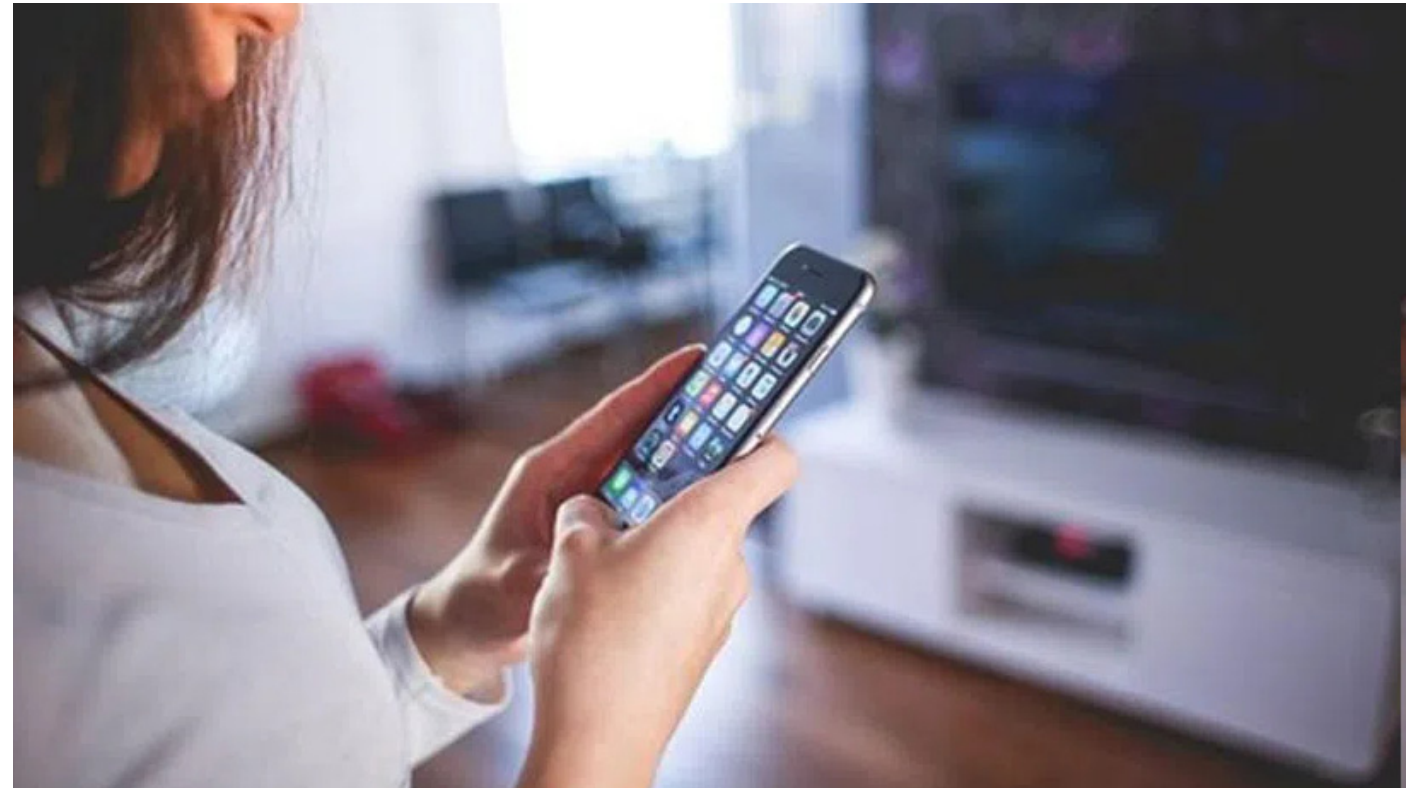


'Limiting mobile phone use could lower cardiovascular disease risk'

New Delhi: Limiting the use of mobile phones in making and taking calls may help reduce the risk of cardiovascular diseases, according to a top neurologist. Taking to social media platform X, Dr. Sudhir Kumar from Indraprastha Apollo Hospitals, said that limiting mobile phone use, along with other healthy lifestyle measures may be good for boosting heart health.

"It is useful to limit the duration of taking and making calls in order to reduce the risk of CVDs," said Kumar. "Ensure good sleep and minimise psychological stress," he added, while also suggesting to quit smoking. He said this citing a recent Chinese study, published in the Canadian Journal of Cardiology, which showed an increased association between mobile phone use and heart diseases like stroke, coronary artery disease, atrial fibrillation, and heart failure. The number of mobile phone subscriptions has increased dramatically worldwide in recent decades and surpassed 8.2 billion in 2020, according to data from the International Telecommunication Union. At the same time, heart diseases have also surged significantly worldwide, including in India.

Data from the World Heart Federation (WHF) showed deaths from cardiovascular disease (CVD) jumped globally from 12.1 million in 1990 to 20.5 million in 2021. The study by researchers from the Southern Medical University in China showed that weekly mobile phone usage time was positively associated with incident CVD risk. The risk was partly "explained by poor sleep, psychologic dis-



stress, and neuroticism", the study showed.

Further, the team noted that "mobile phones emit radiofrequency electromagnetic fields (RF-EMFs), which could induce hypothalamic-pituitary-adrenal axis deregulation, inflammatory reaction, and oxidative stress" — these can affect heart and blood vessels, increasing the risk of

CVD. The study included 444,027 individuals without a history of CVD. After more than 12 years of follow-up, CVD risk was identified in 56,181 individuals (12.7 per cent). Compared with participants who used a mobile phone less than 1 hour per week, those who used a mobile phone more than 1 hour had a significantly in-

creased risk of incident CVD. The risk of CVD was also found to be higher in people with diabetes and current smokers. "Smoking and diabetes compound the risk of CVDs, and hence smokers should quit smoking and people with diabetes should keep blood sugars under control," Kumar said.

TGSPDCL CMD urges pandal organisers to follow safety precautions

The CMD, who reviewed the special arrangements being made for ensuring safety and reliable power supply at Ganesh pandals, asked people and pandal organisers to follow the safety precautions

Hyderabad: Southern Power Distribution Company of Telangana Limited (TGSPDCL) Chairman and Managing Director Musharraf Ali Faruqi has asked officials to ensure safety and uninterrupted power supply to the pandals during the Ganesh festival celebrations to be held for 11 days from September 7.

The CMD, who reviewed the special arrangements being made for ensuring safety and reliable power supply at Ganesh pandals on Friday, asked people and pandal organisers to follow the safety precautions. Pandal organisers should avail power connection to the pandals through

the departmental staff only and not to climb electricity poles for electricity connections, he said.

While doing electrical work in mandapams, the surroundings should be thoroughly examined, he said, adding that the organisers should keep children away from electric wires/poles and other dangerous electrical devices.

"ISI marked standard service wire without any joints should be used in the Ganesh pandals. Do not touch the snapped wires and in turn inform the electricity department immediately through 1912/100 or to the local Fuse off Call office," he added.



Kisan Majdoor Mahapanchayat resolves to oust BJP in Haryana assembly poll



Chandigarh (JAG MOHAN THAKEN), September 7: A largely attended Mahapanchayat, jointly organised by Sanyukta Kisan Morcha (SKM) and Trade Unions at Hisar, Haryana on Saturday, has expressed their firm resolve to teach BJP a lesson in the upcoming assembly elections to Haryana assembly.

Drawn from all over Haryana the first ever panchayat of its kind attracted farmers, workers, agricultural labourers including many women displayed their unity based on common issues related to livelihood and social harmony under threat from the divisive and pro corporate policies of BJP. Addressed by national leaders of SKM and Trade Unions including Jogender Singh Ugrahan, P. Krishna Prasad, Rajan Ksheer Sagar, U R Sindhu and state leaders the panchayat unanimously passed a resolution placed by senior leader Inderjit Singh, stipulating a plan of action for defeating BJP.

A call has been given to launch state wide campaign to oppose and expose the misdeeds committed the ten-year rule of BJP. Sharing the details with our representative, the SKM leader and National Vice-President of All India Kisan Sabha divulged that campaign will be launched on 17 September by holding village level Kisan Mazdoor Panchayats across the state and making door to door contact with all sections of people. He added that Anti corporate and communal character of the BJP will be exposed by observing 28 September to mark the birth anniversary of Shahid Bhagat Singh who is a symbol of anti-imperialism. Speakers appealed the participants to not forget 750 martyrs who had to sacrifice their lives during the 13 months agitation against the three farm laws enacted to hand over to corporate sector. The resolution asked the farmers and workers to remain vigilant against the designs of ruling party to polarise the elec-

torate on communal and caste lines for diverting the attention of people from its misdeeds and the deception in the matter of not honouring the MSP at C2+50 % basis legal guarantee of purchase. Recent spurt in violent incidents by the cow vigilantes in Badhra and Faridabad killing of an innocent youth Aryan Mishra by so called cow protection squads was a wakeup call for

all and this nefarious game has to be foiled by firmly maintaining the unity. It is pertinent to mention that Haryana Sanyukta Kisan Morcha has already decided to expose the anti-farmer and anti-people BJP rule during the forthcoming state assembly elections. In a meeting, held in last month, of the Morcha a review of the announcements made recently by Haryana Chief minister was undertaken and found

that these were just election gimmicks to overcome the anger of farmers and other sections.

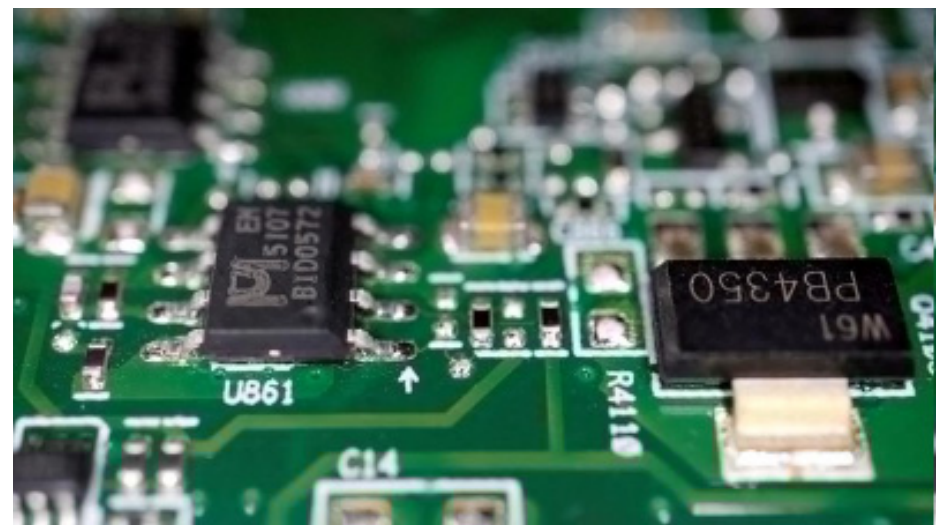
It was resolved in the meeting that SKM will campaign across the state against the deceit done to farmers by not accepting C-2+50% formula as a basis for determining MSP and legal guarantee for procurement of all crops, freedom from debt, withdrawal electricity amendment bill etc.

Israel's Tower Semiconductor, Adani plan \$10 bln chip project in India

Israel's Tower Semiconductor and Adani Group will invest 839.47 billion rupees (\$10 billion) for a semiconductor project in India's western state of Maharashtra, its chief minister said in a post on X on Thursday. India has taken steps to encourage global companies to set up their manufacturing units in the country, with Prime Minister Narendra Modi aiming to make the country a chipmaker for the world despite initial setbacks.

Foxconn withdrew in July last year from a \$19.5 billion semiconductor joint venture with Indian conglomerate Vedanta, and plans by ISMC, a venture between Abu Dhabi-based Next Orbit Ventures and Tower Semiconductor, to invest \$3 billion in India, have been stalled. Still, India expects its semiconductor market to be worth \$63 billion by 2026.

Semiconductor manufacturing marks the latest foray for billionaire Gautam Adani, whose conglomerate has businesses across ports, power utilities, transmission and coal trading. The \$10 billion semiconductor plant in Maharashtra will initially have a capacity of 40,000 wafers,



the state's deputy chief minister Devendra Fadnavis said in a post on X.

Chief Minister Ehnath Shinde said in a social media post that projects worth 1.17 trillion rupees were approved on Thursday, which will create 29,000 jobs in the state. Two new electric vehicle manufactur-

ing units will also be set up in the state, with Skoda-Volkswagen investing 150 billion rupees for its plant to produce electric vehicles and hybrids. Toyota-Kirloskar will dole out 212.73 billion-rupees to manufacture hybrid and electric vehicles at its plant in the state. Adani group,

Get your hands dirty: Sewage surveillance is critical for public health in India

Sewage surveillance has been used since the 1940s to monitor public health in cities and track the spread and reemergence of polio. Like the rest of the world, India has also been carrying out periodic sewage testing to check the community-level presence of polio as part of the National Polio Surveillance Project, even though it has been polio-free since 2011.

The same principle was tested worldwide during the Covid-19 pandemic to check for the prevalence of the virus irrespective of clinical cases, including in India. The union government-run Indian SARS-CoV-2 Genomics Consortium (INSACOG) tracked the emergence of newer variants of the virus over concerns that they posed a new threat. Taking forward the idea, efforts are being made to develop a cost-effective framework and tools to create an early warning system for the outbreak of pathogen-induced diseases by routinely testing domestic wastewater in cities and townships.

Framework to track more diseases Rakesh Mishra, director of Tata Institute for Genetics and Society in Bengaluru and member of Alliance for Pathogen Surveillance Innovations (APSI)-India, said the system, once operational, can provide timely information for the administration to prepare infrastructure to deal with a situation like that witnessed during the Covid-19 pandemic. "Sewage surveillance is essential for knowing the pathogen dynamic in cities. Without timely information, there is no possibility of formulating effective action. Just by spending a few crores of rupees, we can ready a detection system of a full spectrum of pathogens for a whole year for a city," Mishra said.

If all goes according to plan, then cities in India should have near real-time data on the presence of pathogens that cause common infectious diseases such as swine flu, dengue, and Japanese encephalitis. This early warning system has the potential not only to help identify outbreaks but also to track the effectiveness of public health interventions like lockdowns imposed during the pandemic. APSI comprises research institutes like the National Centre for Biological Sciences (NCBS), municipal corporations, hospitals and other medical industry players working in four nodal cities of Bengaluru, Hyderabad, Pune, and Delhi-NCR. The consortium has been active since July 2021, primarily working to detect newer variants of the SARS-CoV-2 and measure the viral load at a population level to detect infection hotspots. Even though Covid-19 is no longer a public health emergency, APSI routinely tracks the SARS-CoV-2.

LS Shashidhara, director at NCBS, said as part of APSI, they are working on identifying sampling sites, determining the frequency of sampling, laboratory methods to detect viral and bacterial pathogens, and understanding the implications vis-a-vis clinical prevalence of those infections. "We are also developing high-quality but low-cost kits so that environmental surveillance may be taken up by public health authorities across the country," he said. Bruhat



Bengaluru Mahanagara Palike chief commissioner Tushar Girinath confirmed the development and said the modalities for different diseases are yet to be finalised. He said that the union government had proposed that under the national health mission, the first such lab for this purpose would be built in Bengaluru before the same is built for other cities. By studying the samples collected from different sewage sheds, the city administration can detect the presence of diseases such as swine flu, dengue, and Japanese encephalitis virus. Shashidhara said that all the data collected regarding SARS-Cov-2 is still being shared with the respective cities, even though no variants of major concern have been detected at a population scale since the vaccination. Tracking anti-microbial resistance As part of APSI's work, cities are working to measure anti-microbial resistance (AMR) in 18 Indian cities and soon, the measures are likely to be standardised by the National Centre for Disease Control under the Union ministry of health and family welfare to be implemented at a national scale. Mishra said, "We explore what pathogens are present there through the genetic material be it DNA or RNA. We come to know of what kind of AMR genes are around and what is their signature." He explained through this they are able to know what kind of resistance the microbes have developed and also the relative quantification of the same. He explained that by periodic testing they can compare if the presence of certain AMR is increasing or decreasing. Over the years, AMR has emerged as a public health threat leading to increased mortality rates. The World Health Organisation in November 2023 warned that 10 million fatalities will occur annually on a global scale by 2050 and could drain the global economy of up to one hundred trillion dollars. India has the largest burden of drug-resistant pathogens. Similarly, in Jaipur, a team of scientists led by Sudipti Arora, assistant

director at Dr B Lal Institute of Biotechnology from January is tracking the pattern of AMR presence in sewage. "By studying sewage samples, we detect a range of microbes that can cause disease in an entire community. By studying further, we can understand how pathogens react to antibiotics and to what degree they are becoming resistant," Arora explained. She said through this exercise, they can provide doctors with relevant information about which antibiotics will no longer be effective at a population level. Since 2021, Arora and her team have been part of multiple

international projects, including the Asia-Pacific Network for Wastewater Monitoring for Covid-19 funded by the Australian government and the University of Wollongong. In one exercise in Nagpur in January 2021, researchers from the University of Nottingham studied multiple sewage samples and found the presence of rotavirus, norovirus from urban samples, and zoonotic viruses like chikungunya and rabies. She is currently exploring how mathematical models using artificial intelligence can be used to predict future outbreaks of diseases based on the routine data collected from cities.

India records highest number of Internet shutdowns globally in 2023

Officials in India continue to impose Internet shutdown orders over communal tension, violence, exams, and other reasons. Image for representation purposes only. India witnessed the highest number of Internet shutdowns in the world in 2023, a record it has held for the sixth straight year, according to a report released

The Internet was snapped 116 times in the country last year, the Keep It On coalition, a grouping of civil society bodies that advocates against Internet blockades, said. Officials in India continue to impose Internet shutdown orders over communal tension, violence, exams, and other reasons. This has drawn condemnation from civil society in India and around the world, especially in Manipur, where footage documenting atrocities committed during the ethnic violence have gone viral several weeks after the incidents actually took place.

More and more of these shutdown orders are being applied regionally rather

than locally, the report said, with "64 shutdown orders affect[ing] more than one district in the same State, province, or region, driven by 47 shutdowns in Manipur but also including the Statewide shutdown in Punjab in March". The Internet was shut down across Punjab during the manhunt for pro-Khalistani preacher Amritpal Singh, and multiple times across Manipur during the ongoing ethnic violence in the State. "The impacts [of the Internet shutdown in Manipur] were severe, particularly for women, as the shutdowns made it more difficult to document rampant atrocities, including murder, rape, arson, and other gender-based violence, and thereby hold perpetrators accountable," the report said. The publication of Internet shutdown orders — as required by guidelines laid down by the Supreme Court — was not done consistently, the report pointed out. "A total of 13 States and Union Territories imposed shutdowns in 2023, where seven of them disrupted Internet services five or more times,"

Madhuri Dixit was a bigger star than 'heroes' of her films, was paid more than Salman Khan; shocked India with her 'provocative' songs



Madhuri Dixit redefined the Bollywood actress — she could be both sensual and coy in the same film, played the vengeful widow and melted the screen with her million-dollar smile. Even in the '80s, she didn't fear kissing a much older actor (Vinod Khanna in *Dayavan*) on-screen, creating an uproar, nor did the idea of looking into the eye of her mother-in-law and defying her (*Beta*), in the '90s, ever make her uncomfortable. Madhuri Dixit Nene was more than just the 'Dhak Dhak girl' — the moniker in itself meant she was desired by the whole nation even as producers were willing to put money on her — the versatility in her roles, and her choices of ground-breaking scripts, which can be called 'bold' in the late '80s and the '90s, makes her an actor ahead of time, who managed to break the mould of the conventional heroine, despite her commercial success and gaudy, loud costumes. There is no denying that Madhuri was the commercial star who every director wanted to work with, but every once in a while she proved to be 'different' and 'unconventional' in her own right. Madhuri didn't merely play characters; she embodied them, infusing each role with depth and nuance. In an era dominated by stereotypes, she dared to break free, choosing roles that challenged societal norms and celebrated women's agency. One such standout performance was in the iconic film *Tezaab* (1988), where she portrayed the feisty Mohini. Her portrayal of a young woman navigating love amidst adversity resonated deeply with audiences, establishing her as a leading lady to reckon with. In the later part of her career, she shattered stereotypes with her portrayal of Chandramukhi in *Devdas* (2002), infusing the character of a tawaif with empathy and resilience, transcending the typical portrayal of courtesans in Indian cinema.

WHAT MAKES HER TIMELESS?

Madhuri consistently demonstrated her ability to take risks and defy expectations. In 1989, while experiencing her first blockbuster success with *Ram Lakhan*, she simultaneously took on the gangland drama *Parinda*. In 1991, she starred in the emotional love triangle *Saajan*, directed by Lawrence D'Souza, and the introspective *Prahaar*, directed by Nana Patekar. Two

years later, she delivered the iconic "Dhak Dhak" dance number in *Beta* and played a vision-impaired dancer in the understated *Sangeet*. Even at the height of her success, as seen in *Dil Toh Pagal Hai* (1997), she continued to challenge herself, working with Prakash Jha on one of his earliest films — the woman-oriented character drama *Mrityudand*. Her performance in the film is considered one of her best. The story centres on Ketaki, played by Madhuri, an educated and strong-willed young woman who is married into a family of zamindars, living in genteel poverty. Unwilling to conform to the traditional expectations placed upon her, Ketaki's voice of dissent inspires other women in the family to question their own roles and status within society. One of the key strengths of *Mrityudand* lies in its subtle approach to addressing feminist themes. Her ability to seamlessly transition between commercial blockbusters and more introspective films not only broadened her range as an actress but also contributed to her enduring appeal and influence in the Indian film industry. The 1994 film *Anjaam*, directed by Rahul Rawail, featuring Madhuri and Shah Rukh Khan, initially failed to make an impact at the box office but eventually garnered a cult following for Madhuri's portrayal of a woman who rises to the occasion. The film revolves around the struggles of a woman, portrayed by Madhuri, who avenges the murder of her husband. *Anjaam* tackles the critical issue of violence against women. While the film may have been underrated during its release, its powerful storytelling and strong performances, particularly by Madhuri, eventually led to its recognition as a 'rare' gem in Hindi cinema. Madhuri and Juhi Chawla's 2014 film, *Gulaab Gang* may not be considered a cinematic masterpiece, but there's undeniable excitement in witnessing the diva confidently kneeling villains with a swagger. Her portrayal of the lead character exhibits a sense of dignity and showcases her versatility as an actress. What's particularly noteworthy is her willingness to take on a film that defied expectations, working with a rookie director (Soumik Sen) and a lower budget than she was accustomed to in the action genre. During a press conference held in Mumbai, Madhuri spoke about choosing



Gulaab Gang and why it was a pathbreaking film. She said, "I'm trying to think of any movie in the past that in that setting of a Bollywood potboiler, has women in the key roles. A movie with all the masala, all the dialogue-baazi, and yet with a female protagonist and antagonist. A woman playing that kind of a role was fascinating, I thought because it changes the rules in one go. It's like throwing down a bowling ball and watching the pins go flying." Abhishek Chaubey's *Dedh Ishqiya* sees Madhuri falling for another woman, played by Huma Qureshi. Abhishek had admitted that the initial "explicit" version of the script featuring lesbian themes made Madhuri hesitant about the project. It was a choice not many actors of her stature would make, considering "same-sex" love was still considered a taboo both onscreen and in life. It is the pre-Section 377 era we are talking about. In an interview with entertainment journalist Raja Sen, Abhishek said, "She (Madhuri) told me about her fears, and I addressed it: This is exactly how I'm going to treat it. If you're observant, you'll get it fairly easily. However, if you aren't watching carefully, you don't get it, and that's it. It doesn't harm your enjoyment of the movie. There were absolutely no inhibitions. She was all systems go."

Madhuri's rise to stardom was nothing short of meteoric. After a brief setback, her journey began with a series of successful films, starting with *Dayavan* and *Tezaab* in 1988. The following year, she delivered powerful performances in *Tridev*, *Parinda*, and Subhash Ghai's *Ram Lakhan*, establishing her as the leading lady in Bollywood, who would guarantee box-office success. With each hit, her star power grew exponentially, and the film industry took notice. Madhuri's demand skyrocketed as she showcased her talent and versatility, leading to an impressive number of releases — nine in 1989 and ten in 1990. This also meant that she not only overshadowed her male co-stars but also charged a higher fee for her films — something that was unfathomable at that time. In one of their biggest films together, *Beta*, Anil Kapoor played a naive son, blind to his stepmother's evil intentions, while Madhuri portrayed a strong woman, challenging her husband's mother. Her perfor-

mance, especially in the suggestive song "Dhak Dhak" was the most striking aspect of the film. "Beta should have been called 'Beti,' people tell me," Madhuri once said. Anil naturally felt overshadowed by the spotlight on his costar. "She only started *Dil* because Anil didn't have dates at the time, and Aamir Khan, who had a string of unsuccessful films following his 1988 debut hit, *Qayamat Se Qayamat Tak* — 'was a nobody,'" trade analyst, Amod Mehra told *The Caravan*. Mehra recalled how as her superstar status grew, "Nobody wanted to take on Madhuri anymore." Even if these actors weren't threatened by Madhuri herself, they might have taken issue with the strong characters she played. "Most of her roles were that of canny, independent women — bright students or feisty professionals who didn't tolerate nonsense, especially from their leading men. Mainstream directors such as Subhash Ghai — even in the loud, testosterone-filled *Khalnayak*, ostensibly a vehicle for Sanjay Dutt — always ensured that they wrote substantial parts for her," he urged. Madhuri became the reigning queen of Bollywood in the '90s. Once producers realised that her name on the marquee ensured a strong box-office opening, she began to outshine her heroes. For instance, in *Hum Aapke Hain Koun..!*, not only did she enjoy higher billing than the hero, Salman Khan, but she was also paid a then-astronomical Rs 2.7 crore for the film, more than almost anybody else at the time, reported *The Indian Express*. "This is what happens when the heroine becomes bigger than the hero," Mehra commented, adding "Stories and films have to be built around her stature. So they become heroine-oriented films — which then don't work at the box office." In an old video clip, that surfaced on Reddit, Madhuri, a guest on Anupam Kher's talk show, engages in a candid conversation. Anupam brings up the subject of Madhuri earning more than her co-star Salman in *Hum Aapke Hain Koun..!* With a big smile, Madhuri playfully responded, "Well, agar yeh baat chali hai toh chalne do," humorously implying that she didn't mind if people believed the speculation. In a 2006 interview with *Filmfare* magazine, SRK, who worked with Madhuri in *Devdas*, *Dil Toh Pagal Hai* and *Hum Tumhare Hain Sanam*,

Shortening the gap between bail and release

Bail proceedings stand at the crossroads of constitutionally guaranteed personal liberty, and the demands of criminal law that often infringe upon it. The court's duty to safeguard liberty does not end with a mere grant of bail but extends to ensuring prompt compliance with procedure, to secure immediate release. Recently, the Delhi high court expressed concerns about the delays in release by jail authorities, leading to prolonged incarceration. While calling for standardised and expeditious release processes, the HC reiterated that deprivation of liberty for even a single day is one day too many. Once bail is granted, the subsequent processes related to verification of sureties and execution of bonds should be set into motion immediately. However, these procedures are often neglected or left unprocessed resulting in unjust, extended periods of incarceration.

Bail entails conditional release, with or without sureties. Upon a bail order, the release occurs when present and future conditions, both monetary and non-monetary, are fulfilled. The Supreme Court has repeatedly cautioned against imposition of onerous bail conditions ordinarily, as they often are far from the socio-cultural realities of the majority of inmates seeking release. The law prescribes that such conditions on sureties, and bond amounts are to be ascertained based on the individual's circumstance. To order the release of a person on conditions, they possibly cannot meet, is to strip them of their liberty. In January 2023, 5,000 such individuals remained in jail despite being on bail, demonstrating the failure of existing safeguards to ensure liberty. A step towards bail reforms

Bail can be granted either on a personal or surety bond — it is essentially a guarantee. While release on a personal bond requires only the individual's guarantee to appear at future court proceedings, bail on surety bonds requires a third party to stand as a guarantee. So surety bonds can involve property papers, vehicle registrations, cash, promissory notes, etc, which will be forfeited if the person flees on bail. During the bail grant, courts have the discretion to decide on bond amounts and surety conditions or simply rely on a personal bond. Anecdotal evidence indicates that individuals frequently do not have persons to stand as sureties for their release. Despite this, the courts attach burdensome monetary and surety conditions, making it bound to fail.

As early as the 1980s, the apex court stressed the importance of bail on personal bond, especially when the individual has strong community ties and poses no significant risk of non-appearance. In the spirit of liberty, the default approach of courts should therefore be to resort to personal bonds, unless surety bonds are necessary, and conditions that unequivocally warrant a monetary bail bond or surety can be demonstrated. Such a deliberate shift in judicial decision-making will alleviate the need for many individuals to undergo additional procedures, and also relieve the burden on the understaffed police force. When bail is made conditional on surety requirements, it must go through

verification and execution procedures, involving the police. This could mean scrutinising documents, validating surety address proofs, and any other information necessary to satisfy the court or the jail superintendent. This process can be notably time-consuming and is additionally based on the subjective satisfaction of the authority verifying and executing the bond, resulting in a delayed release. The recent ruling by the Delhi High Court offers an opportunity to address this by adopting a standardised practice to ensure immediate release. Streamlining processes An efficient standard procedure hinges on two pillars: stringent timelines and simplified processes.

The process must ensure that once bail is granted, the journey to release is set in motion. Verification conducted by the police must be within a reasonable yet strict time frame. If the incarcerated individual is unable to meet bail conditions within seven days, it must be the responsibility of the courts, or jail superintendents to ensure that bail conditions are modified to secure immediate relief. The Bharatiya Nagarik Suraksha Sanhita, 2023 envisages the jail superintendent as a bail guardian, wherein they are tasked with applying for bail. A natural corollary, suggests they also ensure that bail orders reach their logical conclusion and that persons incarcerated are released immediately. The highest court places power and duty on the trial court to suo moto take up cases for relaxing or modifying conditions, when bail conditions remain unmet for a month. Therefore, when dealing with such a case, it becomes the



responsibility of the court to re-evaluate the bail terms and reconsider release on a personal bond. Any procedure developed should focus on incorporating and indeed strengthening existing court directives, focus on strict timelines, and lay down a simple process for all persons to access and avail justice. Such a procedure will also protect individuals against undue harassment from law enforcement. Despite clear laws and straightforward procedures for granting bail, the actual implementation remains inconsistent. Post-bail processes are convoluted, relying on subjective criteria and necessitating the involvement of numerous stakeholders. This complexity disproportionately affects individuals from marginalised backgrounds. Our approach to bail decision-making must evolve to align with the ground realities. The quality

of a nation's civilization is often gauged by the efficacy of its criminal justice system. In India, the principle of justice demands that deprivation of liberty occurs only through a procedure that is just, fair, and reasonable. Therefore, the criminal justice system must operate with the utmost diligence to serve and safeguard its most vulnerable members.

Shrutika Pandey is a lawyer and researcher specialising in access to justice. She engages in developing strategies to advance the rights of undertrial prisoners through legal representation, research, and advocacy. Ragini Nagpal is a lawyer practising in New Delhi. She actively works on child protection issues, including providing legal representation to children in conflict with law, and victims of child sexual abuse.

5G users in India consume 3.6 times more data than 4G: Report

New Delhi: 5G users in India are using approximately 3.6 times as much mobile data traffic compared to 4G since its launch in October 2022 by Prime Minister Narendra Modi, a report showed on Wednesday. The average monthly data traffic per user also surged by 24 per cent year-on-year in 2023, reaching 24.1 gigabytes per user per month. The 5G device ecosystem in India is rapidly evolving, with approximately 17 per cent of active 4G devices, totalling 134 million out of 796 million, now being 5G capable. "5G data consumption has been four times faster than 4G in India", according to the 'Nokia Mobile Broadband Index' report. In 2023, users consumed 17.4 exabytes per month with a CAGR of 26 per cent over the past five years. The launch of 5G has emerged as a significant catalyst for the growth in data usage, contributing to 15 per cent of all data traffic in 2023, the findings showed.

"What is immediately obvious is the incredible proliferation of 5G technology across India and the increasing demand for super-fast 5G data speeds," said Tarun Chhabra, Head of Mobile Networks Business at Nokia (India). 5G traffic has shown substantial growth across all telecom circles, with metro circles leading the



In 2023, the average monthly data traffic per user witnessed a 24% year-on-year increase, reaching 24.1 gigabytes per user per month.

charge and reaching a 20 per cent share in the overall mobile data traffic. Enhanced 5G availability and performance, coupled with the availability of a wide range of affordable devices, as well as the introduction of new data-intensive apps and ser-

vices, will accelerate future 5G growth, the report showed. The rise of 5G Fixed Wireless Access (FWA) will also serve as a key enabler for new services in both the home and business with FWA users expected to consume an estimated 2.5 times more data than average 5G users, the report noted.

2024, a bellwether year for the US

We're sitting inside an old house in Sweet Auburn in downtown Atlanta where the park ranger, a middle-aged white woman in the National Park Service uniform of dark and light olive green, is giving us a screen tour of Dr Martin Luther King Junior's family house. The house is next door but is undergoing restoration and is slated to remain shut for a few months. So we're doing the next best thing i.e. looking at its pictures on a TV screen. The house is impressive. "It had heating, a bathtub and a garage... all the amenities of its time," she tells us in her slow and deliberate southern drawl. Sweet Auburn was in the words of civil rights activist of the 1950s John Wesley Dobbs the "richest street in the world" where African-Americans lived. But Sweet Auburn is today mostly known for MLK Jr's final resting place, which lies further down the road in a beautiful pool of cascading water, each step bearing a line from his speeches. The one that stayed with me was: "Until justice rolls down like water". It is a poetic summation of Dr King's struggle against the official segregation policy of many southern states. As a first-timer in Atlanta, there were a few things on my checklist. The first of them happened to be the Martin Luther King Jr. National Historical Park, which bears his and his wife Coretta Scott King's graves, a museum, the church where he was pastor, his birth home and the Gandhi promenade to honour the Mahatma, whom Dr King admired a great deal for his non-violent freedom movement. It is February, in a leap year, and it is Black History Month which means a month of celebrating the achievements of African Americans. Especially those who have helped expand the horizons of white Americans towards understanding the extent of damage years of institutionalised slavery, segregation and the rapaciously wicked 'Jim Crow laws' can do to the human spirit. Jim Crow was a pejorative term for a black man and the eponymous laws aimed at keeping a permanent lid on black self-esteem and aspirations. Till as late as 2020, when 46-year-old George Floyd was murdered in full public view by police officer Derek Chauvin, the world has seen images of this hateful racial legacy continue in surprising ways.

In a Pews Centre study titled Race in America 2019, 71% of its black population felt that race relations had worsened during the Trump Presidency. Donald Trump's ambitious plans of building a wall on the Mexican border as well as his untrammelled amplification of far-right bigotry had helped him garner the support of many Americans. And by the looks of his current bid, it seems he will get a repeat term. As the news of the mindless murder of Laken Riley, a nursing student, in nearby Athens (Georgia) spread, followed by the capture of a suspect, a Venezuelan immigrant, right-wing opinion-makers upped the ante. Georgia Governor Brian Kemp was quick to question the Biden administration's laxity on illegal immigrants. Trump went a few steps further pronouncing "What Joe Biden has done on our border is a crime against humanity". The USA of today isn't unlike many other developing countries that are struggling with contradictions: like extreme wealth and extreme poverty. In Atlanta's downtown area, the homelessness is unmissable. Barely a few hundred metres from the famous Mercedes



Benz Stadium I spot a row of camping tents, just off the main street. There are (mostly) black men at every street corner asking for a dime. You get asked for money on the subway trains too. I got asked many more times on the way to Martin Luther King Jr. National Historical Park than I would've had I been walking around Connaught Place.

Atlanta is often hailed as the cultural capital of the American South, and that it is. I had a wonderful cab drive listening to a podcast about Aretha Franklin's music and its message of non-violence, especially at the height of the civil rights movement. Instances were cited about how nightclubs were picketed by white mobs in order to prevent Aretha from performing there. Although that sort of in-the-face discrimination may not be there today, there are remnants of it in different forms. The election of Maynard Jackson (grandson of John Wesley Dobbs mentioned earlier) as Georgia and Atlanta's first African-American mayor in 1973 marked a significant milestone in the city's history. It must be added here that other southern states like Louisiana, Tennessee, and South Carolina had had black mayors way back in the 1860s. Jackson's mayorship signalled a shift towards greater representation and inclusion of black leaders in local government. However, even to a cursory observer, there are very clear disparities in the quality of life between white and black communities. One of the primary reasons for homelessness in Atlanta (and elsewhere in the US) is the institutionalised racism in US housing policies. One study conducted by the National Alliance to End Homelessness found that African Americans were disproportionately higher among individuals experiencing homelessness. Keeanga-Yamahtta Taylor's book, Race for Profit: How Banks and the Real Estate Industry Undermined Black Homeownership looks at this issue. In her book Taylor, a professor of African-American studies at Princeton, calls it "predatory inclusion". After the 1968 Fair Housing Act, which aimed to end housing discrimination in America—often referred

to as "redlining" where banks excluded black areas from housing loans. In her book, Taylor argues that the Act in fact helped realtors and mortgage lenders aggressively target black communities since its guarantees meant the government would pay lenders even in the case of foreclosures. So on the face of it, there was ample inclusion but the intent was to get low-income black buyers on board "because they were poor, desperate, and likely to fall behind on their payments". So while buyers were evicted from their homes, the lenders got their payments in full. Since 2024 is an election year there are also fears among the black electorate that they may not get their due representation. Race intersects politics in Georgia in many ways. The legacy of racial discrimination and inequality, deeply ingrained in the state's history, continues to shape perceptions and attitudes, particularly among minority communities. The spectre of voter suppression looms large, as efforts to restrict access to the ballot affect minority communities the most. One of the most notable episodes of voter suppression occurred in the lead-up to the 2018 gubernatorial election, where then-Secretary of State Brian Kemp, also a candidate for Governor, faced accusations of employing tactics that disproportionately affected minority voters. Under Kemp's tenure, Georgia implemented policies such as voter roll purges, exact match requirements, and polling place closures,

which critics argued impacted African-American and other minority communities. However, the wheels of change are turning. Hugely successful black Atlantans like singers Kanye West, Ludacris, Usher, Lil Nas X, actor Chris Tucker, and director Spike Lee among others have delighted global audiences with their talent and their unique southern sensibility. Among them actor-director and now movie mogul Tyler Perry is a category in himself. In 2015, Perry bought Atlanta's 330-acre former military base, Fort McPherson to turn it into film studios the likes of which the state had not seen before. Tyler Perry Studios is today the largest film production facility in the whole of the USA. In fact, his acquisition has kickstarted an exodus of the American film industry: from Los Angeles to Atlanta. Not to mention the fact that it has also made Tyler Perry the first African-American to have sole ownership of a major film production studio in the history of the United States. It is no mean achievement for Tyler, a native of Louisiana, to be able to reverse the race oppression of the deep South. He is in many ways, a living culmination of MLK Jr.'s favourite song: 'We Shall Overcome'. Dhiraj Singh is associate dean and director of Dadasaheb Phalke International Film School and department of Media and Communication at MIT World Peace University, Pune. The views expressed are personal

India now home to over 150 two-wheeler EV startups

New Delhi: Driven by conducive government policies and incentives towards a green future, India now has more than 150 two-wheeler electric vehicle (EV) startups, a new report said on Wednesday. According to an analysis by global investment advisory firm Bernstein, the Indian EV segment is expected to grow

15-20 times to reach annual sales of 15-20 million units over the next decade.

"Around 85 per cent of the 65 models launched last year were such products — high-speed as against speed and range-constrained products, which used to be a feature of the startups," according to the Bernstein report.

The science of untreated solid waste

On Monday, the Supreme Court raised alarm bells about Delhi's solid waste crisis. Terming it "horrifying" and "a great danger to the environment", it directed authorities to come out with a concrete action plan failing which the court would pass "drastic orders". Though it is Delhi that has been called out, solid waste management is an issue that affects most Indian cities and towns. The definition of 'solid waste' differs from place to place, Shyamala Mani, an expert in waste management, currently an advisor at the Centre for Chronic Disease Control (CCDC) and Public Health Foundation of India (PHFI), clarifies that in India, this usually refers to non-liquid waste generated from households and commercial setups. This includes what is popularly known as wet waste, dry waste and domestic hazardous waste. Industrial waste, construction and demolition debris, electronic waste, and sewage are technically outside this umbrella.

How is solid waste treated?

Management of solid waste begins with the segregation of garbage into various categories at source. The variety of processes that are undertaken to effectively deal with each of these categories encompasses what we call 'treatment'. For example: paper, glass and some plastics can be reused or recycled. Household food waste like vegetable peels, bones and leftovers are biodegradable and they can be composted right at home. This happens via aerobic composting, a biochemical process mediated by naturally occurring microorganisms which break down wet waste into an organic fertiliser called compost. Food waste from vegetable markets and restaurants can be treated in the same way, however whole vegetables, fruits and cooked food degrade at a very fast rate. "This gives off foul smells and hence needs a more efficient system" explains Mani. This category of wet waste is more suited for anaerobic decomposition, where the waste is subjected to microbial degradation in the absence of oxygen. This process releases methane-rich biogas which can be used as a fuel or to generate electricity. It takes place in biomethanation or biogas plants, sometimes referred to as waste-to-energy plants. Though the smallest in percentage, hazardous waste - comprising sanitary and chemical wastes - is arguably the toughest to treat. The other major challenge is non-recyclable plastic. While there are technologies that can manage plastic waste such as reverse catalysis which can potentially convert simple plastics back to petroleum, and paving roads with melted plastic waste, both these technologies have problems. There are prescribed treatments available for various types of waste, however, none of this means anything unless solid waste is segregated at source. Despite the hype around several cleanliness campaigns, this is not done in most of our country. Subsequently, mixed waste is collected from door to door and deposited in open landfills or sometimes taken to incinerators or biomethanation plants.

What happens if solid waste is not treated?

According to Soumya Prasad, who researches the impact of garbage on health and ecology at Nature Science Initiative in Dehradun, the first casualty of garbage



dumps is animal life. "It's a place where large quantities of food are available, so in the first 24 to 48 hours, all kinds of wildlife, from flies and dogs to cows, monkeys, leopards and elephants start congregating," she said. Studies show that a staggering proportion of our livestock have plastic in their guts; this seriously affects the health of the animals, reduces their milk production and increases their maintenance costs. Similarly, a large number of reptiles, birds and fishes die from getting entangled in plastic waste. Garbage pileups also increase the frequency of human-wildlife conflicts. The economic costs are expected to be significant, but estimates are hard to come by.

What happens to waste in a landfill?

Waste collected from our homes usually ends up in landfills that are situated on river and lake beds as these are open and unclaimed areas. The odours and fumes from these dumps seriously affect communities living close by. Sometimes, the landfills catch fire and this exacerbates the issue. Groundwater is affected too. "The liquid part of the waste, known as leachate, seeps into the ground and enters aquifers quickly," Prasad says. Indeed, a study co-authored by Mani in 2018 showed that groundwater samples from residential areas around the Okhla landfill site in New Delhi were unfit for human consumption. Burning of mixed waste at low temperatures, which is what happens in most incinerators, results in the incomplete breakdown of solids points out Prasad. Organic pollutants, which are toxic and permanent, are released into the atmosphere. Incineration at higher temperatures, such as in brick kilns and cement factories, allows for a more complete breakdown and release of smaller molecules such as carbon dioxide. Whatever it is, Mani emphasises that incineration has to be seen as the very last resort, meant only for waste that cannot be treated in any other way. "They make sense only for cold countries like Sweden, where they double up as boilers used to heat up their homes,"

she said. According to Prasad, in the absence of source segregation, all that happens is the transfer of garbage from homes to the roadside, from roads to the hillside, from hills to the forest, and ultimately to the ocean. "The scale of our garbage generation is so high that it is idiotic to think that transportation (from site to site) or transition (from solid to gas) will solve the prob-

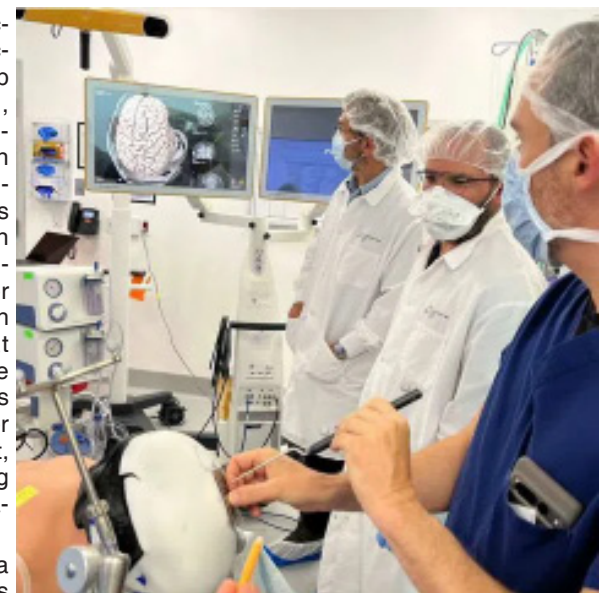
lem," she said. So, what can help? She points to the example of individuals such as Poonam Bir Kasturi, Founder of Daily Dump, who passed away recently and is credited with having started a compost revolution in the country. "If individuals are able to create such an impact, then surely it's possible for government agencies, too," she says.

Neuralink now accepting applications for 2nd chip implant participant: Elon Musk

New Delhi: Elon Musk on Friday said that his brain-computer interface company Neuralink is accepting applications for the second participant for a chip implant. Earlier this month, Neuralink achieved 100 successful days with the first human — Noland Arbaugh — implanted with a brain chip. "This is our telepathy cybernetic brain implant that allows you to control your phone and computer just by thinking," said the tech billionaire. Musk said that Arbaugh himself would tell the second participant about his life-changing experiences after the chip implant. In an X post, Neuralink said that redefining the boundaries of human capability requires pioneers.

"If you have quadriplegia and want to explore new ways of controlling your computer, we invite you to participate in our clinical trial," said the company. After surgery, Arbaugh used the implant to control his laptop from various positions, including while lying down in bed. He also used the brain chip to play a Mario Kart game on a Nintendo Switch

console. An X user commented: "Humanity and Technology at its finest". Before the



brain chip implant, Arbaugh could use a mouth-held tablet stylus (mouth stick) that had to be put in place by a caregiver.

He now plays online computer games, browses the web and uses a MacBook laptop, all by controlling a cursor with his mind.

Sensitivity is the basis of Poetry: Dr. Trikha



Chandigarh (JAG MOHAN THAKEN), September 7: Director of Haryana Sahitya Akademi's Urdu Department, Dr. Chandra Trikha, said that 'sensitivity is the basis of poetry'. In poetry, the writers express their feelings, experiences, and observations in a sensitive manner. Dr. Trikha expressed his thoughts after launching Dr. Sarika Dhupar's book "Udgaar" at a literary event organized by Abhivyakti Sanstha in the Microbiology Department of Panjab University. Dr. Sarika Dhupar has recently received the "State Teachers Award" for her outstanding academic work.

Dr. Trikha appreciated Dr. Sarika's efforts and extended his best wishes for her future endeavours. He said that through poetry, a poet expresses the sensations within. If the reader finds their own emotions in the poetry, then the poet's writing is considered meaningful. Dr. Sarika Dhupar's poetry collection "Udgaar" also meets this criterion.

Earlier, Dr. Sarika Dhupar briefly discussed her poetry collection "Udgaar" and mentioned that it is her second publication, following "Abhisar". She acknowledged the significant support of her family in writing this collection. Dr. Sarika has uniquely interpreted the roles of Manthara

and Kaikeyi from the Ramayana in her poetry, highlighting Manthara's dedication to her mistress Kaikeyi despite societal negativity. She became emotional while expressing her heartfelt emotions and how she wove them into a poetic garland called "Udgaar". Renowned writer and psychology

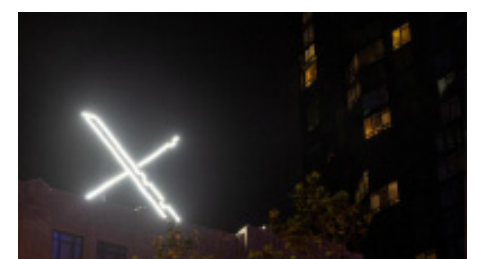
professor, Prof. Gurdeep 'Gul' Dheer, also praised Dr. Sarika Dhupar's poetry collection "Udgaar", citing examples of how poets and writers express their emotions through their work. Vijay Kapoor, a well-known poet, writer, and actor, also appreciated the emotions conveyed in Dr. Sarika

Dhupar's poetry collection "Udgaar". Dr. Sarika Dhupar's mother, Dr. Manju Arya, shared her daughter's journey from childhood to the present, showcasing her talent to the audience. The event was attended by several educators and writers, including Dr. Hemant Verma.

X global affairs head Nick Pickles resigns

.Pickles, who joined the company in 2014, said he had decided to leave X several months ago and was working with the Chief Executive Linda Yaccarino through the transition. "After more than ten years, tomorrow will be my last day at X. It's been an incredible journey," he said. It was not immediately clear what his next plans were, or why he made the decision to quit. Elon Musk-owned X and Nick Pickles did not immediately respond to Reuters requests for comment outside of regular business hours. In June, X's head of business operations, Joe Benarroch left the company,

the Wall Street Journal reported, citing people familiar with the matter. Pickles had started at X as a senior manager in their London office and was appointed the Vice President of Global Affairs for X in 2023 after serving in multiple roles, his LinkedIn profile showed. The Financial Times reported that he was the company's spokesperson in battles with multiple governments, including in Brazil, which said last week it was suspending access to the social network in the country. The popular social media platform missed a court-imposed deadline to name a legal represen-



tative in Brazil, triggering the suspension. Musk has argued that Supreme Court Justice Alexandre de Moraes was trying to enforce unjustified censorship.