

# Rural literacy rate plunges in Telangana; Stands second from bottom among all States

Hyderabad: A silent crisis has unfolded in Telangana as the rural literacy rate dropped to a new low to 69.9 per cent, standing second from the bottom among all the States. The State's rural literacy rate dropped from 72.6 percent in 2022-23 to 69.9 percent in 2023-24. This is way below the national average of 77.5 percent recorded for the same year.

These startling details have come out in the Periodic Labour Force Survey (PLFS) conducted by the Ministry of Statistics and Programme Implementation. The survey information was recently shared by the union Minister of State for Education Jayant Chaudhary in Rajya Sabha. What is more concerning is the drop in female literacy rate by close to 5 per cent in rural Telangana. The female literacy rate in the rural areas, which was recorded 65.9 percent in 2022-23, has come down to 61.1 percent in 2023-24. But the male rural literacy rate remained unchanged at 79.3 percent. As per the last census, a literate is defined as a person aged seven years and above who has the ability to read and write in any language. Overall, the country saw a marginal increase in the rural literacy rate from 77 percent in 2022-23 to 77.5 percent 2023-24. The male literacy rate saw an increase from 83.6 percent to 84.7 percent, while female literacy went up from 70.3 to 70.4 percent across the country. According to the union Minister, the government introduced a literacy



programme in 2022-23 as New India Literacy Programme, popularly known as ULLAS (NILP), being implemented from the financial year 2022-23 to 2026-27. The States/UTs implementing the scheme conduct sur-

veys on hybrid mode to identify non-literates (beneficiary) and Volunteer Teachers. The Foundational Literacy and Numeracy Assessment Test was conducted under the ULLAS scheme to assess basic reading,

writing, and numeracy skills along with financial, digital and critical life skills of the non-literates, and then certifying them as "neo-literates" upon passing the assessment test by the NIOS, he added.

# Telangana's industries, investments take a hit under Congress regime

Hyderabad: Speed, which was once Telangana's USP in attracting investments and establishment of new industrial units in the State, appears to have taken a hit this fiscal year so far. Industries Minister D Sridhar Babu recently claimed that in the last one year, 1901 units with proposed investments of Rs.12,626 crore and proposed employment of 49,384 had obtained approvals through TG-iPASS. A total of 409 units had already commenced operations and balance was at different stages of implementation, he said at a press conference on Thursday.

However, considering the approvals issued through TG-iPASS during the last fiscal year, the investments have slowed down. In the 2023-24 financial year, 2,672 industries had obtained approvals and generated investments of Rs.28,135 crore to the State. In terms of employment, 84,901 persons were provided jobs in the State. Though another three months are left for this fiscal year to end, only 1901 units had obtained approvals with proposed investments of Rs.12,626 crore.

As informed by the Industries Minister, another 882 units with an investment of

Rs.9,646 crore and employment 40,468 have filed applications for clearances under TG-iPASS and they were under process. Yet, the total investments are unlikely to match the previous fiscal's investments. On top of this, Deputy Chief Minister Mallu Bhatti Vikramarka's statement the other day that the MoUs signed in Davos are just expressions of interest and not binding on the State government, has raised concerns whether these MoUs will translate into those firms setting up shop here. The pacts were purportedly for investments worth over Rs.40,000 crore as claimed by Chief Minister A Revanth Reddy. BRS leaders have been expressing their concerns over the industrial sector's performance under the Congress government in the State.

BRS leader Y Satish Reddy posted on X: "Telangana Rising or Reversing? Under the 1 year Congress government TG-iPASS approvals dropped to shocking lows: Industries approved : 1269 (10 year average: 2641) Investments: Rs.8468 crore (10 year average: Rs.29,392 crore) jobs created: 34,862 (10 year average: 1,86,502)". Is this Rising or Reversing?"

At the same time, considering recent

trends as seen from different media reports, Telangana, which was popular for its industry-friendly policies and destination for investments, is losing the race in drawing big units to the State. Former Industries Minister KT Rama Rao posted on X on October 8: "While Telangana is obsessed about destruction and distraction, TN gets FoxConn investment of Rs.13,180 crore and MH gets Toyota investment of Rs.21,000 crore..." Denting Telangana's image, a couple of big companies also relocated their proposed units and investments from the State to other States. In January early this year, Corning International Corporation relocated its Gorilla glass manufacturing facility to Tamil Nadu. The company had signed a pact with Tamil Nadu to set up its Gorilla glass manufacturing facility at Pillaipakkam, Kanchipuram in Tamil Nadu. The nearly Rs.1000 crore project was initially planned to be set up in Telangana. Similarly, Kaynes Semicon shifted its chip assembly unit from Telangana to Gujarat. One of the leaders in Outsourced Semiconductor Assembly and Test (OSAT) facilities, Kaynes Technology had in October 2023 signed a pact with the State government for setting up its OSAT and



compound semiconductor manufacturing facility in the State for the Rs.2,800 crore investment project. However, the Industries Minister in September claimed on X that Kaynes Semicon was "fully dedicated" to its Hyderabad project. "The company remains committed to its Kongara Kalan facility, with the first phase already inaugurated. The new facility in Gujarat does not diminish their investment in Telangana; rather, it enhances employment opportunities," he had said. Whether the State can regain its top position as the sought after destination for marquee companies from across the world remains to be seen.

# Analysing datasets: How predictive AI models are gaining traction

A volcano in Iceland erupted on Saturday (March 16) for the fourth time since December, the Icelandic Meteorological Office said, spewing smoke and molten lava into the air. One question that arose immediately was: Will it impact air travel? A 2010 eruption in Iceland had halted around 100,000 flights in Europe as ash clouds and haze enveloped the skies around the Arctic Circle, a key international flight path. That's where data analysis for pattern searches using Artificial Intelligence comes in. Beyond commercial applications, Moscow-based Yandex has introduced a service capable of monitoring volcanic ash movement and mitigating its impact on communities and ecosystems.

Given that volcanic ash presents a significant hazard, affecting regions across the globe with far-reaching consequences, Yandex, using advanced mathematical models and neural networks, has developed an interactive map that allows the real-time monitoring of ash clouds after eruptions. The idea is to empower authorities and communities to respond swiftly to ashfall and safeguard public safety and infrastructure. According to Anna Lemyakina, Director of Strategic Projects at Yandex Cloud: "In projects such as forecasting volcanic ash dispersion, seamless and swift access to services for hypothesis testing and model training is crucial. Our project is readily scalable to monitor volcanoes worldwide, addressing the urgent issue of volcanic eruptions and their aftermath."

Even as text-based generative AI platforms such as OpenAI's ChatGPT and Google's Gemini have caught the fancy of people, companies and researchers around the world – including oil and gas majors, pharmaceutical companies, and manufacturing entities – are increasingly relying on generative AI for all kinds of purposes, including oil exploration, drug discovery and worker safety, among others. For companies, the advantage is the trove of their own historical data which can become useful fodder for generative AI tools for predicting things. For instance, an oil drilling company with wells around the world has the historical geological data on the regions where all oil drilling has led to successful finds, and an AI system trained on this historical data could predict where a new oil well could be located.

Although, given the hype around generative AI, the term has also become a marketing buzzword. For instance, a number of digital wearables' companies have repackaged some of their personalisation options as AI-first features. While the personalisation basis of a user's typical habits is still a function of AI, it is nowhere near the sophistication – both in hardware and software – that generative AI platforms need.

Oil and gas exploration A majority of the top 20 global oil and gas producers are learnt to be working on an AI strategy for their upstream (exploration) and midstream (pipeline and logistics) businesses. A recent EY survey indicated that more than 92 per cent of oil and gas companies around the world are "either currently investing in AI or plan to in the next two years." AI algorithms are being programmed to seek solutions for a variety of desired outcomes, especially for data-led interventions to sift through the large

amount of data generated by past surveys and explorations to identify patterns and correlations that may escape other forms of analysis. AI for oil and gas can leverage the data produced by active wells during extraction to make predictions about probable reserves, provide predictions about the best ways to access known reserves, and extrapolate the lifetime yield of current wells. Take for instance oil major Shell. Last year it forged a partnership with the AI software service company SparkCognition to develop a proprietary generative AI tool which can generate subsurface images for potential oil exploration opportunities.

As per the company, the traditional approach to subsurface imaging and data analysis is time-intensive and costly, relying on terabytes of data, high-performance computing, and complex physics-based algorithms to analyse and identify exploration opportunities. However, the generative AI solution being developed by Shell and SparkCognition uses deep learning to generate reliable subsurface images using far fewer seismic shots—as little as 1 per cent in completed field trials—than traditionally necessary while preserving subsurface image quality. The company says this will allow it to explore resources at a much lower cost.

Earlier this month, Saudi Aramco, the world's largest oil producer, showcased its metabrain generative AI. According to Amin H Nasser, the company's president and CEO, metabrain is helping Aramco to analyse drilling plans and geological data as well as historical drilling times versus costs and recommend well options. The model will also have the capability to provide precise forecasts for refined products, including pricing trends, market dynamics, and geopoliti-



cal insights.

Then there is the field of applying deep neural networks in drug discovery, which happens to be one of the most promising areas of research currently. "Predictive models are central to our work," according to Friedrich Rippmann, Director, Computational Chemistry & Biology at Merck. "These are statistical models that predict whether a compound idea – a not-yet-synthesised molecule – will produce a desired activity." "The technologies we're using mostly relate to machine learning. In particular, we're using various types of deep neural networks. But we've also explored other more classical statistical techniques, with funny names like random forests and support vector machines." So far, in terms of practical benefit, the research carried out by Friedrich Rippmann's team and Merck's partners has

made available almost 300 new models for assessing the properties of a compound, which can help predict their ability to bind to a specific disease-relevant target. "These models are already being used by our chemists to judge their compound ideas before deciding on whether to synthesise them," according to Rippmann. AI analysis is only as good as the quality of the datasets in use. For this reason, the pharmaceutical industry is increasingly seeking to collaborate by pooling data. A recent initiative to facilitate, the 'MELLODDY Project', involves the EU Innovative Medicines Initiative and around ten pharmaceutical companies in a project aimed at improving predictive models through so-called 'federated learning', by using a novel blockchain system to store data on a secure ledger while protecting the trade secrets of individual companies.

## Eight-hour sleep boosts language learning too, says study

New Delhi: Eight-hour sleep every night not only rejuvenates the body but also helps brain to store and learn a new language, according to a new study. A team of international scientists, led by the University of South Australia and published in the Journal of Neuroscience, revealed that the coordination of two electrical events in the sleeping brain significantly improves our ability to remember new words and complex grammatical rules. In an experiment with 35 native English-speaking adults, researchers tracked the brain activity of participants learning a miniature language called Mini Pinyin that is based on Mandarin but with similar grammatical rules to English.

Mini Pinyin contains 32 verbs and 25 nouns, including 10 human entities, 10 animals and five objects. Overall, the language contains 576 unique sentences. Half of the participants learned Mini Pinyin in the morning and then returned in the evening to have their memory tested. The other half learned Mini Pinyin in the evening and then slept in the laboratory overnight while their brain activity was recorded. Researchers tested their



progress in the morning. Those who slept performed significantly better compared to those who remained awake.

"This coupling likely reflects the transfer of learned information from the hippocampus to the cortex, enhancing long-term

memory storage," said lead researcher Dr Zachariah Cross. Sleep-based improvements were linked to the coupling of slow oscillations and sleep spindles – brainwave patterns that synchronise during NREM sleep.

# How the United States plans to deliver humanitarian aid to Gaza

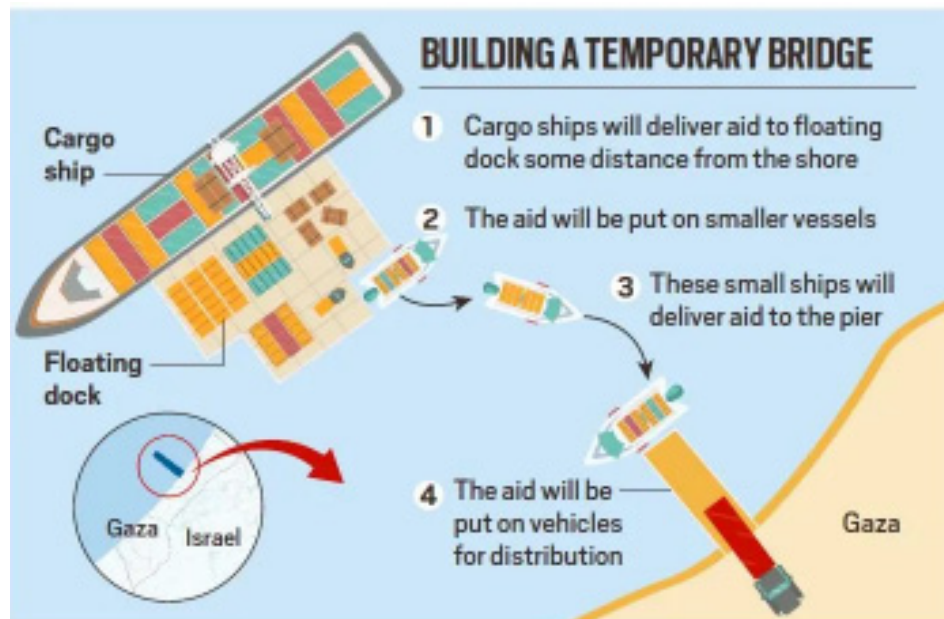
US Army ships have sailed from Virginia with equipment to build a floating pier on the Gaza coast to deliver humanitarian aid to the enclave, Pentagon Press Secretary Air Force Maj Gen Pat Ryder said on March 12. "We expect the pier to be fully operational in approximately 60 days which will be able to facilitate the delivery of about 2 million meals per day," Ryder said. The JLOTS project — the American solution to deal with hunger and an impending famine in Gaza as Israel continues to pummel the Palestinian enclave while blocking overland access to almost all aid — is officially known as Joint Logistics Over-the-Shore (JLOTS).

Former Indian Navy officer Cmde Srikanth Kesnur (Retd) told The Indian Express that JLOTS capabilities are used to transport cargo by sea when one or more ports cannot be operated or are not available for loading or unloading. "Usually, JLOTS is part of a military campaign or exercise — either you want to fight in another country or you want to deliver aid and don't have an operational port to embark or disembark. In most cases, it is assumed that loading (of cargo) would be well executed, but the unloading will happen over the shore," Cmde Kesnur said. Such operations usually involve joint operations by the forces — while the navy transports the goods and provides protection, the army or other agencies are involved in building the 'last mile' bridge, delivery, etc. The floating pier in Gaza will be built with no "US boots on the ground". The US will take the help of the private company Fogbow, which is run by former military and intelligence officials, according to a report by the BBC. The project will consist of two main components, a floating dock and an approximately 548-metre-long pier with a causeway, the US Department of Defense has said.

The floating dock will be a platform built with pieces of steel, which will be delivered to the spot by a roll on, roll off ship — which is essentially a cargo ship with a platform to load and unload heavy cargo. While the pier will be attached to the shore, the dock could be located up to a kilometre from the coast. The dock is required so that ships carrying aid don't have to come close to the shore where they may possibly get stuck in shallow water, Maj Gen A V Krishna (Retd), a former officer of the Indian Army, told The Indian Express. "They (the US) will send a ship (to supply the aid) that is (of) 40,000 tonnes. Anything smaller will be a costly business. Such a ship, depending upon the load, will require a depth of more than 4-5 metres, called minimum draft requirement. If it is less, the ship's keel will get stuck, and it's very difficult to pull out a ship that is embedded in sand," Maj Gen Krishna said. Once the ship unloads the aid on the dock, smaller Logistics Support Vessels (LSVs) will be used to transfer the cargo from the dock to the pier or jetty, which will be a floating structure linking to the shore. A pier can be built in three ways, Maj Gen Krishna said.

One, by using a "ribbon floating" bridge. "Such bridges are used for crossing rivers during wartime. They are strong and can be

built within weeks. Each section of the bridge is about 6 metres by 6 metres, and the bridge is folded with the help of torsion bars in the form of a 'W'. Once the roll on, roll off ship reaches the location, the bridge segments can be pushed into the water and connected end-to-end simultaneously, pushing the bridge towards the shore," he said. Once the bridge touches the shore, anchors will be dropped on either side of each section to ensure the structure's stability. A second way is to use a different type of floating bridge, manufactured by the UK-based company Mabey, Maj Gen Krishna said. The Mabey floating bridge is constructed over a number of pontoons, which are small, flat-bottomed boats with anchors at each end. On reaching the spot, the roll on, roll off ship will begin to push out the pontoons at right angles to the line of the bridge at the place where the pier is required. "Say the ship is 500 metres from the shore. You will push out the first pontoon to a distance of 5-10 metres; then the second pontoon to another 5-10 metres. Over these two pontoons, a panel of the bridge will be made. Subsequently, a third pontoon will be pushed out and the previous two will be pushed further towards the shore," Maj Gen Krishna said. The process is repeated until the pontoons reach the shore. The bridge on the pontoons is typically a Bailey bridge, a truss bridge that is commonly used in mountainous areas. The third way is to use a foam floating bridge made of elastomeric materials that are like rubber, but offer better material properties, Maj Gen Krishna said. Such bridges are commonly used in resorts. The US has heavy-duty ver-



sions of these bridges, but they are somewhat shaky, he said. The pier will also have a causeway that will act as its extension. The causeway will ensure that vehicles carrying the aid from the pier to the coast don't get stuck in boggy sand. Fogbow, the private firm, will move the aid from the shore to distribution points further inland by trucks, the BBC report said. Why bridges float All floating bridges can take heavy weights such as tanks and cargo. They stay afloat because of buoyancy and density. The principle of buoyancy states that any fully or partially submerged object experiences an upward

force — known as buoyant force — equal to the weight of the fluid displaced by the object. Objects that are less dense than water stay afloat. That's because they displace less water and therefore, the buoyant force is more than the gravitational force. Objects that are denser than water sink. Notably, the ribbon floating bridge is made of steel, which is denser than water. To ensure that it remains afloat, the segments of the bridge are hollow, and contain an adequate quantity of air that makes them less dense than water. The floating dock will also have hollow steel segments.

## Is face shaving the answer to all your skin problems?

Until the recent digital wave, the concept of a woman wielding a blade to shave her face was almost unheard-of. Many influencers claim to have reaped the benefits of shaving after achieving supple and radiant skin from the practice, allowing for a smooth surface for makeup and skincare products to glide. While this trendy ritual may seem attractive from the outset, providing a quick fix to get rid of facial hair, there are complications that can arise if people make uninformed decisions just for the sake of following a popular trend.

Dr Meghna Mour, aesthetic dermatologist, cosmetologist, trichologist, laser specialist and founder of Skuccii SuperCliniq, says that there are multiple benefits of face shaving. It helps absorb skincare products more effectively, preserves collagen production in the skin as well as blurs out visible fine lines and wrinkles over time. However, Dr. Rashmi Aderao, dermatology consultant at Ruby Hall Clinic Pune, warns that using an incorrect technique can lead to a myriad of skin problems including redness, irritation, or razor burn. Dr Mour agrees, "Using a dull

razor, shaving too aggressively, or neglecting to moisturise afterwards can worsen these risks." It is no secret that the beauty and skincare industry is massive today, and in the pursuit of that coveted 'glass skin' glow that finds its way into our social media feeds almost daily, many would want to try shaving their faces in order to achieve that perfect glow. But nothing can beat being knowledgeable about what you are putting your skin through. That is why Dr Dinyar Workingboxwalla, skin guru, Beauty by BiE recommends proceeding with caution, especially if you have sensitive and acne prone skin. "Shaving can aggravate these conditions. If you must try, do a patch test first and use a single-blade razor with a super gentle touch," he stresses. Wash your face to remove dirt and makeup. Use a toner on the skin to wipe off any dirt and residues. Gently scrub the facial skin to remove dead skin to prevent ingrown hair. Steam or hydrate your skin to open up the pores, and soften the hair follicles for easy removal. You can also do so by holding a damp washcloth (of tepid water) onto face for about 2-3 minutes. Apply shaving gel on the areas you



want to shave. Shave in the direction of the hair growth. Keep a light downward pressure on the skin and keep the razor at a 45-degree angle. The strokes should be short and steady; wash the razor between every stroke. Moisturise your skin using an oil or cream immediately after shaving. Face shaving comes with several benefits; but it is important to consider the problems that may arise from the use of this technique. If you have skin concerns, then it is best to consult a dermatologist first or go for safer options like threading and waxing. "

# A handbook to help create zero-waste offices in Bengaluru and beyond

Towards this goal, the non-profit, in partnership with the Rainmatter Foundation, recently released a free guidebook that can help offices in the city minimise their waste. According to Kulkarni, also the co-founder of the social enterprise Stonesoup, many corporations today are already looking at ways to be sustainable, "some for name-sake, and some in a deeper sense." As the guidebook, available for free on both the Saahas and Rainmatter Foundation, points out, we often follow a use-and-throw lifestyle, with nearly 50% of plastic being used only once before being thrown away. And even if some of these single-use materials are recyclable, they are best avoided, says the guidebook, pointing out that not only is plastic the most significant contributor of mixed waste, but recycling items made of it takes a lot of resources. Additionally, there are few takers of recycled plastic since it becomes dull and brittle after processing, states the guidebook, adding, "Not everything gets recycled." Tanmayi Gidh, part of the Outreach and Communications team at Rainmatter Foundation, elaborates on the guidebook's raison d'être. "While zero waste is the ideal, it can sometimes feel a little overwhelming," says Gidh. She feels that moving towards a zero or low-waste lifestyle is not as overwhelming and abstract as it is made out to be, provided one has concrete steps and alternatives listed. "That was the whole intention of developing this guidebook," she says. Gidh also discusses the project's genesis. The seeds for the guidebook, she says, were sown around World Environment Day, which falls on June 5. When they considered developing a campaign around the day, they felt that instead of treating it as a one-off event, it is important to create something long-lasting more focused on specific stakeholders.

Waste management, after all, is a crucial piece of the narrative around the environment and climate crisis. "It is the most tangible problem. Everyone has an impact on that problem, and everyone's life is impacted by it," she says, adding that the Rainmatter Foundation decided to start by engaging corporates in the zero-waste pledge because of the volume of waste produced in offices and also because of the ability of changemakers to influence the culture and implement systemic changes in their own organisations.

As part of the larger World Environment Day campaign, Saahas and the Rainmatter Foundation jointly conducted a zero-waste workshop focused on corporates. From there came the idea of the gap that crops up when changes are suggested, she says. "There is very little support provided to materialise that change, especially when you are doing it at a systemic cultural level," she believes, pointing out that it takes a lot of handholding, collaboration and support from people who understand the space well. "So yes, we can suggest alternatives. But who is going to help them understand where it can start from," says Gidh, who believes that the guidebook can help provide this starting point for anyone since it puts all the information and resources in one place. Creating a zero-waste office, what are the major top waste generators in a corporation? Kulkarni lists them:

tissue papers, sachets, paper cups, and PET bottles. "These constitute 80% of the waste generated in corporates. If we managed these four or even one of these four, there would be a significant impact," she firmly believes.

She talks about working closely with organisations like Saahas Zero Waste and the Electronics City Industrial Township Authority (ELCITA) to understand some of the best practices followed in different places. "It is kind of taking a solution from the corporates and giving it back to them," she says. For instance, by replacing tissues with hand dryers, "automatically around 20% of the waste is gone," she says, going into other practical ways organisations can better manage their resources. Other suggestions? Instead of having a vast collection of sugar sachets, organisations can simply have a jar of sugar with an airtight lid, which "will solve the problem of generating so many sachets every single day," says Kulkarni. She also says that having reusable mugs and bottles can reduce paper cup usage considerably, while steel spoons can replace stirrers. And yes, it is important to educate people in organisations about these things. "We made posters as part of it... some messaging across office walls will help reinforce these things," she believes. Remya Mariam Thomas, Head, Human Resources & Admin, Embassy Services Pvt. Ltd, which recently had its facilities team go through a zero-waste workshop, says the organisation has been transforming their workplace culture through innovative waste management initiatives. For instance, they have something called 1 Bay 1 Bin Concept, where dedicated paper waste bins are stationed at strategic points throughout the office bays, discouraging desk-side waste accumulation and prompting employees to dispose of their waste thoughtfully, she says. "This has majorly reduced the paper waste generated at each desk." Going by that age-old management concept -- what cannot be measured, cannot be managed -- the company also has a board in the cafeteria that showcases the amount of food waste generated daily. "This initiative has led to a significant reduction in food waste, with a remarkable 50% decrease achieved since its implementation. Additionally, our on-campus organic waste converter transforms food waste into nutrient-rich compost, contributing to our landscaping efforts," she says, adding that the organisation has also replaced disposable like wooden coffee stirrers, sugar sachets and paper cups with steel spoons, loose sugar and reusable coffee mugs, respectively. "Through these initiatives, we're not only mitigating our environmental impact but also fostering a culture of sustainability and mindfulness within our workplace," she says.

## A low-hanging fruit?

Like Embassy Services, more and more companies are attempting to create this sort of culture in workplaces, something Kulkarni has observed too. "There is pressure from senior management to show sustainability in behaviour and operations (at the workplace)," she says. And yes, since corporate entities always work in a systemic, process-oriented way, she feels that imple-

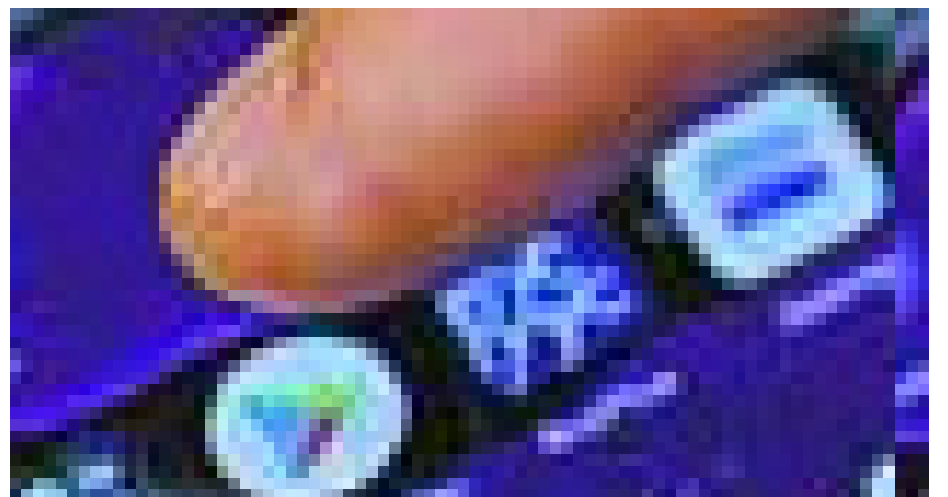


menting these small changes is "a low-hanging fruit." Having said that, changing mindsets is a long-drawn-out process that takes time. "People don't even think twice about doing something. It is the norm," she says, pointing out that while people talk about living sustainably, they often take a selective approach. For instance, while people may be open to drinking from a reusable bottle instead of using paper cups, they don't always segregate their waste properly. "The facilities team manually has to segregate many times," says Kulkarni, who hopes to roll out

these zero-waste initiatives to as many corporates in Bengaluru as they can reach.

"We would like corporates who are leading the way to teach the others. We are just the mediators taking some of the best practices of some of these corporates to help the other corporates catch up," she says, likening it to a Montessori school system where older kids help younger kids with learning. "A small change at the facilities level will result in a huge change as far as waste is concerned," believes Kulkarni. "If done systematically, I see tremendous success."

## India antitrust body to probe Google's in-app billing amid dispute with startups



India's antitrust body on Friday ordered a probe into Alphabet Inc.'s Google in an ongoing dispute with local startups over its in-app billing system, saying the U.S. company implemented its policies in a "discriminatory manner". Indian startups have been at odds with Google for months over the fee it charges for in-app payments. The dispute escalated earlier this month after Google removed more than 100 Indian apps from its app store for violations related to billing, though it restored them after the Indian government intervened. The startups had asked the Competition Commission of India (CCI)

to look into the matter and the watchdog on Friday ordered an investigation, saying: "Google is implementing its policies in a discriminatory manner". The CCI also directed its investigation unit to complete the probe within 60 days."

We are examining CCI's order initiating the investigation," a Google spokesperson said in an emailed response to Reuters, adding that the company will cooperate with the process "in every way". The dispute centres on efforts by some Indian startups to stop Google from imposing a fee of 11% to 26% on in-app payments,

# Gemini's racial images are warning of tech titans' power to 'influence' views

For people at the trend-setting tech festival in Texas, U.S., the scandal that erupted after Google's Gemini chatbot cranked out images of Black and Asian Nazi soldiers was seen as a warning about the power artificial intelligence can give tech titans. Google CEO Sundar Pichai last month slammed "completely unacceptable" errors by his company's Gemini AI app after gaffes such as the images of ethnically diverse Nazi troops forced it to temporarily stop users from creating pictures of people.

Social media users mocked and criticised Google for the historically inaccurate images, like those showing a female black U.S. Senator from the 1800s — when the first such Senator was not elected until 1992. "We definitely messed up on the image generation," Google co-founder Sergey Brin said at a recent AI "hackathon," adding that the company should have tested Gemini more thoroughly. Folks interviewed at the popular South by Southwest arts and tech festival in Austin said that the Gemini stumble highlights the inordinate power a handful of companies have over the artificial intelligence platforms that are poised to change the way people live and work. "Too woke" "Essentially, it was too 'woke,'" said Joshua Weaver, a lawyer and tech entrepreneur, meaning Google had gone overboard in its effort to project inclusion and diversity. Google quickly corrected its errors, but the underlying problem remains, said Charlie Burgoyne, chief executive of the Valkyrie applied science lab in Texas. He equated Google's fix of Gemini to putting a Band-Aid on a bullet wound. While Google long had the luxury of having time to refine its products, it is now scrambling in an AI race with Microsoft, OpenAI, Anthropic and others, Mr. Weaver noted, adding, "They are moving faster than they know how to move." Mistakes made in an effort at cultural sensitivity are flashpoints, particularly given the tense political divisions in the U.S., a situation exacerbated by Elon Musk's X platform, the former Twitter.

"People on Twitter are very gleeful to celebrate any embarrassing thing that happens in tech," Mr. Weaver said, adding that reaction to the Nazi gaffe was "overblown." The mishap did, however, call into question the degree of control those using AI tools have over information, he maintained. In the coming decade, the amount of information — or misinformation — created by AI could dwarf that generated by people, meaning those controlling AI safeguards will have huge influence on the world, Mr. Weaver said. Karen Palmer, an award-winning mixed-reality creator with Interactive Films Ltd., said she could imagine a future in which someone gets into a robo-taxi and, "if the AI scans you and thinks that there are any outstanding violations against you... you'll be taken into the local police station," not your intended destination. AI is trained on mountains of data and can be put to work on a growing range of tasks, from image or audio generation to determining who gets a loan or whether a medical scan detects cancer. Cultural bias But that data comes from a world rife with cultural bias, disinformation and social inequity — not to mention online content that can include casual chats between friends or intentionally exaggerated and provocative posts — and AI models can echo those flaws. With Gemini, Google engi-

neers tried to rebalance the algorithms to provide results better reflecting human diversity. The effort backfired. "It can really be tricky, nuanced and subtle to figure out where bias is and how it is included," said technology lawyer Alex Shahrestani, a managing partner at Promise Legal law firm for tech companies. Even well-intentioned engineers involved with training AI cannot help but bring their own life experience and subconscious bias to the process, he and others believe. Mr. Burgoyne also castigated big tech for keeping the inner workings of generative AI hidden in "black boxes," so users are unable to detect any hidden biases.

The capabilities of the outputs have far exceeded our understanding of the methodology," he said. Experts and activists are calling for more diversity in teams creating AI and related tools, and greater transparency as to how they work — particularly when algorithms rewrite users' requests to "improve" results. A challenge is how to appropriately build in perspectives of the world's many and diverse communities, Jason Lewis of the Indigenous Futures Resource



Center and related groups said here. At Indigenous AI, Mr. Lewis works with farflung indigenous communities to design algorithms that use their data ethically while reflecting their perspectives on the world, something he does not always see in the

"arrogance" of big tech leaders. His own work, he told a group, stands in "such a contrast from Silicon Valley rhetoric, where there is a top-down 'Oh, we're doing this because we are going to benefit all humanity' bullshit," receiving laughter.

## International body recommends more sensitive test to indicate risk of developing diabetes

The International Diabetes Federation (IDF), in a position statement, has recommended the adoption of a test measuring blood sugar one hour (1-h PG) after the load of Oral Glucose Tolerance Test (OGTT) has been administered to check for diabetes risk. They have also recommended revising glycaemic thresholds to measure and predict the risk of developing diabetes. The measure of blood sugar one hour after a 75 gm sugar solution is consumed will be a far more sensitive and practical method to screen for intermediate hyperglycaemia (IH), earlier known as pre-diabetes, and type 2 diabetes (T2D) in people at risk. It recommends the use of the cut-off points of 155 mg/dL for measuring IH, and 209 mg/dL for T2D, meaning any figure higher than specified would indicate a higher chance of diabetes, even if the individual's fasting and two-hour values were normal.

The oral glucose test is the best for detecting the onset of diabetes at a future date, and if it is not employed, many remain undiagnosed and untreated. A "wealth of epidemiological data" guided the confirmation of the superior purpose in using the 1-h PG (plasma glucose) over even fasting PG (FPG), HbA1c and 2-hour PG across ethnicity, sex and age categories. Michael Bergman, who co-chaired the expert panel with Jaakko Tuomilehto, said: "There are many people who would not be diagnosed through an HbA1c or FPG test but who would, if given an OGTT, be more likely to be detected as having IH or T2D. The 1-h PG has been found to be a more sensitive biomarker for the earlier identification of these high-risk individuals." The statement was prepared by an international panel of 22 experts from 15 countries and presented recently at the 17th International Conference on Advanced Technologies, Treatments for Diabetes in Florence, Italy and published online



in Diabetes Research and Clinical Practice. V. Mohan, Chairman, Madras Diabetes Research Foundation, whose organisation represented India on this panel, explained that the one-hour value used to be measured up until the 1980s. "In fact, we used five values measured at different points of the OGTT. Over the years it was pared down to fasting and the two-hour value. We continued to do the one-hour sample at our centre, and that is when we discovered that

155 mg/dL is the crucial cut-off value." In interactions with other experts across the world, including Michael Bergman, it emerged that globally there was agreement over 155 mg/dL at one hour after OGTT being the cut-off value. "The higher it goes from 155 mg/dL the higher are a person's chances of moving into IH," Dr. Mohan explained. Any value over 209 mg/dL and it is considered that the person has diabetes, the statement said.

## Safety Awareness Ride promotes road safety and emergency preparedness in Hyd

Hyderabad: Around 100 bikers from the city came together for a Safety Awareness Ride to highlight the importance of road safety and emergency preparedness. Orga-

nized by Yashoda Hospital, Somajiguda, the event brought together biking clubs from across the city, including Telangana Women Moto Bikers, Biker Knights Hyderabad, Riders Club, TRCR, and others.

# ByteDance | Dancing on a tightrope

In the early 2010s, when discussions on artificial intelligence were limited to academic circles and scientific communities, Zhang Yiming, a computer engineer by training, began building an AI-based recommendation engine that would change the way people connect with information online. Mr. Zhang came up with his moonshot idea after successfully setting up a real estate search company, called 99Fang. On a Metro ride in Beijing, he observed people reading less of newspapers than using their smartphones. That observation led him to build one of the most valuable start-ups in China that catapulted him to the 26th spot on Forbes' richest persons list.

In 2012, Mr. Zhang, along with his former room-mate Liang Rubo and a group of developers, started ByteDance, which would grow into a global behemoth in the following decade that would get caught in the cross-hairs of the U.S.-China tech cold war, with American lawmakers asking the company to divest its stake in the U.S. in its most popular platform, TikTok. The founding team's goal was to capitalise on the fledgling smartphone market and app ecosystem by creating a mobile-based interface for news dissemination. The team started to work on a personalised recommendation engine. To build it, they developed an algorithm that would sift and analyse vast amounts of data to connect people with information relevant to their interests. The flagship app

While most people in English-speaking countries are familiar with TikTok, they are unaware of the Beijing-based company's real game-changing mobile application. The company's first app was Jinri Toutiao — meaning 'today's headlines' in Chinese. More commonly known in China as Toutiao, the mobile-based news aggregator, used machine learning and deep learning models to understand individual user's preferences and interests, and then match them with sources from the web, screened using natural language processing tools. Some have called Toutiao's AI-powered engine the company's "secret sauce". And the app could not have been launched at a better time. Between 2010 and 2014, China's smartphone penetration was rocketing to almost 65% from nearly nothing at the start of the decade. Within four months of its launch, the app had a million daily active users (DAUs). And nearly a decade later, in 2021, the app had over 300 million DAUs, according to data from Statista. The app was so sticky that on average, people stayed on it for nearly 74 minutes daily compared to 58 minutes for Facebook, according to a 2022 USwitch report. Toutiao blended three distinct sets of information to serve content to its users. The blend created a super profile for the user based on using demographic information, article preference, and location-specific data. The AI engine also analysed how the user interacted with the app. To get this input, it tracked how many times a user tapped while reading, swipes, time spent reading an article, and the place from where the content was consumed.

Subsequently, in 2016, ByteDance launched Douyin, a social app exclusively for users in China. Developed in 200 days, the app allowed users to share short videos, and within two years of its launch, it had over 150 million DAUs making and sharing content on the platform. A year later, inspired by



the success of its short-video sharing app, ByteDance launched TikTok, for international users. In the first year of its launch, the app became the most downloaded app on Apple's App Store, totalling 45 million installs, surpassing YouTube, Facebook and Instagram. By the end of the decade, TikTok was topping the charts in both Apple's and Android's app marketplaces. The successes of Douyin and TikTok can be directly attributed to the AI-engine ByteDance developed for its news aggregator app. Plus, the power of network played a crucial role in the young company's success. Network effect is a result of how engaged users create a virtuous cycle of content dissemination. Simply put, the more information users share with the app, the smarter the app gets. In return, it recommends content based on individual user's interests. Subsequent integration of Musical.ly, a feature that lets users add sound or music to their videos, with Douyin and TikTok widened the popularity of the two apps, making each touch over a billion downloads. Globally, TikTok became a sensation, making it the destination for most viral videos that were created and shared by social media influencers. Censorship and geopolitics The rise of ByteDance, particularly TikTok, underpinned by its advanced AI-based recommendation engine, has prompted lawmakers in several countries take a hawkish line towards the app. They fear users' data and other sensitive information could be channelled to China. India was among the first countries that banned the app. In May, the Committee on Foreign Investment in the U.S. (CFIUS) recommended banning or divesting TikTok from its parent ByteDance. They claimed such a move will protect national security by stopping TikTok from sharing sensitive data with the Chinese government. While indiscriminate collection and use of data poses national security concerns, banning or divesting may not be an effective solution as most U.S.-based platforms face no legal requirements to protect their users' personal information.

Also, these concerns would persist even if ByteDance sold TikTok to an Ameri-

can entity. Several American mobile apps collect vast amounts of sensitive personal information from users and transfer them to entities at home and abroad. And more important, if the app is placed on sale, who will buy it and for what price given that it will be a hostile takeover? On March 13, based on the CFIUS's recommendation, the U.S. House of Representatives, controlled by the Republicans, passed a Bill that gives ByteDance an option to sell the app within six months or risk losing access to app stores and web-hosting services in the country. The Bill will now move to the Democrats-controlled Senate, where it will face an uncertain future as

Majority Leader Chuck Schumer was non-committal about bringing it for vote. While TikTok's future in the U.S. hangs in the balance, China's Foreign Ministry said the Bill ran contrary to the principles of fair competition. TikTok's CEO Shou Zi Chew said the legislation would impact creators and small businesses that rely on the social video sharing app. It takes two to tango, but in the case of platforms that are caught between conflicting international governments, it takes three — the algorithm, users, and a conducive political environment. For ByteDance, it is time to learn some new moves from lawmakers on all sides.

## AI to surpass individual human intelligence by next year: Musk



New Delhi: Elon Musk who is currently locked in a battle with ChatGPT maker OpenAI said on Wednesday that artificial intelligence (AI) will probably be smarter than any single human by next year. Musk has sued Sam-Altman-run company, alleging that it had breached the "founding agreement" via its partnership with tech giant Microsoft. OpenAI has hit back, saying they are not in any kind of founding agreement with Tesla and SpaceX CEO Elon Musk. In

a fresh post on X, the billionaire said that AI is going to be smarter than humans by next year. "By 2029, AI will probably be smarter than all humans combined," Musk added. Meanwhile, OpenAI has hired top lawyers from Wachtell, Lipton, Rosen & Katz to represent the company against its legal battle with Musk. In a court filing, the company has said that "Musk supported a for-profit structure for OpenAI, to be controlled by Musk himself.

# Musk's SpaceX is building spy satellite network for U.S. intelligence agency, sources say

SpaceX is building a network of hundreds of spy satellites under a classified contract with a U.S. intelligence agency, five sources familiar with the program said, demonstrating deepening ties between billionaire entrepreneur Elon Musk's space company and national security agencies. The network is being built by SpaceX's Starshield business unit under a \$1.8 billion contract signed in 2021 with the National Reconnaissance Office (NRO), an intelligence agency that manages spy satellites, the sources said. The plans show the extent of SpaceX's involvement in U.S. intelligence and military projects and illustrate a deeper Pentagon investment into vast, low-Earth orbiting satellite systems aimed at supporting ground forces. If successful, the sources said the program would significantly advance the ability of the U.S. government and military to quickly spot potential targets almost anywhere on the globe. The contract signals growing trust by the intelligence establishment of a company whose owner has clashed with the Biden administration and sparked controversy over the use of Starlink satellite connectivity in the Ukraine war, the sources said.

The Wall Street Journal reported in February the existence of a \$1.8 billion classified Starshield contract with an unknown intelligence agency without detailing the purposes of the program. Reuters reporting discloses for the first time that the SpaceX contract is for a powerful new spy system with hundreds of satellites bearing Earth-imaging capabilities that can operate as a swarm in low orbits, and that the spy agency that Mr. Musk's company is working with is the NRO. Reuters was unable to determine when the new network of satellites would come online and could not establish what other companies are part of the program with their contracts.

SpaceX, the world's largest satellite operator, did not respond to several requests for comment about the contract, its role in it and details on satellite launches. The Pentagon referred a request for comment to the NRO and SpaceX. In a statement the NRO acknowledged its mission to develop a sophisticated satellite system and its partnerships with other government agencies, companies, research institutions and nations, but declined to comment on Reuters' findings about the extent of SpaceX's involvement in the effort. "The National Reconnaissance Office is developing the most capable, diverse, and resilient space-based intelligence, surveillance, and reconnaissance system the world has ever seen," a spokesperson said. The satellites can track targets on the ground and share that data with U.S. intelligence and military officials, the sources said. In principle, that would enable the U.S. government to quickly capture continuous imagery of activities on the ground nearly anywhere on the globe, aiding intelligence and military operations, they added. Roughly a dozen prototypes have been launched since 2020, among other satellites on SpaceX's Falcon 9 rockets, three of the sources said. A U.S. government database of objects in orbit shows several SpaceX missions having deployed satellites that neither the company nor the government have ever acknowledged. Two sources confirmed those to be prototypes for the Starshield network.



All the sources asked to remain anonymous because they were not authorized to discuss the U.S. government program. The Pentagon is already a big SpaceX customer, using its Falcon 9 rockets to launch military payloads into space. Starshield's first prototype satellite, launched in 2020, was part of a separate, roughly \$200 million contract that helped position SpaceX for the subsequent \$1.8 billion award, one of the sources said. The planned Starshield network is separate from Starlink, SpaceX's growing commercial broadband constellation that has about 5,500 satellites in space to provide near-global internet to consumers, companies and government agencies. The classified constellation of spy satellites represents one of the U.S. government's most sought-after capabilities in space because it is designed to offer the most persistent, pervasive and rapid coverage of activities on Earth. "No one can hide," one of the sources said of the system's potential capability, when describing the network's reach.

Mr. Musk, also the founder and CEO of Tesla and owner of social media company X, has driven innovation in space but has caused frustration among some officials in the Biden administration because of his past control of Starlink in Ukraine, where Kyiv's military uses it for secure communications in the conflict with Russia. That authority over Starlink in a war zone by Mr. Musk, and not the U.S. military, created tension between him and the U.S. government. A series of Reuters' stories has detailed how Mr. Musk's manufacturing operations, including at SpaceX, have harmed consumers and workers. The Starshield network is part of intensifying competition between the U.S. and its rivals to become the dominant military power in space, in part by expanding spy satellite systems away from bulky, expensive spacecraft at higher orbits. Instead a vast, low-orbiting network can provide quicker and near-constant imaging of the Earth. China also plans to start building its own satellite constellations, and the Penta-

gon has warned of space weapon threats from Russia, which could be capable of disabling entire satellite networks. Starshield aims to be more resilient to attacks from sophisticated space powers. The network is also intended to greatly expand the U.S. government's remote-sensing capabilities and will consist of large satellites with imaging sensors, as well as a greater number of

relay satellites that pass the imaging data and other communications across the network using inter-satellite lasers, two of the sources said. The NRO includes personnel from the U.S. Space Force and CIA and provides classified satellite imagery for the Pentagon and other intelligence agencies. The spy satellites will house sensors provided by another company, three of the sources said.

## What we really need: A feminist health policy

The International Day for Women is not something we ignore at the health desk. No doubt, over the years, the rampant capitalism that surrounds the event, with freebies and offers and discounts galore, has queered the pitch enough for one to be cynical about March 8. But none of that takes away from the fact that it is a day that comes with the entire heft of the feminist movement behind it. It is also significant for us to push for more equitable systems in health care, for equal opportunities for men and women employed in the health sector and addressing women-related health issues in a more sustainable way. This past week, we had all of that, to commemorate Women's Day in a meaningful way for these columns, addressing several issues across the gender-health spectrum. In a specially curated Op-Ed page, Dr. Preetha Reddy writes a very important article on bridging the gender gap in health research. The head honcho of the Apollo group of hospitals, starts with the facts, mixed with an opinion formed from years of working within the health sector: With about four billion women in the world, accounting for approximately 49.75% of the population, it is unfortunate that our approach to health and well-being has been shadowed by a deep-seated gender bias. For far too long, women's health has been confined to gynaecological and reproductive

issues. Quoting the recently-released World Economic Forum's report, 'Closing the Women's Health Gap', she underscores the profound disparity between men's and women's health worldwide. The report elucidated historical neglect in women's health research, funding, and policymaking, and highlighted the need for a global effort to address the women's health gap by urging governments, the private sector, and civil society to realign their strategies with a gender-sensitive approach. A definitive, oft-reiterated point is that by prioritising women's health, we can create a future where health equity is a reality, the author says. For more insights on the subject, hit up the link above. Meanwhile, globally, researchers called for a policy that promotes an equitable global health environment on March 8. Advancing the idea of evolving a Feminist Global Health Policy (FGHP, a group of researchers from across various countries came together to reinforce the importance of this. The world should have a policy that addresses the inequality in the existing power structures hindering health equity, according to the researchers Hannah Eger from the School of Public Health at Bielefeld University, Germany, recently led a study in which researchers and activists, including those from The George Institute for Global Health, India, and across the world collaborated.

# Interview with former BJP general secretary Ram Madhav by Nistula Hebbar and he talks about US election results

Senior leader and former national general secretary of the Bharatiya Janata Party (BJP), and president of the conservative think tank India Foundation, Ram Madhav, speaks to The Hindu's Nistula Hebbar on the recent U.S. election results, and the largely post-WWII 'liberal project', which promotes a political and economic system that places importance on individual freedom, democratic government, and open markets.

What does the victory for Donald Trump in the U.S. mean for the world order and the 'liberal project'?

Donald Trump secured a majority in the popular vote, and also a majority in both wings of the U.S. Congress, the Senate and the House, leading most analysts to interpret this as a more forceful return of the Trump 1.0 era of unpredictability and transactionalism, that it would be worse than his previous term. However, going by the way he took no time in announcing key appointments, and some of the policy announcements that he was making after the election, it is clear that Trump 2.0 is going to be different. He is expected to double down on issues leading to his pet theme of MAGA — 'Making America Great Again' — giving up in the process on issues that stood for the euphemism 'American exceptionalism', like its democracy export projects or human rights campaigns. Interestingly, Trump's return with a vengeance has become a nightmare for not only the radical liberals, but also to China and Europe, who expect him to be harsh with them on several issues, including trade and wars. All in all, Trump's presidency is likely to shake up the world at a time when the old liberal international order has reached the end of its tether with a new one is yet to fully take shape. Trump will certainly be seen as a strong supporter by the rising Conservative and nationalist leaders in Europe and elsewhere, while his liberal counterparts in Europe are likely to face some heat.

Trump has broken new ground among Latinos and Black voters. How did that happen, in your view?

If one dissects the mandate, it becomes clear that Trump was able to break new ground as a rejection of the liberal politics that went too far in championing causes like illegal migrations and 'wokeness'. It must be borne in mind that not all Latinos in America, like not all Indians for that matter, are illegals (illegal immigrants). They didn't like the Democrat rhetoric of supporting illegal migrations from the Latin American countries, which were increasingly erasing the line between legal and illegal migrants, thus subjecting all Latinos to the same treatment from White Americans. On the contrary, Trump's distinction between legal and illegal migrations was welcomed by them. Second and more important reason appears to be the total rejection of 'wokeism' and associated politics championed by the Democratic Party. 'Wokeism' reached alarming proportions in America where all decent citizens, including the minorities, felt threatened over the future of their children and families. One of the first Bills that Joe Biden had signed as President in 2021 was to allow transgender men to use women's toilets and participate as women in all events, including sports. Cancel culture, denying even First Amendment freedoms to people who don't endorse

'wokeism', too caused serious angst among all the citizens, including the minorities.

Finally, American society as a whole, including Latinos and others, is yet to overcome its sexist or gender prejudices. When pitted against women candidates — Hillary Clinton in 2016 and Kamala Harris in 2024 — Trump romped home easily as against a male candidate like Biden in 2020. It may be a contested argument, but can't be dismissed fully.

Has the idea of representative politics changed with the defeat of Kamala Harris, following from this support for Trump among otherwise Democrat supporters?

Kamala Harris's defeat can be attributed to several reasons, one of them being the gender bias at the subterranean level in the American society. But she also lost a section of the Democrat vote because she didn't pass through the litmus test of the Primaries, was seen as an Obama (former U.S. President Barack Obama) proxy imposed from the above by many even within the Democratic Party, and there was the problem of Biden's legacy that Kamala Harris couldn't shrug off in the brief window of three months of campaign. Finally, although she managed to lead in the first and only debate with Trump, her campaign remained lacklustre on important issues bothering the American electorate like the economy, inflation, immigration and 'wokeism'. However, it shouldn't be forgotten that despite all these odds, Kamala still secured 48.4% popular vote, as against Trump's 49.9%, just behind



by less than three million votes. That shows that the Democrats still enjoy wide support in the country.

How has the Trump victory affected the idea of citizenship?

Trump's victory gives greater momentum to the return of nationalism as a respected political issue in the West. Until the rise of racist dictators like Hitler and Mussolini in Europe, nationalism was a well-respected idea associated with great European generals like Otto von Bismarck, who guided the unification of Germany towards the end of the 19th century. After the Second World War, in their zealotry to build

a liberal international order, the liberal ideologues have demonised nationalism as a parochial idea and condemned nationalists to be Nazi-ists. However, nationalist politics has seen a resurgence in Europe in recent decades and Trump's victory in America will further sanctify and fortify those ideals. Citizenship based not just on constitutional provisions, but also on acceptance and assimilation in the national mainstream, will become a dominant idea in the West in coming years. It will subject the migration and multiculturalism debates to a new test. National boundaries will be further strengthened not only in America but in many other countries.

## Low-sugar diet in pregnancy cuts adult disease risk: Study

New Delhi: A low-sugar diet during pregnancy, which if continued in the first two years of life can meaningfully reduce the risk of chronic diseases in adulthood, according to a new study. The study led by the US and Canadian researchers provides compelling new evidence of the lifelong health effects of early-life sugar consumption.

Children who had sugar restrictions during their first 1,000 days after conception had up to 35 per cent lower risk of developing Type 2 diabetes. It can also reduce as much as 20 per cent the risk of hypertension as adults, revealed the study published in the journal *Science*. Diabetes and hypertension (high blood pressure) are the most common non-communicable diseases driving a significant health burden across the globe. The World Health Organization (WHO) recommends no added sugars for children under two and not more than 12 teaspoons (50g) of added sugar daily for adults.

Notably, exposure to sugar restrictions in utero alone was enough to lower risks, but disease protection increased postnatally once solids were likely introduced. If followed this can save costs, extend life expectancy, and, perhaps more importantly, quality of life, said the researchers from the McGill University in Montreal, and the University of California, Berkeley, who examined how



sugar rationing during World War II influenced long-term health outcomes. Besides raising annual medical expenditures, earlier diagnosis of diabetes also means significantly shorter life expectancy, with every decade earlier that a diagnosis of diabetes is made cutting three to four years off of life expectancy. These numbers underscore the value of early interventions that could delay or prevent this disease, the researchers noted. Even as consumption of excessive

amounts of added sugars during children's early life, a critical period of development continues to mount the study raised concerns about children's long-term health. While adjusting child sugar consumption is not easy as added sugar is everywhere, even in baby and toddler foods, they called on policymakers to hold "food companies accountable to reformulate baby foods with healthier options and regulate the marketing and tax sugary foods targeted at kids."