

Over one crore take holy dip in Triveni Sangam as Maha Kumbh ends

Prayagraj: As of Wednesday noon, over one crore pilgrims have taken the holy dip at the Triveni Sangam in Prayagraj, marking an unprecedented surge of devotees in Maha Kumbh on the occasion of Maha Shivratri. With thousands gathering for the final holy dip, the Maha Kumbh is concluding with a historic spiritual fervour. To manage the massive influx, extensive security measures have been deployed, particularly around prominent Lord Shiva temples. The Yogi Adityanath-led Uttar Pradesh government has ensured smooth crowd management, with officials confirming the seamless execution of arrangements.

Adding to the grandeur, a spectacular shower of 20 quintals of rose petals adorned the pilgrims as they performed the sacred ritual at the Sangam. The floral tribute, organised by the state government, heightened the spiritual ambience and was received with immense joy and devotion. Pilgrims from across the country, along with international visitors, have expressed their awe at the scale and sanctity of the Maha Kumbh. A foreign devotee, experiencing the event for the first time, shared, "It feels deeply spiritual and special. I've attended many festivals, but India is truly unique... I can't put it into words." Another devotee expressed gratitude, saying, "I feel fortunate to witness this divine event. The arrangements are excellent, and everything is functioning smoothly." Despite the overwhelming turnout, Chief Minister Yogi Adityanath's continuous monitoring has ensured the event remains well-organised. Pilgrims have widely praised the efficient arrangements, highlighting the seamless management of the world's largest religious gathering. Providing security details, ADG Prayagraj Bhanu Bhaskar said, "Since morn-



ing, large crowds have been gathering at the ghats. So far, 41 lakh people have taken a dip, bringing the total number of visitors to 64.77 crores. A strong police presence has been deployed at all Shivalayas across the city, apart from the Sangam, to ensure smooth darshan and worship." Elaborating on the movement strategy, he added, "Our traditional exit route passes through Triveni via Mahavir Ho and Akshay Bhatt Ho, but we have activated additional exit routes. Every

Shiv temple has designated entry and exit points to manage the crowd efficiently." DIG Maha Kumbh, Vaibhav Krishna, emphasised that crowd management has been highly effective, stating,

"There is no VIP movement today, and no mechanised boats are allowed at the ghats — only manually operated paddle boats are in operation. Police forces are stationed at all Shiva temples to ensure orderly water offerings and darshan." The Maha Kumbh

2025 has set an unparalleled record with over 64 crore devotees taking part in the holy dip, making it the largest human gathering in history.

Breaking down the numbers, 1.7 crore devotees bathed on Paush Purnima, 3.5 crore on Makar Sankranti, 7.64 crore on Mauni Amavasya, 2.57 crore on Basant Panchami and 2.04 crore on Magh Purnima, underscoring the spiritual and cultural significance of this grand event.

Class X board exams to be held twice in a year, proposal out for feedback

New Delhi: The Central Board of Secondary Education (CBSE) on Tuesday announced a big change in the class 10 board exams system from the next year, officials said. From 2026, the CBSE will offer its students an opportunity to appear twice in board exams. As per this rule the first exams will commence from the first Tuesday after February 15 every year. The first exams will be completed by March 6. The second phase of board exam will be held from May 5 to 20. The new system will provide an opportunity to the students to improve their results in the second exam if needed. On Tuesday evening, CBSE released the proposal to conduct board exams twice in a year. The draft of the new examination system has been made available for review on the official CBSE website. Stakeholders, including

schools, teachers, parents, students, and the general public can provide their feedback on the proposed policy. After wider discussions, the draft policy has been developed and hosted on the CBSE website

Stakeholders may respond to the draft policy by March 9. The responses would be scrutinised and policy will be finalised subsequently. The Ministry of Education said that in addition to introducing greater flexibility, student choice, and best-of-two attempts, assessments that primarily test core capacities must be the immediate key reforms to all Board exams. Boards may over time also develop further viable models of board exams that reduce pressure and the coaching culture. Some possibilities include a system of annual/semester/modular board exams could be developed so that each test is far

less material, and are taken immediately after the corresponding course is taken in school so that the pressure from exams is better distributed, less intense, and less high-stakes across the secondary stage. Subjects and corresponding assessments, beginning with mathematics, could be offered at two levels. The Ministry of Education had hosted a significant meeting, chaired by the Union Education Minister Dharmendra Pradhan, where this policy change was discussed in detail. The proposal is aimed at providing students with a chance to improve their performance in the board exams, thus reducing pressure and stress on students. It will be completely student's choice whether to appear in single exam or to take both the exams.

The entire examination process will

span 34 days. In these 34 days there will be examination of 84 subjects. Around 26.60 lakh students are expected to appear for the CBSE Class 10 exams in 2026, an official added. According to the proposal the CBSE Class 10 subjects are categorised into four groups. In elective group — Science, Mathematics, Social Science will be the subjects. In regional and foreign language group — French, Sanskrit, Urdu, Bengali, Gujarati, Spanish, and more languages will be included. Exams for elective subjects will be held in two to three days. It will be based on student combinations and preferences. The CBSE said that while the Board exams for classes 10 and 12 will be continued, the existing system of board and entrance examinations will be reformed to eliminate the need for undertaking coaching classes.

All you need to know about: Glaucoma

Glaucoma is an eye condition that damages the optic nerve. The optic nerve, located at the back of each eye, carries visual messages from the eye to the brain, to help you see. When the optic nerve is damaged, it can lead to blindness. Glaucoma is one of leading causes of vision impairment and blindness globally. In India, glaucoma is the third-leading cause of blindness after cataract and refractive errors, as per a 2023 research paper, Prevalence of glaucoma types, clinical profile and disease severity at presentation: Tertiary Institute based cross-sectional study from South India, by Praveen Kumar Seth et al. Glaucoma contributes to 12.8% of blindness in India, the paper said.

How does glaucoma occur?

Glaucoma is caused by an increase in pressure inside your eye. Everybody's eyes constantly make a clear fluid known as aqueous humour that nourishes the eye. When new aqueous humour is made, an equal amount is drained out, through an area called the anterior chamber angle (or the angle) -- where the iris and cornea meet together at an angle. This drainage of the aqueous humour is crucial to maintaining the pressure in your eye, or intraocular pressure. When the drainage is blocked or does not work properly, the fluid builds up in your eye, your eye pressure increases, and this damages the optic nerve, causing vision loss.

What are the types of glaucoma?

There are two main types of glaucoma: open-angle glaucoma and closed-angle glaucoma. In open-angle glaucoma, there is a gradual build up of eye pressure that eventually damages the optic nerve. This is caused by the aqueous humour not draining from the eye properly. The cause of this is unknown. In the early stages, there may be no symptoms or warning signs. Over time, people may experience blind spots in their peripheral vision (edges/sides of the vision), but because this takes place slowly, people may initially be unaware that their vision is changing. Open angle glaucoma can run in families. Without treatment, it can eventually lead to blindness. Closed-angle glaucoma or angle-closure glaucoma occurs when the drainage of the aqueous humour is suddenly blocked, leading to the eye pressure rising quickly and severely. This can happen because the iris is blocking or narrowing the drainage angle. This type of glaucoma is a medical emergency and needs immediate treatment. There are other types of glaucoma as well, such as secondary glaucoma that can be caused due to an underlying condition or disease or injury and congenital glaucoma that occurs in babies when the eye does not develop properly.

What are the signs and symptoms and who is at risk?

In open-angle glaucoma, most people do not have any symptoms -- this is why glaucoma is called the 'silent thief of sight'. It is important to have regular, complete eye examinations in order to be able to detect this form of glaucoma as early as possible. Symptoms of angle-closure glaucoma may include headache, eye pain, double vision, blurred vision, nausea, seeing halos/rainbows around lights. It is vital to see an eye doctor immediately to help prevent vision loss. People over the age of 60 are at risk of developing glaucoma. There is also a risk if there is a family history of glaucoma and in people who have diabetes or high blood pressure. Other risk factors in-



clude decreased corneal thickness, being far-sighted or near-sighted. The 2023 research paper found that of the 6,120 cases of glaucoma studied, more than half of all these eyes were blind due to glaucoma at presentation. The paper also noted that with India having one of the highest burdens of diabetes in the world, diabetic retinopathy-related complications including neurovascular glaucoma are on the rise. It also said that while both pri-

mary and secondary glaucoma were more prevalent in males, this was also perhaps because Indian women were less likely to seek medical care due to social or financial reasons.

What are the treatment options?

There is no cure for glaucoma, and the damage it causes is permanent and cannot be reversed. However, treatment can help

stop further vision loss. Glaucoma is usually treated with eyedrop medications to help lower eye pressure. Treatment options also include laser procedures to drain the fluid and surgeries to improve the drainage. Early detection and treatment can help prevent vision loss: regular, comprehensive eye exams and knowing and managing risk factors and maintaining healthy habits can all go a long way.

Is consumption enough to drive growth?

An economy's growth is like sailing on two boats tugged to each other. On one side is the supply or the production of goods and services. GDP, or gross domestic product, is the value the production process adds. On the other side, there is demand or expenditure for purchasing these goods and services from the market. Both the supply and the demand boats must move in tandem. If supply proceeds slower than demand, prices rise, leading to inflation. If demand falls behind, firms will be left with unsold inventories, which may lead to cuts in future production, job and income losses, and a worsening cycle of demand and growth slowdown. The demand or aggregate expenditure in an economy comes from four sources. First is private consumption, which is the sum of expenditures by all individuals on items such as food, clothing, and mobile phones. Second is private investment, which is the amount spent by firms and households on installing new machines and constructing new factories or residences. Third is government expenditure, for consumption and investment. The former refers to the money spent on day-to-day government operations, including paying salaries to officers, teachers, doctors and others attached to public institutions. Fourth is net exports or exports minus import of goods and services while engaging in trade with the rest of the world.

Among the sources of demand, investment stands out for its ability to create 'multiplier effects'. That is, an increase in investment of ₹100 could increase the economy's overall demand and GDP by more than ₹100

— let us say by ₹125, with the multiplier being 1.25. Consider, for instance, public investment in building a new highway network. The incomes received by workers and firms involved in the road construction project will generate fresh demand in the economy. But that is not all. The highways will trigger the establishment of new shops and create opportunities for new industries, all of which translate into a much bigger expansion of aggregate demand. The multiplier effect will depend on the nature of the investment and the state of the economy. The multiplier from an investment in a railway line is likely higher in an underdeveloped district than in a region with a well-developed transport network. Compared to investment, the multiplier effect arising from increased consumption is much weaker. If incomes increase, consumption expenditures also increase, but the relation does not work strongly enough in the reverse direction. A rise in consumption cannot lift incomes as much in the rest of the economy. Therefore, according to Keynesian economists, consumption is a passive component of aggregate demand.

Indian and Chinese experiences In the early 1990s, the per capita incomes of India and China were almost the same. Both countries were equally poor, with the average income of an Indian or Chinese resident being approximately 1.5% of the average income of an American. But by 2023, China's per capita income has grown to five times as high as the Indian level (2.4 times as high if purchasing power differences between the two countries are considered). As a proportion

of U.S. levels, the per capita incomes of China and India were 15% and 3%, respectively, in 2023 (Chart 1). The speedy growth of incomes in China has been led by investment. $GDP = \text{Value added in the production of all goods and services} = C + (I + Ig) + Cg + E - M$ $C = \text{private consumption}; I = \text{private investment}; Ig = \text{investment by the government}; Cg = \text{government consumption}; Cg + Ig = G \text{ or government expenditure}; E = \text{exports of goods and services}; M = \text{imports of goods and services.}$ China's investment rates have been significantly higher than India's from the 1970s onward. In 1992, investment as a share of GDP was 39.1% in China compared to 27.4% in India, even though the per capita incomes of the two countries were nearly equal. The gap in investment rates between India and China narrowed during the first half of the 2000s, with India's investment rate climbing to 35.8% in 2007. However, the two countries responded to the global financial crisis of 2007-08 and its aftermath in starkly different ways. The investment rate took a big hit in India, especially after 2012. However, China battled its economic challenges with considerable expenditure, primarily through its state-owned enterprises, in areas such as infrastructure, advanced manufacturing, renewable energy, and artificial intelligence. By 2013, the investment rate rose to 44.5% in China but dropped to 31.3% in India. In 2023, these rates were 41.3% and 30.8%, respectively, for China and India (Chart 1). India's economic growth over the last decade has been driven mainly by expanding domestic consumption expenditures.

Kemin AquaScience™ Named Finalist at 15th Aegis Graham Bell Awards for Social Good Innovation with Pathorol™

Hyderabad :Kemin AquaScience™ has been recognized as a finalist at the prestigious 15th Aegis Graham Bell Awards in the category of Innovation in Social Good for its groundbreaking solution, Pathorol™. Dr. M. Rajalekshmi, Global Research & Development Director, and Harikumar S, Associate Scientist II, Research & Development, received the award on behalf of Kemin AquaScience™. This accolade celebrates Pathorol™'s contribution to sustainable and profitable shrimp farming. The Aegis Graham Bell Awards, supported by the Department of Science & Technology and the Ministry of Education, Government of India, honor innovations that drive positive social impact. The award ceremony, featuring Shri Jitin Prasada, Union Minister of State for Commerce & Industry and Electronics & Information Technology, highlighted Pathorol™'s potential to revolutionize shrimp disease management and its positive impact on the industry. Pathorol™ is a science-backed solution targeting *Enterocytozoon hepatopenaei* (EHP), a significant threat to shrimp productivity. By promoting hepatopancreas health, Pathorol™ improves feed efficiency, growth, and profitability for shrimp farmers, contributing to the industry's long-term sustainability and the livelihoods of those dependent on it. This directly aligns with the "Innovation in Social Good" category. "This finalist recognition at the Aegis Graham Bell Awards underscores Kemin AquaScience™'s commitment to innovation and sustainability in aquaculture, and its dedication to positive social impact," said Sabine Muller, President, Kemin AquaScience™. "Pathorol™ offers shrimp farmers an effective and natural approach to disease management, improving



their yields and contributing to a more sustainable food supply." Kemin AquaScience™, a division of Kemin Industries, develops science-driven solutions for aquatic animal health and nutrition. The company focuses on research, sustainability, and industry im-

provement, collaborating with aquafeed manufacturers and shrimp farmers to address key challenges in disease management and farm productivity. This recognition reinforces the importance of scientific innovation in aquaculture and its potential to create positive so-

cial change. Solutions like Pathorol™ are crucial for the industry's future as it navigates disease outbreaks and environmental concerns. Learn more about Pathorol™ at <https://www.kemin.com/in/en/markets/aquaculture/products/Pathorol>.

Exposing truth about indoor air: 5 myths you should stop believing

Hyderabad :While outdoor pollution often grabs the headlines, indoor air pollution can be even more harmful than you realize. It's time we start paying attention to the air we breathe inside our homes. Many people don't realize that indoor air can be filled with pollutants, affecting our health over time. Even as we step into 2025, India's struggle with air pollution is only getting worse. In 2024, the country ranked third most polluted in the world, according to AQI.in. Despite hopes for improvement, air quality continues to decline. India's air quality might seem moderate at first, with an AQI of 111, but this average masks severe pollution in many areas. Out of the 145 cities with the worst air quality globally, a staggering 125 are in India. The impact of polluted air is undeniable, yet many misconceptions persist. To clear the air, Shawn Navarednam, Dyson Engineer, debunks common air pollution myths. Myth 1: Staying indoors protects you from air pollution. Fact: Staying indoors doesn't shield you from harmful air. Indoor air can be up to 10 times more polluted than outdoor air due to cooking, cleaning products, and poor ventilation. Many believe closing doors and windows keeps pollution out, but it can trap pollutants inside, leading to buildup. Myth 2: Pollution is only a winter problem. Fact: It is a year-

round issue! Pollutants vary by season due to temperature, climate, and human activities. Dyson's Global Connected Air Quality Data project found India recorded the highest annual indoor PM2.5 levels—55.18 $\mu\text{g}/\text{m}^3$ —exceeding WHO's daily guideline every month. A WHO report estimates that around 7 million people die prematurely every year due to air pollution, making it a constant concern. Myth 3: Act only when you see pollution. Fact: Pollution isn't always visible, though its effects are real. Invisible pollutants like nitrogen oxides exist year-round and can be just as harmful. One way to combat invisible air pollution is by using an air purifier. Dyson air purifiers use a three-step process—Sense, Capture, and Project—to remove 99.95% of particles as small as 0.1 microns, including PM10, PM2.5, NO2, VOCs, allergens, bacteria, and viruses like H1N1. Myth 4: Indoor plants alone can purify the air. Fact: While aesthetically pleasing, plants can't eliminate airborne

pollutants effectively. A 2019 study found that achieving meaningful purification would require 10 to 1,000 plants per square meter—

ers up to 1,000 sq. ft. using Cone Aerodynamics for 10-meter projection while oper-



an impractical solution. Dyson's latest air purifier, the Dyson Purifier Big+Quiet, cov-

ers up to 1,000 sq. ft. using Cone Aerodynamics for 10-meter projection while operating at just 56 decibels—Dyson's quietest yet most powerful purifier.

India's Street-Smart EV just got more stylish: Introducing the

Hyderabad :JSW MG Motor India, the country's leading electric carmaker, has introduced the BLACKSTORM edition to the COMET EV portfolio, enhancing the style and appeal of India's Street-Smart EV. Launched at an ex-showroom price of INR 7.80L + Battery Rental @ INR 2.5/km, the COMET BLACKSTORM will be positioned as the top variant. Customers seeking a stylish and tech savvy city commuter, can now visit their nearest MG dealership and book the new MG COMET BLACKSTORM, by paying a sum of INR 11,000.

The COMET BLACKSTORM exudes sophistication and style through its 'Starry Black' exteriors, that enhances the overall appeal of the car. The COMET EV nameplate is carved in dark chrome and INTERNET INSIDE emblem is finished in black, commanding attention from on-lookers. The black theme is carried over in the interiors with the word 'BLACKSTORM' embroidered in red on the leatherette seats, promising a premium experience. For the music aficionados, the company has now equipped the COMET BLACKSTORM with 4 speakers to make traffic congestions a little soothing. Under the hood, this new edition

is equipped with a 17.4 kWh battery that supports fast-charging and delivers a certified range of 230 kilometres*. Customers can further personalise their COMET BLACKSTORM with an exclusive accessory pack, including a unique badge, wheel cover, and optional styling elements like hood branding and skid plates. Commenting on this, Rakesh Sen, Head of Sales, JSW MG Motor India said, "The modern-day Indian car buyers are seeking choices that are unique and are a representation of their personality. They are gravitating towards bolder colour options, that sets them apart and make their choices stand-out. We are delighted to launch the COMET BLACKSTORM that promises to enhance everyday commute by infusing style and sophistication. The COMET BLACKSTORM highlights our dedication of constantly meeting our customers' evolving needs by regularly refreshing our line-up." The MG COMET EV combines the functionality that an urban commuter needs with their desired style, all within a safe and smart package. The COMET EV's sales impressively grew by 29% in CY'24 over CY'23, signalling its strong acceptance among car-buyers. Its innovative design and practicality



have resonated with consumers nationwide, making it a preferred choice for city dwellers

seeking a stylish, eco-friendly mobility solution.

India's great language churn is something to cherish, not spurn

India's 36 states and union territories together are home to 22 official languages. In terms of population, Hindi, a modern language, is the most spoken as it is the link language in at least 10 states in north and central India. Bengali and Marathi come next followed by Telugu, Tamil, Gujarati and others. In a country seized with a selective interpretation of democracy i.e majoritarianism or rule of the majority, political conflicts over imposition of Hindi are not new and neither are the lessons that we need to relearn and remember. Just as homo sapiens evolved over many millennia so did their languages. People living in close knit societies and regions developed their own languages; this is also illustrated by each generation of teenagers forming their own lingo by changing the meaning of existing words, for instance 'sick' which now also means 'cool, and 'crazy' instead of just being unwell. Most modern Indian languages have been classified into four families. Austric (Nishada), Dravidian, Sino-Tibetan and Indo-European (Aryan). Interestingly, central Indian region contains languages that belong to three of these families, which shows how the process of osmosis may have happened over a long period of time.

Classical literary works in north Indian history like Abhijnanasakuntalam, Malavikagnimitram and Meghadutam among others show that the language of the ruling class (Brahmins and Kshatriyas) was Sanskrit while most other people spoke one of the Prakrits or local languages. Pali was the most widely spoken language, and its older versions are used in the Buddhist canon (Theravada) as well as Ashokan inscriptions. Ardhmagadhi was said to have

been the language of Mahavir, the 24th Jain Tirthankar, who was born in Magadha in modern Bihar. The Indus Valley Civilisation also known as the Harappan Civilisation (2500-1700 BCE) had both a language and a script; both remain undeciphered. It is believed that there was considerable interaction between the Aryans or the central Asian peoples who flowed unceasingly into the Indian subcontinent. According to academic consensus, Dravidian languages and early Indo-Aryan intermingled prior to the Mauryan period and Tamil words are found in the Vedic corpus (1500B CE). For example: ulukhala- 'mortar,' ku'??a 'pit,' khála- 'threshing floor,' ka'á- 'one-eyed,' and mayura 'peacock.'

Which is older, Tamil or Sanskrit?

They are largely coterminous with each other, both providing evidence of their usage and existence since at least 3rd-5th BC. This question loaded with power and pride can be addressed scientifically but science alone will not be enough to accept that there were other languages older than both. In fact, those older languages are now less recognised because they have lost political power and therefore are either dead or dying. Many local languages and scripts that existed in ancient India have either disappeared or devolved unrecognisably into other forms. However, while Tamil, which was once the predominant maritime language in south and south-east Asia, has survived and is thriving, on the other hand, Sanskrit has been long dead. Ironically, Sanskrit died because the ruling elite deprived everyone else from learning it, and therefore from acquiring knowledge. In fact, the Bhakti tradition, particularly in north

India was an attempt to democratise religion, restricted to Sanskrit mantra-chanting priesthood into vernacular poetry, and defying the priestly claim that Sanskrit was the language of Gods. G N Devy, author and cultural activist, wrote in his work on non-Sanskrit languages, *The Being of Bhasha*, "The Barbarians do not have knowledge, the Romans have it. Those who speak or recite Sanskrit have knowledge; those who speak Prakrit have no knowledge. Those who speak English have knowledge, those who do not have no knowledge worth the name. Such is the political context of every knowledge system."

Script is a system of writing down symbols for sounds while language is a set of spoken words that contain meaning. The earliest written records of state policy in the Indian subcontinent go back to the Mauryan emperor Ashoka's period (268-232 BCE). He issued directives, appeals, and warnings in at least four scripts and three languages. In Aramaic and Greek for the north-western regions where Greek influence was strong and in various local languages or Prakrits that were written in Brahmi and also in Kharoshti scripts for undivided Punjab and other areas of modern Pakistan. After the Harappan seals, Ashokan edicts, first decoded by James Prinsep, remain the earliest written evidence of the prevalence of many languages. It shows how multilingualism is an inherent characteristic of India. The edicts found in southern India (Karnataka and Andhra Pradesh) were written in the northern form of Prakrit, and contain reference to kingdoms such as the Cholas, the Pandyas, and Keralaputra in present day Tamil Nadu, southern Karnataka and Kerala. This has helped in drawing the territorial boundary of

the Ashoka's empire to present day Karnataka in the south and Kandahar and Shahbazgarhi in the northwest. Mauryan India was a rich, diverse, multi-religious, and multi-lingual society, and while Ashoka became all-powerful, he too had to contend without winning over certain territories.

Devy wrote, "Ashoka's inscriptions are among the earliest samples of recorded Prakrit. There has been no doubt about their historic value and their own historicity. But some of the Buddhist scriptures were written even before these inscriptions. The Pali tripitika on the more philosophical side and the Jataka stories on the more popular side, have a very clearly defined historical place in Buddhist literature. The Mahavamsa offers a good example of versified history written by monks in Sri Lanka. The Jaina history of literature is even more properly preserved. The Jaina canons, with 45 agamas, 11 angas and 12 upangas, were arranged by Devadhi Ganin in the year 454 CE." In the post-Mauryan period, we continue to see the use of Brahmi script all the way up to the Gupta period after which it is gradually replaced by an early form of Sanskrit. As the language of the court and ruling classes, Sanskrit works often appear to imply social hierarchy, pejorating the vernacular and working classes. However, as mentioned earlier, with growing heterodoxy in all forms including languages, poet-saints challenged these depictions. In the 16th century, Vaishnavite Saint Eknath asked, "if Sanskrit was made by Gods, was Prakrit born of thieves and knaves? Let these errings of vanity alone. Whether it is Sanskrit or Prakrit, wherever the story of God is told it is essentially holy and must be respected.

Indian justice system needs to be fair — not just fast

Shailaja Chandra's article, 'Leaner, Faster, Fairer' (IE, November 22), highlights several reasons behind the high number of pending cases across Indian courts and proposes two main solutions — measuring judge's performance by the case disposal rate and recruiting retired officials. It also pointed out the absence of video conferencing facilities in several district courts. We started the project 'System dynamics modelling of the pendency of undertrials' with a focus on speeding up the disposal of cases. However, after talking to several stakeholders in the judicial system for a year and a half, we realised that a fair trial is as important as a speedy trial. One must be careful while talking about faster case disposal since reducing the number of pending cases requires a delicate balance. The pursuit of speed should not come at the cost of fairness.

Categorising judges, on their disposal performance, could push them to choose cases that have a high likelihood of faster disposal. This might negatively impact the hearings of sensitive cases where judges might not have enough time left on the listing days. Hasty judgments can increase the likelihood of appeals, further clogging the judiciary. The article also mentions, "In an average district or subordinate court, about half of the 90 cases listed daily reportedly get adjourned." Keeping the fairness aspect in mind, we need to ask why are there such frequent adjournments. Which type of cases are adjourned frequently? Is it justified to put a permissible limit for adjournments? During our research, multiple advocates told us

that they demand adjournments to get more time to gather evidence, research the law, file motions, or wait for certain events that can have a significant impact on the verdict. Refusing these adjournments in such cases could be unfair.

The judicial system is complex with numerous actors — with judges, lawyers, litigants, and court employees having their own mental models. Delegating administrative tasks to retired officials who are not familiar with and sensitive towards judicial procedures, might create new inefficiencies and increase the unfairness. A system's behaviour is a function of its structure. Delayed disposals and high pending case counts are due to the justice-system structure and cannot be improved by tweaking without addressing structural issues. Each case passes through multiple stages: Charge sheet filing, charge framing, trial (evidence presentation), arguments, and judgment. Each stage has a different source of delay. For example, investigation officers can take time to gather evidence; police and public prosecutors usually keep issuing summons instead of a non-traceable report if a witness is not responding; the roznama has inaccurate or misleading information about the case stage; case files get misplaced or are not available since the case has been pending for long. It is necessary to identify the critical stages where there are bottlenecks and focus on reducing the delays in those specific stages. Several experts we spoke to raised concerns about video proceedings. During such proceedings, the accused are often surrounded by jail officers creating an envi-



ronment of intimidation. If they are mistreated in jail, say they have been tortured, they fear saying so; judges cannot see their physical condition clearly. During the physical trial, the accused are under the custody of judges, not jailers. Coming out of jail to the court for trial is the only chance for an accused to breathe free air.

They can meet their family members and talk to their lawyers confidentially. Video conferencing trials take away these particularly important rights of

undertrials. Accessing prompt legal advice and assistance is critical for ensuring a fair trial and the rule of law. However, researchers at National Law University Delhi's Project 39A have shown that undertrials from poor socioeconomic backgrounds cannot get the desired legal assistance due to unawareness about free legal aid, and the poor quality of the legal aid system.

We urge allocating more resources to strengthen the legal aid system to ensure that the judicial system is both efficient and fair.

Scientifically Speaking: When machines become poets

I want to start off this science column in a slightly different way this week, with a poem. Please bear with me, because we will get to science very soon. Here's a short poem that seems like it was written by the American poet, Sylvia Plath. The poem is written in Plath's characteristic confessional style with striking imagery. For example, "a fragile, broken yolk" conveys vulnerability with an unexpected, startling intimacy reminiscent of Plath's poetry. You wouldn't be in the minority if you thought the poem was written by Plath. But here's the twist: this poem wasn't written by Sylvia Plath or any other human poet. It was created by OpenAI's GPT-3.5, an artificial intelligence trained to mimic language and tone, including the emotionally charged Plath. Researchers Brian Porter and Edouard Machery from the University of Pittsburgh used AI to mimic Plath, William Shakespeare, and Walt Whitman, and other poets to test if people could tell the difference between poems written by people and those written by AI trained to mimic them. They published their findings in a recent study published in Scientific Reports.

Given that I'm writing about this paper

in my science column you might have guessed the outcome already. People couldn't reliably tell the difference between poetry created by human poets and those created by AI. What's more, they often believed that the AI-generated poems were human-authored often rating them more beautiful and rhythmic than poems from real poets!

So, what did Porter and Machery actually test? First, they presented over 1,600 participants with a mix of poems from ten notable poets. Half of the poems were genuine; the other half were generated by GPT-3.5, designed to capture each poet's distinctive style. The participants were tasked with identifying which poems were human-authored and which were AI-generated. Surprisingly, they identified the source correctly only 46.6% of the time (which is worse than chance). Many participants found the AI poems so convincingly "human" that they assumed they were real, particularly because these verses tended to be simpler and easier to understand. In a second experiment, the researchers had another group of around 700 participants rate the poems on qualities such as rhythm, imagery, emotional depth, and

sound. Some participants were told the poems were human-written, others were told they were AI-generated, and a third group was given no information on authorship. Predictably, participants rated poems labeled as human higher, even if they were actually written by AI. But when the participants didn't know the origin, AI poems often outscored their human counterparts, especially on qualities like rhythm and accessibility. The simplicity of the AI poems, free from messy metaphors or complex allusions common in human poetry, seemed to appeal to many readers. While human poets, like Plath, pour personal struggles and life experiences into their art, AI doesn't feel the weight of sorrow or joy, or anything at all. It reassembles language patterns based on probabilities. So, is it game over for poets, philosophers, artists, and their ilk? Certainly, the ability of AI to produce convincing poetry raises philosophical questions about creativity and authenticity. But Plath didn't write poems with words for maximum popularity, she wrote to express her pain and her doubts. Every poem she penned was shaped by a lifetime of experiences, emotional turmoil, and creative struggle. In contrast, an AI-generated poem above is an arrangement of learned patterns,

an echo without a soul. This study was conducted with GPT-3.5, and we're now well into the era of GPT-4, with even more advanced models on the horizon. AI will keep improving at capturing the subtleties of human tone, rhythm, and style. But for human poets, the struggle with language will remain. And that's kind of the point. We will continue to wrestle with "the clay of language," shaping raw emotion into words through a process that is vulnerable and unpredictable.

I'm a scientist, but I also read and write poetry. I recall John Keating's memorable line in Dead Poets Society, "We don't read and write poetry because it's cute. We read and write poetry because we are members of the human race. And the human race is filled with passion. And medicine, law, business, engineering- these are noble pursuits and necessary to sustain life. But poetry, beauty, romance, love- these are what we stay alive for." Human poetry is irreplaceable because art can never be separated from the artist. Anirban Mahapatra is a scientist and author, most recently of the popular science book, *When The Drugs Don't Work: The Hidden Pandemic That Could End Medicine*. The views expressed are personal.

Trump's MCC funds freeze a setback for Nepal's development aspirations

Three years ago, Kathmandu was caught in the crossfire of Washington-Beijing tensions over the Millennium Challenge Corporation (MCC), a multi-million American grant for Nepal.

While the United States warned of reviewing its overall ties with Nepal should Kathmandu fail to ratify the MCC-Nepal Compact from Parliament, Beijing referred to the grant as a "Pandora's box."

Within Nepal, politics was sharply divided, with some sections, particularly those holding extreme left and nationalist views, opposing the parliamentary ratification of the MCC. They argued that along with the MCC money, American boots would land in Nepal. Signed in 2017, the U.S., under the compact, committed \$500 million in grants for building electricity transmission lines and upgrading roads in Nepal. Fast forward to 2025, a month after Donald Trump returned to the White House, Nepal's Ministry of Finance (MoF) announced that it had been informed about the MCC funds freeze. In a statement, the Ministry said the Nepal government was informed by the MCC that payment-related activities funded under the Nepal Compact had been halted in compliance with a 90-day freeze imposed by an executive order of the U.S. President Donald Trump on January 20, 2025. When Mr. Trump froze USAID funds earlier in January, it was largely expected that the MCC, which the U.S. and Nepal signed during the American President's first term in 2017, would continue. Analysts now warn that if the funding is completely withdrawn, there will be broader implications for Nepal — not just in terms of infrastructure and development efforts, but also geopolitically, with respect to India and China. The million-dollar question

With the U.S. fund freeze for the largest infrastructure assistance, the immediate question is: Who will fill that void, and how will it impact Nepal's development efforts?

The natural answers could be China or India, Nepal's two next-door neighbours and the second and fifth largest economies, or Nepal itself. However, analysts offer a different perspective. Sanjay Upadhyaya, a U.S.-based author and analyst, argues that neither India nor China has the capacity or readiness to fill a vacuum of this scale and scope. "We lack the resources to ensure the continuity of the projects," he said. Even if attempts are made, such projects take years of negotiations. The MCC itself was signed in 2017 after years of discussion. Electricity transmission lines are one of Nepal's major infrastructure projects, as the country aims to exploit its hydropower potential with a view to selling it to India, the biggest market in the south. Mr. Upadhyaya suggests that Mr. Trump's decision significantly impacts Nepal's infrastructure initiatives and overall development efforts. "With the construction of the transmission lines and the enhancement of Nepal's road network under the Compact now on hold, uncertainty looms over their future," Mr. Upadhyaya told. The Hindu? over the phone said. "This situation may postpone Nepal's infrastructure development plans and result in costly contractual issues for the country." In June 2023, Prime Minister Narendra Modi announced that India would import 10,000 MW of electricity from Nepal. Accordingly, in January of the previous year, Nepal and In-

dia signed a power trade agreement for Nepal to export 10,000 MW of hydroelectricity to India over the next 10 years.

Setback for both Given the hullabaloo over the parliamentary ratification of the MCC three years ago, analysts say the fund freeze represents a setback for both the donor and the recipient. Binoj Basnyat, a strategic analyst and retired Major General of the Nepal Army, explains that the decision may erode trust in the U.S., which has been the biggest bilateral aid provider to Nepal since 1951. "Nepalis may wonder what policy the U.S. is going to pursue with regard to Nepal," said Mr. Basnyat. "But simultaneously, a review by the U.S. also gives Nepal, as a recipient, a chance to rethink its aid policy."

The MCC is the largest American infrastructure grant for Nepal in history. Through USAID, the American assistance to Nepal since 1951 amounts to over \$1 billion. In 2022, USAID and Nepal signed a five-year Development Objective Agreement worth \$659 million. While the USAID fund pause will affect sectors like health, education, agriculture, climate, and women's and children's empowerment, the MCC halt directly affects the infrastructure area. "The funding freeze places both countries in a difficult position. Nepal feels vulnerable about its control over its future," said Mr. Upadhyaya. "The U.S. has experienced a blow to its reliability and standing. Nepal took the political risk of accepting it, the U.S. has now stepped back. This sends a contradictory message to other countries considering American aid." According to him, the freeze in funds could further polarise Nepal. "Opponents feel vindicated," he said. "It may become increasingly challenging for Nepal to negotiate other international agreements." China-India interplay Beijing was suspicious of the MCC from the outset, believing it was Washington's ploy to counterbalance the Belt and Road Initiative (BRI), to which Nepal signed up the same year the MCC compact with the U.S. was signed. Only recently, in December last year, Nepal and China signed a BRI framework deal, paving the way for investment and cooperation in Nepal under the Chinese scheme after both sides agreed on "aid assistance financing."

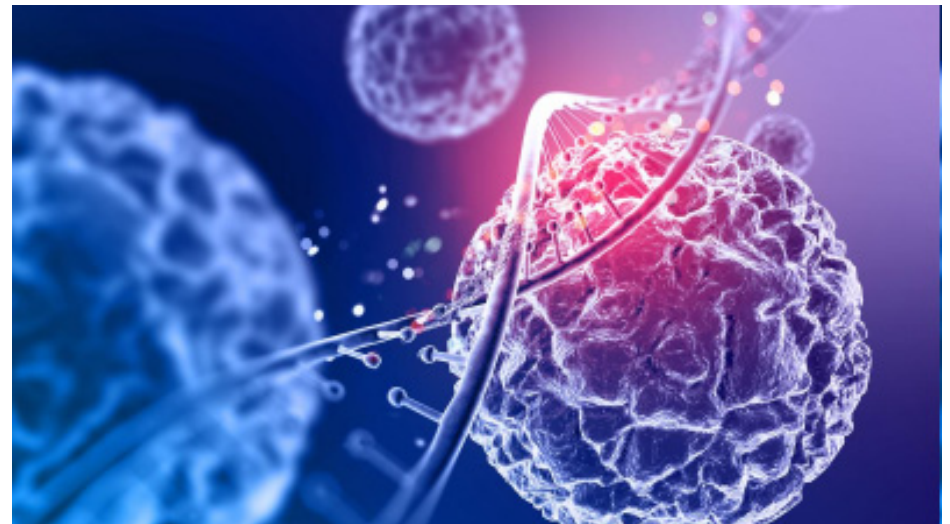
According to Mr. Upadhyaya, China now has an opportunity to reaffirm its narrative that U.S. commitments are unreliable and that it is the most reliable partner. "While Beijing capitalises on a propaganda victory, Nepal could potentially risk further assistance from China. At a time when the U.S. is competing with China for influence in South Asia, pausing MCC funds undermines Washington's objective in the region," he said. "Additionally, there is a risk of reverting to military- or security-led approaches to foreign aid." India, Nepal's traditional development partner in the region, remained conspicuously silent when Nepal signed up to the MCC and BRI. Some say the U.S. reversal on its aid to Nepal could open the door for Beijing to make more aggressive inroads into Nepal, which could become a headache for India. Ties between Nepal and India appear to be at a standstill, with many viewing New Delhi's reluctance to invite Prime Minister K.P. Sharma Oli even after six months in office as a sign of displeasure. Ajaya Bhadra Khanal, a research director at the



Centre for Social Innovation and Foreign Policy, suggests that neither India nor China can fill the void left by the MCC, as one lacks the necessary resources and the other lacks the willingness. He, however, adds that in areas like health, agriculture, and education, Beijing has more capacity and willingness than India. "Additionally, the north may continue its efforts to establish Left parties in power," he said. There are also concerns that

the U.S. distancing itself from Nepal could pose a bigger challenge for Kathmandu in balancing its neighbours—India and China. According to Mr. Basnyat, Nepal needs to focus on formulating its own credible foreign policy. "Nepal has to acknowledge it is a buffer state and find ways to re-engage with not just the U.S. but also China and India," he said. "It has to assert that it is a player, not a playing field."

Chinese researchers find bat virus enters human cells via same pathway as COVID



A newly discovered bat coronavirus uses the same cell-surface protein to gain entry into human cells as the SARS-CoV-2 virus that causes COVID-19, raising the possibility that it could someday spread to humans, Chinese researchers have reported. The virus does not enter human cells as readily as SARS-CoV-2 does, the Chinese researchers reported in the journal Cell, noting some of its limitations. The scientists said that like SARS-CoV-2, the bat virus HKU5-CoV-2 contains a feature known as the furin cleavage site that helps it to enter cells via the ACE2 receptor protein on cell surfaces. In lab experiments, HKU5-CoV-2 infected human cells with high ACE2 levels in test tubes and in models of human intestines and airways. In further experiments, the researchers identified monoclonal antibodies and antiviral drugs that target the bat virus. Bloomberg, which reported on the

study earlier on Friday, said the paper identifying the bat virus had moved shares of COVID vaccine makers. Pfizer shares closed up 1.5% on Friday, Moderna climbed 5.3% and Novavax was up about 1% on a down day for the broader market. Asked about concerns raised by the report of another pandemic resulting from this new virus, Dr. Michael Osterholm, an infectious disease expert at the University of Minnesota, called the reaction to the study "overblown." He said there is a lot of immunity in the population to similar SARS viruses compared with 2019, which may reduce the pandemic risk. The study itself noted that the virus has significantly less binding affinity to human ACE2 than SARS-CoV-2, and other suboptimal factors for human adaptation suggest the "risk of emergence in human populations should not be exaggerated."

A death in hostel and a campus on the boil

On the morning of February 17, Pankaj Yadav, a 19-year-old student, was fast asleep in his hostel room at the Kalinga Institute of Industrial Technology (KIIT) when he heard aggressive knocks on the door. He was startled to see the administrative staff of the university standing outside. He says they instructed him to pack his belongings and leave the campus in five minutes. The first-year BTech student at KIIT in Bhubaneswar, Odisha, says he was not involved in the events that had unfolded on campus the previous evening, but he was still having to face the consequences. "I was told to go home, but it felt like I was being sent on exile," he says.

On February 16, a Nepali student was found dead in her room. Angry students began protesting on campus, demanding justice for her and alleging that the university had ignored complaints of harassment. When tensions escalated, the university evicted more than 500 Nepali students from the university.

Yadav says he was unceremoniously dropped off at the Cuttack railway station, 30 kilometres away from campus, by a university bus and left to fend for himself. "I stood cramped inside the general compartments of multiple trains for more than 50 hours," he says about his harrowing journey back home to Rajbiraj, a town in Nepal's Madhesh province. "I waited at three railway stations, exhausted and hungry. I also spent one cold night at a friend's place at Jogbani in Bihar on the India-Nepal border. My only fault is that I am Nepali," he says. The administration's behaviour was "atrocious," says Sanghamitra Jena of the All India Students' Federation, which lent support to the KIIT students' protest. "Instead of offering solace to the students who were agitated by the loss of one of their own, the authorities resorted to a heavy-handed approach," she says.

Even as videos of students being evicted appeared online, a video clip allegedly showing two faculty members making derogatory comments about Nepali students went viral online. These events triggered a response from Nepali Prime Minister K.P. Sharma Oli, who took to X on February 17 to express concern over the incident. The university immediately backtracked on its decision to evict the students and removed the faculty members. The Odisha government swung into action and said that justice would be served in the case. But the protests did not abate. On February 21, Randhir Jaiswal, spokesperson of the Ministry of External Affairs, said that "the Government of India accords high priority to the safety, security, and well-being of all international students in the country." He added that the Ministry had constantly been in touch with the Odisha government ever since the matter came to light. Nepali students leave the Kalinga Institute of Industrial Technology after the administration evicted them. KIIT, a deemed-to-be university, was founded in 1992-93 as an industrial training institution and has now grown into an academic township of 36 sq km. Its 25 lush green campuses are home to more than 3,000 faculty members, researchers, and 15,000 staff. It has a 40,000-strong student community. Of them, 2,000 are foreigners from 65 countries. More than half the foreign students (1,068) are Nepali and stay in four hostels on campus.

On the afternoon of February 16, the

mood was upbeat on campus, say students. Most of them were dancing to rapper Badshah's performance at the university's annual festival. It was around this time that Lamsal, a third-year BTech student of computer science, withdrew to the quiet of her room in Queen's Castle-4 hostel, claims her friend, who has been protesting continuously on campus since. "A male batchmate had repeatedly abused her, which we believe pushed her to a breaking point," she says.

At around 4.30 p.m., Siddhant Sigdel, Lamsal's cousin, a third-year BTech student of KIIT, received a phone call. The caller told him that Lamsal had died by suicide and asked him to rush to the casualty ward of the Kalinga Institute of Medical Sciences Hospital, a medical college of the KIIT Group, says the First Information Report which was filed based on a complaint lodged by Sigdel. Family members of Prakriti Lamsal grieve her death in Bhubaneswar. Family members of Prakriti Lamsal grieve her death in Bhubaneswar. | Photo Credit: PTI "At around 5 p.m. in Nepal, I got a call from KIIT that my daughter had passed away," says Lamsal's father, Sunil Lamsal, while he waits in AIIMS Bhubaneswar for the post-mortem to be completed. Phones buzzed incessantly as the news of her death spread like wildfire. "Many of us were trying to process what had happened and a sense of solidarity took hold," says Kunal Dhama (name changed), a second-year BTech student, who was on his way to Nepal following eviction from the university and spoke to The Hindu over phone. "We began to congregate at KIIT's International Relations Office, which oversees the affairs of foreign students," Dhama continues. "Indian students and students from other countries also joined us. All we asked for was a thorough and impartial investigation into her death." In his complaint, Sigdel told the police that Lamsal was being tormented by a batch mate, Advik Srivastava. The police tracked Srivastava down at the Biju Patnaik International Airport the same evening and are now interrogating him. Despite the prompt action of the police, the students remained unconvinced and unhappy. "When we previously approached the Infocity Police Station with a complaint regarding a fight between two groups of students, they informed the university authorities and refused to register our complaint. The university then hushed things up," alleges Sujit (name changed), a second-year student of mechanical engineering. Bijan (name changed), another student, says the university was trying to "suppress the protests". He says, "It seemed like they were trying to tamper with evidence to protect the institution's carefully cultivated reputation." The students continued to demand that law-enforcement agencies secure Lamsal's laptop and mobile phone. By then, an audio clip purportedly featuring a conversation between Srivastava and Lamsal surfaced on social media. It showed the man, who is allegedly Srivastava, abusing a woman, who is allegedly Lamsal. The words were incomprehensible, but the tone was clearly abusive, say students. "The audio made us even more angry," says one of the protesting students. Things come to a head by the night of February 16, tensions had reached a boiling point. The founder of KIIT, Achyut Samanta, went to pacify the students and urged them to return to their hostels. But the crowd stood firm, show videos in the public domain. Students say the



campus then descended into chaos. "The university hired bouncers, who came down on us. Some students were chased down the campus and beaten black and blue. Some students received injuries and had blood stains on their shirts," says a Nepali student. While tempers ran high, two faculty members, Jayanti Nath and Manjusha Pandey, made "racist remarks" at a girls' hostel, say students. "One of them bluntly told us to leave KIIT. It was humiliating when she said that the amount spent by the university on students' welfare was more than Nepal's GDP," says a Nepali student. The students recorded the altercation and the videos went viral on social media, sparking outrage. Yadav says he forgot to have dinner in the midst of these events and went back to hostel. "The next morning, I was asked to leave. When some of my classmates tried to ask the administration why they were being bundled off, they were attacked. The university staff was also busy trying to delete the videos of the previous night's fiasco," he says.

Bijan says everyone quickly collected their laptops and mobile phones and boarded the university buses parked outside hostels. The women were given two hours to leave campus, he says. By then KIIT had issued a notice that read, "The university is closed sine die for all international students from Nepal. They are hereby directed to vacate the university campus immediately today on 17th February, 2025." Anil Pradhan, a Bhubaneswar-based education activist, asks why the people of one nationality were singled out during the unrest. However, KIIT justified the move. Shyam Sundar Beura, Additional Registrar of KIIT University, says, "The entire protest was led by Nepali students. The entire incident revolved around Nepali students. So the sine die notice mentioned only them." The sudden eviction led to an uproar. "How can they ask us to suddenly catch a train or flight to Nepal at such short notice? Many students had no money. For hours, we sat at the Cuttack Railway Station to board the next train to Kolkata, so that we could consider our next options there," says Arjun Adhikari (name changed), a first-year BTech student who has gone back home to Biratnagar, Nepal. He adds that some students went to Delhi, some to West Bengal, and some others to Bihar. Many students went to relatives' homes. Hearing of the attacks and eviction, Nepali citizens staged demonstrations in front of the Indian embassy in Kathmandu. Prime Minister Oli took note. "Our embassy in New Delhi has dis-

patched two officers to counsel Nepali students affected in Odisha. Additionally, arrangements have been made to ensure they have the option to either remain in their hostel or return home, based on their preference," he wrote on X. Perhaps realising that this could spiral into a diplomatic crisis, the university issued an apology. It said, "We are also regretful of the way some of us behaved with the agitating students. We love them as much as we love the people of India and the people of the world. Additionally, we are again appealing our Nepali students to join the regular academics with immediate effect." Nath and Pandey issued separate apologies in videos online. Nath said, "My intention was never to offend, defame and demean anyone. I deeply regret if it has caused unintended hurt anyone. My words were directly instigated by statements during the protest where my country and institution were called corrupt and poor." Pandey said she had made the remarks in the spur of the moment. However, these expressions of regret have failed to cut ice with the students, who insist that the two faculty members, who have been removed from service, must apologise publicly in front of students. They intensified their protests on February 18 and 19. A plea and no heed. The Mohan Majhi government in Odisha has set up a high-level committee, chaired by the State Home Secretary, Satyabrata Sahu, to investigate the circumstances surrounding the alleged death by suicide. The committee has also been tasked with examining claims of high-handedness by university authorities, the rationale behind issuing notices to a specific group of students, and the university's decision of February 17 to close the institute for them. The committee summoned the founder, Samanta, for questioning. Two ministers, along with the State Chief Secretary, met with Nepalese consular officials to discuss the safety and academic future of Nepali students. Majhi also said justice would be served and urged Nepalese students to return to India. However, the issue rocked the Odisha Legislative Assembly for the last three days, with MLAs from the ruling party and the Opposition demanding stringent action against the university. Meanwhile, Lamsal's relatives, who travelled to Bhubaneswar to claim her body, say she was bright and wanted to excel in the field of technology. They also say she was soft-spoken, talented, and loved by friends and teachers. While performing the 13-day-long rituals following her death, Sunil Lamsal spoke about his daughter's life and ambitions.

What does the AWS-Adarsh Developers case tell about cloud data management | Explained

The story so far: On February 11, Bengaluru-based Adarsh Developers filed a complaint against Amazon Web Services (AWS), claiming that years' worth of company and customer data hosted on AWS was lost, resulting in a financial loss of well beyond ₹100 crores. The loss of data and Adarsh Developers' decision to take legal action against the tech giant in India has raised questions about security in enterprise-grade cloud storage, the importance of multiple versions of backed-up data, and the legality of such cases.

What exactly happened between the two companies?

In its FIR filed on February 11, Adarsh Developers said that it was using SAP ERP hosted on Amazon cloud to secure the company's financial data and customers' personal data. The real estate firm alleged that in May 2023, AWS's business development representative Saidalawi Safan advised the company to opt for an upgraded service to secure their data, so as to ward off cyberterrorism or sabotage. They complied. But on January 9, 2025 at 10.48 AM., the company said, the data environment - the entire SAP S/4HANA environment, to be specific - hosted on AWS was completely deleted. After making inquiries through its partner SAVIC Technologies Pvt. Ltd., Adarsh Developers said that the data loss was a result of the action taken by individuals at Redington, a vendor, and AWS. The participants' exact actions and the specific allegations against them are not known. The real estate company further claimed that years' worth of vital financial records, supply chain data, customer information, and operational insights had become inaccessible. The loss of the data brought its business functions and operations to a complete halt, Adarsh Developers said in their complaint.

The company estimated that the value of the data it lost to around ₹150 crores as of January 31, with approximate losses of ₹5 crores per day starting from January 9. Adarsh Developers also said that it was unable to collect customer payments, pay statutory taxes, and facilitate interest payments to lenders. The cybercrime police has registered a case against AWS and others, under the IT Act, Section 318(4) (cheating and fraud), and Section 319(2) (impersonation) of the Bharatiya Nyaya Sanhita.

How might the data have gone missing?

There is a general tendency to think data loss is a result of actions performed by malicious agents, such as hackers or even disgruntled employees. However, there can be a number of reasons behind data loss, especially when teams of vendors, technical partners, clients, service-providers, and consultants work together to keep a company's complex systems up and running in a secure environment. One possibility is cloud misconfiguration, which stems from poorly implemented cloud storage settings, bad system architecture, low-quality security infrastructure, unsecured databases, or unmanaged access. Human error is also a common cause for large-scale outages and data loss incidents. In the FIR, Adarsh Developers cited SAVIC's claims that some individuals in the Redington and

AWS teams were responsible for the data loss, and that, "... employees at Redington Group have entered into our storage area at root level and deleted our account completely." But it is not possible to pinpoint the exact cause of the data loss and those behind it until a comprehensive forensic investigation is carried out and the results backed up by evidence. For this to happen though, Adarsh Developers, Redington, SAVIC, and AWS will all have to present their claims and technical data to make sure they are in the clear. What was Amazon's response? Adarsh Developers claimed that AWS India responded by saying that they could not retrieve the data or restore it, forcing the real estate company to take legal action. Amazon, however, has refused to accept Adarsh Developers' allegations. "The claims against AWS are false. AWS operated as designed and is not responsible for the deletion of Adarsh Developers' data," said an AWS spokesperson in response.

While the root cause of Adarsh Developers' data loss incident is not yet clear, some similar incidents involving data loss through cloud services have been recorded in the past. For example, The Register outlet reported that the Microsoft Azure outage of January 29, 2019 affected Azure SQL databases and also led to some data loss within a certain time window. To compensate users, the company waived a few Azure usage charges for 2-3 months, depending on how the databases were affected, per The Register. Even before this, code-hosting platform Code Spaces had to shut down after its servers were hit by a DDoS attack and its Amazon Web Service account [Amazon



Elastic Compute Cloud (EC2)] was data and its backups (including offsite backups) were deleted, said Code Spaces. breached by a hacker. Most of the platform's

The long and winding road of India-China relations

India's Foreign Secretary Vikram Misri was in China in January 2025, during which India and China made several announcements on the future of their bilateral relations. He met Wang Yi, who is China's Foreign Minister, the Director of the Office of Central Commission of Foreign Affairs and also a politburo member of the party, and also Liu Jianchao, Minister of the International Department of the Chinese Communist Party. The Indian statement after this meeting indicated that the process of restoration of several aspects of bilateral relations including media and think tank exchanges, the Kailash Mansarovar Yatra, and bilateral flights is on the cards for the summer of 2025. Possible reasons India and China have attempted to move forward after more than four years of tense and stalemate-based relations since the clashes in Galwan in June 2020. Stalemates cannot be permanent. Both sides have made their points and moved to the détente. One can argue that there are several reasons for the timing of this bilateral agreement, the main being the election of Donald Trump, who is a known disruptor and unpredictable in his ways of doing business. The other is about economic concerns in China and in India in recent times. India and

China have been bracing for the Trump impact especially when by the middle of October last year his election was already beginning to look more likely to happen. This possibility may have pushed the October 2024 de-escalation agreement between India and China, and Mr. Trump's gigantic electoral victory in November 2024 may have pushed the January 2025 agreement between India and China. There is a historic logic to this as well. China agreed to normalising relations with India, after the 1962 war, only in the backdrop of the backlash in the aftermath of the 1989 Tiananmen Square massacre. Again, China may have agreed to normalise its relations with India given that it had to brace for the Trump impact. Thus, there is both internal and external logic around the restoration of normalcy. However, since we do not know whether patrolling rights have been/are fully restored or whether demobilisation is in its advanced stages, such an absence of communication on the part of the government raises doubts and questions needlessly. The Government of India has maintained absolute silence on the status of de-escalation, demilitarisation and demobilisation of the fairly large number of troops. Troops were mobilised and deployed on the border, first

during the tensions of May-June 2020, and then in even larger numbers in the aftermath of the June 15, 2020 clashes. These troops were on active duty or in newly created barracks close to the six points of tension along the border including in Galwan, Depsang Bulge, Charding Nala, Gogra Post and Hot Springs and on the north bank of the Pangong lake. There is also no clarity whether the large number of People's Liberation Army troops on the Chinese side, before and after the clashes, have retreated to their bases. Confirmation of this would mean that the actual restoration of normalcy on the Line of Actual Control (LAC) has been achieved. India has also made it clear in the aftermath of 2020 that it was China that had violated the several agreements and protocols the two sides had signed. One is not sure about whether these have been rectified in a verifiable way. This in turn can only be established when patrolling rights have not only been agreed to but also exercised. The briefing in October 2024, by the Foreign Secretary, prior to the 16th BRICS summit in Kazan in this respect, was already guarded. It only alluded to an agreement that would lead to the "process of disengagement".