

Power employees unions to hold 'maha dharna' on October 26

Hyderabad: The managements of State-run power utilities, which are facing allegations of irregularities in the transfer of employees, are likely to face more trouble from employee unions as they have threatened to hold massive protests on October 26 if their long-standing demands are not fulfilled. The Telangana Electricity Employees 1104 union has threatened to hold a 'maha dharna' at the corporate office of Southern Power Distribution Company of Telangana Limited (TGSPDCL) on October 26, if the long-standing issues faced by the employees and artisans working in the company were not resolved. State general secretary of the union, affiliated with CPI(M), G Saibabu, gave a notice to TGSPDCL Chairman and Managing Director Musharaff Ali Faruqui on Thursday evening, informing that if their demands were not considered in next few days, the union would hold a massive protest at the SPDCL headquarters in which employees from all the offices across the State would take part. Saibabu said despite several representations made in the last 3-4 years, the issues of employees, operations and maintenance workers were not resolved.

He demanded that a Pre Negotiation Meeting (PNC) be conducted to resolve all the major issues of the employees by October 25 in a harmonious manner, failing which the union would be left with no other option but to hold the protest as planned. Meanwhile, the operations and maintenance staff on the field, including senior line inspectors, line inspectors, linemen, assistant linemen, and junior linemen are facing significant distress due to the recent general transfer policy implemented by the SPDCL and Northern Power Distribution Company (NPDCL).

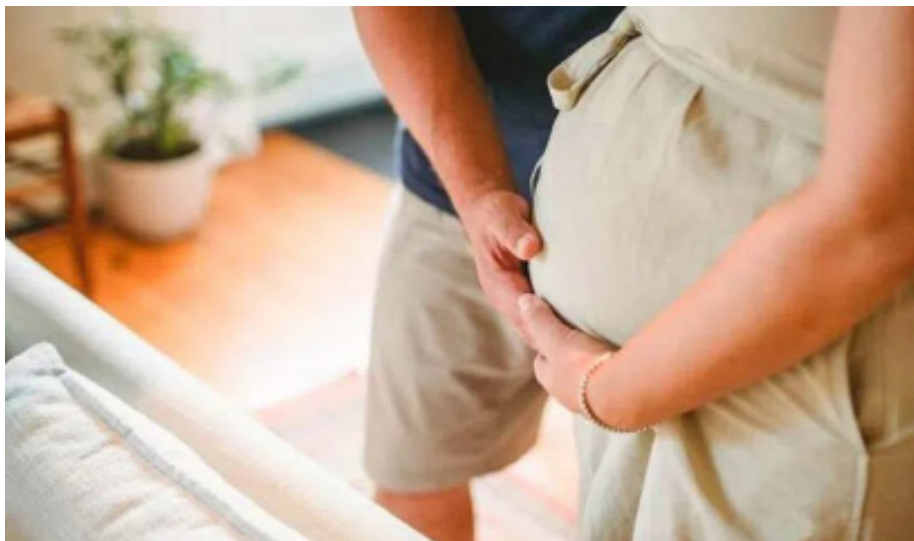
The union leaders claimed that the transfers of Operation and Maintenance (O&M) staff are not aligned with the State government's guidelines, which stipulate that transfers should occur after four years of service. This discrepancy has led to severe hardships for nearly 23,000 field workers, they alleged. Even Telangana Electricity BC & OC Employees' Joint Action Committee is exerting pressure on the managements of power utilities to review the promotions given in the four public sector undertakings since formation of the State in



June 2014 as per the directions of the High Court. They have threatened to go on strike if promotions are not awarded to them in the next few days. The artisans are also not happy with the decision of the power utilities not to consider them as regular employees and promote them as junior

linesmen. With most of the power staff unhappy with the power utilities management on various issues and employees unions standing firm on their demands, there is a possibility of a massive protest across the State in the power department in the next few days.

Telangana witnesses sharp decline in fertility rates



Hyderabad: In the coming decades, Telangana State will have very few young people and large number of senior citizens to take care. The dramatic decline of fertility rates in the State is a clear indication of the challenges, including dwindling young workforce and the economic burden due to healthcare costs and other social security systems due to an aging population, which the state has to focus

proactively. Based on the this year's analysis presented in the Economic Survey (2023-24) by Government of India, the fertility rate of Andhra Pradesh (the then united Andhra Pradesh) way back on 1992-93 was 2.6, which means the number of children (average) born alive to women of a specific age group, in comparison to the total number of women in that same age group. However, by 2021, the fertility rates

in TS have drastically dropped to just 1.7. A recent worldwide report on reduction of fertility rates, published in Lancet (May, 2024), said that the average fertility rate forecast by 2050 for India will be 1.29. At present, the countrywide total fertility rate is 1.91 while the fertility rate in all the Southern Indian States, which are far more developed in all aspects including health, education and economic opportunities, hovers between 1.7 and 1.8.

The drop in fertility rates in South Indian states is expected to continue and in all likelihood by 2050, it would be less than the forecasted national average of 1.29. Senior public health workers from Telangana, who are familiar with the is-

sue, said that major factors for the steep drop in fertility rates are obesity, stress, smoking, environmental pollution, promotion of smaller families, improved infant mortality rates, mortality rates, socioeconomic changes like urbanization, rise in women workforce, improvement in women's education that usually causes delay in childbearing. The sharp rise in infertility health clinics across Hyderabad and other major urban centres in Telangana and other Indian states is a clear indication of the rising infertility rates. Based on various sources, the IVF market in the country is expected to increase and reach 3.7 billion by 2030 from 793 million in 2020 in India.

Woman allegedly pressures daughter into flesh trade in Hyderabad; booked

Hyderabad: In a disturbing incident, a mother has been accused of allegedly pressuring her own daughter into flesh trade in Alwal. Unable to take up further harassment being meted out against her, the young woman fled from home and ap-

proached the local police. The incident came to light when she lodged a complaint at the Alwal police station. Responding to the complaint, the police transferred the victim to a Sakhi Centre, a support facility for women.

A food-sufficient India needs to be hunger-free too

Ending hunger, food insecurity and any form of malnutrition is one of the Sustainable Development Goals set to be realised by 2030. Such a goal is far removed from its realisation given rising conflicts, climate vulnerability and extremes as well as economic slowdown in regions that remain vulnerable and food deficient. Food insecurity and malnutrition are a manifestation of a lack of access to and the unaffordability of healthy diets. In fact, food sufficiency serves as a pre-requisite to address hunger. But for a nation to be food sufficient, it needs to have an ideal distributional mechanism that ensures universal access to food that is affordable. Further, adequate food does not necessarily imply balanced food intake with all required nutrients to address the concern of malnourishment. Hence, a transformation from a hunger-free environment to a nutritionally compliant one needs to take into account the unaffordability of healthy diets, unhealthy food intakes and their underlying inequalities across the population segment.

A lack of purchasing capacityThe global hunger assessment based on the prevalence of undernourishment shows a continuing lack of progress towards the goal of zero hunger. The global magnitude of the undernourished has risen to 9.4%, or 757 million people as of 2023. It is disproportionate in the African region with 20.4% facing hunger. In comparison, 8.1% in Asia, 6.2% in Latin America and the Caribbean and 7.3% in Oceania are undernourished. However, in real counts, Asia is home to the largest magnitude of those who are hungry — 384.5 million — as compared with 298.4 million in Africa.

The projected trends too are more disappointing in the sense that by the end of this decade, i.e., 2030, half of the world's hungry/undernourished will be in Africa. The other distinct feature of undernourishment is its rural bias with a marginal advantage in urban and semi-urban areas. The gender divide in this adversity disadvantages women over men although such a divide is narrowing. While food insecurity results in undernourishment or manifestation of hunger, the intrinsic connect lies with the lack of a purchasing capacity for adequate food. In this perspective, the cost and affordability of a healthy diet (CoHD) assumes significance. The cost of a healthy diet has risen in recent years world-wide, peaking at an average of 3.96 purchasing power parity (PPP) dollars per person per day in 2022. This undoubtedly varies across world regions in PPP terms, with the same being at \$4.20 in Asia.

Despite rising CoHD, those unable to afford a healthy diet at the global level decreased from 2.88 billion in 2021 to 2.83 billion in 2022. However, in low-income countries, many still lack access to a healthy diet. This is a real threat to the dream target of zero hunger in the world by 2030. A practical solution lies in regulating food prices and a reduced share of food expenditure in the total expenditure that makes healthy diets universally affordable. On this count the Indian scene is ex-



amined with a focus on thalonomics that contemplates rising affordability for a nutritionally compliant meal for every Indian. A recent exploration shows that the share of the rural Indian population in 2011 unable to afford the cost of a required diet (CoRD) even with 100% income spent on food would be 63.3% or 527.4 million. There is a lack of improvement in food security and uneven progress in economic access to healthy diets. This is a wake-up call. For this to change, there needs to be a transformation of India's agri-food system so that it builds resilience in its major drivers and addresses inequalities, ensuring that healthy diets are available and affordable for all.

Unhealthy diets in IndiaDiets in India are generally unhealthy and there is an imbalance in composition in relation to the EAT-Lancet reference ('the first full scientific review of what constitutes a healthy diet from a sustainable food system') or the recommendations by the Indian Council of Medical Research. In fact, qualifying such reference diets would not be affordable for much of the low income population. In South Asia, a reference diet might cost 60% of the mean daily per capita household income. The lack of affordability of healthy foods may be one of the reasons for their low consumption in India. However, in the midst of subsidies and market regulation of prices of basic food such as cereals in India, low affordability may not be the sole reason for non-compliance with required food intake. Evidence suggests that the richest 5% of Indian households too consume less of protein rich food against processed food. This points to a lack of availability, accessibility, awareness, and acceptability being the other major causes for the poor quality of diets. On the Global Hunger Index Going back to the assessment of hunger globally and in India, there is continuing controversy in relation to the Global

Hunger Index (GHI) that places India poorly in relation to other nations. However, close attention to this issue has not been given as the GHI connects less with hunger per se. This is because its components are more about nutrition and early age mortality. The realistic hunger domain may go well beyond food insecurity and nutritional compliance to the basics of having a square meal a day. This is a statistic that is much available in our own surveys which shows the number of meals consumed by individuals in the last 30 days. Such information reveals the average number of meals consumed in a day. According to these statistics by the NSSO on the recent consumption expenditure surveys, 3.2% of the Indian population are not compliant with a minimum of 60 meals in a month, which is equal to a square meal a day. In fact, more than 50% of the population are reported to have three meals a day. Using the calculation of those who fall short of having two square meals a day, one arrives at the calculation of 2.5% of the population that might fall under this category. In a population of 140 crore, this can be calculated as 3.5 crore, which is still a number that cannot be ignored. World Food Day this year

has the theme 'Right to foods for a better life and a better future', which highlights the significance of a hunger-free world with the universal right to food. Although a right to food campaign in India has gained sufficient momentum to ensure food security for every citizen, the ground reality reflects some failure. There are situations and circumstances wherein individuals may go hungry as they do not have the means to buy food. But mechanisms to provide free food by setting up food banks that evolve as a way to avoid food waste may be an ideal alternative. Discouraging food waste and organising proper food collection and distribution may be a step in ensuring that no one is left hungry.

A nation that is proud about being self-sufficient in its food needs to qualify as being a hunger-free nation as well. Food sufficient regions in the world should ensure redistribution in a humanitarian manner so that the food deficient ones are not left out. S. Irudaya Rajan is Chair at the International Institute of Migration and Development (IIMAD), Kerala. U.S. Mishra is Honorary Visiting Professor at the International Institute of Migration and Development (IIMAD), Kerala

NIMS completes 1000 kidney transplants in one decade

Hyderabad: The Urology team of Nizam's Institute of Medical Sciences (NIMS) has completed 1000 kidney transplants in the past decade, marking a significant milestone in the institution's renal transplant program. Except for the Covid-19 year in 2020, the team has conducted over 100 kidney transplants for ten consecutive years in collaboration with

Jeevandan cadaver transplantation program. This year, the NIMS urology team conducted 101 kidney transplants, comprising 55 live-related and 46 deceased donor transplants.

The complex transplant surgeries were carried out by the same team that also performs over 900 to 1000 other urological procedures each month, i

5 EVs to Buy This Festive Season for Style, Range, and Sustainability

As the festive season approaches, it's the perfect time to switch to electric vehicles (EVs) that offer not only cutting-edge technology but also an eco-friendly solution to pollution. Here are five EVs to consider, combining striking designs, luxurious interiors, impressive range, and sustainability.

MG Windsor EV:

India's first intelligent CUV, the MG Windsor, offers a perfect blend of innovation, style, and comfort. With its 2700 mm wheelbase which is longer than many (ICE) vehicles with superior dimensions, it maximizes space, providing an unmatched cabin experience. The Windsor offers an infinity-view glass roof, aerodynamic design, and spacious, opulent interiors, ensuring luxurious business-class comfort. Reassuring safety, smart connectivity, and driving comfort are enhanced by its hi-tech features. Built on the 'Pure EV Platform,' the MG Windsor starts at INR 13,49,800 (Ex-Showroom). Under the unique Battery as a Service (BaaS) program, it is available at INR 9.99 Lakhs + ₹3.5/Km for battery*. Offering a range of 332* km ARAI certified with a 38-kWh battery and four driving modes, the Windsor's zero-emission powertrain helps significantly reduce air pollution, promoting a greener future.

MG ZS EV:

India's first pure electric internet SUV,

the MG ZS EV, is designed with dynamic lines and 17-inch diamond-cut alloy wheels, giving it a progressive and bold look. It adopts MG signature global design cues and comes loaded with luxurious features like a panoramic sunroof, spacious interiors, advanced i-SMART tech, and 75+ connected car features, making it an excellent choice for consumers. Starting at INR 18,98,000 (Ex-showroom), the ZS EV is powered by a 50.3 kWh battery, offering an impressive range of up to 461 km. With the Battery as a Service (BaaS) program, customers can opt for the MG ZS EV at ₹13.99 Lakh + a battery rental of ₹4.5/km. Its sustainable, zero-emission powertrain combined with Level 2 Autonomous features makes it an ideal choice for eco-conscious drivers looking for both innovation and comfort. Kia EV6:

Kia EV6 the Korean carmaker's first all-electric crossover in India, starting price of Rs 59.95 lakh for the RWD variant, going up to Rs 64.95 lakh for the AWD version (ex-showroom, India). With an impressive 708 km range and fast-charging capabilities, the EV6 is available in India in a sole 77.4kWh battery pack. The Kia EV6 is based on the company's E-GMP platform – a dedicated EV skateboard architecture. The EV6 crossover looks striking, particularly to the rear-end styling with its ducktail-style spoiler and full-width LED taillight. The interior is tech-heavy, characterised by a

curved dual-screen layout, floating centre console and two-spoke steering wheel. It gets sustainable materials such as vegan leather inserts for the suede seats and steering wheel. Safety features include eight airbags and a full ADAS suite, offering forward collision warning, lane keep assist, and more. The EV6 is eco-friendly, using electric power to reduce emissions and energy consumption.

Hyundai Ioniq 5

Ioniq 5, electric crossover features sharp lines, flat surfaces and SUV-ish stance, but with highly raked windscreens. Its distinctive pixelated headlights and taillights enhance its modern appeal, while the 20-inch aero-optimized wheels boast a turbine-like design. The Ioniq 5's interior is minimalistic; it gets a flat floor, flexible seats and a movable centre console. Hyundai used fabrics made from recycled plastic and eco-friendly leather for upholstery. As the first model built on the E-GMP platform—also shared with the Kia EV6. The E-GMP platform comprises a vehicle chassis that includes a battery, motor, and electric power system. It is equipped with a 72.6 kWh battery, providing an impressive range of 631 km on a single charge, with a starting price of ₹46.05 lakh. The Hyundai Ioniq 5 is packed with features such as electronic stability control, ADAS, and multiple airbags. This EV contributes to a cleaner environment by cutting down carbon emis-

sions

BMW i4 eDrive 40

The BMW i4 electric sedan represents the company's first four-door model in both India and the global market, available in two variants: the BMW i4 eDrive 40 and the BMW i4 M50 xDrive. In India, only the i4 eDrive 40 variant has been launched as a Completely Built Unit (CBU) at an introductory price of ₹69.90 lakh (ex-showroom). This electric sedan distinguishes itself from traditional internal combustion engine (ICE) models with its unique closed kidney grille and redesigned bumpers, highlighting its commitment to sustainability.

The i4 eDrive 40 offers an impressive WLTP-certified range of 590 km, powered by a floor-mounted 83.9 kWh battery pack. Inside, the cabin is designed with modern technology, featuring a 12.3-inch digital instrument cluster and a 14.9-inch touchscreen infotainment system, both utilizing BMW's latest iDrive 8 user interface. Additionally, it comes equipped with premium amenities such as wireless charging, powered seats, and automatic climate control, ensuring an elevated driving experience. Each of these EVs not only promises a stellar driving experience but also plays a significant role in reducing pollution, making them the perfect eco-friendly choice this festive season.

BJP unhappy over State unit's failure to achieve membership target



Hyderabad: The Bharatiya Janata Party (BJP) central leadership has expressed serious displeasure over the party State unit's failure to enrol 50 lakh members during the ongoing membership drive. The party claims it now has about 20 lakh members, but among these, over 14 lakh were existing members. The central leadership has pulled up State leaders for enrolling only 6 lakh new members during the month-long membership drive. BJP

National President JP Nadda reportedly expressed anger over the poor enrolment and asked the State leaders to achieve the target by October 24. Nadda himself participated in the membership drive to encourage the party leaders and workers to enrol new members into the party, but still the party could not manage to even achieve 50 percent of the target.

With just six days left for the deadline, the party leaders are tensed and are

pressurising local leaders to take up a massive enrollment drive. Party sources say the State leadership blamed the district in-charges for poor enrollment. The enrollment drive in-charges reportedly did not make much effort to enrol new members. The party organisation has set a target of enrolling a minimum of 200 members from each polling booth across the State during the drive. Despite comprehensive information from previous membership drives at the local level, the party has not effectively leveraged it to fortify its grassroots presence, sources said, adding that the party had conducted a number of workshops for the party leaders and workers to train them about the member-

ship drive, but still they failed to achieve the target. The BJP, which has been hoping to capture power in Telangana, was supposed to double its membership in the State during the membership drive.

The party leadership were confident of enrolling 50 lakh members in the State as the party managed to poll over 76 lakh votes during the Lok Sabha elections. Since the party captured eight Lok Sabha and assembly seats, it was confident of achieving the target, but the poor response from the people of the State has shocked the party. Sources say to achieve the target of 50 lakh members in next one week was impossible.

Upset over personal issues, transgender person ends life in Hyderabad

Hyderabad: Allegedly upset over personal problems, a transgender person died by suicide by hanging in her house at Balaji Nagar in Jawaharnagar on Friday.

The victim, identified as Saritha alias Santosh (33), was reportedly upset over

some issues for past some days. Police sources said Saritha hanged from the ceiling fan in her bedroom in the absence of her family members in the early hours. Her family members found her dead and informed the police. The Jawaharnagar police are investigating.

Gang Leader Rhea Chakraborty sparks fan frenzy in Hyderabad during MTV Roadies Double Cross auditions!

MTV Roadies Double Cross Auditions has kicked off with a bang, marking the beginning of an epic journey for the 20th season. As the show celebrates two decades of thrilling challenges and unforgettable moments, the excitement among fans has reached new heights. Especially with Rannvijay as host, alongside Gang Leaders Prince, Neha, Rhea, and the newest addition, Elvish.

Gang Leader Rhea Chakraborty, who made waves last season as a debutante Gang Leader and made her protege win, set Hyderabad buzzing during her visit to promote MTV Roadies Double Cross, leaving fans energized and excited. Rhea dived into the heart of Hyderabad's culture embarking on food and talking a walk at the iconic Char Minar Market. Embarking on a fan meet and greet she made her way to Sarath City Capital Mall, where she interacted with 1000+ lucky fans, taking

selfies and fueling the Roadies hype like never before and giving out the much awaited, 'Jump The Queue' passes to lucky aspirants. From start to finish, her Hyderabad visit was a whirlwind of fan love, culture, and high-energy buzz that had everyone talking!

Next day, Host Rannvijay, along with Gang Leaders Prince, Neha, Rhea, and Elvish, set the stage on fire as they kicked off the auditions at Surya The Global School. With over 2000+ aspiring Roadies showing up in full force, the energy was electric! The excitement was palpable as the crowd eagerly waited to see who would make the cut for this season's shortlist.

This season, nothing is off-limits. Welcome to MTV Roadies Double Cross - where betrayal is the name of the game. MTV Roadies Double Cross Auditions coming to a city near you, this October!



4 issues in Supreme Court's Assam verdict

The verdict has importance not just for Assam, where politics has long been shaped by issues of migration and demography, but also for wider issues of citizenship and Parliament's powers in this regard. The majority comprising Chief Justice of India (CJI) D Y Chandrachud, and Justices Surya Kant, M M Sundresh and Manoj Misra, upheld Section 6A of The Citizenship Act, 1955, which codified the political consensus of the 1985 Assam Accord. Justice J B Pardiwala dissented.

The tripartite Assam Accord signed among the central and Assam governments and the leaders of the Assam Movement set January 1, 1966 as the base cut-off date for the detection of "foreigners" and their deletion from electoral rolls. It also provided a process for the grant of citizenship to those who arrived in the state after that date, upto March 24, 1971. These aspects were codified in Section 6A of The Citizenship Act. In 2014, a two-judge Bench referred the challenge to Section 6A to a Constitution Bench, highlighting some key questions of law. The legal scheme for granting citizenship for those who migrated from Pakistan is in Articles 6 and 7 of the Constitution. The petitioners argued that Section 6A, which deals with migrants from East Pakistan (later Bangladesh) amends this provision — a change that can only be made through a constitutional amendment. CJI Chandrachud held that Articles 6 and 7 are only meant to determine citizenship at the commencement of the Constitution on January 26, 1950. Section 6A, on the other hand, "deals with those who are not covered by the constitutional provisions". Justice Kant in his majority opinion (for himself and Justices Sundresh and Misra) wrote that "Section 6A aligns with the fundamental purpose of Articles 6 and 7, which was to extend citizenship

rights to those affected by the country's partition".

As Articles 6 and 7 were aimed at safeguarding the rights of those citizens who found themselves residing in Pakistan after Partition, Section 6A grants citizenship to persons of Indian origin migrating from erstwhile East Pakistan "due to political disturbances in a foreign territory", the court held. Both CJI Chandrachud and Justice Kant referred to Entry 17 of the Union List, which gives Parliament the power to make laws to address "Citizenship, naturalisation and aliens".

They also referred to Article 11 of the Constitution, under which Parliament can make "any provision with respect to the acquisition and termination of citizenship and all other matters relating to citizenship". None of the other Articles in this Part of the Constitution (including Articles 6 and 7) will "derogate" or take away from this power, they said. That Parliament can amend the law relating to citizenship is the most significant takeaway from the ruling — since this could have ramifications for other cases, including the challenge to the 2019 Citizenship (Amendment) Act.

Does Section 6A violate the Right to Equality?

The petitioners argued that Section 6A, which was specifically drafted for Assam, violates the principle of equality because (i) it confers citizenship only to migrants to Assam, and (ii) if curbing Bangladeshi migrants is the issue, then other border states are also excluded. They also argued that the March 24, 1971 cut-off date is arbitrary. The SC held that the events leading up to the signing of the Assam Accord placed the state in a unique position, even when compared to other border states. "...The magnitude of influx to Assam and its impact on the cultural and political

rights of the Assamese and Tribal populations is higher [than elsewhere]," CJI Chandrachud said. He noted that although West Bengal has a higher immigrant population than Assam, the impact on Assam is greater because of its smaller size and population. It is, therefore, "rational" to classify Assam as separate from other border states for the purposes of 6A, he held. Justice Kant held that "since a piquant situation such as that in Assam [because of the Movement] did not exist in any of the other states, Section 6A's objective did not extend to allowing such citizenship in these other States".

Does Section 6A facilitate "external aggression" by allowing illegal immigration? The petitioners argued that extending the cut-off date to include migrants as citizens went against the SC's ruling in Sarbananda Sonowal vs Union of India (2005), in which the court held that "illegal immigration" falls under the definition of "external aggression".

In Sonowal, the Illegal Migrants (Determination by Tribunals) Act, 1983 (IMDT Act) was under challenge. The court struck down the law, which also applied only to Assam, saying it was ineffective in dealing with illegal immigration in comparison to laws such as the Foreigners Act, 1946, which applied to the entire country. Both CJI Chandrachud and Justice Kant expressed reservations in applying Sonowal in the challenge to Section 6A.

Justice Kant held that Section 6A does not allow for "unabated migration", and instead offers a "practical solution" in the form of a "controlled and regulated form of immigration", which does not amount to "external aggression".

CJI Chandrachud asked whether a law be challenged for "violating" Article 355, which is an Emergency Provision un-

der the Constitution. Allowing this would lead to "disastrous consequences", and would open the doors for petitions seeking to invoke other emergency powers which "would effectively place the emergency powers with citizens and courts", he said.

Does granting citizenship to migrants violate the rights of Assamese people to conserve their culture?

Article 29(1) of the Constitution guarantees citizens the fundamental right to conserve the "distinct language, script or culture of its own". The petitioners argued that Section 6A is violative of Article 29, since conferring citizenship to migrants from Bangladesh increases the Bengali population and affects the "culture of the Assamese population".

The majority verdict rejected the argument that change in the demography of Assam erodes the rights of indigenous Assamese.

Accepting this contention "would undermine the idea of fraternity envisaged by our Constitutional drafters, and bring to life their fears by threatening the cohesion of our diverse nation", Justice Kant held. CJI Chandrachud held that "the mere presence of different ethnic groups in a State is not sufficient to infringe the right guaranteed by Article 29(1)".

What Justice Pardiwala's dissenting opinion said*The dissent flagged the lack of a proper mechanism to grant citizenship to those who migrated between January 1, 1966 and March 25, 1971. It is "illogically unique" that the procedure does not allow someone to voluntarily submit themselves to the process under Section 6A of The Citizenship Act, and that they must instead wait for the government to detect or identify them as a "suspicious immigrant", so that they can then appear before a foreigner's tribunal to prove their citizenship.

Doctors' agitation highlights India's need for universal healthcare | Analysis

The rape and murder of the doctor at Kolkata's R.G. Kar Medical College triggered nationwide protests. At present, junior doctors in Kolkata have been on hunger strike for nine days and their peers in other parts of the state have expressed support with symbolic strikes of their own. Three doctors on hunger strike have already had to be hospitalised after their conditions deteriorated. The State government has thus far punished many police and administrative officials.

Even through breaks in their agitation, the health workers have maintained that their underlying issues are far from resolved. Their protest has sought among other things a complete overhaul of the healthcare system. They have reported working 36-hour shifts with meagre allowances, no proper rest rooms or toilets, and being left vulnerable to violence in the workplace. These working conditions for health workers are not restricted to West Bengal. A report of the Indian Medical Association in 2018 said 75% of doctors in India have at some point been exposed to harassment or physical violence inside health centres or hospitals, largely due to lack of infrastructure, medicines, long working hours, and excessive political interference. Yet successive governments, both at the Centre and in the States, have swept these pressing issues under the rug.

Issues with insurance coverage India's declared expenditure on healthcare is only 2% of its GDP, compared to the 5-10% in China and Brazil. The success story of Cuba's healthcare system is rooted in its spending 14% of its GP on health. In India, continued state-led apathy towards favourable government policies, plus longstanding low-quality healthcare infrastructure, has allowed the private sectors to flourish at the public sector's expense. From 8% in 1950, the private sector captured nearly 70% of India's total healthcare market in 2024.

According to the National Sample Survey, the cost of treatment in private hospitals is seven-times that in government hospitals, yet only 14% of the rural and 19% of the urban populations have health insurance to help cover the resulting costs. The consequences have been disastrous. Even as India's public sector per-capita expenditure on healthcare has steadily declined, out-of-pocket expenses for individuals have soared. According to official data, of every 100 rupees an individual spends on healthcare in India, they spend Rs 52 from their savings, while the Central and the relevant State governments together contribute Rs 35. To compare, Brazilian and Cuban citizens spend Rs 22 and Rs 8, respectively, out of their pockets. A study by IIT Mandi published in December 2023 reported that much-touted government health schemes — including the Centre's Ayushman Bharat Pradhan Mantri Jan Arogya Yojana and West Bengal's 'Swasthya Sathi' — mostly cover treatment costs for inpatient admissions but



provide almost no coverage for outpatient services, whereas the latter accounts for up to 80% of the total healthcare expenses in India. West Bengal second-worst. One consequence of this state of affairs has been a corrupt collusion between some acquisitive doctors, corporate entities, pharmaceutical companies, and political traders taking advantage of patients desperately seeking timely and good-quality care. In an October 2021 report, NITI Aayog estimated the exorbitant cost of treatments have pushed nearly 7% of the national population into poverty every year. The situation in West Bengal is more dire considering the State government's healthcare expenditure is only 1% of its gross state domestic product. According to the Union Ministry of Finance, 68% of healthcare expenses in the state are out-of-pocket — the second-highest in the country after Uttar Pradesh. Further, the World Health Organisation has recommended that any country's health sector must have at least one doctor for every 1,000 patients. In the last 77 years, India has hardly ever met this goal. The doctor-to-patient ratio in West Bengal is similar whereas Kerala has four doctors per 1,000 patients. Then again, this ratio alone does not fully explain the healthcare crisis particular to Bengal.

Need for whistle-blowers For one, the actual number of doctors and healthcare workers in rural primary and community health centres is lower than in urban areas. Junior doctors have complained that the State government's claim to have built super-speciality hospitals in different districts is meaningless because there are too few health workers to staff them and not enough essential medicines and equipment either. Where some equipment is available, their use is held back by the lack of skilled operators. When freshly minted

doctors are deputed to work in these centres, they are exposed to patients' and their families' frustration over the poor facilities. This reality has persisted irrespective of the party in power. And again, this state of affairs is not unique to West Bengal. According to the advocacy organisation Transparency International, corruption in healthcare is becoming increasingly severe. Of the \$7.5 trillion spent worldwide on healthcare every year, around \$500 billion is lost to corruption. It also estimated that one in five people is forced to bribe workers and officials to avail medical care and that corruption is responsible for the deaths of 1.4 lakh children annually, with the poorest and the most marginalised communities suffering the most. The healthcare syndicates operating in West Bengal's hospitals are a good example of such corruption. As part of its suggested solutions, the Transparency International report asks the sector's stakeholders and employees to come forward as whistle-blowers to stem the rot. The junior doctors and others agitating in Kolkata and other cities are currently essaying this role.

Loss due to corruption Some other West Bengal government schemes have also fizzled out. For example, just as with 'Swasthya Sathi', Bengalis were enthusiastic about the 'Kanyashree' scheme when the State mooted it in 2013 to increase the enrolment at school of girls using conditional cash transfers. But a June 2023 analysis by University of Pennsylvania and University of Kalyani (West Bengal) researchers revealed that although the scheme had prompted more girls to enrol, they were learning little because — much like in healthcare — there were no proper classrooms or teachers. West Bengal, like most other States, spends less than 3% of the national GDP on education even as

privatisation in the sector has been increasing since the 1990s. In any healthy democracy, the government should be fully responsible for ensuring its citizens' basic rights, including education and healthcare. Paving the way for higher healthcare expenses and not improving infrastructure and staffing is an abdication of this responsibility. In a paper published in 2023 in *The Lancet*, two social science researchers reported actual healthcare spending in India has come down to just 1.2% of GDP even as the Central government has disputed this conclusion. Corruption further diminishes this figure's contribution to healthcare activities. It is no surprise then that the poor and the marginalised are often forced to seek care in private facilities and risk poverty.

'Bread at the price of jewels' In sum, this is why it is imperative for India's governments to listen to the junior doctors' complaints and demands. In line with the aspirations of a welfare state, the government must post-haste increase its healthcare spending and demonstrate its commitment to eliminating corruption. Norman Bethune, a Canadian doctor who devoted his life to serving the poor, travelled around the world and attended to care-seekers during the Spanish Civil War as well as the Sino-Japanese conflict. He eventually died on the battlefield in 1939 when tending to Chinese soldiers.

He was critical of the idea of health being treated as a market-commodity and said: "Medicine, as we are practising it, is a luxury trade. We are selling bread at the price of jewels. Let us take the profit, the private economic profit, out of medicine, and purify our profession of rapacious individualism. Let us say to the people not 'how much have you got?'"

A political controversy that hogged headlines in the early 80s over allegation against Karunanidhi

September 1982 to March 1983. In a matter of six months, Tamil Nadu saw two high-pitched by-elections: one to the Periyakulam (now called Theni) Lok Sabha constituency and another to the Tiruchendur Assembly seat. In both the by-elections, the ruling AIADMK emerged victorious. It was against this backdrop that a huge political controversy broke out over the allegation made by the then Local Administration Minister P. Kolandaivelu that the DMK president and Leader of Opposition in the Assembly, M. Karunanidhi, had purchased 100 acres of land in the name of his son, M.K. Alagiri, at Muthudevanpatti near Theni (then part of the Madurai district). In fact, the allegation was first raised by the Minister during the Periyakulam by-election. According to Karunanidhi's autobiography, 'Nenjukku Needhi' (Vol III, pages 491-93), he stayed at the residence of 'Cumbum' N. Natarajan, (who was elected to the Lok Sabha from the constituency in 1980 but died in June 1982) in Muthudevanpatti for the by-poll campaign. It was this place that later became the subject of controversy.

On March 12, 1983, the Local Administration Minister raked up the matter again when the Assembly debated the State Budget. The problem erupted when members of the Left, S. Alagarsamy of the Communist Party of India (CPI) and N.Sankariah (CPI-Marxist) questioned the propriety of a large number of Ministers camping in Tiruchendur and emphasised the need for spending the taxpayer's money judiciously. In fact, Kolandaivelu reminded the Leftists that West Bengal was no exception where Communist ministers in the then regime, led by the CPI (M), too had campaigned in by-elections. It was the turn of DMK's legislators, A. Rahman Khan and Duraimurugan, known as firebrand legislators, to take on the Minister. The latter, now Minister for Water Resources, recalled that Kolandaivelu had declared during the Periyakulam by-election that he was prepared to quit if he was not able to prove his charge that Karunanidhi had bought lands in his son's name in Muthudevanpatti.

Refer to BAC for solution The Minister, who noticed the presence of Karunanidhi in the House, responded that the person himself could raise the issue. He reiterated that he did not say anything "without basis," stated The Hindu on March 13, 1983. Having been provoked to react, the former Chief Minister rose immediately and denied "in the name of Anna [DMK founder and former Chief Minister C.N. Annadurai]" that he had bought any land in the name of Mr. Alagiri and challenged the Minister to prove his charge and offered to resign if it was proved. Then, the Minister had clarified that what he meant during the by-election speeches was that the family of Karunanidhi had bought the lands in question. The Leader of the Opposition again challenged the Minister to set a date to prove his charge, whether it be one or two weeks. His point was that while he was ready to resign from the post of MLA, let alone the position of Leader of Opposition, whether Kolandaivelu, if not being able to prove his allegation, would be prepared to quit as Minister. Deputy



Speaker P.H. Pandian, who was in the Chair, said he decided to refer the matter to the Business Advisory Committee (BAC) for a solution. Nearly 20 days later (April 4), the Minister, who again raised the matter, appeared aggrieved over the BAC examining the allegation and asked why Karunanidhi's counter-allegation, purportedly made outside the House, against him that he had indulged in "benami land transactions in Pollachi and Udumalpet" had not been referred to the Committee, whereas his charge was being looked into. The Leader of the Opposition sought to explain his position by stating that a perusal of the proceedings of the House a few weeks ago showed that he had not accused anyone of having indulged in benami transactions. He had only said the benamis were endless and only a judicial probe would expose them.

'No basis for the allegation' On April 15, Speaker K. Rajaram held that the Local Administration Minister had failed to substantiate his allegation that the Leader of the Opposition had purchased 40 hectares (approximately 100 acres) of land at Muthudevanpatti near Theni in his son's name. The BAC, to which the issue was referred, went through the documents produced by both Karunanidhi and Kolandaivelu and unanimously felt "there was no basis for the allegation," reported this newspaper on April 16, 1983. The BAC found no documentary evidence of the land purchase. The Speaker said six documents submitted by Karunanidhi, covering an extent of 8 acres 74 cents, were all registered sale deeds; these and the house tax receipt proved that the property in question had been acquired by four minor children of the deceased Member of Parliament. The particulars collected by the Assembly department from the Sub-Registrar concerned confirmed that between 1971 and 1983, no encumbrance other than the six documents had been regis-

tered in respect of the property. Following the ruling, there was speculation in the Assembly lobbies that the Minister had sent his resignation letter to Chief Minister M.G. Ramachandran. However, when approached by pressmen, the Chief Minister said he had not received any such letter. The next day, Kolandaivelu himself

scotched rumours about his resignation. "Why should I resign?" was his stand. Even though the DMK leader had, initially, persisted with his demand for the Minister's resignation, he did not pursue it subsequently. After the Budget session came to an end, the controversy had met its natural end.

Mahindra First Choice opens its first pre-owned car showroom in Hyderabad



Hyderabad: Mahindra First Choice, in association with Car and Bikes has opened its first pre-owned car showroom in Telangana at Autonagar. The new showroom was launched by Mahindra First Choice MD and CEO Mohammed Turra in the presence of VVC Group Chairman and Managing Director VV Rajendraprasad.

Mohammed Turra told the media that the new stores will offer all the facilities and services that the company's brand represents, including certified used-car sales, warranty on Mahindra Certified used cars, easy finance, and hassle-free RTO trans-

fer. With the addition of the store, the company has now a network of over 1150 outlets across the country. VV Rajendraprasad said First Choice, which has started selling and buying pre-owned cars in India, opened the first pre-owned car showroom in Telangana with VVC Group as part of its expansion. "Here we will maintain lowest prices and with quality standards to our customers," he added. Retail Business Head Jay Rungta, Zonal Head Retail Harshil Desai, Regional Sales Manager Abhishek Kumar, Auto Nagar Showroom General Manager Narayana Murthy and showroom staff participated in this event.

Coastal flooding harms different tree species differently: study

Global warming is raising sea levels and making flooding more common in some areas. Researchers have held both these effects among others responsible for discouraging the growth of plants of many tree species in coastal areas. But a new study by researchers at Drexel University in Philadelphia and the Northern University of Arizona has called for a pause in this thinking. The study paper, published in the journal *Frontiers in Forests and Global Change* on August 28, has reported that a rising sea and coastal flooding could actually enhance the resilience of some coastal tree species while being detrimental to others. Trees respond quickly

How well trees grow in a place depends on the place's ambient temperature, average rainfall, soil health, access to water with the appropriate qualities, and the location of other vegetation nearby, among other factors. Trees can respond fairly quickly to these changes, too. For example, even as sea levels are rising by a few millimetres a year, many species of coastal trees have started to move further inland, where the tides are lower and the salinity more tolerable — but also where other conditions may be more inhospitable. The study's authors LeeAnn Haaf and Salli F. Dymond previously studied coastal forests in the Delaware Bay in the U.S. state of Delaware and the Barnegat Bay in New Jersey. In a paper published in 2021, they reported that different plant species here responded differently when exposed to rising seas and repeated coastal flooding. "In our recent study, we found species- and site-specific patterns related to sea level rise, temperature, and precipitation pattern (associated to tree growth) and that also extends to how those factors change with climate change," Haaf, an environmental scientist at Drexel University, said. One species in particular, the American holly (*Ilex opaca*), responded to more water in its surroundings by increasing the rate at which it grew — while loblolly pine (*Pinus taeda*) and pitch pine (*Pinus rigida*) trees suffered under higher water levels. Tracking the rings

In the new study, Haaf and Dymond used a method called dendrochronology to understand how trees grew in response to specific conditions. In dendrochronology, scientists estimate when a tree formed a particular tree ring, and based on that develop a time-wise correlation between a climatic condition and the tree's response. They wrote in their paper that they compared changes in "environmental conditions" to the growth of American holly, loblolly pine, and pitch pine trees in the Delaware and Barnegat Bays. They also used "gradient boosted linear regression, a machine-learning approach, ... to investigate tree growth responses across gradients in temperature, precipitation, and tidal water levels." In this way, Haaf and Dymond assessed whether tree rings became larger or smaller as each natural condition varied over time.

Gradient-boosted linear regression The tree rings consist of water

vessels. When a tree is exposed to a lot of rain along with appropriate levels of sunlight and ambient temperature, it also develops more water vessels. But a heavy downpour and a deluge would disrupt this process altogether and prevent the plant from growing normally. So thicker rings signify abundant tree growth while thinner ones mean stunted growth. And because older rings remain at the centre of the tree trunk and newer ones near the periphery, dendrochronology can help provide timestamps for climatic conditions in the past. Gradient-boosted linear regression is a machine-learning model used to understand patterns in tree rings. It helps by estimating the effects of a combination of forces acting on a system. Such problems are too complicated for techniques like a correlation test that indicate how closely the changes in the values of only two variables are related and overlook interactions between variables that cause other effects. Pratik Karmakar, a computer science researcher at the National University of Singapore who wasn't involved in the study, said "the gradient boosted linear regression model of machine learning is an appropriate method used in this study". While the data are specific to the mid-Atlantic region, the "methods would certainly work in any temperature location in the world," Haaf said. She added that the correlation with temperature, precipitation, and sea level may not be significant everywhere — "but I think that is part of understanding how at-risk forests are." Sea-level rise accelerating

Sea levels were increasing by around



2 mm/year in 1993. This rate has since doubled and climate researchers expect floods in coastal areas will increase threefold by 2050 and the average number of days of flooding will increase twofold. Haaf continued, "Our study can help forest managers understand how at-risk a coastal forest is to tidal flooding by inventorying what species are there and considering other conditions specific to that site." For example, some temperate coastal forests are predominantly loblolly. "Such forests may do better than others as temperature rises, so these forests may not need to be prioritised yet." More than three billion people worldwide live near the coast and depend on coastal ecosystems' services to meet many of their needs, including livelihoods. Conserving coastal vegetation is thus valuable.

'Site-specific mechanisms' The new study highlights the coastal plant conservation strategies that currently emphasise sea level rise and coastal inundation and need amendments to take other weather and soil factors into account. "As climates change, and sea levels rise, some sites or species may confer benefits to growth, whereas other sites may experience conditions that reduce growth," the researchers wrote in their paper. "Site-specificity of results underscores the importance of local conditions on tree growth in coastal forests. To aid future management efforts, future research should examine site-specific mechanisms and explore non-linear relationships that may contribute to tree responses to climate and tidal flooding." Madhurima Pattanayak is a freelance science writer and journalist based in Kolkata.

Only connect — the essence of T20 batting, and India's new freedom

Many years ago, I interviewed the coach of the Uruguayan football team, and something he said has stayed with me ever since. Speaking of Brazil's skill, he said that often the players would suddenly break into a pattern or complete a move that caught even their coach by surprise. Metaphorically, it caused jaws to drop and grown men to drool. India's T20 batting is doing that now. Sometimes it is difficult to understand where the strokes come from — although many work on these at the nets and away from public scrutiny. Suryakumar Yadav's flick or shovel high into the stands between square leg and the sight screen behind the wicketkeeper is so much a part of his game now that the initial shock has worn off. Clearly, there is no limit to what a player can do armed with just a bat and lots of imagination — such things as eye, fitness, attitude being taken for granted, of course. Some of the strokes can be put down to the orthodox being carried to its logical extreme. When Sanju Samson moved to leg and twice drove Taskin Ahmed past cover in the Hyderabad carnage against Bangladesh, it was stunning but could be explained by traditional metrics. The second stroke was played rocking back slightly, but even that could be

understood. In fact, despite making 111 off just 47 deliveries, Samson seldom went outside the parameters of orthodoxy; he only seemed to do everything more quickly and with better timing or power. The ball didn't have to be bowled short to be pulled into the stands, and neither did it have to be pitched up to be driven to the boundary. When Mustafizur Rahman bowled one coming into him and giving no room, Samson's response was a casual six over extra cover. This is skill of a high order. And just as you were thinking such shots could not be repeated, Hardik Pandya did so, off Tanzim Hasan. Riyan Parag, Rinku Singh, in fact everyone from No.1 to No.8 is capable of strokes that are inexplicable but seem inevitable after execution. Like something from a great musician or mathematician, the natural response to these would be: "How did he do that? How could he do that?" This is not a direct comparison between cricket and the arts — the commonality lies in the reaction to the effort. In the second match, Hardik didn't even bother to watch the ball onto the bat or look to see where he had hit it (Taskin was the bowler). It was like a favourite uncle's card trick to a child! Rather like the Brazilian football team, the Indians have worked out the angles,

and taken command of the empty spaces to drive the ball through. Hundreds of hours of practice have allowed them to play both the shots they practised as well as those beyond mere practice. It is this latter that has been magical. The precision needed to dig out a potential yorker and scoop it over point for six, as Suryakumar does routinely, is staggering. In the commentary box, even Sunil Gavaskar, the epitome of batting orthodoxy could not hide his excitement. It pointed to the essential difference between traditional cricket and T20 — the former is about the process, the latter about the result. If Test batsmanship is built on the coaching manual, T20 owes its philosophy to what the novelist E.M. Forster said in another context: Only connect. Perhaps it has taken the retirement of Virat Kohli to free up the T20 thinking in the Indian approach. That, and something Kohli can take some credit for — a lack of selfishness. Young players no longer fear the axe and play a 'safe' game. Samson, following his recent poor scores resisted the temptation to merely add runs but went hammer and tongs from the start. The big score was just a matter of time. There is a famous goal in World Cup 1970 where Brazil's Jairzinho scores against England after a series of often astonishing moves.

ChatGPT in Classrooms: How AI is transforming learning in the U.S. and India

Open AI dropped its revolutionary generative artificial intelligence (AI) chatbot, ChatGPT, at the end of November 2022. Within months one in five teenagers living in the U.S. started using ChatGPT to help with their school and homework. Indian students have not been lagging too far behind. ChatGPT's ability to answer queries and produce 5-page essays in no time has become a nightmare for many educators who have sought to block the chatbot and banned its use for schoolwork. But like most tech advancements, bans haven't quite worked. While the fears around using ChatGPT in education still linger in the air, some institutions have opened their doors to the new technology and integrated it into their teaching and learning frameworks.

Vanderbilt University, a private institution in Tennessee, U.S.A., has sought to extensively integrate ChatGPT in its teaching. While Indian institutions and educators including the University Grants Commission are seeking to get a grip on AI's inevitable use in education, a few such as IIM Sambalpur are seriously considering integrating AI into their learning methods. At Vanderbilt, Holly Tucker, Professor of French History, assigned each student in her class, a historical character from the French Revolution as their persona for the new six weeks of her class, complete with detailed character sheets on political views, philosophy, and goals. Rather than combing through the pages of information manually, she asked her students to upload this information to ChatGPT and talk to it, and ask questions about their characters and their relationships with other figures from the revolution.

AI helped the students to quickly access and analyse vast amounts of data, allowing them to communicate with one another as their French revolution persona, form alliances and strategize moves. Students exchanged around 18,000 messages with each other, with AI tracking their interactions and suggesting potential outcomes of their decisions. It was a unique and immersive way of understanding the French Revolution.

Tucker's AI-assisted teaching approach comes a year after Vanderbilt University launched its Future of Learning and Generative AI, an initiative aimed towards exploring ways to harness AI-driven tools and training the Vanderbilt students, faculty and staff to make the best of the technology. "The whole purpose of this curriculum is to get students to understand how complex history is and how, during these watershed moments, history can turn on a dime. We don't need to tell them that—they're living it," she has stated in a university publication. Jules White, Professor of Computer Science and Senior Advisor to the Chancellor for Generative AI professor at Vanderbilt, believes that that generative AI is not just a tool for getting answers, but a powerful interface for computing. And banning ChatGPT is strictly on his DON'T's list. "Students are going to need these tools to be competitive in the future workforce, and by denying them access, we risk putting them at a disadvantage," he told The

Hindu. To encourage his students to think of ChatGPT beyond a mere search engine, Prof Jules White who leads the Future of Learning and Generative AI Initiative likes to present his class with tasks that require customised and detailed solutions. For instance, creating a meal plan that is a fusion of food from Ethiopia and Uzbekistan. The food also needs to be keto-friendly and made from ingredients that can be found in an average grocery store. Information that wouldn't appear on a single page if one were to google search, yet ChatGPT can develop meal plans within seconds. This opens up the students to not just finding interesting solutions but also nudges them to think beyond the box and come up with intriguing problems. Doug Schmidt, Cornelius Vanderbilt Professor of Computer Science, has found a way to make teaching and grading his class more streamlined. After he records his lectures, Schmidt uses a Chrome Plugin called Glasp to convert the videos into transcripts, summarize the key points and also generate quizzes based on the lecture, which he later verifies for accuracy. This creates space for him to write more lectures and experiment with coding.

To ensure that his students don't cheat during tests, Schmidt has a trick or two up his sleeve. ChatGPT is great at generating code for very specific problems so he designs the questions to be open-ended, to push the students to look at the problem from a creative angle. Furthermore, he has trained the ChatGPT to look for identifiers that should and shouldn't exist in the student-submitted code, thus significantly reducing the number of hours he or his teaching assistants have to spend grading the papers. A faculty member from the English department turned the entire picture upside down. Instead of writing an essay on a given topic, the students were asked to generate an essay using ChatGPT—and grade it. This exercise allowed the students to identify the ChatGPT's weaknesses such as awkward phrasing and factual inaccuracies, while simultaneously exposing them to its ability as a potential assistant for organizing ideas.

Using ChatGPT a new skill?

The problem isn't in the tool but in the way it is being used. "The fear that students might use it as a shortcut to avoid deeper exploration is valid," stated Mr. White. However, he insists that with moderation and guidance from teachers, students will be able to leverage the computing power of generative AI as a tool for exploration not a replacement for their critical thinking. Dr Arun K. Tangirala a Professor at the Department of Chemical Engineering, IIT Tirupati, also believes that generative AI demands a change in how teaching is approached in a classroom. He elaborated on how educators need to play a more facilitative role, helping students how to apply, interpret, verify and gain perspective from the information generated by AI. "Teachers can no longer be postmasters taking the delivery content from the book and writing on the board." He further explained that AI in education can be seen as a coin with two distinct but intercon-



nected sides. One is knowledge enrichment which includes generating content such as audio-visual media, quizzes or simulations – resources that can augment the existing lecture sessions and make them more interactive. The other is personalized learning which takes into account the student's learning ability and prior knowledge.

As an educator and facilitator of workshops exploring role of AI in Indian education, Tangirala strongly advocates teaching ethical AI use to both educators and learners. He also stresses the need for national regulations, especially with the rise of AI-assisted self-learning courses.

Is India ready for ChatGPT-assisted teaching?

The Indian Institute of Management (IIM), Sambalpur has announced the introduction of AI-enabled teaching for their MBA courses, commemorating their 10th Foundation Day on September 24, 2024. The program is designed in accordance with Bloom's Taxonomy for education with emphasis on the evaluation and the creation aspect. MBA is a case-study-heavy course and familiarity with the case materials is crucial to drive the direction and learning in a lecture session. Over his years of teaching, Director Prof. Mahadeo Jaiswal has observed that only 10-15% of the students come prepared. As a result, teachers usually spend most of their time with those who are well-prepared students, leaving the rest feeling as though they haven't learned anything new. "The problem in the traditional class was that we were not able to ensure that every student came prepared. This can be taken care of by AI-enabled learning management platform," said Mr. Jaiswal. He discovered the AI-assisted learning platform that IIM Sambalpur is gearing up to use during one of his recent visits to the U.S.. The platform registers both students and professors who can then access case studies and articles, participate in quizzes based on their course material and participate in discussions with their peers from home. The AI then evaluates the preparedness of individuals, and the overall performance of the class professor present and provides feedback to the professor, thus helping them prepare a lecture that can build on the existing knowledge of the classroom. The institute plans

to kickstart the program with 5 pilot cases, but Jaiswal is positive that soon at least 20% of the class can be switched to AI-assisted teaching.

Can AI-assisted teaching become mainstream?

Traditional methods of teaching have been streamlined over the years both methodology and policy-wise. AI-assisted teaching ventures, both in India and internationally, are being explored in the higher education sector. Natasha Joshi, an educational specialist and policy-maker, pointed out that improvements in learning outcomes in the case of young children largely depend on strong human facilitation from teachers and mentors, rather than on the technology itself. "The question is, how well set up are your teachers to facilitate? What is their level of tech savviness? The requirement doesn't end there. They actually need to be domain experts, said Joshi. "Within the public education system and even within the private education system, our teachers are not really at that level of expertise." From the policy front, Natasha raises three major concerns: Data privacy: Where is the student/teacher data collected for AI-assisted platforms stored and who controls it, when it is largely not localized within Indian servers?

Misuse: What if there is a misuse of the information that's being generated on AI? This opens up the scope for cheating by students and educators relying heavily on generative AI and not interacting with students enough. Equity: Can it be used in areas without a powerful internet connection? Does the student using the paid version of ChatGPT have access to better outputs versus those using the free versions? And how it might impact their academic performance and evaluation. "The problem with ChatGPT is there are many mistakes in the answers they give to questions. Unless students can recognize their mistakes, they will blindly use them for assignments and projects... The database for ChatGPT is limited and only inputs fed in (by humans) are what they have to rely on. Students can get confused," said Prof Lakshmy Ravishankar, who has been Resource Person and Guide at Homi Bhabha Centre for Science Education for over two decades.