuz — the narrow waterway that used to see a fifth of the world’s energy flows in peacetime.

WHY TATA CHEMICAL’S KENYA OPS ARE HALTED

Kenyan President William Ruto’s order to halt Tata Chemicals’ operations in the African nation has put the Tata Group company on the defensive, with the firm saying on Friday (September 4) that it remained committed to resolving the dispute through “constructive engagement”.

Key Takeaways:

— This is the second major dispute between Kenya and an Indian entity after it cancelled the Adani Group’s Nairobi airport project.

— The current dispute centres on Tata Chemicals Magadi Ltd (TCML), which operates a soda ash plant at Magadi in Kenya’s Kajiado County. TCML is Africa’s largest producer of natural soda ash, used in a range of industries, such as glass manufacturing. It has been operating the facility for decades and says it remains fully compliant with regulatory requirements.

— Ruto has criticised Tata Chemicals over what he said was a lack of investment and development in Kajiado, where the Magadi operation is located. “That Tata company... had that contract for 100 years. They have not built anything in Kajiado, they have not built any factory in Kajiado,” Ruto said.

— He said the government would bring in two new companies to take over Tata Chemicals’ operations. Ruto’s main accusation is that Tata has extracted Kenya’s mineral resources without providing enough economic benefit to the local area or country.

— Specifically, he says Tata has operated under a very long-term contract but hasn’t built sufficient local industrial facilities. It has largely exported soda ash rather than creating more value-added manufacturing in Kenya.

— It hasn’t generated enough local jobs, investment and industrial development relative to the resources it extracts and has failed to meet what the government considers adequate obligations towards the local community. Tata Chemicals, however, has said that the Magadi operation has played an important role in the Kenyan economy since it acquired the plant in 2005.

SUBHASH CHANDRA CASE: WHY ARE CREDITORS SET TO RECOVER ONLY ₹6.5 CR. AGAINST ₹22,006 CR. CLAIMS?

The story so far:

The National Company Law Tribunal (NCLT) on August 25 approved a repayment plan for Essel Group founder Subhash Chandra under the Insolvency and Bankruptcy Code, 2016 (IBC). Under



the plan, ₹6.25 crore will be paid to creditors and ₹25 lakh towards the insolvency resolution process costs.

This is against admitted claims of ₹22,006.57 crore, implying a recovery of about 0.03%, or a haircut of nearly 99.97%, which means a drop in the value of collateral assets, which reduces the lender's protection against losses. Some creditors, including HDFC Bank, have opposed the plan and are considering an appeal.

What's the case

The case before the NCLT concerned Mr. Chandra's liability as a personal guarantor and not against the Essel Group as a corporate entity. The proceedings were initiated by Indiabulls Housing Finance in connection with a ₹170-crore loan to Vivek Infracon Private Limited, for which Mr. Chandra had provided a personal guarantee.

A personal guarantee is a promise by an individual to repay a borrower's debt if the borrower defaults.

In a press statement issued on August 27, Mr. Chandra's office clarified he had not borrowed any money. "Chandra is only a personal guarantor. The total claim against him as a personal guarantor in proceedings is only ₹3,992 crore by the objectors of the plan and not ₹22,000 crore," the statement said.

Personal vs. corporate

A firm and the individual who own or control it are separate legal persons. Insolvency proceedings against a company and its personal guarantor are separate proceedings, although they may arise from the same borrowing.

In a corporate insolvency resolution process (CIRP), the focus is on resolving the firm's financial distress, generally through a resolution plan failing which liquidation. In personal-guarantor insolvency, the individual can propose a repayment plan. "In a corporate insolvency, the Code envisages the resolution of a firm's debt by taking over its management and finding a buyer or revival plan, whereas in personal insolvency, the first step is to allow the borrower to propose a repayment plan to be voted on by the creditors. If approved by the creditors and the NCLT, the Code provides the guarantor with a fresh start by passing a discharge order under section 119 of the Code," said Mr. Vasa.

The two proceedings can run simultaneously. Section 60 of the IBC provides for insolvency proceedings relating to a personal guarantor of a corporate debtor to be dealt with by the NCLT where proceedings against the corporate debtor are pending.

"The legal rationale for simultaneous proceedings is based on the settled principle of law found in contract jurisprudence i.e., the liability of a guarantor is coextensive and independent of the principal borrower's liability," said Rohan S. Vasa, a Mumbai-based counsel practising insolvency and commercial litigation.

Thus, Mr. Chandra's personal insolvency does not itself settle the liabilities of the Essel-linked firms that borrowed the money. Creditors can continue to pursue the principal borrowers via own legal or insolvency proceedings.



Why only ₹6.5 crore?

The admitted claims in Mr. Chandra's personal insolvency proceedings total ₹22,006.57 crore. Against this, the repayment plan provides ₹6.25 crore to creditors and ₹25 lakh towards process costs.

The 99.97% haircut is therefore a comparison between the total admitted claims and the amount proposed for distribution under Mr. Chandra's personal repayment plan. It does not mean that Mr. Chandra personally borrowed ₹22,006 crore.

"The '99.97% haircut' is a comparison against admitted claims, ₹22,006.57 crore, not against realisable assets that the guarantor, Dr. Chandra in this case, actually owns," said Mr. Vasa.

The resolution professional assessed Mr. Chandra's disclosed personal assets at about ₹31.79 crore. The NCLT considered if creditors would be better off under the repayment plan than if Mr. Chandra were pushed to bankruptcy and approved the plan.

The case also raised questions about Mr. Chandra's earlier reported wealth. A 2017 net-worth certificate furnished to RBL Bank put his net worth at about ₹45,888 crore while a 2018 certificate put it at about ₹40,562 crore. His assets in the present proceedings were assessed at about ₹31.79 crore. Creditors sought a forensic audit to examine the discrepancy.

"A gap between an old net-worth certificate and today's disclosed assets, while being a rational question to ask, isn't by itself proof of fraud, and it doesn't automatically trigger a forensic audit. While this may be alarming, suspicion is not proof, and at present, the NCLT held the creditors failed to show, with actual evidence, that specific assets were transferred, concealed or diverted to defraud creditors" said Mr. Vasa.

The NCLT similarly held the earlier certificates did not, by themselves, establish that assets had been concealed or diverted. It also held that a forensic audit was not a mandatory precondition for approving the repayment plan.

The IBC provides for collective decision-making by creditors. A repayment plan does not require unanimous approval. In this case, the plan received 80.814% of voting share, over statutory threshold of more than three-fourths.

The principle is that an individual creditor cannot veto a plan approved by the required majority. Once the NCLT sanctions the plan, it becomes binding on the creditors covered by it, including those who voted against it.

However, creditors can challenge how the majority was obtained or whether the law was followed.

One major objection in this case concerned five entities that dissenting creditors alleged were associates of Mr. Chandra and therefore should not have been allowed to vote. The NCLT did not accept the objection.

"Once a plan clears the 75% voting share requirement as provided by the Code, no creditor gets a veto. The plan binds everyone, including those who voted against it. That's the whole point of majority rule in insolvency law," said Mr. Vasa. The original NCLT Bench itself had differed over the plan, requiring the matter to be decided by a third member. The third judicial member, Nilesh Sharma approved it.



If creditors appeal

Creditors can challenge the NCLT order before the National Company Law Appellate Tribunal (NCLAT).

An appeal would have to raise a legal or procedural challenge, such as whether ineligible creditors were allowed to vote, whether the statutory majority was correctly calculated, or whether the NCLT wrongly applied the

A creditor cannot overturn the plan merely because it considers the ₹6.5-crore recovery too low.

“The strongest grounds available to the dissenting creditors are the objections with respect to the votes that came from entities that are allegedly ‘associates’ of Dr. Chandra and that family control over those entities should have been enough to disqualify their votes,” said Mr. Vasa.

If the appellate tribunal finds that votes were wrongly counted and that the required majority was consequently not achieved, it could interfere with the NCLT’s approval.

“Lastly, the most recent newsletter published by the Insolvency and Bankruptcy Board of India (“IBBI”) confirms that since the Personal Guarantor law kicked in, out of the approximately 5,186 cases filed by creditors, only 64 cases ended in a repayment plan, and across those cases, creditors have recovered roughly 1% of what they are owed. Therefore, the Subhash Chandra case is the norm, not the exception,” said Mr. Vasa.

For now, however, the NCLT-approved plan provides for ₹6.25 crore to be distributed to creditors, with ₹25 lakh towards process costs. The plan concerns Mr. Chandra’s personal insolvency and does not, by itself, extinguish the separate liabilities of the companies that originally borrowed the money.

NCLT SPECIAL BENCH STAYS RELIEF TO SUBHASH CHANDRA

A five-member Special Bench of the National Company Law Tribunal (NCLT) on Tuesday stayed an August 25 ruling by a single-member Bench of the tribunal that cleared a repayment plan requiring Essel Group founder Subhash Chandra to pay ₹6.25 crore towards admitted claims of ₹22,006.57 crore in personal insolvency proceedings against him. It also restrained Mr. Chandra from alienating his assets.

The Bench found that earlier opinions in the case had failed to yield a clear majority and consequently stayed the August 25 opinion delivered by the third member, Nilesch Sharma.

The Special Bench also issued notices to the parties and sought their replies ahead of the next hearing on September 23.

It assured the parties that they would be heard at length before a final decision was taken on the repayment plan.

The larger Bench, comprising President Justice (retd) Anupinder Singh Grewal, Judicial Members Bachu Venkat Balaram Das and Mahendra Khandelwal, and Technical Members Atul Chaturvedi and Ravindra Chaturvedi, was constituted on August 31. Earlier, after a two-member Bench of the NCLT in New Delhi, comprising Judicial Member Ashok Kumar Bhardwaj and Technical Member Reena Sinha Puri, delivered a split verdict on the repayment plan in September 2025, Mr. Sharma was brought in as the third member to resolve the impasse.



In his August 25 ruling, Mr. Sharma backed the repayment plan approved by creditors holding 80.814% of the voting share. The plan required Mr. Chandra to pay ₹6.25 crore from his personal estate against admitted claims of ₹22,006.57 crore, effectively entailing a haircut of over 99% for dissenting creditors, including major banks and financial institutions.

‘Independent order’

However, when the matter returned to the original two-member Bench, it found that Mr. Sharma had “consciously passed an independent order” rather than concurring with either of the earlier opinions, leaving no majority view. This prompted a fresh reference to the NCLT President, who then constituted the five-member Bench.

Meanwhile, dissenting creditors, including LIC Housing Finance and Union Bank of India, have challenged the approval of the repayment plan before the National Company Law Appellate Tribunal (NCLAT). Appearing for the creditors before the Special Bench, Solicitor General Tushar Mehta sought to restrain Mr. Chandra from disposing of any property held by him, either directly or indirectly.

Acceding to the request, the Special Bench restrained Mr. Chandra from alienating his assets.

The insolvency proceedings against Mr. Chandra date back to 2024, when Indiabulls Housing Finance approached the NCLT to enforce personal guarantees furnished by him for loans taken by Essel Group-linked entities. The proceedings concern his liability as a personal guarantor and are distinct from insolvency cases involving group companies and regulatory proceedings concerning Zee Entertainment Enterprises.

Dissenting creditors had opposed the repayment plan. LIC Housing Finance had termed the payment terms under the plan “unviable and unlawful”.

The lender, which has an admitted claim of ₹1,322.39 crore, stood to receive only ₹38.09 lakh under the plan.

INDIA’S DATA CENTRE BOOM IS COLLIDING WITH ITS CLIMATE REALITY

India is in the middle of a data centre gold rush. Global tech giants — Google, Meta, Amazon, Microsoft — have committed billions to build facilities across the country. The government estimates that data centres will drive nearly \$200 billion in investment over the coming decade.

Many States in the country are competing fiercely for a piece of the pie. Maharashtra wants to be the data centre capital of the country. Telangana has declared data centres as “essential services.” Karnataka is reviewing its policy to attract more. Rajasthan is offering tax exemptions and cheap land. All eyes are on the opportunity, but none on the cost.

Data centre capacity in India has nearly tripled from 520 megawatts in 2020 to nearly 1.5 gigawatts today. By 2030, it is projected to hit 6.5 GW, which is a fourfold expansion in just four years. Electricity demand from these facilities is expected to rise from about 13 terawatt-hours (TWh) in 2024 to roughly 57 TWh by 2030. The Union Ministry of Power estimates that artificial intelligence alone will add 26.3 gigawatts of new demand by 2031-32.

No policy document, at the Central or State level, has assessed what guaranteed power costs the grid that is already strained under 45°C heat, or where the water will come from for cooling, or



what the thermal load from thousands of servers will do to regions already teetering on dangerously high temperatures.

The resource reality

A 100 MW data centre consumes about 2 million litres of water daily. That is equivalent to the daily use of roughly 6,500 households. India's data centres consumed an estimated 150 billion litres of water in 2024-25. By 2030, that figure is projected to more than double to 358 billion litres annually.

The water use matters because data centres are clustering in India's most water-stressed regions. Rajasthan extracts 147.11% of its annual groundwater recharge, the second highest rate in the country. Several groundwater assessment units in Maharashtra are classified as semi-critical. Telangana's Irrigation Minister confirmed in May 2026 that 16 districts were under groundwater stress. Hyderabad's surface water supply dropped 20% during the summer of 2024 due to poor monsoon recharge, forcing the water board to ration supply. Mumbai's reservoirs stood at just 44.5% of capacity in March 2026.

The water these facilities consume is not accounted for in any State policy. None of the policies require public disclosure of daily water consumption. None require a hydrogeological assessment before approval. None mandate that water sourcing must not compete with agriculture or municipal supply.

The electricity situation is equally concerning. India's power grid is already straining under record demand. Maharashtra's peak power demand hit 27,230 MW in April 2026, the highest ever handled by the State utility. Two-year waits for 220 kV grid interconnections across the country are already lengthening project timelines.

Transmission constraints are also becoming a critical bottleneck. India curtailed 300 GW-hours of renewable energy in the first quarter of 2026 alone, simply because the grid could not carry it, according to an analysis of Central Electricity Authority data by Ember Energy, a specialised consultancy. Over the past five years, India has met only about 80% of its annual transmission targets. One in four major transmission schemes is running a year or more behind schedule. As a result, 20 GW of renewable energy capacity faces connectivity delays of more than four months.

Rajasthan and Gujarat, which house the bulk of India's utility-scale solar and wind, face the longest queues at pooling stations. The problem has become structural in the country. Solar projects are being built faster than the wires to carry their power. This matters because data centres need reliable, uninterrupted electricity. If renewable energy cannot reach them, the power will come from coal, adding to the burden of carbon emissions that India is trying to curtail.

The heat they generate

Data centres do not just consume power and water. They also generate heat. And that heat makes the places around them hotter. A March 2026 study from the University of Cambridge, analysing 20 years of NASA satellite data, found that data centres raise land surface temperatures by an average of 2°C within a 10 km radius, with extreme cases reaching 9.1°C. The study estimates that approximately 340 million people globally live within these affected zones.

This is not a distant problem. Mumbai's land surface temperature has already risen from 40.9°C in 2003 to 47.3°C in 2023, an increase driven largely by urbanisation and heat-trapping infrastructure. Hyderabad's urban heat island intensity ranges from 5.74°C to 6.82°C, even as its



urban area doubled between 2001 and 2020. The city recorded temperatures above 43°C in the summer of 2024.

The Cambridge finding creates a feedback loop. Data centres generate heat. That heat raises ambient temperatures. Higher ambient temperatures increase cooling demand. Increased cooling demand raises electricity consumption. Higher electricity consumption, unless fully renewable, increases emissions. And those emissions contribute to the very climate change that is making India hotter in the first place.

The governance gap

The data centre policies of various States offer generous incentives in the form of electricity duty exemptions, transmission charge waivers, stamp duty relief, and fast-track clearances. But they impose virtually no conditions. None of the major State policies require a grid impact assessment before commissioning. None require mandatory renewable energy sourcing. None require thermal load assessment for surrounding communities.

Telangana's policy is particularly revealing. It classifies data centres as "essential services," guaranteeing them uninterrupted power even during shortages. In a State where 16 districts face groundwater stress and temperatures have reached 47°C, this is a policy choice with direct consequences.

Maharashtra's policy originally required 100% renewable energy for core operations. In June 2026, the State reduced that requirement to 51%, a dilution framed as improving project viability.

Gujarat's new Data Centre Policy 2026-29 mandates at least 51% green energy sourcing. Karnataka's IT minister told the State Assembly in March 2026 that the State was reviewing its policy over water and energy concerns. Tamil Nadu has linked incentives to renewable compliance. But these are exceptions, not the norm. And even where mandates exist, enforcement and verification remain weak.

"There is a risk that a significant part of the associated infrastructure cost could eventually be socialised," said Vibhuti Garg, Director, South Asia at the Institute for Energy Economics and Financial Analysis (IEEFA), a think tank. "Where broader grid infrastructure is required, government support or appropriate financing mechanisms could help ensure that the cost is not simply transferred to consumers through higher electricity tariffs."

"Governments should introduce phased power and water use standards with enforceable benchmarks," said Prateek Aggarwal, Senior Programme Lead at Council on Energy, Environment and Water, a Delhi-based think tank. "A national AI Energy Star rating would let buyers and regulators compare how energy-efficient a facility or model actually is."

What needs to change

India's generation pipeline can absorb the additional demand from data centres. The Union Ministry of Power says capacity is not the constraint. The constraint is market design and transmission infrastructure.

Aggarwal argued that "India needs climate-intelligent power markets that price grid services separately, where short-term markets pay for ramping, storage, and demand response." Ember's analysis points to another near-term solution in the form of battery storage at renewable pooling stations. Roughly 3-4 GW of two-hour storage could have absorbed most of the curtailed



generation in early 2026, according to its calculations. The technical pieces are in place but the gap is regulatory and commercial.

IEEFA has suggested that coastal locations offer advantages such as proximity to near-shore wind and solar, and access to seawater for cooling without desalination. But for now, most data centres are clustering around existing tech hubs of Mumbai, Hyderabad, Bengaluru, and the National Capital Region. These are precisely the places where water and grid stress are already most acute.

A national sustainability framework would help. It would establish minimum standards for renewable energy sourcing, water consumption disclosure, grid impact assessment, and thermal load evaluation. It would create a common set of expectations for investors and a common set of protections for consumers. It would also recognise that environmental constraints are economic constraints, and that ignoring them only creates larger costs later.

Data centres are not optional. They are critical infrastructure for India's digital future. The question is not whether India should build them. The data centres will be built. It remains to be seen whether they will be built in a way that protects India's water, power grid and climate, or in a way that leaves future generations to pay the bill.

THE BROKEN PROMISE OF RIGHT TO WORK

On August 21, a three-judge Supreme Court Bench led by the Chief Justice of India dismissed a petition and sought a fresh one in a case on minimum wages in rural employment guarantee programmes. The Bench lauded MGNREGA's role in rural development. It probed whether the 'Right to Work' should be treated on par with Article 21, the fundamental right to life, sparking an important discussion on the constitutional foundations of this right.

A guarantee under strain

Despite its limited scope of only 100 days of work per rural household and chronic underfunding, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was the only law anchored in the core principle of the right to work. In December 2025, the Union government replaced MGNREGA with the Viksit Bharat — Guarantee for Rozgar & Ajeevika Mission (Gramin) (VB-GRAM G) Act, and its implementation began on July 1. About 3.44 crore households worked for about 44 crore person-days under MGNREGA in July and August, on average, over the previous five years (Table 1). There has been a 68% decrease in employment in July and August this year compared with the average of the preceding five years. Notwithstanding the proverbial 'teething issues', the dismantling of MGNREGA's demand-driven right-to-work framework and the disproportionate fiscal burden that the new law places on States are likely to be major factors behind the dramatic fall in employment under the VB-GRAM G Act.

The impact of taking away even this limited right to work is therefore palpable. Discussions around the recent Supreme Court observations on the right to work can be traced back to the Constituent Assembly debates.

While most members agreed that a right to work was vital, the debate rested on whether it should be a fundamental right or be part of the Directive Principles of State Policy (DPSP). The DPSPs do not automatically constitute rights but are meant to serve as precepts for governments to formulate laws and policies. This became the basis of the differences in perspective.



Professor K.T. Shah had strongly advocated recognising the right to work as a fundamental right, arguing that the State needed a constitutional and positive legal mandate to guarantee socio-economic security to its citizens. Dr. B.R. Ambedkar, among others, held that while the right to work was an essential goal, its immediate universal enforcement was not fiscally and institutionally viable in a newly independent India that had been hollowed out of its resources. The placement of the right within the Directive Principles, rather than among the fundamental rights, thus reflected a deliberate constitutionalism of aspiration, rather than an abandonment of the welfare ideal. As scholars Anjani Kapoor and Manu Bhagwan have written in their essay 'Ambedkar and the anti-isolation of Fellowship', "The constitution does not establish the nation, but rather provides the tools to help achieve it."

Therefore, Article 41 of the DPSP states: "The State shall, within the limits of its economic capacity and development, make effective provision for securing the right to work..." Embodying stronger progressive consecrations, Articles 39, 42 and 43 call for the "right to an adequate means of livelihood, equal pay for equal work for both men and women, just and humane conditions of work" and to "secure to all workers a living wage and decent standard of life."

From aspiration to a statutory right

The Supreme Court, in *Olga Tellis vs Bombay Municipal Corporation* (1985), ruled that the right to livelihood was a necessary condition for the fundamental right to life, giving a judicial fillip to the right to work. Spurred by the collective efforts of activists and rural workers, the National Rural Employment Guarantee Act was passed in 2005. Although limited in scope, it made a pan-India right-to-work law a reality for the first time. The State had to ensure its statutory obligation to provide employment at minimum wages.

In 2009, MGNREGA wages were delinked from the Minimum Wages Act, 1948. Over time, MGNREGA wages barely kept pace with inflation and continued to remain lower than the minimum agricultural wages in most States. Low wages and an inadequate budget for generating employment have resulted in a steep decline in household earnings, with estimated total household earnings halving in July and August this year compared with the same months last year (Figure 1).

During the recent hearing, the Supreme Court Bench remarked that if financial resources remained the same, having a minimum wage threshold could reduce the number of workers who could be provided employment. This remark, which appears to align with the Union government's approach to employment guarantee, merits scrutiny on at least two counts.

First, it vitiates the judgment in *Sanjit Roy vs State of Rajasthan* (1983) where the Supreme Court observed that payment of wages below minimum wages violates Article 23 of the Constitution and is akin to 'forced labour.' Second, it rests on a misleading economic logic that financial resources to implement a welfare programme must remain unchanged and constrained.

In reality, higher wages for rural workers increase their purchasing power, enhance their freedoms, and improve human development outcomes. These, in turn, increase effective demand for goods and services, creating a positive multiplier effect, resulting in higher economic productivity. Therefore, higher government spending on an employment guarantee programme at increased wages can yield a mutually reinforcing cycle between development and growth.



A retreat from the right to work

By putting an arbitrary cap on funds for the VB-GRAM G Act and not linking it with minimum wages, the very notion of employment guarantee stands delegitimised. States are already grappling with fiscal constraints and curtailed borrowing limits under the Fiscal Responsibility and Budget Management (FRBM) framework. The increased burden of funding the VB-GRAM G Act will prevent States from generating employment. The sharp drop in employment and earnings is a reflection of this change.

The VB-GRAM G Act also contains provisions to denotify certain areas and exclude them from the scheme, thereby limiting the universality of MGNREGA's right to work.

Lawyer Purbayan Chakraborty highlights how the Supreme Court has affirmed the doctrine of non-retrogression in *Navtej Singh Johar vs Union of India*. The doctrine implies that once the State has achieved a certain level of progressive legislation and enforceability of a right, it cannot implement measures that deliberately undo it. Non-retrogression operates as a check on State power, ensuring that rights, once realised, are not diluted later. The replacement of MGNREGA with the VB-GRAM G Act appears to be in violation of this doctrine.

Rural wages have been stagnant for a decade, while women are increasingly employed as 'unpaid family workers'. In such light, the minimal requirements for affirming the commitment to the right to work are: linking MGNREGA wages to living wages, timely payment of wages, a focus on social audits by empowering local institutions to be partners in mitigating corruption, and giving more powers to Panchayati Raj institutions.

All these measures could be implemented within a legal framework of the right to work. The VB-GRAMG Act, unfortunately, is silent on most of them. Reinstating the right to work would therefore not only be a legal course correction advancing constitutional aims, but would also be sound economics.

MANY LAYERS

Farmers need more storage facilities and better distribution networks

Since the 1960s, India has developed a balancing-act habit: between keeping food prices affordably low for consumers and assuring farmers of remunerative prices, with the state's interventions focused on managing this volatility in the short term. This is also why the government banned onion exports from December 2023 to May 2024, then imposed a \$550/tonne minimum export price and a 40% export duty, reduced the duty to 20% in September 2024, and finally abolished it in April 2025. But erratic weather together with the lack of long-term relief has rendered the act increasingly awkward. From farmers' point of view, the government often changes its mind after they have made important production-related decisions based on the expected price. On the other hand, during the bounteous rabi harvest, onion farmers in Maharashtra, the country's principal supplier, had argued that the Centre's procurement price of ₹12.35/kg would not cover the costs of cultivation. The Centre subsequently raised the price to up to ₹26.45/kg, but many farmers — including some who had had to sell at ₹1/kg earlier because of low quality and lack of storage, among other factors — were unable to capture the higher value, exposing the limits of intervening after prices have already collapsed and not reaching all farmers or grades of produce.



While the government has alluded to some price manipulation, the dominant issue remains that it keeps reacting instead of taking proactive measures, including improving storage options, maintaining a less erratic trade policy, moving stock more efficiently between regions, and protecting farmers against price shocks. The abnormal rainfall at the time of harvest and a 5%-7% drop in the kharif crop in Maharashtra, together with the well-known challenges associated with storing onions and maintaining large buffers, are simply among the pressures that highlighted the flaw this year. Further, Tamil Nadu's targeted subsidy, to buy 1,000 tonnes of onions to distribute 1 kg per ration card at ₹35, will impose pressures on the Centre to maintain a steady supply. The move is commendably designed to discourage hoarding while allowing private retail prices to cool down. However, the State must also guard against the pitfalls of distributing onions through a dry-grain PDS network — its economic case could collapse if post-harvest losses, to which onion is more susceptible than, say, wheat or rice, exceed 10%-15% — and if the need arises to persist with the subsidy. Finally, if other States also adopt similar measures, the Central buffer could be quickly exhausted, more so given this year's high storage losses of around 30%.

WHAT'S THE REASON BEHIND THE SUDDEN SURGE IN ONION PRICES?

The story so far:

Days after sugar prices increased sharply, the price of onion, an essential commodity whose prices are considered a politically sensitive topic, nearly doubled from last year's.

On September 1, the all-India average price was ₹49.59 a kg, registering an over 74% increase from ₹28.48 on the corresponding day in 2025.

On August 1, the price was ₹35.47 a kg. In Kolkata and Chennai, the price has now reached ₹60. What has worried the Centre is the fact that over the past two weeks, the price has gone beyond ₹70 in certain retail markets, particularly in North India. This increase is unprecedented, and according to some officials, has left the Centre searching for reasons behind this surge, as the Opposition says the government has failed to curb the price rise of essentials.

What could be reason for the increase?

The production of onion is estimated at 307.37 lakh tonnes (lt) in 2025-26, which is in line with the previous year's production of 307.67 lt. The production is adequate for the domestic consumption and for export, which comes to about 15 lt. However, industry sources claim that the quality of onions, particularly after the delay in the rain and the subsequent delay in harvest in Maharashtra (the largest onion producing State), was not up to the standard. The fact that quality onions are less than last year is considered a reason for the price rise.

Historically, according to the government, onion prices have exhibited a seasonal uptick and volatility from August-September owing to increased demand during festive season, weather, supply-chain movements, and other demand conditions.

This year, as soon as the price of sugar increased, there was a tendency not to release the onion stocks, particularly among the big traders. Union Agriculture Minister Shivraj Singh Chouhan and Union Consumer Affairs Secretary Nidhi Khare have outlined hoarding and black marketeering as the reasons for the sudden increase in the prices of onion.



What steps are being taken to ease the prices?

As it is natural for traders and big farmers to look for better prices of what they produce and sell, the government says that it was expecting such a problem in the case of onions. Big farmers and big traders try to keep the stock in cold storage, hoping to release it when prices are right.

To counter this, the government has started a calibrated release of onion from its buffer stocks. It is selling onions at ₹35 a kg, to give a message to the consumer that it is the real price of onion and put pressure on those hoarding it, a senior official said.

10 YEARS OF UPI: HOW CAN IT EXPAND NEW FRONTIERS FOR DIGITAL PAYMENTS?

The Unified Payments Interface (UPI), celebrating its tenth anniversary in August this year, is unique in many ways as it democratised technology, altered consumers spending behaviour and elevated India's position from a consumer of global payment technologies to an exporter of digital public infrastructure.

Launched in 2016 with 21 banks, UPI is an open-access platform built by National Payments Corporation of India (NPCI). It now has over 700 lenders, daily processing about 66 crore transactions — a milestone recognised by the International Monetary Fund (IMF).

An ACI Worldwide report said India accounted for 129.3 billion real-time payment transactions or 49% of global volume, followed by Brazil with 37.4 billion transactions (14%), Thailand with 20.4 billion (8%), China with 17.2 billion (6%) and South Korea with 9.1 billion (3%).

Volume giant

Faster penetration of affordable smartphones and Internet, Aadhaar-based identity framework, and the government's push to digital payments created a perfect environment for the exponential growth of UPI, making it a volume giant. However, it is not yet a value goliath. Officials, directly and indirectly, view that a platform handling trillions of rupees annually cannot depend indefinitely on a zero-cost model.

Annual UPI transactions scaled from just 1.78 crore in FY17 to more than 24,162 crore in FY26 — nearly a 13,000-fold jump. Value expanded from ₹0.07 lakh crore to around ₹314 lakh crore during the same period.

Retail payments accounted for about 81% UPI's transactions by volume in FY25, but constituted mere 9–10% of total value, while systems like RTGS dominate large-value transfers.

Displaying financial inclusion, anybody from a street hawker or a small merchant to auto drivers with a QR code can now accept digital payments without investing in expensive point-of-sale infrastructure.

Simultaneously, the reduced transaction costs and expanded customer engagement also forced banks to rethink their traditional payment revenue models.

UPI's main competitors

Brazil's Pix is the closest comparison to UPI. Meanwhile, China's digital payment revolution was driven mainly by private technology platforms — Ant Group's Alipay and Tencent's WeChat Pay.



The U.S. payments remain dominated by card networks such as Visa and Mastercard, along with bank-based systems like ACH. The U.K. has Faster Payments, while Singapore has PayNow. Although UPI leads in transaction volume, global acceptance and merchant integration are the areas where global networks have an advantage.

The payment infrastructure is fast becoming a key component of economic diplomacy. UPI is now operational globally, with adoption and acceptance expanding across almost a dozen countries. The objective is to facilitate payments for Indian travellers and create cross-border payment connectivity that can reduce dependence on traditional correspondent banking channels. For decades, global payment systems were dominated by card networks and closed-loop platforms.

India — which demonstrated that a low-cost, interoperable, real-time payment system could operate at massive scale — has attracted global interests. New Delhi has signed digital public infrastructure cooperation agreements with as many as 23 countries, covering areas such as digital identity, payments and data exchange. Namibia, Peru, South Africa, Kenya, Rwanda and other African countries have had discussions on adopting India's digital payment infrastructure approach.

Next frontiers

The UPI's first decade marked building scale, adoption and trust, which have been achieved diligently. The next decade should ideally focus on sustainability, globalisation, and financial innovation. The time has come for the UPI to move beyond its role as payment gateway and evolve into a new generation of embedded finance, spanning digital lending, insurance products, investments, wealth management and cross-border remittances.

Key challenges ahead

The key challenges include raising transaction limits and building confidence among corporates, regulators, and tax authorities. UPI is now largely used for low-value person-to-person and merchant payments, with normal transactions having ₹1 lakh per transaction limit. Select categories such as IPO applications, capital markets, and tax payments have higher limits, including up to ₹5 lakh in some cases. To attract large-value flows, UPI needs higher merchant transaction ceilings for verified businesses, tiered limits based on risk profiles, instead of uniform cap, corporate UPI accounts with maker-checker authentication similar to corporate internet banking, and bulk payment capability for salaries, vendor payments, GST payments and government transactions.

Monetisation issues

Monetisation is unresolved. The zero-MDR (Merchant Discount Rate) model helped adoption but raises queries on long-term sustainability for banks and payment providers.



LIFE AND SCIENCES

HOW A STAR WITH AN EXTREME MAGNETIC FIELD COULD PROVE SPACE IS NOT EMPTY

Quantum physics has made numerous strange predictions, and scientists have checked and confirmed many of them. But one of the strangest ones persists unresolved. In the 1930s, the German physicists Werner Heisenberg and Hans Heinrich Euler proposed that empty space is not really empty. Instead, they predicted that in the presence of a magnetic field, the vacuum of space would behave like a crystal, changing the properties of light passing through it.

The trouble with testing this prediction — called vacuum birefringence — is that the magnetic field has to be extraordinarily strong.

In a study published in *Nature* on August 5, astronomers from Australia, Canada, Japan, South Africa, Taiwan, and the U.S. reported it had observed such birefringence using two satellites and a telescope in Australia, almost confirming the prediction at long last.

The work could prove ‘nothingness’ is actually a complex and active medium and also potentially help scientists refine their maps of the universe.

Staggering numbers

In classical physics, a vacuum is absolute nothingness. But in quantum electrodynamics (QED) — which is a theory in quantum physics — a vacuum is a soup of virtual particles: pairs of electrons and anti-electrons that constantly pop in and out of existence, and so quickly that they cannot be observed.

Normally, these virtual particles have a negligible effect on light. But when a magnetic field nearby becomes strong enough, it changes how the short-lived charged particles can move, so they respond differently to light depending on the direction in which its electric field is vibrating. This part of space will then behave like a calcite crystal when light passes through it, splitting it into different paths depending on its electric field. (As an electromagnetic wave, light consists of electric and magnetic fields travelling through space.)

For vacuum birefringence to become noticeable, the magnetic field has to be around 88 trillion times stronger than the earth’s magnetic field, and more than 500 million times as strong as the ultra-powerful magnets in the world’s largest science experiment, the CERN supercollider. These are staggering numbers far beyond the abilities of current technologies, so physicists have been looking for proof of vacuum birefringence in outer space, where objects called magnetars generate the universe’s most extreme magnetic fields.

Sometimes the core of a dead star can collapse to form a neutron star. Neutron stars with powerful magnetic fields are called magnetars.

Railroading polarisation

The international team focused its attention on one magnetar named 1E 1547.0-5408, located 14,700 lightyears away. As independent experts Ekaterina Sokolova-Lapa and Joern Wilms wrote in a commentary accompanying the team’s paper, “1E 1547.0-5408 belongs to a rare subclass of magnetars that also emit pulses at radio wavelengths”.



By combining X-ray and radio frequency measurements, then, the team could piece together the geometry of the magnetar's magnetic field.

If the vacuum of space were truly empty — as in classical physics — the X-rays from the magnetar would reach the earth with a low degree of polarisation. But the team found the opposite: the NASA Imaging X-ray Polarimetry Explorer (IXPE) satellite in particular detected very high levels of polarisation, up to 80% in some instances, which is the smoking gun of vacuum birefringence.

As X-rays leave the magnetar and move through the surrounding space, QED predicts that their electric field will have to lock itself into one of two directions — a condition that unmagnetised space does not impose — thus polarising the light. Since these directions are defined by the direction of the magnetic field, the X-rays' polarisation is effectively railroaded along the magnetic field lines. And as the X-rays travel away from the magnetar, their polarisation will stay fixed even as the magnetic field becomes less and less able to 'hold on'.

According to the team, the amount of polarisation dropped as the energy of the X-rays increased, which QED predicts as well. The team was also able to elucidate that the magnetar rotated along an axis that aligned almost perfectly with its magnetic poles, like a top spinning upright — a detail that informed the team's models of how the X-rays from the magnetar would look with and without vacuum birefringence.

The models that did not account for the phenomenon fit substantially worse with the telescope data than those that included it.

WHY IS META'S \$17.1-BILLION SETTLEMENT SIGNIFICANT?

The story so far:

On August 26, Meta reached a landmark settlement of up to \$17.1 billion with at least 47 U.S. States, ending a lawsuit which accused the tech giant of hiding harms caused by its platforms to children, violating child privacy laws, and deliberately using tactics to keep teens engaged or 'addicted' to its platforms. The settlement also requires Meta to make changes to the safety features on Instagram and Facebook.

What was the lawsuit about?

The lawsuit, brought by 29 States, alleged that Meta regularly collected data on children under the age of 13 without parental consent, thus breaking various State and federal privacy laws. It also alleged that the company deliberately designed platforms to be addictive in order to keep teens engaged, which led to depression and anxiety. The suit accused Meta of refusing to "abandon its use of known harmful features" and focusing solely on profits and financial gain over the safety of children.

What happened during the trial?

The matter went to trial on August 18, 2026, in Oakland, California. During the trial, internal documents from the tech giant were showcased, pointing towards addictive behaviours among teens using Instagram. There were also witness testimonies from former Meta employees stating that the company had repeatedly ignored warning signs.

According to Meta's own company documents, a Facebook study found that 13.5% of British teenage girls surveyed said their suicidal thoughts had become more frequent after joining



Instagram. A study by internal researchers of the company on Instagram had found that some of the problems, especially related to social comparison, were issues specific to only Instagram and not social media as a whole. As per a Wall Street Journal investigation, the internal researchers had said that while other media mostly focus on the face and 'jokey' filters (SnapChat), Instagram focuses on the body and lifestyle, which lead to comparisons and feelings of inadequacy.

A key witness for the States was Arturo Béjar, a former Meta safety engineer, who stated on record that Meta was aware of the harm its products caused children, which included exposing them to content from sexual predators as well as violent and graphic images. He said that while he had repeatedly raised the issue to various Facebook and Instagram executives, nothing was done to resolve it. He raised concerns about features such as infinite scroll, which keep users engaged while generating revenue for the company through targeted ads.

Meta has denied all these allegations. It said that the statements from documents were cherry-picked and taken out of context. Paul Schmidt, a lawyer for Meta, said that the company had undertaken various measures to address teens' over-use of Instagram, and that it had disabled more than 1 million accounts of young users. During the trial, Adam Mosseri, the CEO of Instagram, denied allegations that his company hid negative information from the public. Even after the settlement, Meta has denied any wrong-doing.

Is Meta the only company facing such lawsuits?

Meta and other social media giants such as Alphabet (the parent company of Google and YouTube) and TikTok have been facing a series of lawsuits over youth social media 'addiction' and children's safety.

Earlier this year, a Los Angeles jury found Meta and Alphabet liable for \$6 million in damages due to the 'addictive' design of their platforms. The plaintiff said that she had become 'addicted' to social media, mainly YouTube and Instagram, at a young age, which led to a deterioration in her mental health.

In March, a New Mexico court ordered Meta to pay \$375 million for misleading users about the dangers its platforms pose to children. New Mexico sued Meta in 2023 alleging that the company "steered" children and teens towards sexually explicit, graphic, and violent content which exposed them to offers of solicitation and even trafficking.

TikTok settled three cases brought by teens who alleged that using the platform had led them to suffer from self-harm, anxiety, depression, addiction, and eating disorders. Earlier this month, it also reached a \$400 million settlement with the U.S. Department of Justice, which alleged that the company violated federal laws on children's privacy.

Can social media be addictive?

The American Society of Addiction Medicine defines an addiction as a "treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences. People with addiction use substances or engage in behaviours that become compulsive and often continue despite harmful consequences." Social media is sometimes described as a form of behavioural addiction since it makes you engage in an action which you know to be harmful, yet cannot stop.

A review paper published by Jashvini Amirthalingam and Anika Khera in Cureus in 2024 states that social media "addiction" is shaped by a combination of "psychological factors, such as low



self-esteem and mental health issues, technological mechanisms like infinite scrolling and personalised notifications, and social influences, including peer pressure and exposure to idealised content". A potential "treatment" for the same would include cognitive therapy, educational awareness, and parental strategies such as placing limits and boundaries on social media use.

However, social media has not been medically recognised as an addiction. Therefore, there aren't any clear cut guidelines on how to diagnose, measure, and treat such 'behaviours'.

This point was a key argument by Meta's lawyers who claimed that social media addiction was not an established psychiatric condition.

What next?

Under the settlement, Meta has agreed to introduce several safety features for teens.

CAN META'S SAFETY CONTROLS MAKE FACEBOOK AND INSTAGRAM LESS ADDICTIVE FOR TEENS?

The story so far:

On August 26, Meta agreed to an approximately \$18 billion settlement with dozens of U.S. states in annual instalments over 10 years, and announced stricter controls in its apps for teen users. The settlement is the culmination of a lawsuit brought by California and 28 other U.S. states alleging that Facebook and Instagram are harmful for children and that they illegally collect personal data. While several parents and child health advocates welcomed the new child protection controls, enforcing them will be a lot more challenging.

What child protections is Meta rolling out?

The social media giant is both rolling out new features and building on existing features designed to create a safer and less addictive experience for Facebook and Instagram users under 18.

These measures are set to automatically apply in participating U.S. states and territories. 52 attorneys general covering U.S. states, territories, and the District of Columbia have joined the agreement.

Arguably, the biggest win for parents and the biggest concession by Meta is a default two-hour daily time limit across Facebook and Instagram. Teens can only turn this off with a parent's permission.

Furthermore, a 'Night Mode' will block app users between 12 AM and 6 AM, so teens cannot post or view their Feed, Stories, Reels, or the Explore section. Similarly, the School Mode between 8 AM and 3 PM will mute notifications by default. However, these limits do not apply to direct messages (DMs).

Teens are set to receive multiple prompts after every 15 minutes of continuous screen time on Facebook/Instagram, apart from prompts that come after their total daily usage reaches 60 minutes and 90 minutes.

To directly address addictive video features, Meta is giving teens (and their parents) the ability to choose a non-algorithmic feed as their default, as well as the ability to turn off Autoplay.



As for steps to combat unhealthy comparisons and anxiety over appearances and popularity, teen users will no longer see the number of likes and reactions on posts by default. Meta is also expanding its policy to block teens from using “extreme makeup filters,” adding to a previous block against cosmetic surgery filters for teens.

Meta reaffirmed its commitment to strengthening existing controls in order to catch underage account users, as well as teens falsely entering adult birthdays. The company claimed it will continue placing teens into private accounts on Instagram and activating private default settings on Facebook, apart from restricting “potentially suspicious adults” from reaching out to them.

Meta also said it would encourage parents to set up its supervision tools, and give them new controls and insights.

Can these safety controls be effectively enforced?

This is the crux of the matter. Safety controls for teens work only as well as the technology that verifies users’ ages and detects rule-breakers.

Take Australia, for example; the country was the first to enforce a strict blanket ban on social media for children under 16. While many parents lauded the idea and Meta reported this month that it removed over 750,000 accounts that it suspected were held by under-16s, a study by the University of Newcastle there reported that the ban did not appear to have significantly impacted under-16s who were using social media.

As other platforms and administrations explore age restrictions, critics have pointed out how easily children can fake their ages — even in video selfies and live camera tests. What’s more, these data collection tactics raise additional questions about how children’s private information is being harvested.

In its settlement announcement, Meta pointed out that all platforms — and not just its apps — should have teen safety measures in place to prevent children from moving to less restricted apps. So as to not be held back in isolation, Meta called on rival social media apps YouTube and TikTok to adopt the “new standard.”

Meta stated that around 30% of its settlement, or \$5.3 billion, would be released only after rival apps YouTube and TikTok implement similar controls and pay a stipulated amount of money. To sweeten the deal, Meta said that if industry peers signed the agreement, it would further reduce the daily limit to one hour per app and expand night mode limits. In other words, this increases the incentive for U.S. regulators to also bring Meta’s rivals in line with the new policies.

Separately, the social media giant said it supported laws requiring app stores to verify users’ age and obtain parental approval before teens can download an app. This shifts the responsibility of age verification to companies such as Apple and Google.

How can parents elsewhere make Facebook, Instagram less addictive?

Even without Meta’s new controls, parents and educators can work with children to fight social media addiction. Most smartphones come with built-in parental controls that allow adults to set time limits for individual apps, as well as curtail overall device use.

Furthermore, many of Meta’s existing safety controls — such as Teen Accounts on Instagram — can be used by children across borders who enter their ages correctly.



For more advanced settings, adults can research and download parental control apps that allow them to set up different usage limits for multiple children and monitor their activity remotely. Some apps allow parents to remotely lock devices and apps during sleeping hours and/or school hours.

Meanwhile, teachers can communicate with their students via email, or send alerts through non-addictive digital forums during daytime hours. Students should be strongly discouraged from conducting school assignments or group projects via social media apps.

Enabling parental controls for teen social media users is a constantly evolving challenge. After all, these young internet and AI-native users are often more tech-savvy than the very adults trying to restrict their time online.

WHERE OPEN AI'S NEW ASTRA MODEL STANDS AMID RISING SECURITY RISKS

OpenAI has released GPT-6 Astra, its newest frontier artificial intelligence (AI) model, claiming gains in computer use, coding, long-running tasks and cybersecurity.

Key Takeaways:

- It is also the first OpenAI system to cross what the company calls its “critical” cybersecurity capability threshold, under which a model can, with the right tools and access, find previously unknown security flaws and develop ways to exploit them across well-protected systems without a person guiding each step.
- This also holds importance in light of recent cases of AI agents undertaking unauthorised actions and exploiting vulnerabilities in external software.
- Astra began rolling out on Thursday (September 3) to a limited set of organisations. OpenAI said it would become available over the following days to ChatGPT Plus, Pro, Business and Enterprise users, as well as through its API and Amazon Web Services.
- OpenAI describes Astra as a model built for end-to-end work, rather than only answering prompts. In that sense, it is closer to more autonomous AI agents than models.
- It can operate computers and browsers, fill online forms, update customer records, organise calendars, conduct web research, draft material inside documents and email, analyse scientific data, generate plots, build websites, install and test software, and troubleshoot problems visible on a screen.

Do You Know:

- Artificial intelligence (AI) refers to the field of computer science which aims to make computer systems think, reason, learn, and act to solve a complex system like humans.
- This field of research was established in 1956 at a small workshop at Dartmouth College (New Hampshire, United States). It was organised by a young mathematician named John McCarthy, who had become intrigued with the idea of creating a thinking machine.
- He also persuaded Marvin Minsky of Harvard University, Nathaniel Rochester from IBM, and Claude Shannon from Bell Telephone Laboratories to help with the workshop. These four men are considered some of the founding fathers of AI.



— The term artificial intelligence was coined by McCarthy. “McCarthy later admitted that no one really liked the name — after all, the goal was genuine, not ‘artificial’, intelligence — but ‘I had to call it something, so I called it “Artificial Intelligence”,’” wrote Melanie Mitchell in her book, ‘Artificial Intelligence: A Guide for Thinking Humans’.

— To enable computer systems to imitate the way that humans learn, and perform tasks autonomously (meaning, without instructions), machine learning (ML) is used. ML is implemented by training (this term will also be explained in subsequent explainers) computers on data so that they can make predictions about new information.

CAN AI CLAIM COPYRIGHT FOR ORIGINAL WORK? A QUESTION OF AUTHORSHIP

Can AI companies use copyrighted material to build their systems? And can something an AI creates be copyrighted in turn?

Key Takeaways:

— The Copyright Office answered the second question on August 31, rejecting an application filed by American computer scientist Stephen Thaler seeking copyright registration for an artwork generated by his AI system, DABUS.

— The Office found the artwork original because nothing on record showed it was copied from any specific existing work, not because AI-made works are inherently original.

— And the human-authorship requirement doesn’t disappear either. Even if a work is original, someone still has to be identifiable as the person who “caused” it to be created.

— It said that the person who creates something “refers to the person who brings about, or is responsible for, the coming into existence of the work. The emphasis is upon responsibility for the work’s origination, rather than upon the instrument, mechanism or tool through which its final expression is generated.”

— The order is among the first decisions in India to address a question that is becoming increasingly important: if an AI system generates a work, who, if anyone, is its author?

Do You Know:

— Conventional use of the terms AI and generative AI refers to a subset of artificial intelligence called large language models (LLMs). These models learn statistical patterns from enormous volumes of text input and generate textual (or visual) output based on the quality of data fed into them.

— The Turing Test, proposed by British mathematician Alan Turing in the 1950s, is a test of a machine’s ability to exhibit intelligent behaviour that a human evaluator cannot distinguish from that of a human. To date, it is considered a benchmark for AI.

HIMALAYAS HANGING GLACIER THREAT

The devastating flooding in Nepal has similarities to at least four major incidents in India over the last decade-and-a-half, each involving a sudden release of large volumes of waters in the mountainous rivers.

**Key Takeaways:**

- But there are more warning bells for India. As rising temperatures and shifting regional precipitation patterns reduce the stability of the Himalayan glaciers, some of them could evolve into “hanging glaciers” — ice masses perched on steep slopes that can detach and trigger massive avalanches.
- An April 2026 study published in Nature magazine has found that there are as many as 219 hanging glaciers in the Alaknanda basin of the Garhwal Himalayas. Nearly a third of this unstable ice, according to the study, is concentrated in the Upper Alaknanda basin.
- The study — by Ashim Sattar of the School of Earth, Ocean and Climate Sciences, Indian Institute of Technology, Bhubaneswar and Nandu Krishnan of the Divecha Centre for Climate Change, Indian Institute of Science, Bengaluru, alongside two colleagues — flagged that Himalayan glaciers are increasingly exhibiting “geometric and dynamic instability” owing to rapid warming and climate variability.

Do You Know:

- Unstable glaciers are essentially those whose velocity may change by an order of magnitude and more during a comparatively short period of time. The result is redistribution of ice, accompanied by geometric and structural-and-tectonic shifts.
- This instability then leads to the development of hanging glaciers on steep slopes. While these glaciers have been extensively studied in the Alps, basin-scale assessments in the Himalayas remain limited. Hanging glaciers pose a significant risk of break-offs.
- The break-offs from hanging glaciers can also trigger secondary hazards such as glacial lake outburst floods (GLOFs).

WMO WARNS OF ‘VERY’ STRONG EL-NINO, TO LAST UNTIL FEBRUARY 2027

The World Meteorological Organization (WMO) on Thursday warned of an impending “very strong” El Nino that could last till February of next year and could alter temperature and rainfall patterns globally.

Key Takeaways:

- The intensity of El Nino is determined by the sea surface temperature average over three months in the Nino 3.4 region along the equatorial Pacific Ocean.
- In recent months, this temperature index value surpassed 1.5 degrees Celsius above normal during May-July and further escalated 2 degrees Celsius above normal in July, confirming the rapid intensification.
- Europe, this year, witnessed one of the hottest summers in recent decades and August, according to many global weather agencies, reported record temperatures in many parts of the globe.
- The UN agency’s chief noted that this El Nino episode was pushing resources to their limits and will require extensive preparations and coordination to tide over the extreme weather.



— The India Meteorological Department (IMD), earlier this month, confirmed that the monsoon rainfall in the later half of August came under the cloud of El Nino. But, with three-fourths of the season over, the monsoon has largely escaped the developing El Nino.

Do You Know:

— Sea surface temperature (SST) and atmospheric pressure are the two main factors affecting global ocean circulation. The El Niño Southern Oscillation (ENSO) is a periodic ocean-atmospheric fluctuation in sea surface temperatures and air pressure across the equatorial Pacific Ocean.

— The chemical composition of ancient coral skeletons reveals that ENSO has been happening for the past thousands of years. It has three distinct phases: warm or El Niño, cold or La Niña, and neutral.

— The term 'El Niño' was first used by South American fishermen in the 1600s. It comes from Spanish and literally means the Christ Child or Little Boy, as this phenomenon typically peaks around Christmas. Therefore, the full name the fishermen used was El Niño de Navidad ("The Christmas Child").

— El Nino is a natural ocean-atmosphere phenomenon that is caused when the equatorial Pacific Ocean warms significantly and interferes with weather patterns globally. It is known to trigger extreme weather — heatwaves, wet spells and extreme temperatures.

DUNG BEETLES PREFER DOG POOP, BUT THEIR CHILDREN PAY THE PRICE

Dung beetles are humble insects. They feed on the faeces of other mammals. In many species, a male dung beetle flies to a fresh pile of dung, shapes a piece of it into a ball, and quickly rolls it away from the pile so others don't grab it.

Reputedly, male dung beetles have rolled dung balls a thousand times heavier than their own body weight.

A female will inspect the ball and decide if it is good enough to lay her egg in. If it is, the couple mate, the female lays her egg, and the ball is then buried in a tunnel in the soil. The ball will provide food for the offspring.

Dung beetles quickly clear dung piles and recycle soil nutrients. Plants benefit, too: the seeds that pass through a mammal's gut get planted deep underground, in dung-fertilised spots. Dung beetles have been known to increase plant growth by 17%. On August 12, a team from Clark University in Massachusetts, U.S., reported in *Ecology and Evolution* that these dung beetles are vulnerable to a previously unforeseen risk: dogs. The researchers found that, given a choice, the dung beetle *Onthophagus orpheus* preferred dog poop. This was in line with other studies that have shown dung beetles prefer the faeces of omnivorous mammals to that of herbivores, like cows.

In the laboratory, the dung beetle made larger brood balls on dog poop than on cow dung. Male offspring developed in larger brood balls than female offspring, suggesting more resources are provisioned to the sons. This sex difference was more pronounced with cow dung than with dog dung.

O. orpheus eggs also developed faster in dog poop and the progeny that emerged were larger. However, egg mortality was also higher in dog poop. The researchers inferred that "the dung type



most strongly preferred by adults was also associated with the lowest offspring survival”, creating a mismatch between preference and performance.

They added that this “suggests that accumulation of domestic dog waste ... may pose a widespread but underappreciated risk to urban dung beetles”.

Why the mortality was higher with dog poop remains unclear. One possibility is that pets are routinely administered antiparasitic medications which accumulate in faeces, and could have increased the mortality of the larvae and the pupae of dung dwelling insects.

The insect cannot be faulted for its unfortunate mismatch. It is our lack of foresight.

SALMONELLA INFECTIONS: WHY INDIA NEEDS TO LOOK BEYOND TYPHOID AND DIARRHOEA

Salmonella is often linked to food poisoning, diarrhoea and typhoid. But the infection can range from mild gastroenteritis that gets better on its own to a serious bloodstream infection, and therefore, say experts, deserves more attention than it is currently being given.

Salmonella is a group of bacteria that can cause different infections. Typhoid and paratyphoid or enteric fever, are caused by Salmonella Typhi and Salmonella Paratyphi. The problem, however, is broader than typhoid. Non-typhoidal Salmonella infections, which often cause gastroenteritis, may go undiagnosed because many people recover without testing. At the same time, antibiotic resistance is making serious infections harder to treat.

Why infections turn serious

Non-typhoidal Salmonella commonly causes gastroenteritis, with diarrhoea, stomach cramps, fever and sometimes vomiting. It is often linked to poultry, eggs and other animal-based foods. Most healthy people recover with supportive care, but the infection can become serious and spread to the bloodstream. “Salmonella should not be seen as only a cause of diarrhoea,” said Sweatha Kumar, associate consultant, infectious diseases, Rela Hospital, Chennai. “In some patients, especially young children, older adults and those living with other illnesses or weakened immunity, it can become invasive and life-threatening.”

Suresh Kumar D., senior specialist in infectious diseases, Apollo Speciality Hospitals, Vanagaram, Chennai, said the actual burden of non-typhoidal Salmonella is difficult to estimate as many mild infections are never diagnosed.

Both typhoid and non-typhoidal Salmonella infections spread through the faecal-oral route, but their sources are different. For typhoid, humans are the reservoir. Non-typhoidal Salmonella has a wider ecology, involving animals, food and the environment. Poultry, eggs, meat and other animal-derived foods can be sources. Transmission can also occur when raw meat contaminates ready-to-eat food during preparation.

Food handlers can play an important role in transmission, as those carrying the infection can contaminate food and potentially expose many people to the bacteria. But food safety cannot depend only on individual food handlers. The wider system needs better training, sanitation, refrigeration, monitoring and enforcement. While the Food Safety and Standards Authority of India has surveillance and testing systems, gaps remain, particularly in the large informal food sector.



At the household level, it is important follow: washing hands, using safe water, cooking poultry and eggs thoroughly, refrigerating perishable foods appropriately and keeping raw meat separate from ready-to-eat food.

Challenges and way forward

The major concern is the growing antimicrobial resistance in Salmonella. India has seen a major shift in the resistance pattern of S. Typhi. A recent study in PLOS Neglected Tropical Diseases said, culture-confirmed isolates from 1977 to 2024 found that fluoroquinolone resistance rose sharply, reaching 85% in 2015-19, and remains high despite a subsequent decline.

“The emergence and spread of extensively drug-resistant typhoid shows what can happen when resistance accumulates across multiple antibiotic classes,” Dr. Sweatha said, “It can leave clinicians with very limited treatment options.”

Experts say the answer is not to simply use stronger antibiotics. Blood culture is the main test for suspected typhoid and should ideally be done before antibiotics are started. The Widal test has limitations and should not be used alone to diagnose typhoid. For uncomplicated non-typhoidal Salmonella gastroenteritis, treatment mainly involves adequate fluids and electrolyte replacement. Antibiotics are usually reserved for severe or invasive infections and people at higher risk of complications.

Prevention remains as important as treatment. The World Health Organization recommends typhoid conjugate vaccines for children from six months of age; however, this not yet part of India’s universal immunisation programme.

The challenge is to treat the infections that genuinely require antibiotics while preventing the infections that can be prevented in the first place.

MOVING TOWARDS A UNIVERSAL VACCINE AGAINST PNEUMONIA AND MENINGITIS

There is a bacterium called Streptococcus pneumoniae. It comes in at least a hundred different forms, or serotypes, and lives in the tissue lining our nose and throat. S. pneumoniae is normally harmless. But when your body’s immune system becomes weaker, for example when you have a viral fever, these bacteria may invade your lungs and cause pneumonia, your brain and spinal cord to cause meningitis, and your bloodstream to cause sepsis.

These diseases are called pneumococcal diseases, and fortunately, they can be prevented by vaccines. Each of these vaccines contains a unique sugary substance called a capsular polysaccharide, aimed at each serotype of S. pneumoniae. That is, they offer protection specific to each serotype.

And the current crop of pneumococcal vaccines protect against only a subset of the 100-odd serotypes. To increase coverage, scientists need to include additional serotype-specific capsular polysaccharides in the vaccine. And covering all the serotypes in a single shot would be extremely challenging, not to mention extremely expensive as well.

Sugary shot

Recently, a team of British scientists reported an important first step in this direction. They did two things: first, they switched the polysaccharide with proteins and, second, they adopted an approach called reverse vaccinology.



Basically, two kinds of pneumococcal vaccines are available today. One is a mix of purified capsular polysaccharides from multiple serotypes. Pneumovax 23 is an example. It does not work well in infants and offers short-lived protection.

To help boost the effects as well as the durability of the immune response, scientists have linked the polysaccharides to a carrier protein. Such vaccines are known as pneumococcal conjugate vaccines (PCVs). Typical examples include PCV10 and PCV14; the numerals denote the number of serotypes included.

When these vaccines target and eliminate some serotypes of *S. pneumoniae*, it also opens the door for other serotypes to mount an infection. These non-vaccine serotypes also face less biological competition for space and resources, so they multiply and eventually replace the vaccine-targeted serotypes, rendering the vaccines obsolete.

Second, many non-vaccine serotypes either possess antibiotic resistance genes or can acquire them from their resistant counterparts. This leads to the rise of both vaccine- and antibiotic-resistant serotypes.

Thus, scientists are looking for a universal pneumococcal vaccine that can target all serotypes and prevent these outcomes, which keep the threat of pneumonia, meningitis, and other pneumococcal diseases alive in the population.

Reverse vaccinology starts from the germ's genome to identify proteins that can be included in vaccines. Scientists demonstrated an example of this in the recent COVID-19 pandemic: once the virus's genome was sequenced in early 2020,

scientists around the world could analyse it and zero in on the spike-protein gene to make COVID-19 vaccines. The approach completely bypassed the need to culture the germs in large bioreactors and purify molecular components from them to make the vaccine.

The *S. pneumoniae* genome encodes more than 2,000 genes. Of them, around 1,300 are common across serotypes. The genomic data of more than 20,000 *S. pneumoniae* isolates across nearly a hundred serotypes are also available in the public domain.

The scientists deployed extensive computational analysis using an arsenal of bioinformatic tools to analyse these sequences.

They reasoned that the best candidate genes for creating their universal vaccine would need to encode for proteins with three attributes: (i) it must be located on the surface so that the immune system can easily access it; (ii) it must have low or no similarity to human proteins, so that the immune system does not attack the body's tissue, and (iii) it must be capable of eliciting a robust and durable anti-pneumococcal immunity.

The team shortlisted some candidates and further whittled the list down based on their predicted shapes and stability. From this, the team picked three candidate genes. They were: zinc metalloprotease B (Z), pneumococcal adherence virulence factor A (P), and a protein which the scientists designated YfhO-like (Y) due to its similarity to another bacterial protein.

The team produced proteins Z, P, and Y in the laboratory and made an experimental vaccine by mixing them together. They also added two non-protein immune response boosters: a small piece of synthetic DNA called CpG and a sugary polymer called chitosan. They named this formulation ZPY-CpG-Ch.