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DreamIAS



INTERNATIONAL

EXPRESS VIEW ON PRESIDENT BIDEN'S EXIT: TRIUMPH AND TRAGEDY

Four years ago, Joe Biden was hailed as the saviour of the Democratic Party from the unprecedented political and economic shockwaves generated by Donald Trump's presidency (2017-21). Trump's first term in the White House culminated in the January 6 riots by his political supporters protesting against the alleged unfairness of the 2020 polls that elected Biden as president. As a long-standing figure of the Washington establishment, who had served for decades in the US Senate and as Vice President of President Barack Obama (2009-17), Biden was expected to heal the political divisions within America, revitalise US democracy, and restore Washington's global image as a responsible great power. This Monday, Biden walks out of the White House with a deeply divided Democratic Party and a triumphant return of Trump to the White House for a second term with an impressive political mandate.

It is no secret that Biden was bitter over the Democrats ousting him as the party's presidential candidate last summer and replacing him with Kamala Harris. Biden was confident that only he could defeat Trump, but Democrats thought he was a certain loser and panicked and changed horses midstream. In his farewell speech and interviews, Biden insisted that history would treat his presidency more kindly than his contemporaries. His critics say Biden yielded too much ground to the Democratic Party's left-wing factions that promoted a new woke ideology, opened doors for unrestricted immigration, triggered massive inflation, and ignored the concerns of the traditional support base among the working class. Biden rightly takes credit for the big effort to restore America's manufacturing and technological edge that it had ceded to China over the last few decades. Biden ended his term with rancour about the tech titans of America betraying him to support Trump. In his farewell address, he warned against the dangers of growing economic inequality and a rising oligarchy. He also slammed the new "techno-industrial-complex" in America that has garnered far too much power.

The critics of his foreign policy point to the chaotic withdrawal from Afghanistan, the weakening of deterrence in Europe that emboldened Russian President Vladimir Putin to invade Ukraine in 2022, and his failure to persuade Israel's Benjamin Netanyahu to stop his brutal military campaign in Gaza and accept a ceasefire. There is much praise, however, for Biden's Asia policy, including an intense effort to upgrade the strategic partnership with India. Biden had reinforced the Indo-Pacific initiative unveiled in Trump's first term, elevated the Quad to the summit level, created a new AUKUS forum for nuclear powered submarine and other advanced military technological cooperation with Australia and the United Kingdom, set up trilateral arrangements with Japan and South Korea in North East Asia, and another quad with Australia, Japan and the Philippines. On the bilateral front with India, the initiative for cooperation on critical and emerging technologies was the highlight. Arguably, Biden has been the most "pro-India" president in recent decades and in Trump's second term, Delhi will hope it can build on that legacy.

INAUGURAL DRAMA

Republican Donald Trump has been sworn in as the 47th President of the U.S. after his decisive victory in the November 2024 election. He marked the start of his second innings with a slew of executive orders, actions and directives that set the tenor for his administration's policy agenda over the four years. Significant among these are the nearly 1,600 pardons issued to those prosecuted for their role in the riot at the U.S. Capitol in 2021, the U.S.'s exit from the Paris Climate

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Agreement and the World Health Organization, the ending of birthright citizenship, protected under the U.S. Constitution's 14th Amendment, for children of undocumented migrants and those on temporary visas, a proposed 100% tariff on BRICS nations — both of which could impact Indians considerably — and 25% tariff on Canada and Mexico from February 1, a declaration of national emergency on the U.S.'s southern border with Mexico, and reversing 78 executive orders and memoranda of his predecessor, Joe Biden. Striking optics of Mr. Trump's swearing-in was the positioning of tech bosses Elon Musk, Jeff Bezos, Sundar Pichai, and Mark Zuckerberg, prompting speculation on whether the incoming administration would have shades of a de facto "oligarchy"; and Mr. Musk, who is heading the new government's efforts to reduce waste and inefficiencies, giving a crowd what appeared to resemble a Nazi salute. As it stands, however, some, if not most, of these executive orders will face legal challenges — the attempted reading down of the 14th Amendment has already been challenged in court.

The note that the second Trump administration has struck in terms of its policy agenda appears to be innately hostile to the progressive agenda of the Democrats. To a considerable extent, that is to be expected, as the two parties diverge significantly on matters such as the economy, immigration and reproductive rights. Yet, previous Republican governments have often sought to build bridges with Democratic colleagues in Congress and at the State level, to find bipartisan consensus in key policy areas rather than risk deadlock and internecine conflicts over policy design and resource allocation. In this instance, however, the federal government trifecta and a sympathetic Supreme Court stacked with conservatives might mean that the Trump team needs to rely even less on support from across the aisle than it did during the Trump first term. Further, Mr. Trump appears to be emboldened by the breadth of his election victory to allow unconventional, even bizarre, policy priorities to enter the proposed agenda, including ideas such as the takeover of the Panama Canal, the de-recognition of transgender rights, threatening Denmark with a plan to takeover Greenland, and the prospect of travel bans for certain countries. Perhaps America is getting what it voted for.

WHO IS RIGHT

President Donald Trump's decision to withdraw the United States from the World Health Organization (WHO), based on charges of bias, is stunningly short sighted, and deeply concerning to the global health community. Pundits are predicting that this move, if not withdrawn, or reconsidered, may well unleash the butterfly effect — a cascading set of unpredictable consequences arising from even the smallest of changes in a system. Soon after his inauguration, Mr. Trump wasted no time in announcing the beginning of the process of ending the U.S.'s membership of WHO. In language that smacked of petulance, Mr. Trump, as he signed his first batch of executive orders, declared: "The World Health [Organization] ripped us off." The U.S. will now leave the United Nations health agency in 12 months' time and stop all financial contributions to its work. He accused the organisation of mishandling the COVID-19 pandemic, and of being partisan towards China, though the U.S. contributed more to its coffers. The move has not been entirely unexpected: during his previous term as U.S. President, he relentlessly criticised WHO for acting slow and being "owned and controlled by China"; in 2020 he initiated a move to halt funding to WHO, though it was scuppered as his term came to an end.

Why is the withdrawal of the U.S. significant? For starters, Mr. Trump is right — the U.S., which is a founding member of WHO, is also its biggest financial backer, contributing around 18% of its overall funding. Withdrawal of these funds will seriously impact health programmes being implemented across the world, including interventions for HIV/AIDS, tuberculosis and the



eradication of certain infectious diseases. WHO is also involved in ensuring equity of access to life-saving drugs for people across the world, building stronger health systems, detecting and preventing disease outbreaks. If Mr. Trump could set his petulance aside, it would be clear that global health does not operate in silos, and neither a stern countenance nor physical boundaries can keep pathogens out of one's own geography. If any lessons have been learned at all from the COVID-19 pandemic, it is that no one is safe until everyone is safe, and that collaboration among nations, and open sharing of data and technology are essential to tackle pandemics. WHO has reached out to the U.S., hoping that it will reconsider its decision and engage once again with it. As fantastic as it may sound, medicine is no stranger to miracles of science, and the health community hopes one more will restore the U.S. back to WHO's fold.

AN EXIT OF BLUSTER

President Donald Trump has fired his howitzers at multilateralism by signing into decree the United States' withdrawal from the 2015 Paris Agreement. This sets records that are in a class of their own. The U.S. is the only country to have withdrawn thrice from a climate agreement — beginning with George W. Bush's withdrawal, in 2001, from the Kyoto Protocol. Mr. Trump, of course, sets a new low by being the only President to withdraw from a climate agreement twice. In the run-up to the decree, there is a pall of gloom in the climate world over what the U.S.'s latest exit might mean, particularly when the globe has finished its first full calendar year above the 1.5° Celsius mark.

The U.S. is the second largest emitter of greenhouse gases. By virtue of being the most powerful economy, it has arrogated to itself the mantle of 'global leadership' in addressing climate change. But now that the leader has had the spottiest track record of keeping to the terms of a significant agreement — one, whose rule book the U.S. played a major role in compiling — perhaps it is time for the rest of the world to reassess America's role in addressing climate change. Under both Republican and Democratic governments, U.S. domestic policy on greenhouse gas emissions has been subservient to business interests. Oil and gas production increased under the Biden administration. The U.S. remains the world's largest crude oil producer, achieving record production in 2023. The country is also the world's largest producer of gas and, in 2022, became the world's largest exporter for liquified natural gas (LNG). Mr. Trump has only committed to add on to this already substantial base. The U.S. is critically short of achieving its target of greenhouse gas emissions. As of 2022, the U.S. has achieved only about one-third of its 2030 emissions reduction target. In the last weeks of his Presidency, Mr. Biden increased the U.S.'s emission-reduction commitments to 61%-66% of 2005 levels by 2035. This too, calculations suggest, will be insufficient to meet a 1.5° C target. Private capital propping up renewable energy has grown exponentially since Mr. Bush, and is now too substantial for Mr. Trump and his financial backers to ignore. While it will take a year for the exit to be formalised, it is likely that the U.S.'s behind-the-scenes engagement — especially at the next climate meet (COP 30) in Brazil in November 2025 — will continue. The politics of Mr. Trump suggests that he is not averse to running with the hare and hunting with the hounds.

TRUMP EFFECTIVELY PULLS U.S. OUT OF GLOBAL CORPORATE TAX DEAL

President Donald Trump on Monday declared that a global corporate minimum tax deal "has no force or effect" in the U.S., effectively pulling America out of the landmark 2021 arrangement negotiated by the Biden administration with nearly 140 countries.



Mr. Trump, in a presidential memorandum issued hours after taking office, also ordered the U.S. Treasury to prepare options for “protective measures” against countries that have — or are likely to — put in place tax rules that disproportionately affect American companies.

The European Union, Britain and other countries have adopted the 15% global corporate minimum tax, but the U.S. Congress never approved measures to bring the U.S. into compliance with it. The U.S. has a roughly 10% global minimum tax, part of Mr. Trump’s landmark 2017 tax cut package approved by Republicans.

But countries that adopted the 15% global minimum tax may be in a position to collect a “top-up” tax from U.S. companies paying a lower rate.

Mr. Trump’s memo referred to such actions as “retaliatory.”

“Because of the Global Tax Deal and other discriminatory foreign tax practices, American companies may face retaliatory international tax regimes if the United States does not comply with foreign tax policy objectives,” the memo reads.

“This memorandum recaptures our nation’s sovereignty and economic competitiveness by clarifying that the Global Tax Deal has no force or effect in the United States.”

After years of stalled talks on global tax issues hosted by the Paris based-Organization for Economic Cooperation and Development (OECD) to end competitive reductions in corporate tax rates, former U.S. Treasury Secretary Janet Yellen agreed to the deal in October 2021.

Mr. Trump’s Treasury nominee Scott Bessent said on Thursday that following through with the global minimum tax deal would be a “grave mistake.”

Sharing taxing rights

Another part of the OECD negotiations were aimed at a new arrangement to share taxing rights on large, profitable multinational companies with countries where their products are sold.

The effort was aimed at replacing unilateral digital services taxes that target largely American technology firms from Meta Platforms’ Facebook to Apple.

But these so-called “Pillar 1” talks largely stalle and without U.S. participation, countries including Italy, France, Britain Spain and Turkey may be tempted to reinstate their digital taxes, risking retaliatory tariffs from Washington.

HOW DOES TRUMP’S 75-DAY ORDER AFFECT THE TIKTOK BAN?

The story so far:

On January 20, after taking office as the 47th President of the U.S., Donald Trump signed an order that gave TikTok a 75-day lifeline. The short-video sharing platform went offline for U.S.-based users just a day earlier following a protracted legal and political battle that ended in a federal ban. TikTok appealed to the U.S. Supreme Court. The court upheld the ban, making both Google and Apple remove the app from their app stores. Web-hosting platforms were also ordered to cut ties with the platform or face fines of as much as \$5,000 per user.



Based on what law was TikTok banned?

The controversial law, 'Protecting Americans from Foreign Adversary Controlled Applications Act,' signed by former President Joe Biden aimed at blocking apps controlled by the U.S.'s foreign adversaries from operating in the country. It specifically targeted TikTok, owned and controlled by ByteDance, a Chinese firm. The goal is to prevent potential threats to national security from apps that may be used for espionage, data collection, and other harmful activities.

How does the law apply?

Under the law, some apps controlled by foreign adversaries can be prohibited from being distributed, maintained, or hosted in the U.S. However, it does allow an exception for apps that undergo a "qualified divestiture," meaning they can be sold or restructured in a way that reduces foreign control.

To enforce the ban, the U.S. Department of Justice (DoJ) has been given the authority to investigate and impose penalties on any entity that violates the law. The penalties are determined based on how many users the app has. TikTok has over 170 million U.S.-based users. If the app is banned, users are entitled to request and receive all their account data — posts, photos, and videos— before the prohibition is enforced, ensuring they don't lose access to their content.

Any challenge to specific actions or decisions under the law must be made within 90 days of the decision. Legal disputes related to the law will be handled exclusively by the U.S. Court of Appeals for the District of Columbia.

What does Trump's order say?

Mr. Trump has noted that the timing of this enforcement is problematic as it doesn't give his administration enough time to assess the national security risks posed by TikTok or to negotiate a solution to address the risks without immediately shutting down the platform. And so, he has directed the Attorney General not to enforce the Act's provisions for 75 days. During this period, the DoJ is prohibited from imposing penalties on platforms distributing or maintaining the app.

Can the President override a ban upheld by the Supreme Court?

While a section of legal experts may recognise the broad authority granted to the President under the Constitution of the U.S. in matters of national security and foreign relations, others will raise concerns that Mr. Trump's order could undermine the Congress's authority to legislate.

Another way to look at the order is through the lens of political expediency given the popularity of TikTok. Mr. Trump may be attempting to balance national security with public relations and economic interests. In this context, the order is a temporary measure to avoid an immediate shutdown and give the new administration time to negotiate a solution with TikTok's parent company, ByteDance, or implement mitigation measures.

Ultimately, the Supreme Court may play a key role in determining whether Mr. Trump's order is consistent with constitutional principles, especially if this matter is challenged in court. If the case reaches the apex court, it could result in a landmark ruling on the separation of powers and executive authority in national security matters.



CHANGED DYNAMICS

The first 48 hours of U.S. President Donald Trump's second term have been proof of the radical shifts he plans over four years, with the overarching theme of putting "America First". While the strengthening of India-U.S. ties during his first term should give those in New Delhi attempting to strategise for this term some comfort, his moves now make it clear that it will be necessary to expect the unexpected as well. The slew of Executive Orders changes U.S. policy on energy, the environment and climate change, trade and global taxes, citizenship routes, health, border control and immigration. But the new administration has shown it is keen to engage India: External Affairs Minister S. Jaishankar, who was invited along with other Quad Foreign Ministers at the inaugural ceremony, was the first Foreign Minister to hold a one-on-one bilateral meeting with new U.S. Secretary of State Marco Rubio. The readout of their meeting and the Quad Foreign Ministers' joint statement make it clear that the two sides are on the same page on the Indo-Pacific partnership, concerns over Chinese actions, critical and emerging technology cooperation, strategic and defence ties. Yet, some Trump-Rubio pronouncements have set alarm bells ringing, notably on trade, immigration and the cancellation of citizenship by birth. On trade, India has escaped being named in the first round of tariff announcements, but Mr. Trump's comments on a "100% tariff" against all members of the BRICS emerging economies grouping raised the suspense and a possible market reaction. In his first term, he had withdrawn India's GSP status affecting Indian exporters. On immigration, he has announced a "border emergency", authorised a crackdown on illegal and undocumented migrants, and plans to crush the hopes of H-1B visa holders and other Indians working there, by cancelling the automatic path to citizenship for any children born to them in the U.S. With 7,25,000 undocumented Indians, any action to deport them in large numbers, beginning with about 18,000-20,000 on the Immigration "final list for removal", will be a major crisis for India.

In this context, Mr. Rubio's statement talks with Mr. Jaishankar that they must address the "irregular migration" should be taken seriously. So too should Mr. Trump's pronouncements insisting on investments in the U.S., hiring in the U.S., and the buying of U.S. energy. The new administration's geopolitical outlook appears to be set on devaluing the multilateral world order, withdrawing from U.S. commitments of support to WHO, the WTO, and the UN, and putting NATO allies on notice. Given the signs, New Delhi must be prepared for a U.S. administration that will not be particularly sensitive to India's concerns or be a willing partner in India's growth unless it sees a benefit for itself, and instead chart a more transactional course, while moving to limit the damage from any adverse actions of the Trump era.

DONALD TRUMP CLAMPS DOWN ON IMMIGRATION: WHAT IS THE CBP ONE APP AND WHY WAS IT CLOSED?

Donald Trump Deportation Programme: Among his first steps as President, Donald Trump cut off access to a mobile app that allowed migrants to apply to legally enter the US as asylum-seekers.

The CBP One entry programme, instituted by former President Joe Biden, had allowed thousands of migrants to schedule appointments at entry points across the US-Mexico border. In a press release on Monday (January 20), the US Customs and Border Protection said that it had initiated "removal of the scheduling functionality" for the app and "existing appointments have been cancelled."



According to an AP report, the app had enabled entry for nearly one million people since January 2023. Thousands of appointments scheduled till February were cancelled.

What is CBP One?

The CBP One app worked as a lottery system that awarded 1,450 people daily with appointments at eight border crossings. It allowed migrants to plan interviews with immigration authorities to seek immigration parole before reaching the US border.

Formally launched in January 2023, the app replaced a convoluted system of exemptions to Title 42, a pandemic-era public health order used by the US government since March 2020 to deny asylum. Until 2023, asylum-seekers were forced to wait in large camps in Mexico waiting for an exemption to Title 42, unless they tried to cross the border illegally. Since then, CBP One has served as the sole route for asylum-seeking amidst a larger crackdown by the Biden administration on illegal border crossing.

The app's implementation was not a breeze – migrants seeking an appointment often complained of technical glitches and long waits for an initial screening to determine if they were qualified to apply.

According to a report in The Washington Post, CBP One was originally launched by US Customs to control commercial trucking companies trying to schedule cargo inspections. This was repurposed and relaunched to become the sole route for asylum-seekers from Mexico, Cuba, Haiti, Nicaragua, and Venezuela.

And what is immigration parole?

CBP One allowed asylum seekers to seek immigration parole without securing formal admission into the US. According to US Citizenship and Immigration Services (USCIS), this enables an individual “who may be inadmissible or otherwise ineligible for admission into the United States, to be paroled into the United States for a temporary period.”

Parole may be granted for urgent humanitarian reasons or “significant public benefits”, according to the authority’s discretion. Such parole cannot be used solely to avoid normal visa processing procedures and timelines, to bypass inadmissibility waiver processing, or to replace established refugee processing channels.

Why is curtailing immigration a key policy priority for Trump?

Throughout his presidential campaign, Trump has maintained that Biden had allowed an influx of undocumented migrants and said he would launch a massive deportation programme throughout his presidential campaign.

He followed through with this promise in his inaugural address, promising to “begin the complete restoration of America and the revolution of common sense”.

“All illegal entry will immediately be halted, and we will begin the process of returning millions and millions of criminal aliens back to the places from which they came,” he added.

Removing the app comes amidst a series of sweeping presidential executive orders curtailing immigration, including declaring a national emergency at the US southern border and launching the process to end birthright citizenship.



This action may prove to be counterproductive: CBP One has long been touted by Homeland Security staff as having driven down migrant crossings and providing asylum-seekers with an orderly way to apply to the US. The closure of the app will likely trigger an influx of illegal immigrants across the southern border.

The American Civil Liberties Union (ACLU) challenged the order in the US District Court in Washington on Monday.

UNDOCUMENTED MIGRANTS IN U.S.: VITAL WORKFORCE, LOW CRIMINALITY

United States President Donald Trump introduced sweeping changes immediately after being sworn in, which could have a lasting impact on millions of undocumented migrants in the U.S. and the hundreds of thousands of people seeking entry at the country's borders. Mr. Trump pledged to "deport millions and millions of criminal aliens," referring to undocumented migrants living in the country.

While Mr. Trump has frequently claimed that former President Joe Biden allowed 15-20 million illegal immigrants into the country, official figures estimate that there are around 11 million. Other estimates suggest that there are 13-14 million illegal immigrants. But none of these comes close to Mr. Trump's assertions. Around 2.1 lakh Indians were included in these estimates (as of 2022).

Nearly 80% of the estimated 11 million undocumented migrants currently in the U.S. arrived before 2010, 1.5 million of them entered decades ago, between 1980 and 1990.

Reports state that Mr. Trump has also dismissed top immigration court officials who are responsible for deciding who gets asylum and who does not. There are more than 3 million cases pending in immigration courts. In addition, Mr. Trump has shut down the mobile app CBP One, the sole platform for requesting asylum in the U.S.

In just over a year, the backlog in immigration courts increased from 2.4 million to 3.5 million (Q4 of 2023-Q4 of 2024). Notably, the number of Indians attempting to enter the U.S. illegally has surged in recent years. A decade ago, U.S. border authorities stopped more than 1,500 Indian illegal migrants. This figure rose sharply to 96,917 in 2023 and 90,415 in 2024. There was a similar spike seen among Indians seeking asylum in the U.S.

Moreover, a Bill passed by the Senate empowers officials to detain and even deport undocumented migrants who are arrested for or charged with even non-violent petty crimes such as shoplifting. Mr. Trump has blamed migrants for fuelling violent crime in the country. But data show that the violent offending rate of undocumented migrants is significantly lower than that of U.S.-born citizens. The rate measures the frequency of criminal offenses committed by a specific population.

The rate of violent crimes committed by undocumented migrants was half than that those committed by U.S.-born citizens and significantly lower than those done by documented immigrants.

A significant majority of undocumented migrants contribute to the U.S. workforce, particularly in construction and agriculture. With discussions of mass deportations gaining momentum, business owners in these sectors are increasingly concerned about finding viable alternatives.

A 2018 study by the Centre for Migration Studies of New York estimated that 5.5 million undocumented migrants are part of the U.S. workforce. If deported en masse, the most immediate



impact would be felt on construction sites, in farms, and in restaurants. Essential services such as landscaping, laundry, auto repair, and safety and sanitation would also face severe disruptions.

The recent changes aim to deport undocumented migrants without a clear understanding of their numbers. Many have lived in the U.S. for decades, contribute significantly to essential services, and lead lives with relatively lower levels of criminal activity.

THE IMPACT OF H-1B VISAS ON THE TECH INDUSTRY IN U.S.

The last week of 2024 didn't exude the holiday spirit for several folks in the tech world. A section of billionaires, politicians, and tech workers were piqued by a specific U.S. immigration policy that allows skilled foreign workers to work in the country.

A verbal mudslinging began after President-elect Donald Trump appointed Sriram Krishnan as his senior policy advisor on Artificial Intelligence (AI). Within days after the announcement, Laura Loomer, a prominent MAGA supporter, wrote rancorous social media posts against the decision, calling Indian immigrants "third world invaders." The right-wing influencer then doxxed Mr. Krishnan, sharing his domicile details scoured from the U.S. Federal Election Commission (FEC). While Ms. Loomer apologised for doxxing Mr. Krishnan, she remains rooted in the idea that the number of skilled foreign workers must be reduced in the U.S. as the programme is negatively impacting native workers.

Mr. Krishnan, an Indian immigrant who came through the ranks of top tech firms in the Silicon Valley, supports simplifying the legal process for tech workers to enter the U.S. His stance has been echoed by several tech billionaires. His to-be-peer in the Trump administration, former PayPal executive David Sacks, came in support of the a16z's general partner and clarified that Mr. Krishnan did not advocate for the removal of restrictions for a green card but was only seeking the removal of country-specific caps.

Elon Musk and Vivek Ramaswamy, both immigrants and Mr. Trump's picks to overhaul the U.S. government, are supportive of the skilled foreign worker visa programme. The world's richest man even said he would "go to war" to defend the programme. In an X post, he wrote: "The reason I'm in America along with so many critical people who built SpaceX, Tesla, and hundreds of other companies that made America strong is because of H1B." The H1-B issue has not just split MAGA supporters; it has also turned some prominent Democrats, who were pro-immigration during the election season, into H-1B programme bashers. For instance, Vermont Senator Bernie Sanders said the main function of the H1-B visa "is not to hire 'the best and the brightest' but rather to replace good-paying American jobs with low-wage indentured servants from abroad."

Heated debates on the H-1B visa programme are not a new phenomenon. It helps to know the programme's brief history — at least from the time it went through a major revision in the 90s — and its net impact on wages and productivity in the U.S.

A brief history

In the early 90s, the U.S. enacted the Immigration Act of 1990 to increase the number and diversity of immigrants coming into the country and to adapt to the changing economic and social needs of a globalising world. The legislation significantly revised and expanded the H-1B visa programme.



Apart from mandating employers to file an application with the labour department that hiring H-1B workers will not adversely affect wages and working conditions of U.S. workers, the law established an annual cap of 65,000 new H-1B visas for each fiscal year.

These changes led to a substantial increase in the number of H-1B visas issued and made the programme more accessible to U.S. employers seeking high-skilled foreign workers. This, in turn, contributed to the programme's role in attracting skilled workers at a time when American companies were facing intensifying global competition, especially from Japan in high-tech and manufacturing sectors.

Silicon Valley was emerging as a global tech hub, creating unprecedented demand for scientists, technology professionals, engineers, and mathematicians (STEM workers). Traditional industries in other parts of the country were also undergoing rapid computerisation, requiring STEM talent that wasn't readily available in the domestic workforce.

The cap on H-1B visas were hiked to 1,95,000 during the dot-com boom before returning to the base cap. Then, in 2004, an additional 20,000 slots were added for advanced degree holders from U.S. universities. Since 1990 to 2019, roughly 4.5 million H-1B visas were issued, and in the fiscal year of 2023, 72% of approved H-1B petitions were for beneficiaries born in India, and 65% of all approved H-1B petitions were for workers in computer-related occupations.

The impact of H-1B workers

A 2013 study, titled 'STEM Workers, H-1B Visas, and Productivity in U.S. Cities' by economist Giovanni Peri, found that H-1B workers had a positive impact on the wages of native college-educated workers and overall productivity in U.S. cities.

The study examined the influx of foreign STEM workers through the H-1B visa programme and their impact in 219 cities between 1990 to 2010. It noted that H-1B-driven increases in STEM workers boosted wages for native college-educated workers. A one percentage point increase in the foreign STEM share of a city's employment led to an increase of around 7-8 percentage points in the wages of native college-educated workers.

Also, wages of non-college-educated native workers saw a positive, though smaller, increase. These workers experienced a 3-4 percentage point increase in wages for every one percentage point increase in the foreign STEM share of employment. The study estimates that the growth in foreign STEM workers may account for 30% to 50% of aggregate productivity growth in the U.S. between 1990 and 2010. Fast forward to 2024, and the impact of foreign workers on U.S. wages and productivity continued to be positive.

In a follow-up study, titled 'Immigration's Effect on US Wages and Employment Redux,' economists Alessandro Caiumi and Giovanni Peri note that immigrants and native workers complement each other in the labour market. In their research that examines the broader impact of immigration on the U.S. labour market between 2000 and 2022, they found that immigrants often specialise in different and complementary occupations compared to native workers.

In a separate study that documents the impact of H-1B workers on innovation and product commercialisation, Harvard Business School Professor William Kerr notes that skilled immigrants have contributed significantly to U.S. patent activity, particularly in emerging technologies. Jennifer Hunt, Professor of Economics at Rutgers University, has shown in her research that H-1B



workers who transition to permanent residency tend to be particularly innovative and entrepreneurial, often founding companies that create jobs for U.S. workers.

Talent conundrum in the age of AI

Despite the positive impact of H-1B workers on the U.S. economy, opponents of the visa programme are clamouring for restrictions and lowering the number of legal immigrants. Some criticisms, particularly the ones against Indian tech services companies like Infosys and Cognizant, are well-laid.

These companies developed a business model that combined offshore development centres in India with on-site presence in the U.S., facilitated by H-1B visas. This model, sometimes called the “global delivery model,” transformed how technology services were delivered to U.S. companies, but it did not truly make a path-breaking innovation for the U.S. economy.

These companies typically rank among the top H-1B sponsors annually. For instance, in many years between 2005-2019, Indian companies accounted for a substantial portion of all H-1B visa petitions. This has raised concerns about the programme’s concentration among top IT services firms.

It will do well for the incoming Trump administration to look into these practices and redraft a skilled worker immigration policy that prioritises the skill and educational background of an individual over a company’s profit-making interests.

IS FRANCE’S INFLUENCE IN WEST AFRICA OVER?

The story so far:

On January 1, Ivory Coast President Alassane Ouattara announced that French troops would withdraw from the country by the end of the month. On December 26, in Chad, France handed over its military base in Faya-Largeau and began the withdrawal of troops following the termination of a defence cooperation agreement in November. On December 3, Senegalese President Bassirou Diomaye Faye called for the closure of all French military bases, commenting that their presence was “incompatible” with the country’s national sovereignty. Senegal, Ivory Coast, and Chad have joined three West African countries — Mali, Niger, and Burkina Faso — asking for French troop’s withdrawal, marking a major blow to France’s waning influence in the region.

Why did Chad, Ivory Coast, and Senegal ask for French troop’s withdrawal?

First, the narrative on incompatibility with national sovereignty. France has around 1,000 troops in Chad, 600 in Ivory Coast, and 350 in Senegal. Since independence, France had colonial pacts with these former colonies to maintain economic, political, and military influences, referred to as ‘Françafrique’. In Senegal and Ivory Coast, French troops have been stationed since 2014 as part of Operation Barkhane. For Chad, the defence pact existed for decades and does not align with its security requirements. Chad’s President Mahamat Daby says ending the defence agreements is like taking back national sovereignty. Ivory Coast and Senegal have followed in similar footsteps for a reciprocal relationship that respects each other’s independence and sovereignty.

Second, public dissatisfaction over French presence. French troops have been fighting insurgent groups linked to the Islamic state and al Qaeda across West Africa since 2014. Despite their



military presence, French troops failed to quell the insurgency in the region. Besides, it has spread, degenerated, and intensified across the region. This raised anti-French sentiments alongside a public demand for their withdrawal.

Third, West Africa's quest to move beyond France. Recently, many West African countries have shown interest in diversifying their relations from traditional colonial to new partners. The military governments in West Africa, Mali, Niger, and Burkina Faso, have built military ties with Russian mercenaries to fight insurgency. For military leaders, Russian mercenaries do not come with the baggage of adhering to democratic values. Besides, Russia has successfully spread an image as a better security provider in Africa.

What does French withdrawal mean for African countries?

For Africa, French withdrawal means the end of France's decades-long influence. However, in Mali, Niger and Burkina Faso, French withdrawal and Russia's arrival has not addressed or contained insurgency. Rather, these three countries rank among the top in the Global Terrorism Index 2024 by the Institute for Economics & Peace. The military regimes have strengthened in the region with the new Alliance of Sahel states between Mali, Niger, and Burkina Faso. The common anti-French sentiments would likely bring Chad, Senegal, and Ivory Coast to join the Sahel alliance and an opportunity to boost regional counter-terrorism efforts.

What does the withdrawal mean for France?

The withdrawal would have four implications — first, the obituary of the 'Françafrique'. Under French President Emmanuel Macron, the withdrawal marks the end of "Françafrique," giving prominence to maintaining a strong economic and diplomatic foothold. Second, the decline in political influence affects economic relations. Since 2010, President Ouattara has been in term with support from France; however former president Gbagbo's reemergence in 2020 challenged political stability. Without political influence, fulfilling France's economic interests can be problematic. Third, a waning military presence would impact international reputation. The military has supported pro-France African leaders to maintain political and economic stability. French Armed Forces have been stationed in support of UN operations since the Ivorian Civil War. Therefore, projecting France as a global fighter against terrorism and a defender of international values and human rights will be undermined in the new reality. Fourth, Mali, Burkina Faso, and Niger have pushed out French troops involuntarily, which are now either replaced by Russian mercenaries or engulfed in a military coup, making French influence impossible. It is uncertain for the Ivory Coast, given its political and economic ties with France even after independence.

Is there a larger waning European influence in Africa?

In the geopolitical era of conflicts, Europe's declining presence and the competition from Russia and China in Africa were the least focused. The EU is struggling with the shifting political landscape, security issues from the war in Ukraine, and larger economic strain; therefore handling autocracies, migrants, and anti-Europe sentiments has been put on the back burner. In the last few decades, Germany, France, and the U.K. have called down their development funding, leading to increased military coups and greater involvement of external actors. To gain a political and security presence in Africa, Russia has filled the military vacuum, while China asserts its economic influence through the Belt and Road Initiative. The EU's trade surplus has declined by 15%, from 55 billion euros to 35 billion euros between 2022 and 2023. In comparison, China maintains a surplus of more than 70 billion euros.



Militarily, Russia has benefited from the troops' withdrawals. Whether this will change the right-wing governments in Europe is worth asking. The 2024 manifestos of these parties can be useful in this regard. Their policies are more security-oriented in managing borders and migrants, rather than being economically driven. In the coming years, Europe's foreign policy approach will be more inward-looking, with few EU members looking to expand markets into Africa while facing competition from China.

WILL THE CEASEFIRE IN THE GAZA STRIP HOLD?

The story so far:

After 15 months of fighting, which was triggered by Hamas's October 7, 2023 attack in which about 1,200 people were killed, Israel and Hamas have accepted a ceasefire in Gaza. On Saturday, Israel's 24-member cabinet gave approval to the agreement, which is expected to be implemented in three phases. The deal, which came into force on Sunday, was reached in talks mediated by Qatar, Egypt and the U.S. If it holds, it would provide a desperately needed relief for Gaza, the tiny strip along the Mediterranean Sea which was relentlessly bombed by Israeli Defence Forces (IDF) over the past 15 months in which over 46,000 Palestinians were killed and almost the entire population of the enclave displaced.

What are the terms?

The deal is to be implemented in three phases. In the 42-day first phase, Hamas will release 33 hostages, most of those alive, and Israel will free roughly 1,000 Palestinian security prisoners. Israel will also partially withdraw the IDF from Gaza, and allow the entry of about 600 trucks of humanitarian aid into the enclave every day. The IDF is expected to withdraw from the Netzarim Corridor, which separates northern Gaza, which has seen massive Israeli bombardment from Day one of the war, from the south, where most of the enclave's population have been pushed into. If the Israeli troops withdraw from Netzarim, it would allow some of the displaced Gazans to move from the south and centre to the north.

But in the first phase, Israeli troops will remain in the Philadelphi Corridor on the Rafah crossing — which means Israel will continue to monitor Gaza's border with Egypt. On the 16th day of the first phase, discussions are expected to begin on the second phase. If the first phase is implemented as per plan, 65 hostages will still be in Hamas's captivity and Israeli troops will still be there at Philadelphi and some buffer zones in Gaza. In the second stage, Hamas will be required to release most of the remaining living hostages and both sides should declare a permanent end to the hostilities. The third phase will involve discussions on the 'day after'.

Why did both parties accept a ceasefire now?

The deal accepted by both parties is not essentially different from the deal offered eight months ago. Hamas had announced earlier that it would accept a deal, provided the war is brought to a permanent end. In May, Israeli Prime Minister Benjamin Netanyahu dismissed the agreement, saying Israel would continue its military offensive in Gaza until it meets its objectives.

But a lot has changed in the region since.

Israel now believes its regional standing has become stronger. Hezbollah, the Lebanese militia organisation, has lost most of its top leadership in Israeli attacks. The IDF has killed most of the leaders of Hamas, including Yahya Sinwar. Israel carried out a massive air strike in Iran in October,



targeting the Islamic Republic's air defences and other military facilities (to which Iran hasn't responded yet). More importantly, the fall of the Assad regime in Syria has further weakened Iran's so-called 'axis of resistance' in West Asia. Mr. Assad's Syria was the land bridge between Iran and Hezbollah. Since this land bridge is disrupted, Hezbollah will find it difficult to rearm itself. These developments have also strengthened Mr. Netanyahu's political standing at home.

These factors probably influenced him to change his position about a deal with Hamas. But that's not all.

After months of fighting, Israel failed to meet its declared objectives in Gaza. When he launched the war, Mr. Netanyahu said Israel would dismantle Hamas. Israeli attacks have degraded Hamas's militant infrastructure, but Hamas reinvented itself as an insurgency, its original avatar. Antony Blinken, the U.S. Secretary of State, recently said the American assessment was that Hamas recruited as many fighters as it had lost.

The inability to meet its objectives through military means might also have influenced Israel's leaders to take a more pragmatic view of pausing the conflict and getting the hostages freed. Then, there is the Trump factor.

What role did the U.S. play?

The Biden administration has been pushing for a ceasefire for long, but it also offered full support to Israel's war in Gaza. Washington continues to supply weapons to Israel and offer diplomatic protection to Israel at global fora. Mr. Biden's refusal to use effective pressure tactics on Israel meant that the latter continued the war despite Washington's public call and private diplomatic push for a ceasefire. But now, Mr. Biden can claim that a ceasefire was reached just days before he left the White House. Arab and Israeli media claim that the Trump factor also played a key role. Donald Trump had earlier said that "all hell will break loose" if there was no agreement between Israel and Hamas before he takes office on January 20 as the 47th President of the U.S. Mr. Trump's West Asia envoy Steve Witkoff had met the negotiators and the Israeli leadership last week. Times of Israel reported, quoting Arab officials, that Mr. Witkoff managed to achieve in a single meeting more than what President Biden did the whole year.

Mr. Trump is known for his pro-Israel positions. But he had promised during his campaign that he would bring the wars in West Asia and Ukraine to an end if returned to the White House. If the war is brought to an end, besides the humanitarian angle, it would offer some stability to West Asia. Mr. Trump may not like the U.S. being drawn into another never-ending war in the region. Also, if the Israel-Hamas war pauses, the Houthis of Yemen could stop attacking Israel and the ships passing through the Red Sea. Both the U.S. and Israel carried out air strikes against the Houthis in recent months but failed to stop their attacks.

If the Red Sea calms down, normal freight traffic through the Suez Canal could resume, tamping down the inflationary pressure on the global economy.

Why is Phase 3 going to be a challenge?

As of now, the focus of both parties would be on implementing the first phase — which has a fair chance of being implemented. The second phase could see the exchange of more hostages for prisoners. But the real challenge would be Phase 3. Hamas has demanded a complete withdrawal of Israeli troops from Gaza. Israel now realises that it cannot dismantle Hamas — the organisation would survive in one way or another. On a more practical note, Israel doesn't want to leave Hamas



as a ruling or fighting force in Gaza. This poses a dilemma for Israel. If it agrees to end the war and leave Gaza, Hamas would remain a militant insurgency in Gaza. If Israel continues to stay in Gaza, there won't be a lasting ceasefire agreement and a war of attrition will go on.

IRISH PEOPLE'S SOLIDARITY WITH PALESTINE FORCES THE CLOSURE OF ISRAELI EMBASSY

On December 15, 2024, Israel pulled down the shutters on its embassy in Dublin and Israel's Foreign Minister accused Ireland of "anti-Semitic rhetoric" and of crossing "every red line" in their relations. Ireland's Taoiseach (Prime Minister) Simon Harris of the Fine Gael party was quick to reject that accusation, while asserting Ireland's stance of a two-state solution for Israel and Palestine. Earlier in May 2024, Ireland joined Spain and Norway in recognising the state of Palestine. And two weeks ago, Ireland joined South Africa's genocide case against Israel at the International Court of Justice (ICJ). Ireland has thus become the only country in Europe that has irked the Israeli government to this extent.

But the Irish seem to be rejoicing: social media has been aflutter with images of t-shirts with a watermelon (symbolic of the black-white-green-red Palestinian flag) and the word "Paddystinian".

Ever since Israeli forces escalated the violence in Gaza from October 2023, there have been local demonstrations as well as massive rallies in the island country's capital at least once a month, bringing together at least 2,000 in each, with people from other parts of the country travelling to participate in them. Many bring along their children and pets, many march along in their wheelchairs. The nearly 4-km rallies culminate at a set-up stage, with speeches and music sung by Irish, Palestinian, and other musicians. Richard Boyd-Barrett is often seen among the sea of people wearing a *keffiyeh* (the square checkered scarf long associated with Palestinian solidarity), in his trademark black jumper and jeans.

Speaking to *The Hindu*, Mr. Boyd-Barrett, who was elected Teachta Dála (Member of Parliament) from the People Before Profit (PBP) party in 2024 general election, said it is still a victory for the popular mobilisations in Ireland that Palestine became a core election agenda. "Religious sectarianism was used as a tool to enforce Ireland's colonial subjugation. Ireland witnessed a genocide in the form of what is called the famine. But it was actually enforced starvation by the British empire, which was closely connected to an apartheid-style system that systematically discriminated against Catholics in favour of Protestants. We have seen the same being inflicted on Palestinians, first by the British empire and then by the Zionist state. But there are also incredible parallels with resistance movements in both places," he said.

But Mr. Boyd-Barrett notes the Irish government's "double standard", given the prompt sanctions against Russia when it invaded Ukraine. "If Europe and the U.S. can rightly say that the Ukrainian people have the right to armed resistance against an illegal invasion, how can they simultaneously accuse Palestinians of being terrorists for engaging in resistance? I am sad that the Irish government is guilty of the same hypocrisy of many of the other European countries," he said, adding that the only difference is the Irish public opinion.

For now, there have been rumours that the building of the erstwhile Israeli embassy will be converted into a museum of Palestine, but nothing has been confirmed yet. Remembering the year he spent in Palestine just before the first *intifada* in 1987, Mr. Boyd-Barrett said a museum would rightly highlight the Irish and Palestinian similarities in colonial histories, and be an anti-racism educational tool, towards combatting the recent rise of the far-right in Ireland.



Mr. Boyd-Barrett, meanwhile, sees hope in the face of the unprecedented global solidarity with the Palestinians. “There is a particular responsibility on formerly colonised countries like Ireland and India, to always side with the oppressed,” he said.

RETURN OF THE BEGUM

Early morning of May 30, 1981, clouds from the Bay of Bengal lashed Chittagong. Through the heavy pitter-patter of rain on the roof of the Circuit House of Chittagong, President Ziaur Rahman heard the sound of gunfire. A man of action known for his bravery as a Pakistani soldier in the 1965 India-Pakistan war and later as a nationalist officer who rebelled against the Pakistani Army in 1971, Rahman was not someone to hide. Dressed in his night suit, Rahman came out to check the source of the gun fire and just then a hail of bullets literally sliced him into two halves.

The killers, however, failed in their plot to seize power as Abdus Sattar, a seasoned political figure, quickly took charge as President with Army Chief Hossein Mohammed Ershad’s support.

It was in this dramatic situation that Khaleda Zia, widow of Rahman, entered the political spectrum. She had reportedly fainted on hearing the news of the assassination of Rahman, but two and a half years later, Ms. Zia took over from Abdus Sattar. On January 13, 1984, Ms. Zia took charge of the Bangladesh Nationalist Party (BNP) that was founded by Rahman.

The death of Rahman also came at a critical time for the volatile country. On May 17, Mujib’s daughter Sheikh Hasina returned to Bangladesh.

Ms. Zia and Ms. Hasina came from different backgrounds. The former was the young wife of a Bengali officer in the Pakistani military and Ms. Hasina was the daughter of a firebrand anti-Pakistan figure. But in 1984, the two emerged as leaders of the two political alliances that opposed President Ershad.

Ms. Zia led a seven-party alliance and Ms. Hasina led a 15-party alliance against Ershad. In 1986, Ershad held a fraudulent election. Infuriated by the sham polling, the two alliances joined hands and finally dislodged Ershad from power in 1990.

After the fall of Ershad, the February 1991 election was won by the BNP and Ms. Zia, also known as Begum Khaleda, became the first woman Prime Minister of Bangladesh. But even as Ms. Zia was getting a grasp of the problems, a monstrous cyclonic storm killed nearly half a million people. Ms. Hasina sensed an opportunity and termed the BNP government incompetent. Despite the opposition, the BNP managed to win the 1996 election but had to give up power after the Awami League accused it of rigging the polls. Then Ms. Hasina became PM for the first time.

From 1991 till 2006, Ms. Zia dominated Bangladesh’s politics, along with her rival Ms. Hasina. She returned to power with the support of the Jamaat-e-Islami Bangladesh at the turn of the century and remained in office till 2006.

Boycott of elections

Though Ms. Zia was kept out of power by Ms. Hasina during the next 15 years, the BNP remained strong on the ground. While Ms. Zia took a backseat during the Hasina era, the day-to-day affairs of the party were handled by Mirza Fakhrul Islam Alamgir and Amir Khasru Mahmud Choudhury, who maintained the combative attitude of the party which boycotted election thrice — 2014, 2018 and 2024.



After being freed from detention following the fall of the Hasina government on August 5, 2024, Ms. Zia reiterated that she does not harbour any ill-will towards the currently exiled Ms. Hasina, giving a hint that she is waiting and watching how long the interim government led by Mohammad Yunus would last. While the BNP boycotted polls in the past, it is also known that the Hasina regime did not stop doctors from Johns Hopkins Hospital in the U.S. from flying into Dhaka to conduct a complex surgery on Ms. Zia in 2021.

With Hasina out of Bangladesh and the BNP enthused by the prospects of returning to power, Ms. Zia, 79, is once again in the limelight, but this time she is far more cautious. Earlier this month, an air ambulance from Qatar flew her for special medical care in London where she was reunited with her elder son Tarique Rahman who has been in exile since he was reportedly tortured by the military during the 2006-08 caretaker rule. Last week, Ms. Zia was acquitted in a 2008 corruption case, overturning a previous 10-year sentence.

In Bangladesh's fractious politics, Ms. Zia has been seen as a survivor. And her tactics will be tested once again whenever the interim government calls for elections.



DreamIAS



NATION

INDIA, BANGLADESH FARMERS CLASH AT INTERNATIONAL BORDER

Farmers from the bordering areas of West Bengal and Bangladesh clashed on Saturday at the Sukhdebpur border outpost in Malda district.

This incident occurred when some Indian farmers, like on normal days, had gone to their fields near their International Border. It was at the same border outpost that differences between the Border Security Force (BSF) and Border Guard Bangladesh (BGB) had surfaced over fencing a few days ago.

“Indian farmers accused Bangladeshi farmers working in the fields across the border of stealing the crop, due to which an argument started between the farmers of both the countries. The incident took a serious turn when farmers from both sides started gathering in large numbers and started abusing and pelting stones at each other,” a press statement issued by the South Bengal Frontier of the BSF said.

As soon as the incident came to the light, BSF and BGB jawans reached the spot and brought the situation under control.

The ruckus continued for some time but there were no reports of anyone being injured. Videos of the clashes were also telecast by local television channels.

The BSF statement said, “BSF advised Indian farmers to stay away from such disputes and asked them to inform BSF in case of any problem. BGB also played a positive role in controlling the situation and immediately took necessary action in its area to prevent the situation from worsening.”

The statement added that the BSF and the BGB unit commandants of the concerned area were also trying to establish better coordination among themselves.

QUAD MESSAGE TO CHINA: OPPOSE ANY ACTION TO ALTER STATUS QUO

US Secretary of State Marco Rubio held his first multilateral meeting on Tuesday as the foreign ministers of the Quad grouping – India, the US, Australia, and Japan – gathered in Washington DC and vowed to “strongly oppose any unilateral actions that seek to change the status quo by force or coercion”, a statement aimed at China’s assertive behaviour in the Indo-Pacific region.

- On his first day on the job, Rubio held talks with External Affairs Minister S Jaishankar and his Australian and Japanese counterparts Penny Wong and Takeshi Iwaya.
- In a joint statement, the four nations said officials would meet regularly to prepare for an upcoming leaders’ summit in India, likely this year.
- “We, the Secretary of State of the United States and the Foreign Ministers of Australia, India, and Japan, met today in Washington D.C. to reaffirm our shared commitment to strengthening a Free and Open Indo-Pacific where the rule of law, democratic values, sovereignty, and territorial integrity are upheld and defended,” a readout by the US State Department said.



- “Our four nations maintain our conviction that international law, economic opportunity, peace, stability, and security in all domains including the maritime domain underpin the development and prosperity of the peoples of the Indo-Pacific. We also strongly oppose any unilateral actions that seek to change the status quo by force or coercion,” it added.
- “We are committed to strengthening regional maritime, economic, and technology security in the face of increasing threats, as well as promoting reliable and resilient supply chains. We look forward to advancing the work of the Quad in the coming months and will meet together on a regular basis as we prepare for the next Quad Leaders’ Summit hosted by India,” it further said.
- “Significant that the Quad (foreign ministers’ meeting) took place within hours of the inauguration of the Trump Administration. This underlines the priority it has in the foreign policy of its member states,” Jaishankar said on X after the meeting.

Do You Know:

- Following the Indian Ocean tsunami of December 2004, India, Japan, Australia, and the US created an informal alliance to collaborate on disaster relief efforts. In 2007, then PM of Japan, Shinzo Abe, formalised the alliance, as the Quadrilateral Security Dialogue or the Quad.
- But this nascent group was hampered by a lack of cohesion amongst members and accusations that the Quad was nothing more than an anti-China bloc. Thus, the early iteration of the Quad, largely based on maritime security, eventually dissipated. In 2017, faced again with the rising Chinese challenge, the four countries revived the Quad, and broadened its objectives.
- Nonetheless, the Quad is not structured like a typical multilateral organisation, and lacks a secretariat and any permanent decision-making body (like the EU or UN). Instead, it has focused on expanding existing agreements between member countries and highlighting their shared values. Additionally, unlike NATO, the Quad does not include provisions for collective defence, instead choosing to conduct joint military exercises as a show of unity and diplomatic cohesion.
- In 2020, the trilateral India-US-Japan Malabar naval exercises expanded to include Australia, marking the first official grouping of the Quad since its resurgence in 2017, and the first joint military exercises among the four countries in over a decade. In March 2021, the Quad leaders met virtually and later released a joint statement titled ‘The Spirit of the Quad,’ which outlined the group’s approach and objectives. The first in-person meeting was held in Washington DC, later that year.
- The group’s primary objectives include maritime security, addressing the risks of climate change, creating an ecosystem for investment in the region, and boosting technological innovation. In 2020-21, the grouping also collaborated to combat the Covid-19 crisis, especially vis-à-vis vaccine diplomacy.
- Quad members have also indicated a willingness to expand the partnership through a so-called Quad Plus that would include South Korea, New Zealand, and Vietnam, amongst others.

WHY NEUTRAL EXPERT’S DECISION ON IWT IS A WIN FOR INDIA

The Neutral Expert appointed by the World Bank under the terms of the Indus Waters Treaty (IWT) has decided that he is “competent” to adjudicate on the differences between India



and Pakistan regarding the design of two hydroelectric projects in Jammu and Kashmir, vindicating New Delhi's long-held position.

- “The decision upholds and vindicates India’s stand that all the seven questions that were referred to the Neutral Expert, in relation to the Kishenganga and the Ratle hydroelectric projects, are differences falling within his competence under the Treaty,” the Ministry of External Affairs said on Tuesday.
- On Tuesday India welcomed Lino’s decision. In a statement, the Ministry of External Affairs (MEA) said, “India welcomes the decision given by the Neutral Expert under Paragraph 7 of Annexure F to the Indus Waters Treaty, 1960.
- The decision upholds and vindicates India’s stand that all seven (07) questions that were referred to the Neutral Expert, in relation to the Kishenganga and Ratle hydroelectric projects, are differences falling within his competence under the Treaty.”
- “It has been India’s consistent and principled position that the Neutral Expert alone has the competence under the Treaty to decide these differences. Having upheld his own competence, which comports with India’s view, the Neutral Expert will now proceed to the next (merits) phase of his proceedings. This phase will culminate in a final decision on the merits of each of the seven differences,” the MEA statement said.
- It said, “Being committed to preserving the sanctity and integrity of the Treaty, India will continue to participate in the Neutral Expert process so that the differences are resolved in a manner consistent with the provisions of the Treaty, which does not provide for parallel proceedings on the same set of issues. For this reason, India does not recognise or participate in the illegally constituted Court of Arbitration proceedings.”

Do You Know:

- The IWT was signed by India and Pakistan on September 19, 1960 to determine the distribution of the waters of the Indus and its tributaries.
- It was signed in Karachi by then Prime Minister Jawaharlal Nehru and then Pakistan President Ayub Khan after nine years of negotiations arranged by the World Bank.
- Under the IWT, India enjoys “unrestricted use” of the three “Eastern Rivers” (Beas, Ravi, Sutlej), whereas Pakistan controls the three “Western Rivers” (Indus, Chenab, Jhelum). This, in effect, gives India roughly 30% and Pakistan 70% of the water carried by the Indus River System.
- According to Article III (1) of the Treaty, “India is under obligation to let flow” waters of the Western Rivers to Pakistan.
- Pakistan objects to the design features of two hydroelectric projects currently under construction in J&K — the Kishenganga HEP on Kishenganga, a tributary of the Jhelum, and the Ratle HEP on the Chenab. Although they are “run-of-the-river” projects, which generate electricity without obstructing the natural flow of the river, Pakistan has repeatedly alleged that these violate the IWT.
- In 2015, Pakistan requested the appointment of a Neutral Expert to examine its technical objections to the projects. However, it unilaterally retracted this request a year later, and instead proposed adjudication by the Permanent Court of Arbitration (PCA).



- Article IX of the IWT provides for a graded three-level dispute settlement mechanism, in which disputes are first decided at the level of the Indus Commissioners of India and Pakistan, then escalated to the World Bank-appointed Neutral Expert, and only then to the PCA in The Hague.

SRI LANKAN MEDIA SPOTLIGHTS DISSANAYAKE'S 'BALANCING ACT' WITH BEIJING AND NEW DELHI

Following Sri Lankan President Anura Kumara Dissanayake's recent, four-day visit to China, analysis and commentary in local media pointed to the leader's "balancing act" with Beijing and New Delhi.

During Mr. Dissanayake's state visit from January 14 to 17, close on the heels of his India visit in December 2024, he announced a \$3.7 billion investment — "one of our largest FDIs" — from Sinopec for a refinery in the southern Hambantota district. Meanwhile, addressing a public rally of supporters following his return, Mr. Dissanayake said his government is discussing a joint venture with India to refurbish Second World War-era oil storage tanks in the eastern Trincomalee district and develop it as a hub.

Around Mr. Dissanayake's visit, Sri Lanka and China issued a 21-point joint statement, covering various bilateral matters. Sri Lanka sought more Chinese investment, and the two sides committed to the early conclusion of a comprehensive free trade agreement. While the joint statement made no mention of Chinese marine research vessels calling at Sri Lankan ports, an issue New Delhi remains highly sensitive to, the two sides agreed to continue maritime cooperation, and "pool their strength to build a maritime community with a shared future."

In its coverage since, Sri Lankan media pointed to the comparable, red-carpet honour and ceremonial welcome accorded to Mr. Dissanayake in both New Delhi and Beijing. In its latest editorial, *Sunday Times* observed that the two joint statements, issued with the governments of India and China, were "similar in content and intention".

'Wooing Sri Lanka'

"Both aspirants for global power status and leadership roles in the Global South are wooing Sri Lanka through a strategic lens: India through its 'Neighbourhood First and SAGAR' framework and China through the BRI," the editorial noted.

Meanwhile, Colombo-based analyst and disinformation researcher Sanjana Hattotuwa highlighted Sri Lanka's "careful diplomatic balancing" in both statements. Sri Lanka's joint statement with India focused heavily on "specific development projects" and "granular implementation details", while its statement with China emphasised cooperation in the Belt and Road Initiative and broader economic frameworks, he observed.

Following announcements on agreements inked with China, some detractors slammed the Dissanayake government for merely taking forward predecessor governments' initiatives with India and China, or for "compromising" Sri Lanka's interests.

Pubudu Jayagoda, from the Frontline Socialist Party — formed in 2012 by a breakaway faction of Mr. Dissanayake's Janatha Vimukthi Peramuna — accused the government of allowing India to control Sri Lanka's north and east, and China to control the southern parts of the island, Tamil daily *Virakesari* reported on Tuesday.



Acclaimed Sri Lankan cartoonists, often among the boldest and most astute commentators on domestic politics and economy, too, expressed their take on the competing interests of India and China in their recent cartoons, highlighting the tricky balance act facing Mr. Dissanayake, who has pledged to follow a non-aligned foreign policy.

RUBIO-JAISHANKAR DISCUSS 'IRREGULAR IMMIGRATION': HOW THE US IS DEPORTING MORE UNDOCUMENTED INDIAN IMMIGRANTS

In his first meeting with External Affairs Minister S Jaishankar in Washington DC on Wednesday (January 22), newly appointed US Secretary of State Marco Rubio raised the issue of “irregular immigration”.

If the Trump administration moves on deportations, among the first affected could be the 20,407 “undocumented” Indians, as of November 2024. These Indians are either facing “final removal orders” or are, currently, in detention centres of the US Immigration and Customs Enforcement (ICE). Of these, 17,940 “paperless” Indians are not in detention but are under “final removal orders,” and another 2,647 are in detention under ICE’s Enforcement and Removal Operations (ERO).

In recent years, there has been a “steady increase” in deportations of undocumented Indian immigrants from the US, Royce Murray, assistant secretary for border and immigration policy at Department of Homeland Security (DHS), had told The Indian Express during a virtual briefing last year. The US had deported more than 1,100 undocumented immigrants from India between October 2023 and September 2024, Murray had said.

Here is a look at the process of deportation carried out by the US, whether a deportee can appeal against it, who bears the expenses, and how many Indians were deported during the Biden Administration, and the previous Trump regime.

How does deportation from the US work?

Deportation is the process of removing a non-citizen from the US for violating immigration law. The US may detain and deport non-citizens who participate in criminal acts, are a threat to public safety; or violate their visa. The foreign national may be held in a detention centre before trial or deportation.

However, the US Immigration and Nationality Act (INA) sets forth a streamlined “expedited removal” process for certain foreign nationals who might have recently entered the US without inspection. Expedited removal may happen when a non-citizen comes to the US without proper travel documents; uses forged travel documents; or does not comply with their visa or other entry document requirements.

According to a document by the Congressional Research Service on “Expedited Removal of Aliens”, “Non-US nationals (aliens) who do not meet requirements governing their entry or continued presence in the US may be subject to removal.” It further says, “The expedited removal process, created by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, permits the Department of Homeland Security (DHS) to summarily remove aliens arriving at a designated US port of entry (arriving aliens) “without further hearing or review” if they are inadmissible”.



Many of the Indian nationals facing imminent deportation fall under this category, according to experts. Most of them are likely to have been apprehended either at a designated port of entry or near the international border when trying to enter, or shortly after entering the US.

Can a person appeal against deportation?

The rules say a non-citizen, classified as “alien” otherwise subject to expedited removal who expresses an intent to apply for asylum or a fear of persecution if returned to a particular country, is entitled to administrative review of that claim before being removed.

Asylum is the only form of relief that gives such a non-citizen a permanent legal foothold in the US. A non-citizen, classified as “alien”, who shows a credible fear of persecution is placed in formal removal proceedings rather than expedited removal.

Who bears the cost of deportation?

Before the deportation is carried out, one might be able to leave the US at their own expense. This is known as voluntary departure. However, the ICE Air Operations (IAO) — ICE’s primary air transportation division — facilitates the transfer and removal of non-citizens via commercial airlines and chartered flights in support of ICE field offices and DHS initiatives.

IAO also conducts special high-risk charter flights on an as-needed basis to repatriate non-citizens subject to final orders of removal to locations worldwide and may include non-citizens who have failed to comply with final orders of removal, security risks, or other risk factors. IAO stages a total of 12 aircraft at its operational locations in Arizona, Texas, Louisiana, and Florida.

How has deportation from the US to India increased in recent years?

According to the US Immigration and Customs Enforcement’s Fiscal Year 2024 Annual Report, Honduras, Mexico, Guatemala and El Salvador remain top countries where citizens are deported or repatriated from the US. However, India figures above China and almost equals Brazil.

In 2019, around 1,616 Indians were deported, which increased to 2,312 in 2020. In the post-Covid years of 2021, 2022, 2023, also the Biden years, the numbers were significantly lower — 292, 276 and 370 respectively. But it rose to 1,529 last year. In comparison, 517 Chinese and 1,859 Brazilians were deported from the US in 2024.

IN A FIRST, A TRIBAL KING FROM KERALA TO ATTEND REPUBLIC DAY PARADE IN DELHI

Raman Rajamannan, the head of the Mannan community and the only tribal king in Kerala, will participate in the Republic Day parade in Delhi.

According to officials, the king and his wife will join the event as guests of the Scheduled Tribes (SC) Development Department. Minister for Welfare of Scheduled Castes, Scheduled Tribes, and Backward Classes O.R. Kelu handed over the invitation to Mr. Rajamannan.

According to officials, this will be the first time a tribal king will attend the Republic Day parade in Delhi. The SC Development Department will meet the travel expenses of Mr. Rajamannan and his wife, Binumol.



During the visit, the couple will meet the President and other prominent leaders. He will also visit Agra and other historically important places in the capital. They will be returning to Kerala on February 2.

According to officials, the Centre demanded the participation of persons from the tribal community of the State for the Republic Day parade. The SC Development Department then decided to send the couple as representatives of the community.

“The government’s decision is an honour to the Mannan community,” said the official.

On Tuesday, Mr. Rajamannan and Ms. Binumol visited the State Assembly, and was received by Mr. Kelu. Devikulam MLA A. Raja accompanied them.

48 settlements

The Mannan community is mainly settled in the buffer zone area of the Idukki Wildlife Sanctuary at Kozhimala, the hub of the tribe with 48 settlements ruled by a king, the only such community in southern India.

The king is an integral part of the traditional functions and festivities of the community.

He will wear a turban or headgear and special dress on such occasions and will be assisted by two Ministers and soldiers during the functions.

MITIGATING CIRCUMSTANCES: WHY RG KAR RAPE CASE CONVICT WAS NOT GIVEN DEATH PENALTY

RG Kar rape case verdict: A sessions court in Kolkata sentenced Sanjoy Roy, convicted of the rape and murder of a doctor at RG Kar Medical College and Hospital, to life imprisonment on Monday.

The CBI had argued strongly for the death penalty in the case that shook West Bengal and triggered several weeks of protests and strikes by doctors. West Bengal Chief Minister Mamata Banerjee had demanded death for the murderer.

The Supreme Court has held that a sentence of death should be passed only in the “rarest of rare” cases, after the court has considered possible “aggravating” and “mitigating” circumstances (Bachan Singh v. State of Punjab, 1980).

‘Rarest of rare’ test

In Bachan Singh, the SC considered a challenge to the constitutionality of the death penalty. It upheld the death penalty, but said it should be imposed only in the “rarest of rare” cases where there is no possibility of reformation.

The five-judge Constitution Bench did not specify the standards to determine whether the death penalty should be imposed, but laid down non-exhaustive lists of “aggravating” and “mitigating” circumstances for courts to consider while making the decision.

AGGRAVATING CIRCUMSTANCES, which could tilt the court’s decision towards the death penalty:

* If the murder is pre-planned, calculated, and involves extreme brutality;

* If the murder involves “exceptional depravity”;



* If the accused has been found guilty of murdering a public servant, police officer or a member of the armed forces while on duty, or because of anything they may have lawfully done while discharging their duty.

MITIGATING CIRCUMSTANCES, which could tilt a case away from the death penalty:

* Whether the accused was “under the influence of extreme mental or emotional disturbance” at the time of the offence;

* Age of the accused; they would not be given death if they are very young or very old;

* Probability of the accused posing a continued threat to society;

* Probability of reforming the accused;

* If the accused was acting on the directions of another person;

* If the accused believed their actions were morally justified;

* If the accused suffers mentally and is unable to appreciate the criminality of their actions.

After Bachan Singh

The understanding of mitigating and aggravating circumstances has evolved over the years, and new factors have been added to the list through several decisions. These include:

AGE OF ACCUSED: In several cases including Ramnaresh and Ors v. State of Chhattisgarh (2012) and Ramesh v. State of Rajasthan (2011), the Supreme Court considered the young age of the accused persons (below 30 in these cases) as an indication that they could be reformed.

However, as the Law Commission of India noted in its 262nd Report (2015), The Death Penalty, age as a mitigating factor “has been used very inconsistently”. In Shankar Kisanrao Khade v. State of Maharashtra (2013), the SC split several cases with similar facts into two groups: where age was considered as a mitigating factor, and where age was ignored or considered irrelevant. The court also noted that sentencing in death penalty cases had become “judge-centric”.

In the RG Kar case, the convict Sanjoy Roy is 35 years old.

NATURE OF OFFENCE:

In Shankar Khade, the SC said courts should compare the case before them with a pool of cases concerning similar offences before determining the punishment. Otherwise, the court said, applying the “rarest of rare” doctrine would become “subjective”. The Law Commission Report used the example of cases concerning the rape and murder of a young child, and presented examples to show that it “shocks the judicial conscience in some cases, not in others”.

In Machhi Singh v. State of Punjab (1983), the SC held that death could be given in cases where the “collective conscience” of society is so shocked that the judiciary is expected to impose the death penalty.

The Law Commission noted that this decision, and the decisions it influenced in the future, focused only on the circumstances of the crime, and not the circumstances of the criminal and the possibility of reform.



POSSIBILITY OF REFORM: In *Bachan Singh*, the SC held that the government must prove there is no possibility of reform, and that the presumption would be against such a penalty. In *Santosh Bariyar v. State of Maharashtra (2009)*, the SC said “the court will have to provide clear evidence as to why the convict is not fit for any kind of reformatory and rehabilitation scheme”.

The Law Commission Report said the requirement for evidence was held as “essential” in *Bariyar* “for introducing an element of objectivity into the sentencing process”.

Stage of the trial

When should the court consider these circumstances?

In *Bachan Singh*, the SC said courts must conduct a separate trial after convicting, so that judges can be persuaded why the death sentence should not be imposed.

When should this separate trial take place? In several rulings, the SC has held it can be on the same day; in other cases, it has stressed the importance of a “real, effective and meaningful hearing” during the sentencing hearing in death penalty cases.

In *Dattaraya v. State of Maharashtra (2020)*, the court held that such a hearing did not take place, and that this was a valid reason to commute a death sentence to life imprisonment.

In suo motu proceedings instituted in 2022 (*IN RE: Framing Guidelines Regarding Potential Mitigating Circumstances To Be Considered While Imposing Death Sentences*), the SC asked whether sentences delivered on the same day as the conviction satisfy the requirement of a meaningful and effective hearing.

It also noted that aggravating circumstances form a part of the record of a case and are always available to a judge, whereas mitigating circumstances are only placed on record after a conviction and before sentencing.

“This”, the Bench said, “places the convict at a hopeless disadvantage, tilting the scales heavily against him”, and referred the case to a larger Bench to create a uniform approach to sentencing hearings in death penalty cases.

WHY SUPREME COURT SUGGESTED APPOINTING RETIRED HIGH COURT JUDGES ON ‘AD HOC’ BASIS

On Tuesday (January 21), the Supreme Court suggested temporarily appointing retired judges on an ad hoc (as required) basis to address the growing backlog of pending criminal cases before several High Courts.

Notably, Article 224A of the Indian Constitution allows the Chief Justice of a High Court to request retired HC judges to perform the duties of a judge again, with the permission of the President of India. Though it has rarely been invoked, there is a detailed procedure for such appointments, with the SC previously having weighed in on the practice.

The SC on Tuesday also suggested modifying the top court’s 2021 SC decision, which held that ad hoc judge appointments could only be made in certain situations. We explain.



How is an ad hoc judge appointed?

Article 224A, titled “Appointment of retired Judges at sittings of High Courts”, states: “The Chief Justice of a High Court for any State may at any time with the previous consent of the President, request any person who has held the office of a Judge of that Court or of any other High Court to sit and act as a Judge of the High Court for that State”.

Such appointees are entitled to allowances as determined by the President’s order and have all the jurisdiction, powers and privileges of a Judge of that High Court. However, they cannot be “deemed” as such. Further, both the retired judge and the President of India are required to consent to the appointment.

The detailed procedure can be found in the 1998 Memorandum of Procedure (MOP) for the appointment of High Court judges, prepared following the creation of the collegium system for appointing judges.

The MOP states that after the retired judge has consented to the appointment, the Chief Justice must forward her name and details on the duration of the appointment to the state’s Chief Minister. The CM will pass this recommendation to the Union Law Minister, who will consult the Chief Justice of India before forwarding the recommendation and the CJI’s advice to the Prime Minister of India. The PM will advise the President on whether to give her approval.

However, in the case of Lok Prahari Through Its General Secretary S.N. Shukla IAS (Retd.) v. Union of India (2021), the Supreme Court held that this recommendation “has to be routed through the collegium of the Supreme Court”. This collegium includes the CJI and the two seniormost judges of the Supreme Court. The court also provided guidelines for when this appointment process can be initiated.

When can an ad hoc judge be appointed?

The SC, in Lok Prahari, was considering measures to address pending cases before the courts and the vacancies in posts for HC judges, stating that “A number of vacancies arising every year are barely filled in by fresh appointments”. At the time, the SC was faced with nearly 40% vacancies across all High Courts. The court also took note of Law Commission reports published in 1979, 1988, and 2003, which suggested that temporarily appointing retired judges who already have decades of experience is a viable solution to tackle the mounting backlog of cases.

Though the apex court agreed, it expressed concerns that Article 224A would encourage “inaction in making recommendations” for regular judge appointments. The court thus passed directions on when the appointment process under Article 224A could be initiated.

Most importantly, the court held ad hoc judges can only be appointed when recommendations have not been made for less than 20% of the vacancies, after considering both the number of active judges and pending proposals for judge appointments. This is so that Article 224A can be “resorted to only on the process having being initiated for filling up of the regular vacancies and awaiting their appointments.”

The court also held that there has to be a “Trigger Point” for appointing judges under Article 224A, such as if the HC has vacancies of more than 20% of the sanctioned strength (excluding any proposals for appointment) and if more than 10% of the backlog of pending cases is over 5 years.



It further recommended that each Chief Justice should create a “panel” of retired and soon-to-retire judges for possible ad hoc appointments. Such judges should generally be appointed for 2-3 years, with two to five ad hoc judges in a HC. The court also held that these directions should be subject to a “periodic review”.

When have ad hoc judges been appointed in the past?

In 2021, the SC noted there have only been three recorded instances of ad hoc judges being appointed under Article 224A, calling it a “dormant provision”. These include:

The appointment of Justice Suraj Bhan to the Madhya Pradesh HC in 1972 for one year to hear election petitions;

The appointment of Justice P. Venugopal to the Madras HC in 1982. His term was renewed for another year in August 1983;

The appointment of Justice O P Srivastava to the Allahabad HC in 2007 to hear the Ayodhya title suits.

There are no recorded instances of ad-hoc judges being appointed since the 2021 decision.

ABETMENT TO SUICIDE: WHY SC ADVISED CAUTION IN USING THE PROVISION

The Supreme Court on Thursday highlighted the need to sensitise investigation agencies and courts in abetment of suicide cases under Section 306 of the Indian Penal Code, 1860 (IPC).

- A Bench of Justices Abhay S Oka and K V Viswanathan stated that “It is time that investigating agencies are sensitised to the law laid down by this Court under Section 306 IPC so that persons are not subjected to abuse of process of a totally untenable prosecution”.
- The apex court made this statement while clearing charges against a bank manager accused of abetting the suicide of a man who allegedly took his own life after he was unable to repay his bank loans.
- A Bench of Justices J B Pardiwala and Manoj Misra stated that the bar for proof would be higher in cases where the deceased and the accused have an official relationship (such as between an employer and employee), and both the courts and prosecuting agencies must see if there is evidence to show that the accused intended to cause the suicide.
- The court also held that there must be “direct and alarming encouragement/ incitement by the accused” to prosecute someone for abetment to suicide.
- The requirement for direct evidence can be found in other SC cases as well. In *M Mohan v The State* (2011), the SC set a high bar for proving abetment of suicide under Section 306 IPC, including specific intent — it “requires an active...or direct act which led the deceased to commit suicide seeing no option and this act must have been intended to push the deceased into such a position that he/ she committed suicide”.

Do You Know:

- The term “abetment” is defined under Section 107 of the IPC, which is the same as Section 45 of the Bharatiya Nyaya Sanhita, 2023 (BNS).



- A person abets the doing of a thing, if she (i) instigates any person to do that thing, or (ii) engages with one or more others in a conspiracy for the doing of that thing, or (iii) intentionally aids, by any act or illegal omission, the doing of that thing.
- To prove abetment of suicide, one has to effectively show that the accused directly instigated or aided the deceased to die by suicide. The punishment for abetment of suicide provided under Section 306 IPC (Section 108 BNS) can be up to 10 years imprisonment along with a fine.
- According to the National Crime Records Bureau's annual Crime in India report, the conviction rate in abetment of suicide (Section 306 IPC) cases was 17.5% in 2022, the year for which the latest data are available. For comparison, the overall conviction rate for all crimes under the IPC was 69.8%. It was 54.2% for cognizable offences — which includes abetment to suicide — where an arrest can be made without a warrant.

USE OF LOUDSPEAKERS NOT CRUCIAL FOR ANY RELIGION, SAYS BOMBAY HIGH COURT

Use of loudspeakers is not an essential part of any religion, the Bombay High Court said on Thursday, directing the law enforcement agencies to take prompt action against loudspeakers that violate the noise pollution norms and rules.

A Division Bench of Justices A.S. Gadkari and S.C. Chandak said noise was a major health hazard and no one can claim that their rights are affected in any manner if he or she is denied permission to use loudspeakers.

The High Court asked the State government to direct religious institutions to adopt mechanisms for controlling noise levels, including calibrated sound systems with auto-decibel limits.

The court passed its judgment on a petition filed by two housing associations from suburban Kurla — Jaago Nehru Nagar Residents' Welfare Association and Shivrushti Co-operative Housing Societies Association Ltd — alleging police inaction against noise pollution caused by loudspeakers installed on mosques in the area.

The petitioners contended that the use of loudspeakers for religious purposes, including the recitation of *azaan* (Islamic call to prayer) disturbed the peace and violated the Noise Pollution (Regulation and Control) Rules, 2000, as well as provisions under the Environment (Protection) Act, 1986.

The Bench, in its order, said Mumbai was a cosmopolitan city and obviously there are persons of different religions in every part of the city.

"It is in public interest that such permissions should not be granted. By denying such permissions, rights under Article 19 or 25 of the Constitution of India are not at all infringed. Use of loudspeakers is not an essential part of any religion," the High Court said.

The court said it was the "bounden duty" of the State government and other authorities to enforce the law by adopting all the necessary measures, as may be prescribed by the provisions of law.

"In a democratic State, there cannot be a situation that, a person/group of persons/association of persons would say that, it will not follow or adhere to the law of the land and the law enforcers would be meek or silent spectators to it," the judgment said.



It added that common citizens are “hapless and helpless victims of these obnoxious use of loudspeakers and/or amplifiers”.

The court said the police must act on complaints against loudspeakers violating the noise pollution rules without requiring identification of the complainant to avoid such complainants being targets or ill will and developing hatred.

AFTER ELECTORAL BOND BAN, FUNDING THROUGH TRUST ROUTE UP: EC DATA

After the Supreme Court’s decision to scrap electoral bonds last year, donations to political parties significantly increased through electoral trusts, as indicated by the electoral trust contribution reports released by the Election Commission of India (ECI) for the previous financial year.

- On February 15, 2024, the Supreme Court ruled that the electoral bond scheme was unconstitutional and ordered the banks to cease issuing bonds immediately.
- Nearly three-fourths of the donations to the Prudent Electoral Trust, which has received the highest contribution, were made after the Supreme Court’s decision on February 15. Out of Rs 1,075.7 crore donated to the trust, Rs 797.1 crore was received following the court’s ruling.
- The contribution to the Prudent Electoral Trust also increased almost three-fold compared to the previous year — it increased to Rs 1075.7 crore in the last financial year compared to Rs 363.16 crore the year before, according to the report.
- The top contributors to the trust for the year 2023-24 included ArcelorMittal Nippon (Rs 100 crore), DLF (Rs 99.5 crore), Maatha Projects (Rs 75 crore), Maruti Suzuki (Rs 60 crore), and CESC (Rs 60 crore), according to the report.
- The highest donation through the trust went to the Bharatiya Janata Party (BJP) at Rs 723.8 crore. This was followed by the Congress with Rs 156.35 crore, Bharat Rashtra Samithi (BRS) with Rs 85 crore, and YSR Congress with Rs 72.5 crore.
- Another Rs 132.5 crore worth of donations came through Triumph Electoral Trust. Again, Rs 130 crore of the 132.5 total donated through the trust came in after February 15, according to the report.
- The total donation through the trust increased from just Rs 0.5 crore last year. The top contributors to the trust were Cholamandalam Investment with Rs 50 crore, CG Power Industrial with Rs 30 crore, and Coromandel International with Rs 25.5 crore. Of the total, Rs 127.5 crore went to the BJP, and the remaining Rs 5 crore went to Dravida Munnetra Kazhagam (DMK).

Do You Know:

- Under the scheme notified by the UPA-2 government on January 31, 2013, any company registered under Section 25 of the Companies Act, 1956, can form an electoral trust.
- Under Section 17CA of the Income-tax Act, 1961, any citizen of India, a company registered in India, or a firm or Hindu Undivided Family or association of persons living in India, can donate to an electoral trust.



- The electoral trusts have to apply for renewal every three financial years. They must donate 95% of contributions received in a financial year to political parties registered under the Representation of the People Act, 1951.
- The contributors' PAN (in case of a resident) or passport number (in case of an NRI) is required at the time of making contributions.
- The electoral trusts route is transparent on contributors and beneficiaries. Where there is only one contributor and one beneficiary of a particular trust, the public can know for sure who is funding whom. For instance, in 2018-19, the Janhit Electoral Trust had just one contribution of Rs.2.5 crore from Vedanta, and the entire amount was donated to the BJP, as per the trust's annual contribution report.

WHAT DO DRAFT DATA PROTECTION RULES STATE?

The story so far:

The Ministry of Electronics and Information Technology on January 3, 2025, released the draft rules for implementing the Digital Personal Data Protection (DPDP) Act, 2023 — 16 months after the law was notified in August 2023. The Union government is currently soliciting feedback on the draft rules through a fiduciary framework that effectively precludes both public disclosure and the submission of counter-comments. "The draft rules, coupled with the existing legislation, are inadequate for establishing a comprehensive data privacy framework... Moreover, the government should consider submitting the rules to a parliamentary standing committee for scrutiny," Amar Patnaik, advocate and former MP, told The Hindu.

What is the data localisation mandate?

The draft rules introduce a data localisation mandate that extends beyond the original scope of the legislation. Data localisation refers to measures that restrict the flow of data within a jurisdiction's borders. While the DPDP Act permits the government to limit personal data transfers, it confines such restrictions to specific notified countries.

In contrast, the rules propose the creation of a government-appointed committee to define which classes of data cannot be exported from India. This mandate will apply to significant data fiduciaries (SDFs), as designated by the government based on the volume and sensitivity of the personal data they process. Major tech companies, such as Meta, Google, Apple, Microsoft, and Amazon, are expected to fall within this classification. The localisation provision likely stems from the challenges law enforcement agencies face in accessing cross-border data during investigations. In 2018, the Reserve Bank of India implemented a similar mandate, requiring payment data operators to localise their data within the country. Currently, financial, payment, and insurance data must be stored domestically, with copies of payment data allowed overseas solely to facilitate international transactions.

However, the government has clarified that the proposed committee is envisioned as a central body that will collaborate with other ministries and sectoral regulators to ensure the effective implementation of local data storage without disrupting industry operations. This approach could also help prevent ad hoc data localisation mandates from government departments working in silos. Union Minister of Information and Broadcasting Ashwini Vaishnaw earlier told media portals that the government plans to provide the industry with a two-year timeline to establish the necessary systems for compliance.



According to Aparajita Bharti, a founding partner at TQH Consulting, which advises tech companies on compliance with Indian laws, data localisation mandates could present substantial operational challenges for both large tech companies and start-ups. “It is extremely difficult for companies to segment different sets of data and determine the appropriate data centre for each tool. This will restrict business operations and result in higher operational costs,” she said.

What about executive overreach?

Section 36 of the DPDP Act, read in conjunction with Rule 22, empowers the Union government, through the designated authorised person, to demand “any” information from a data fiduciary or intermediary (entities processing personal data) in the interest of India’s sovereignty, integrity, or national security. Experts have cautioned that such sweeping discretionary powers are susceptible to misuse, potentially enabling surveillance or the suppression of dissent.

Additionally, these provisions could compel social media intermediaries to compromise end-to-end encryption of messages — a concern raised by Meta-owned WhatsApp last year in its challenge to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021. Rule 22 prohibits companies from disclosing information about such government demands if doing so could “prejudicially affect the sovereignty and integrity of India or the security of the State.”

Apar Gupta, advocate and co-founder of Internet Freedom Foundation, told The Hindu that this provision stands in stark contrast to the recommendations of the Group of Experts on Privacy, headed by Justice (retd.) A.P. Shah, in 2012.

“The committee categorically recommended that individuals subject to interception should be notified. There is ample evidence of interception orders being misused by police departments under political influence. This provision effectively creates a giant backdoor for the government to requisition information without any checks and balances,” he said.

Ms. Bharti agreed, highlighting the absence of adequate restraints on the government. “The government should consider adopting safeguards akin to those under the Information Technology Act, 2000, to ensure that citizens are not left unaware of the nature and extent of data requisitioned by the government from data fiduciaries. Such expansive governmental discretion could also hinder commercial interests,” she said.

HOW THE DRAFT RULES FOR IMPLEMENTING DATA PROTECTION FALLS SHORT

After a long wait of 16 months, the Ministry of Electronics and Information Technology (MeitY) has released the draft rules for implementing the Digital Personal Data Protection Act, 2023 (DPDP Act). These rules are open for public feedback until the middle of February. Various stakeholders, including civil society, academia, and industry, have been eagerly awaiting the publication of these proposed rules as they contain the baseline implementation framework of the DPDP Act.

The DPDP Act is India’s first comprehensive data privacy law that applies to all spheres of commerce and industry. It lays down operational obligations for data processors, special protections for children, and rights for all users, and a body for grievance redressal called the Data Protection Board of India. At the time of release, the DPDP Act was criticised by civil society for not instituting a specialised regulator, not incorporating standard protections against government access to data, and excessive delegation of regulatory functions to the Central government.



Lack of detail

The draft rules propose operative guidance for critical mechanisms such as notice and consent to a user for data collection and processing, intimation of data breaches, collection of parental consent on behalf of children, data localisation measures, and the procedure for setting up the Data Protection Board. Although the draft rules provide some guidance for implementing the DPDP Act, they lack detailed guidelines to help improve the lives of India's digital *nagriks*. Let's illustrate some shortcomings from the perspective of two critical avenues that the DPDP Act seeks to introduce — rights of users and the protection of children's data.

User rights

The DPDP Act enhances the autonomy of users over their personal data by providing them with the right to access, correct, complete, update, and erase their data. The law leaves it to the corresponding rules for clarifying the manner in which users can exercise these rights. Unfortunately, the draft rules do not make it clear how users may make these requests. They simply state that users can make requests to data processors for exercising their rights by following the steps published by businesses. This is simply restating what the Act lays down in another language.

For example, as per the right to erasure, can users ask search engines to remove links to certain websites? Courts in India have frequently asked Google to 'de-list' certain links from showing up on its public search engine. The rules could have prescribed standards to clarify the mechanism in these situations such as requiring that users share specific hyperlinks for erasure.

Since the right to erasure may also impact a third-parties' online speech, the draft rules could have articulated certain modes or conditions for objection that data processors could make against such an erasure request. However, the draft rules do not bring out any such clarity.

Protecting children

Today children are increasingly using various websites on the internet including social media platforms.

To safeguard children, the DPDP Act obligates data processors to seek verifiable parental consent before accessing the personal data of children under the age of 18. The manner of obtaining parental consent was to be laid down in the subsequent rules. However, here again the draft rules fall short. There is no detailing of an exact mechanism for identifying children and collecting parental consent. The rules provide that data processors will need to adopt appropriate technical and organisational measures to ensure parental consent is obtained prior to accessing data of a child. The rules focus on how data processors must exercise due diligence for checking that parents are identifiable adults. This is a simple rephrasing of what the law lays down in the DPDP Act.

The rules were required to lay down detailed procedures for how businesses are expected to verify the identity of parents. They simply lay down illustrations where parents could either point to their existing user details on a common platform, or prove their identity by providing details of any kind of formal identity, for example a government issued ID. Again, critical questions remain.

How will data processors identify parental relations, that is, that the adult proving their identity and providing consent is actually the guardian of the child? What if children lie about their actual age when accessing a website? What mechanisms do platforms need to put in place to gauge the



veracity of an age claim? Indian families, including children, often share a single device to access digital services, how will businesses identify children in these cases? The draft rules do not provide any guidance to these practical implementation questions.

Despite a 16-month window for drafting and consulting experts for the framing of these rules, the MeitY has released a document that is vague, incomplete, and rushed. Typically guidelines are very detailed, account for consumer privacy, and provide operational clarity for businesses and data processors. Unfortunately, the proposed rules leave much to be desired.

The government needs to seek appropriate expert advice, conduct wide consultations, and clarify timelines for implementation, before finalising the rules that will form the back-bone of India's first data privacy law.

META SECURES NCLAT RELIEF FROM CCI'S WHATSAPP DIKTAT

An Indian tribunal temporarily suspended a five-year data sharing ban between WhatsApp and owner Meta Platforms, a major relief for the U.S. giant which had warned its advertising business will be affected.

Meta had challenged the Competition Commission of India's (CCI) directive issued in November that imposed a ban on data sharing between WhatsApp and other Meta entities for advertising purposes, warning it may have to roll back some features. Meta also criticised the CCI for not having the "technical expertise" to understand the ramifications of its order. On Thursday, India's National Company Law Appellate Tribunal (NCLAT) ordered a suspension of the data sharing ban while it continues to hear Meta's challenge to the antitrust ruling.

The ban "may lead to a collapse" of WhatsApp's business model, the tribunal noted. India is the biggest market for Meta where it has more than 350 million Facebook users and over 500 million people using WhatsApp.

Meta earlier told the appeals tribunal that it may have to "roll back or pause" some features such as those that would allow an Indian fashion business, for example, to personalise ads on Facebook or Instagram based on interaction with a WhatsApp user.

Facebook's registered entity engaged in selling advertising in India — Facebook India Online Services — reported revenue of \$351 million in 2023-24, the highest in at least five years. A Meta spokesperson said it welcomed the ruling and "will evaluate next steps." CCI, which did not respond to a request for comment, can challenge the order in the Supreme Court if it wants to.

MURDER SHE WROTE: HOW GOOGLE CLOUD HELPED COURT CONVICT KERALA'S GREESHMA IN HER BOYFRIEND'S KILLING

When Greeshma, then 22, allegedly decided to kill her boyfriend Sharon Raj in 2022, she turned to the internet, running extensive Google searches on using paracetamol and the herbicide paraquat as slow poisons. What she did not bargain for, however, was the digital footprint she had left behind.

This was what Neyyattinkara Additional Sessions Judge A M Basheer pointed out while handing Greeshma the death sentence earlier this week. "The God in the cloud (Google Cloud) saved data of crime," the judge said. "No one can leave the place of crime without leaving a trace of evidence."



On January 20, Greeshma was sentenced to death for having killed Sharon with an ayurvedic concoction mixed with the herbicide. Sharon, 23, died on October 25, 2022, exactly 11 days after she gave him the drink.

This was allegedly her second attempt on Sharon's life. Her first one – a juice mixed with 50 painkiller tablets — failed after Sharon refused to swallow the drink because it was “bitter”.

The court acquitted Greeshma's mother Sindhu, although it sentenced her uncle Nirmalakumaran Nair to three years of imprisonment. Both had been charged with the destruction of evidence after the crime.

“Sharon fought for his life for 11 days without even consuming a gulp of water,” the court said while pronouncing the judgment. The family now plans to appeal the ruling.

For the investigators, the case posed a massive challenge – there were no eyewitnesses to the killing. As a result, they constructed the crime scene using a mix of digital evidence – data from Google Cloud, the mobile locations of Sharon and Greeshma, their call records and WhatsApp chats, CCTV footage and video calls – as well as forensics.

What emerged is a picture of what the court referred to as a “diabolical” murder, meticulously planned over days with extensive internet searches on various poisons and how they work on the human body.

CAN BHOPAL WASTE BE SAFELY DISPOSED OF?

The story so far:

On January 2, Madhya Pradesh government authorities moved 358 tonnes of hazardous waste from the defunct Union Carbide facility in Bhopal to the Pithampur industrial area in Dhar district. On December 3 last year, the Madhya Pradesh High Court had set a four-week deadline for authorities to dispose of this waste, nearly 40 years after the gas disaster that killed more than 4,000 people and injured or debilitated thousands more.

What is the waste's status?

The disaster on the intervening night of December 2-3, 1984, was the result of poisonous gases leaking from the plant, which Union Carbide had set up to manufacture fertilizers. The waste at the facility is composed of the ingredients required to make these fertilizers.

After years of lying in Bhopal and multiple petitions from civil society groups, the Madhya Pradesh government was to incinerate the waste at a Treatment, Storage, and Disposal Facility (TSDF) in Pithampur more than 200 km away. Officials arranged for the waste to be packaged and transported in secure long-haul containers.

But protests in the industrial town by the local population fearing harmful emissions from the incineration have paused the State's plans.

On January 6, the Madhya Pradesh High Court gave the State government six weeks to safely dispose of the waste. The order came after State authorities had also sought time to spread awareness about the manner of disposal and measures to minimise its effects on health and the environment.



The Central government has allocated ₹126 crore to the State to incinerate the waste and deposit the residue in the TSDF landfill.

Why Pithampur?

In 2012, the Supreme Court selected the Pithampur facility as being the most suitable final destination for the waste. According to the Central Pollution Control Board (CPCB), it is the sole TSDF in the State and includes a landfill and an incinerator. The CPCB submitted an affidavit to the apex court in 2013 attesting to the TSDF's ability to 'handle' the waste.

In 2015, Madhya Pradesh organised a 'trial run' in which it incinerated 10.1 tonnes of the waste at the TSDF. The CPCB monitored the process with help from experts from private laboratories in Chennai and Hyderabad. Notably, the State had secretly advanced the incineration date by a few days to sidestep local resistance.

According to Bhopal Gas Tragedy Relief and Rehabilitation Department director Swatantra Kumar Singh, the emissions from the trial were under stipulated limits. The State's public relations office also reported no adverse effects on the environment or on public health.

Is the waste harmful?

The 'trial' waste consisted of 4.8 tonnes of excavated waste, 1.6 tonnes of semi-processed residue, 1.3 tonnes of naphthol waste, 1.3 tonnes of carbaryl residue, and 0.8 tonnes of reactor residue. According to a December 2024 press release from the State's public relations office, the Regional Director (Central) of CPCB Bhopal had collected and tested five water samples from around the Pithampur TSDF. The report (numbered WW24.25-188.189) indicated the water colour, chloride, sulphate, and fluoride concentrations, hardness, and the amount of total dissolved solids "exceeded permissible limits" specified in the IS 10500 standard in two open wells near the landfill.

However, the release said according to "scientists involved in the analysis" the higher values "reflect groundwater quality and don't appear to be linked to the TSDF operations".

The release also said experts from the All India Institute of Medical Sciences (AIIMS) Bhopal and the Indian Council of Medical Research reportedly surveyed 12 villages and found the prevalence of skin and respiratory ailments to be lower than the national average.

Credible media reports in 2015 had said around four-times as much ash and residue as the waste combusted (by mass) had been generated and which the CPCB had said it would dispose of in the landfill, including protections to contain leachates.

The U.S. Environmental Protection Agency (EPA) has said these protections can degrade and need to be reinstalled at periodic intervals.

What next?

Madhya Pradesh has temporarily put off incinerating the waste. Authorities have said the local protests, including two attempts at self-immolation, mean they would first like to improve public confidence in the safety of the disposal process.



“We are preparing 50-odd master trainers, including science teachers, professors, and officials,” PTI quoted Dhar collector Priyank Mishra as saying. “They will be informed about the exact status of the waste before they reach out to people to dispel misinformation.”

There will also be another trial run: a 90-kg batch will be incinerated at 1,200° C, Mr. Singh said. According to the EPA, most organic compounds (like naphthol) are destroyed when subjected to 590° to 650° C. Operating hazardous waste incinerators at 980-1,200° C would thus strip the waste of organics.

If the resulting emissions don’t breach legal thresholds, the rest will be incinerated in batches of 270 kg each over three months. If the emissions exceed, Mr. Singh had told The Hindu the batch size would be reduced and the duration extended to nine months.

The next hearing in the High Court is set for February 18.

RUMOUR HAS IT

Panic and confusion seem to have triggered the Lucknow-Mumbai Pushpak Express accident in Maharashtra that killed 12 people and injured at least 10 others. Eyewitness accounts talk about the rumour of a fire that led to an alarm chain being pulled and the train coming to a stop. Passengers often choose to get down when their train makes unscheduled stops and that is what happened near Pachora station in Jalgaon district. Those who deboarded on the side of an oncoming train on the adjacent track, the Karnataka Express, were mowed down. Reports talk about a curve that reduced the line of sight of the driver of the oncoming train who, nevertheless, promptly applied the brakes seeing the flashing lights, as in the procedure adopted to stop all other trains when one train stops midsection. The Karnataka Express was speeding and had a braking distance of some 750 m; the Rajdhani needs more than a kilometre to stop. It could have been worse had the brakes not been applied promptly, railway officials have been quoted as saying. Passengers deboarding a train and facing danger is not uncommon either. Auto doors that can be opened and closed only by railway personnel — a feature of the Vande Bharat and Rajdhani trains — may need to be fitted in general trains as well. Such doors come with their own logistical challenges such as a requirement that the door locking system of each bogie matches with the rest, but it may well be worth the cost.

The panic shown by the passengers is a typical response in India and is seen in stampedes. In 2017, a flower vendor on a rail platform bridge at Elphinstone Road station in Mumbai, apparently complained in Marathi of ‘her flowers falling’, which commuters misunderstood to mean that the bridge was collapsing, leading to a stampede that killed 23 people. Probably, the series of railway accidents in recent times was fresh in the minds of the Pushpak Express passengers and added to the panic. While those accidents, at first glance, were caused by human errors or local faults, they were actually a result of a long-term and unaddressed need for enhancing railway safety. Further, initial media reports quoted railway officials talking about “hot axle” and “brake binding” that may have caused sparks and smoke, which gave rise to fears of a fire, and in turn the alarm chain being pulled. Brake binding happens when a brake is applied by the driver but after its release the brake does not disengage in one or more bogies. The wheels, instead of rolling, would only slide when speed picks up, leading to the emission of sparks and smoke. Brake binding is a case of poor maintenance. An inquiry by the Commissioner of Railway Safety concerned, an independent body of railway experts that does not come under the Railway Ministry, should uncover the true cause of Wednesday’s accident.



UGC REGULATIONS OR STATE UNIVERSITY LAWS?

Six of Tamil Nadu's State universities are at present without a Vice Chancellor (VC). Some of these posts have been vacant from a few months to over a year. This impasse is due to a disagreement between the Governor and the State government regarding the composition of the search committee for selecting VCs.

The Governor (as ex-officio Chancellor of State universities under the University Acts) insists on including a nominee of the University Grants Commission (UGC) in the search committee as per Regulation 7.3 of the UGC Regulations, 2018. Conversely, the State government insists on adhering to the respective State University Acts, which generally require the search committee to consist of one nominee each from the Chancellor, the syndicate, and the senate. It opposes UGC involvement due to concerns over erosion of State autonomy in university governance.

Conflicting Supreme Court rulings have complicated the situation. One set of judgments support the Governor's stance that UGC regulations are mandatory and can override the State University Acts in cases of conflict. Another set of judgments back the State government, holding that UGC regulations are merely recommendatory for State universities. The controversy has been exacerbated by the UGC's Draft Regulations, 2025 which are seen to erode State autonomy further.

There is a somewhat similar stand-off in Kerala and Punjab where numerous universities also face leadership vacuums. This has led to serious deterioration in university administration, including delays in staff appointments and award of degrees.

A constitutional question

UGC regulations are a subordinate legislation framed under Section 26 of the UGC Act, 1956. The crux of the dispute is whether UGC regulations framed by the UGC's Chairman, Vice-Chairman and 10 other members can supersede provisions of State University Acts which are plenary laws passed by State legislatures and assented to by the Governor or President. This is part of a larger question of law dealing with Centre-State relations — "can delegated legislation (rules, regulations, notifications, etc.) framed by the Union Government and its agencies under a Central law override the provisions of a plenary State law?"

It underlines a critical constitutional issue regarding the scope of delegated legislation with potential for eroding the separation of powers, and federalism — both considered 'basic features' of the Constitution.

Judicial precedents

Article 254(1) of the Constitution addresses conflicts between central and State laws. It states that if a State law is repugnant to a central law on matters in the Concurrent List, the central law will prevail, and the conflicting part of the State law will be void. The plain wording of Article 254(1) indicates that it applies only to plenary laws enacted by Parliament and State legislatures, and not to delegated legislation. The Supreme Court has consistently upheld this interpretation in several landmark judgments.

The leading case on the subject is *Ch. Tika Ramji versus State of Uttar Pradesh* (1956). The Supreme Court ruled that the Centre's Sugarcane Control Order, 1955 issued under the Essential Commodities Act, 1955, could not repeal the provisions of the U.P. Sugarcane Act, 1953. It held: "The power of repeal, if any, was vested in Parliament, and Parliament alone could exercise it by



enacting an appropriate provision in regard thereto. Parliament could not delegate this power of repeal to any executive authority. Such delegation, if made, would be void...”

In *Indian Express newspapers (Bombay) versus Union of India* (1984), the Supreme Court ruled: “Subordinate legislation may be questioned on any of the grounds on which plenary legislation is questioned. In addition, it may also be questioned on the ground that it does not conform to the statute under which it is made. It may further be questioned on the ground that it is contrary to some other statute. That is because subordinate legislation must yield to plenary legislation.” In *J.K. Industries versus Union of India* (2007), the Supreme Court again ruled: “(Subordinate legislation) may further be questioned on the ground that it is inconsistent with the provisions of the Act or that it is contrary to some other statute applicable on the same subject matter. Therefore, it has to yield to plenary legislation.” These rulings make it clear that the Central Government and its agencies cannot use subordinate legislation to override plenary State laws; any changes require a plenary central law passed by Parliament.

An overreach by the UGC

There is no repugnancy between the provisions of the UGC Act, 1956 and Tamil Nadu’s University Acts because no provision of the UGC Act addresses the appointment of VCs. According to the UGC, its power to form Regulation 7.3 relating to VCs is derived from Section 26(1)(e), which allows the UGC to define qualifications for university teaching staff, and Section 26(1)(g), which permits regulation of standards and coordination of work or facilities in universities, of the UGC Act, 1956. But the VC is not a ‘teaching staff’ within the meaning of S.26(1)(e). In all University Acts — Central and State — the VC is an “officer of the university” along with the Chancellor, Registrar, Controller of Examinations, Finance Officer and Directors. So, the above two provisions do not apply to VCs.

Moreover, the UGC’s powers under Section 12(d) of the Act are only recommendatory. While the UGC can advise on standards in higher education, it cannot enforce compliance, except by withholding grants under Section 14. The Supreme Court has affirmed this interpretation in *University of Delhi versus Raj Singh* (1994), ruling that UGC regulations are advisory, not mandatory. Universities can choose whether or not to follow them, albeit at the risk of losing funding. Thus, UGC’s regulation 7.3 on VCs is a classic case of executive overreach in delegated legislation and is *ultra vires* the UGC Act, 1956.

Additionally, the UGC’s shifting stance — no regulation on VCs till 2010; introducing a UGC nominee on the search committee in 2010; withdrawing this requirement in 2013; reinstating it in 2018; and expanded control in the 2025 draft regulations — reflects an agenda driven more by administrative control than a genuine effort to improve academic standards.

Inconsistencies in judgments

Recently, some conflicting Supreme Court judgments have created confusion.

In *Annamalai University versus Secretary, Information & Tourism* (2009), *State of West Bengal versus Anindya Sundar Das* (2022), *Gambhirdan K. Gadhvi versus State of Gujarat* (2022) and *Professor Sreejith P.S. versus Dr. Rajasree M.S.* (2022), the Supreme Court held, without articulating reasons, that once UGC regulations are laid before both Houses of Parliament, they become part of the UGC Act, invoking Article 254(1) and rendering any VC appointments contrary to these regulations void.



However, in *Kalyani Mathivanan versus K.V.Jeyaraj* (2015), the Supreme Court used the same rationale but confusingly ruled that UGC Regulations are not mandatory for State Universities unless adopted by the State. In *P.J. Dharmaraj versus Church of South India* (December 2024), the Supreme Court held: “If the State Government itself has not adopted the amended regulations, the same cannot be applicable to the (institute).” In other words, UGC regulations apply only if adopted by the State.

The interpretation that UGC regulations lose their subordinate character and automatically become part of the parent Act merely by being laid before Parliament is not supported by the Constitution or the General Clauses Act, 1897. It contravenes a significant precedent ruled in *Chief Inspector of Mines versus Karam Chand Thapar* (1961) where the Supreme Court held: “(Rules) continue to be rules subordinate to the Act, and though for certain purposes, including the purpose of construction, they are to be treated as if contained in the Act, their true nature as subordinate rule is not lost.” In other words, they retain their character as subordinate legislation and do not become integral to the parent Act.

There are three recognised procedures for laying subordinate legislation before a legislature— (i) without further procedure; here the subordinate legislation takes effect immediately and is for information only; (ii) negative resolution procedure; here legislation takes effect immediately but can be annulled or modified by the legislature within a limited period (as in the case of UGC regulations under Section 28(1)); (iii) affirmative resolution procedure; here resolution takes effect only after receiving prior approval from the legislature.

Courts should recognise only rules and regulations laid under the affirmative resolution procedure as part of the parent Act, because the other two procedures have nil or limited legislative oversight and allow executive overreach.

What next?

Given the constitutional significance of the dispute and doctrinal ambiguities, a definitive ruling by a Constitutional Bench of the Supreme Court is imperative. Such a ruling would hopefully reaffirm that Article 254(1) of the Constitution applies only to conflicts between plenary Central and State laws; clarify that delegated legislation does not automatically become part of the parent Act unless laid under the affirmative resolution procedure; and emphasise the advisory nature of UGC regulations for State universities unless adopted by the State.

Such clarity is essential not only to restore the normal functioning of State universities across the country, but also to preserve the delicate balance of legislative powers between the Centre and States.

NOT IN SPIRIT OF CONSTITUTION, PART OF COMMUNAL AGENDA: KERALA ASSEMBLY RESOLUTION AGAINST UGC DRAFT REGULATIONS

The Kerala Assembly on Tuesday unanimously passed a resolution urging the Union government to withdraw the University Grants Commission’s draft regulations that Chief Minister Pinarayi Vijayan has said was against federal principles.

In a major overhaul of the process of appointment of leaders in higher education, the UGC recently issued new rules that effectively give Governors in states broader powers in appointing vice-chancellors and opened the position to industry experts and public sector veterans, thus breaking from the tradition of selecting only academicians.



Some Opposition-ruled states have criticised the draft regulations. In Kerala, both CPI(M) and Congress had come out against it, saying it was part of a Sangh Parivar agenda in higher education. Last week, the Congress-led Opposition in Kerala demanded that the Assembly pass a resolution against the draft regulations.

The resolution on Tuesday was moved by CM Vijayan under Rule 118 of the Procedure and Conduct of Business. Opposition members suggested some amendments, but the resolution was passed without considering the suggestions.

Kerala is the first state in the country to pass a resolution against the UGC draft regulations.

In the resolution, Vijayan said the Assembly is of the view that the UGC draft is against federal principles and the democratic system. "It completely avoids the opinion of the state governments in the appointment of vice-chancellors and does not imbibe the spirit of the Constitution," the resolution said.

The resolution was moved in the Assembly against the backdrop of concerns raised by various state governments and academics, the CM said, calling the draft regulations a move to commercialise the higher education sector.

The changing rules can be seen as an attempt to bring higher education into the clutches of those who propagate religious and communal ideas, the resolution said.

"Around 80 per cent of the money for the functioning of universities and other higher educational institutions is spent by state governments. State governments have a major role to play in maintaining and improving the quality of universities. The Kerala Assembly is of the view that the approach of the Central government and the UGC is to completely keep away the state governments from appointments including those of VCs. This is undemocratic and needs to be corrected," the resolution said.

SCHEMES RELATED TO GIRL CHILD

National Girl Child Day, an initiative of the Ministry of Women and Child Development, is celebrated every year on January 24 to spread awareness about the challenges that girls face. Similar to these initiatives, the government has launched several schemes to improve girls' education, health, and nutrition.

1. **NPS Vatsalya Scheme:** The NPS Vatsalya scheme was launched by the Finance Minister on 18th September 2024. It is a new pension scheme for children in the age group of 0 to 18 years. A parent can deposit a minimum of 1000 per month and a maximum with no limit. This account will be operated by the parents until the child turns 18, after which the account will be in the name of the children. Once the child turns 18, the account can be seamlessly converted into a regular NPS account or a non-NPS scheme. It is regulated and administered by the Pension Fund Regulatory Authority of India (PFRDA).
2. **Sukanya Samridhhi Yojana:** Launched in 2015 as part of the Indian government's 'Beti Bachao, Beti Padhao' campaign, Sukanya Samridhhi Yojana is a small savings scheme designed to help parents of girl children accumulate a corpus for their daughter's education and marriage. Parents of a girl child aged 10 years or younger can invest in this scheme. The scheme allows for a minimum and maximum annual deposit of Rs.250 and Rs.1.5 lakh, respectively. Deposits to the account can be made for 15 years from the



account opening date. The account, however, has a lock-in period of 21 years, implying that deposits mature after 21 years.

3. **Mission Poshan 2.0:** It addresses the challenges of malnutrition in children, adolescent girls, pregnant women, and lactating mothers. The strategic focus is on nutrition content by creating of convergent ecosystem to develop and promote practices that nurture health, wellness, and immunity. Initiatives have been taken to improve nutritional quality and testing in accredited labs, strengthen delivery, and leverage technology under the 'Poshan Tracker' for prompt supervision and management of services. Under Mission Poshan 2.0, the emphasis is placed on dietary diversity, food fortification, and encouraging the consumption of millet.
4. **CBSE Udaan Scheme:** Launched in 2014 by the Central government by the Central Board of Secondary Education (CBSE) under the guidance of the Ministry of Education aims to address low enrollment of women in STEM (science, technology, engineering, and mathematics), specifically in the Indian engineering colleges. The CBSE provides free tutorials for students of class 11 and class 12 to crack engineering entrance exams including the Joint Entrance Exam (JEE).
5. **Beti Padhao, Beti Bachao:** On January 22, the BBBP scheme completed 10 years since its launch in 2015. ' BBBP has been instrumental in overcoming gender biases and at the same time it has created the right environment to ensure that the girl child has access to education and opportunities to achieve her dreams', the prime minister said.

- The Beti Bachao, Beti Padhao Scheme, launched to address the decline in Child Sex Ratio and related issues of empowerment of girls, is implemented by states with 100% central assistance. It set several targets concerning the nutritional status of girls, their attendance in schools, the provision of adequate infrastructure in schools and so on. This was to be done through publicity campaigns, inspections and raids to stop the illegal detection of pregnancy in clinics and other measures.

- In the 2011 Census, as many as 12 Haryana districts were among 100 gender-critical districts in the country, which were chosen based on the child sex ratio (0-6 years) for the campaign under the BBBP programme, launched in 2015, to control the menace of sex-selective abortions.

- After the launch of the BBBP in Haryana in 2015, the sex ratio at birth increased to 914 in 2017 compared to 871 in 2014. The sex ratio at birth rose to 923 in 2019 and then fell to 922 in 2020, 914 in 2021, 917 in 2022, 916 in 2023, and 910 in 2024.

Note:

International Day of the Girl Child, observed on October 11, was established by the UN to focus on gender equality, education, and healthcare, advocating for the rights of girls and inspiring global action towards a more inclusive future. In 2024, the theme was "Girls' vision for the future," highlighting the urgent need, action, and persistent hope, driven by the power of girls' voices and vision for the future.

The Sex ratio at birth is defined as the number of female births per 1000 male births. The Economic Survey for 2023-24 noted that the national Sex Ratio at Birth improved from 918 per 1000 males (2014-15) to 930 (2023-24, provisional), citing data from the Health Management Information System (HMIS) of the Ministry of Health & Family Welfare.



WHY ARE FERTILITY LEVELS DECLINING IN INDIA?

The story so far:

A comprehensive demographic analysis of global fertility in 204 countries and territories from 1950-2021 has found that fertility is declining globally and that future fertility rates will continue to decline worldwide, remaining low even under successful implementations of pro-natal policies.

What has it noted about India?

The Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) 2021, noted that India has moved from a fertility rate of 6.18 in the 1950s to a Total Fertility Rate (TFR) of 1.9 in 2021. This, it pointed out, was below the replacement fertility level of 2.1 (which is the average number of children a woman should have to replace herself and her generation, for population stability). The GBD study projected that the TFR could fall further to 1.04 — barely one child per woman — by 2100.

The steep fall in fertility levels has triggered concerns about the political and socio-economic fallout, especially in the southern States, which fear the loss of parliamentary seats post the delimitation exercise in 2026.

Why is fertility falling?

Even though the country has had one of the oldest birth control/family planning programmes, increased female literacy, workforce participation of women, women's empowerment and improved aspirations could have contributed more to the steady drop in fertility rates over the decades than the faithful adoption of family planning initiatives.

The decline in fertility rate has also a lot to do with changing societal attitudes towards marriage and reproduction, with women increasingly exercising their choice. They often prefer to marry late or not at all, often choosing career and financial independence over motherhood. Rising rates of infertility in both men and women and abortions are important factors which could be contributing to this decline in fertility though no absolute data is available. With an increasing number of young men and women opting to go abroad for higher studies and jobs and choosing to settle down and raise their families there, migration is another key factor that could be in play when one considers the decline in fertility levels.

What are the implications?

Declining fertility rates have resulted in a rapid demographic transition in many southern States. The consequences of this — an ageing population, a declining young workforce and increased demands on healthcare and social security measures for the care of an increasing population of the elderly — are being acutely felt in States such as Kerala. Migration of youngsters in search of better prospects is also an issue.

What is happening in the southern States?

There is concern over the irreversible fertility decline across the country, but more so in the southern States, where fertility rates had dropped below the replacement levels much earlier than the rest of India.



Kerala led the demographic transition in the South, achieving the replacement level fertility rate in 1988, with the other four States achieving this by mid-2000. Along with education and women's empowerment and development in the social and health sectors, which were the hallmark of Kerala's high human development index, the State has also seen low economic investments and growth. Educated youth are leaving the State; the proportion of the aged population is expected to surpass that of children (23% in 2036). Changed attitudes towards marriage and motherhood are beginning to reflect in the health of women, leading to an increasing proportion of older mothers and pregnancy-related morbidities.

Kerala's high labour wages and high quality of life index are attracting internal migration from other States to supplant a shrinking workforce. The State Planning Board reckons that by 2030, the proportion of migrant labour could be close to 60 lakh, about one-sixth of the State's population.

What is the way forward?

Fertility decline is almost always irreversible and the graph, once it starts going down, may never bounce back. Countries like South Korea, which tried to stem the demographic crisis by pumping in millions have failed and the fertility rate plunged from 0.78 in 2022 to 0.73 in 2023.

Demographers suggest that socio-economic policies that propel the growth of the economy, improve job prospects for the youth and tap the potential of a growing population of senior citizens, can help in reducing the impact of a long spell of low, sub-replacement level fertility rates on countries.

DRDO CONDUCTS KEY SCRAMJET TEST IN MAJOR STEP TOWARDS DEVELOPING HYPERSONIC MISSILE

AMID A global race to develop hypersonic munitions, the Defence Research and Development Organisation (DRDO) recently demonstrated a cutting-edge "active cooled scramjet combustor ground test" for 120 seconds for the first time in India. The successful ground test marks a crucial milestone in developing next-generation hypersonic missiles, the Ministry of Defence (MoD) said.

- The Defence Research and Development Laboratory (DRDL), a Hyderabad-based facility of DRDO, has been working on development of a long-duration supersonic combustion ramjet or scramjet-powered hypersonic technology.
- The MoD said the ground test of the scramjet combustor showcased several notable achievements, demonstrating its potential for operational use in hypersonic vehicles, like successful ignition and stable combustion. Officials said the ignition in a scramjet engine is like 'keeping a candle lit in a hurricane'.
- Another key achievement is the development of Thermal Barrier Coating (TBC), which is designed to withstand extreme temperatures encountered during hypersonic flight.
- A new advanced ceramic TBC having high thermal resistance and capable of operating beyond melting point of steel has been jointly developed by DRDL and Department of Science and Technology (DST) facilities.
- The coating is applied inside the scramjet engine using special deposition methods that enhance their performance and longevity.



Do You Know:

- Hypersonic missiles are a class of advanced weaponry that travel at speeds greater than ‘Mach 5’, or more than five times the speed of sound. These advanced weapons have the potential to beat existing Air Defence Systems of major military powers across the world and deliver rapid and high-impact strikes.
- Hypersonic weapons could pose crucial challenges to missile defense systems because of their speed and manoeuvrability.
- Several nations including the US, Russia, India and China are actively pursuing hypersonic technology and have demonstrated various levels of development.
- The key to hypersonic vehicles is scramjets, which are variants of a category of jet engines called the air breathing engines. The ability of the engines to handle airflows at speeds in multiples of speed of sound without using any moving parts gives them the capability of operating at those speeds.
- Scramjet combustor incorporates an innovative flame stabilisation technique that holds continuous flame inside the combustor with air speeds more than 1.5 km per second.
- Many novel and promising ignition and flame-holding techniques were studied by the DRDO scientists over multiple ground tests before arriving at the scramjet engine configuration.
- Advanced Computational Fluid Dynamics (CFD) simulation tools were used for their evaluation and performance prediction.
- Earlier in September 2020, in another major milestone in India’s hypersonic technology development, the DRDO had successfully flight-tested the Hypersonic Technology Demonstrator Vehicle (HSTDV).
- In this test, the hypersonic cruise vehicle was launched using a solid rocket motor, which took it to an altitude of 30 km, where the aerodynamic heat shields were separated at hypersonic Mach number.
- The hypersonic combustion sustained and the cruise vehicle continued on its desired flight path at hypersonic speed for more than 20 seconds.

IS THE GOVERNMENT ENCOURAGING ‘CROSSPATHY’?

The story so far:

The Maharashtra Food and Drugs Administration has, in a recent directive, allowed homeopathic practitioners, who have completed a certificate course in modern pharmacology, to prescribe allopathic medications.

Why is it being challenged?

In 2017, the Maharashtra Medical Education and Drug Department had issued a notification allowing homeopathic practitioners to practise modern medicine. As per this notification, doctors who had obtained the Licentiate of the Court of Examiners of Homeopathy degree from 1951-1982 (the degree was abolished in 1982), and were registered with the Maharashtra Medical Council, were allowed to practise modern medicine. This directive was challenged in the Bombay

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



High Court by the Indian Medical Association (IMA). The High Court issued a stay, with the Bench questioning the risk that could be posed to patients if these doctors were allowed to practise allopathy.

IMA Maharashtra president Santosh Kadam said it was unclear why the Maharashtra FDA had now issued this directive. He said that even the central body for homeopathy had no provision to allow its practitioners to practise another stream of medicine and that ‘crosspathy’ was banned by the Supreme Court. Following the Bombay High Court stay, homeopathic practitioners were not allowed to prescribe allopathic medication, until the final decision of the court came in, he said.

Former secretary of the IMA, Maharashtra, Parthiv Sanghvi, pointed out that the issue has been portrayed as the Maharashtra government allowing homeopathic practitioners to practise modern medicine — which is not the case, as this has already been stayed by the High Court. “This was a direction to chemists to entertain allopathic prescriptions of homeopathic practitioners. But who has given the FDA the authority to issue such a directive, in light of the fact that court has stayed the order allowing homeopathic practitioners to practise modern medicine,” he asked.

What is SC’s stance on ‘crosspathy’?

In 1996, in *Poonam Verma versus Ashwin Patel and Others*, which involved a homeopath treating a patient with allopathic medications and the patient subsequently dying, the Supreme Court held the homeopath liable for negligence as he had prescribed medications that he was not qualified to. A 2015 research paper by Suresh Bada Math et al states: “Across judgments, the judiciary has held that cross-system practice is a form of medical negligence; however, it is permitted only in those states where the concerned governments have authorised it by a general or special order.”

Is there a shortage of doctors?

The Central government has been promoting AYUSH medicine for some years now, with a push being given to integrative/integrated medicine. The rationale, in general, has been that India has a shortage of doctors, particularly in rural areas, and that the AYUSH cadre of practitioners can help fill in these gaps.

As per a Parliament statement in February 2024, there are 13,08,009 allopathic doctors registered with the State medical councils and the National Medical Commission as on June 2022, and 5.65 lakh AYUSH doctors. The shortage of specialists is dire — the Health Dynamics of India 2022-23 report reveals a nearly 80% shortage of specialist doctors in community health centres across rural India. Public health specialist Soham Bhaduri pointed out that while there is evidence that mid-level providers can provide care of comparable quality to that of medical doctors, their orderly integration into the system is crucial. “Allowing just any cadre of alternative medical practitioners to assume roles and functions that are meant for medical doctors is a recipe for anarchy.”

A CONFLUENCE OF FAITH AND CULTURE

Monday, January 13, marked the first day of 45-day long Maha Kumbh in Prayagraj, listed by UNESCO as the largest peaceful religious congregation of pilgrims on earth, where devotees walk miles to take a dip at ‘Sangam’, the convergence of the holy rivers Ganga and Yamuna and the mythical Saraswati. The fair is visited by Hindu ascetics, saints, ash-smearred Naga Sadhus,



skeleton-donning Aghoris and other pilgrims. It is expected to have a footfall of 450 million this year, nearly twice the population of Uttar Pradesh, India's most populous State.

Kumbh, derived from a Sanskrit word which means a pitcher, is rotationally held every three years at the four riverside cities of Prayagraj, Haridwar, Ujjain and Nasik. Its schedule is based on the planetary alignments, mainly of that of Sun and Jupiter. The Ardh (half) Kumbh is held every six years at Haridwar and Prayagraj while the Purna (complete) Kumbh takes place in all four cities, every 12 years. The Maha Kumbh happens after 12 Purna Kumbhs in Prayagraj, once in 144 years and is considered the most auspicious.

The mythological beliefs say that drops of Amrit (essence of immortality) were spilled at these sites from an urn which came out during the Samudra Mantha (churning of the ocean) done by the gods and demons.

The central ritual of the fair remains bathing in icy cold waters of the sacred rivers where millions immerse themselves with the belief that the act will cleanse them of their sins and liberate them from the cycle of birth and death and will attain spiritual liberation.

A gathering of ascetics

Religious texts also link Kumbh Mela's origins to the 8th-century philosopher, Adi Shankaracharya, who established this practice of gatherings of ascetics from across the country, for discussion on religion. It was Shankaracharya who instituted the monastery system and the 13 Akharas (warrior-saint sects) — Nirvani, Atal, Niranjani, Anand, Juna, Awahan and Agni, Nirmohi, Digambar Ani and Nirvani Ani, the two Udasin Akharas (Naya and Bada) and the Nirmala Akhara. The saints from these sects, who sport weapons such as tridents, swords, and lances, are the main attraction at the Kumbh.

The latest in the line of Akharas is the Kinnar (transgender) Akhara, established in 2015 by transgender rights activist Laxmi Narayan Tripathi. The Akhara is still competing for space between the community of religious leaders but remains one of the most visited Akharas in Kumbh.

The Akharas use the fair as an opportunity to elect their chiefs and divide powers at its council meeting called the Dharam Sansad. This year, the meeting, scheduled on January 27, may pass a proposal for the formation of a 'Sanatan Board' (a board dedicated to safeguard the Hindu religious sites), which will be sent to the government with a request for implementation.

The seers have already placed wishes such as no entry for Muslims and non-Hindus at the Kumbh, which was partially supported by Chief Minister Yogi Adityanath who says that those who don't believe in Sanatan Dharma should not visit the event.

Mahatma Gandhi had visited the Kumbh Mela in 1918. Political parties today capitalise on this event to win over Hindus. The fair was also used by the Vishwa Hindu Parishd to chalk out the blueprint for the Ram temple construction in Ayodhya in 1989.

With the BJP being in power at the Centre and State, this year's Kumbh is one of the most well-funded religious gatherings being held in the country. Prime Minister Narendra Modi dubbed it as "A Maha Yagya of Unity", as the Centre approved a special grant of ₹2,100 crore for it. About ₹7,500 crore was devoted to ensure proper logistics to host millions.



A sprawling tent city has been carved out within the limits of Prayagraj district, spread across an approximately 4,000-hectare area and divided in 25 sectors, 12 ghats for bathing. A large group of bureaucrats were deployed at the site to ensure smooth management of the fair. The airport was expanded to accommodate more flights while the Indian Railways has announced that it will run 13,000 trains to Prayagraj to ensure maximum devotees arrive at the Kumbh putting immense pressure on the town which exceeds its carrying capacity every time the fair is organised. In the 2019 Kumbh, this gathering generated 18,000 metric tonnes of solid waste.

Approximately 1,60,000 tent shelters have been constructed this time to accommodate 15-20 lakh Kalpwasis — devotees who spend around a month in the fair living a minimalistic life. Although the tents are free for the Kalpwasis, they do bear the brunt of rocketing price of groceries, travel and other needs.

Apart from the cubical-shaped hiking tents for Kalpwasis, the government has also set aside luxury cottages across the Sangam bank to drive tourism. These cottages cost ₹50,000 to ₹1 lakh per night.

With 1,50,000 toilets, deployment of police offices, hospitals, banks, and eateries, the State has not left any stone unturned to make the Maha Kumbh an event like never before.

The fair has gigantic posters of the Prime Minister and the Chief Minister, advertising schemes and achievements of the BJP government, including the LPG schemes, Swachh Bharat, solar energy, among others.

Business opportunities

The fair presents business opportunities to both local traders as well as multinationals who set up kiosks to expand businesses. From Domino's pizza to Cafe Coffee Day, from RBI to LIC and from medicines to clothes, agriculture products and gadgets, the Maha Kumbh has a stall selling everything. The State has projected to generate up to ₹2 lakh crore from this 45-day long gathering, which will end on February 26.

With millions gathering at the river banks, the Kumbh Melas had seen accidents such as stampedes in the past, which led to the deaths of hundreds of pilgrims. With the humongous footfall at the site, incidents of missing cases too have become synonymous with the fair. Several Bollywood movies have drawn their plots from the Kumbh where heroes get separated from families at the fair and then dramatically reunited decades later.

After the end of the gathering, Sangam city will once again turn into a barren land, which will be used by the farmers to grow melons and children to play, leaving the sand banks to wait for another Kumbh to feel lively again.

THE BULL AND THE BRAVE

The Tamil festival of Pongal is celebrated with great enthusiasm in districts such as Madurai, notably hosting the ancient sport of jallikattu.

The traditional bull-taming event, believed to date back to the Sangam period, attracts thousands of spectators from around the world each year. Avaniapuram, Palamedu, and Alanganallur are some of the places famed for the event.



From men waiting in long queues to release their bulls into the arena, to bull-tamers preparing to jump in, photographers with sharp eyes waiting to capture the right moment, and cheering spectators watching from terraces, parapets, and galleries, jallikattu undoubtedly is a vibrant celebration.

The event is promoted as a tourist attraction by the State government and it holds appeal as a symbol of Tamil culture. Tourists from the U.S., the U.K., Australia, France, Belgium, Austria, Brazil, and other countries registered and witnessed this year's event with much joy and enthusiasm.

Traditionally a male-dominated sport, jallikattu has seen increased participation from women and transgender persons in recent years. Each year, alongside men who wait for their turn to untie their bulls in the field, hundreds of women, and transgender persons too train and wait for their turn to tackle their bulls. Many women and a few transgender people who participated in this year's jallikattu events were seen celebrating their victory by kissing or embracing the bulls.

Once looked upon as an event to test the prowess of the young men in the region, jallikattu soon evolved into a competitive sport with high stakes, and, more recently, controversy. Despite its cultural significance, jallikattu has faced criticism due to safety concerns. The event has been associated with numerous injuries and fatalities among both participants and spectators over the years. Animal activists have also alleged that the sport involves cruelty to the bulls.

As the echoes of celebration and spirit settle for now, it is time to consider ways to preserve this tradition with more safety for participants and welfare measures for the animals.

FURTHER SOUTH

The Iron Age in India has been a subject of fascination and discussion. In the rest of the world, the Iron Age succeeded the Copper-Bronze Age or bridged the gap between the Bronze Age and the Early Historic period. But the situation in India is different: when the region north of the Vindhyas belonged to the pre-iron Chalcolithic or Copper Age, the south, with over 3,000 sites, was associated with iron. Many archaeologists have, generally and conservatively, placed the Iron Age to be in the second millennium BCE. Given this backdrop, Tamil Nadu Chief Minister M.K. Stalin's recent statement, that the origin of iron in the State could be traced to the first quarter of the fourth millennium BCE, is significant as this pushes the antiquity of iron further. After excavations in the mid-Ganga Valley of Uttar Pradesh about 25 years ago, early evidence of iron technology was dated to 1800 BCE. But now, the work in Sivagalai in Tamil Nadu, which was carried out between 2019 and 2022, has made authorities attribute the introduction of iron in the country to the early part of the fourth millennium BCE, even though the period of 2500 BCE-3000 BCE is taken as a mid-range value. This forms the highlight of a study by the State Department of Archaeology (TNSDA), titled "Antiquity of Iron: Recent radiometric dates from Tamil Nadu". The TNSDA had the scientific dating results of its study validated by renowned institutions such as the Beta Analytic laboratory in the U.S. Mr. Stalin's observation was made keeping the findings in mind. Early this month, he announced a \$1-million prize scheme for deciphering the script of the Indus Valley Civilisation.

The work by the TNSDA should spur new thinking with regard to the strategies to be adopted by archaeologists who are working on the Iron Age of India. They may have to look for more iron-specific sites than copper-cum-iron sites, which will save time, energy and resources. Even though the Tamil Nadu government supports research projects on a wide range of themes in other States, the TNSDA has its constraints with regard to territorial jurisdiction. This underscores the need for



complementing Tamil Nadu's efforts with those of other southern States. The Archaeological Survey of India should take the initiative of bringing the entire southern region under a common fold and enabling well-designed and coordinated work. After all, the idea is to share available resources and expertise in the country to arrive at more reliable findings. At a time when certain forces are increasingly using history and culture as powerful instruments to pursue their political agenda, credible and concrete evidence on the antiquity of the country will naturally put to rest any claim based on baseless assumptions.

A COLOSSAL BUDDHA HEAD, A GIANT PALM UNEARTHED AMID ASI EXCAVATION IN RATNAGIRI. WHAT THIS MEANS

Odisha's links to Buddhism dates back to Mauryan Emperor Ashoka's invasion of the ancient kingdom of Kalinga. But with ASI renewing excavation efforts in Ratnagiri, it has brought back focus on a site experts believe rivalled Nalanda as a centre of Buddhist learning.

In December, when Archaeological Survey of India's superintending archaeologist D B Garnayak and his team took up excavations at the 5th-13th Century Buddhist complex in Ratnagiri, in Odisha's Jajpur district, after a gap of 60 years, their aim was two-fold – to uncover more of the complex and to find material evidence of the state's link to the larger Southeast Asian culture.

So far, the mission has been partially successful – they have unearthed a colossal Buddha head, a massive palm, an ancient wall and inscribed Buddhist relics, all of which are estimated to date back 8th and 9th Century AD.

"The Buddha head was 3-4 feet tall and the palm was 5 feet," says Sunil Patnaik, a Buddhist researcher and secretary of Odisha Institute of Maritime and South East Asian Studies who is part of the excavation team. "You can imagine the richness of the area from just this."

The discoveries are significant, especially given Odisha's historical relationship with Buddhism beginning with Mauryan Emperor Ashoka (304-232 BCE), one of Buddhism's greatest patrons whose invasion of the kingdom of Kalinga – the ancient name for Odisha – led to him embracing the religion.

Located 100 km northeast of Bhubaneswar and part of the famous Diamond Triangle of Odisha along with Udaygiri and Lalitgiri, Ratnagiri – translated as the 'Hills of Jewels' – was first documented as a historical site in 1905. The site stands on a hill between Birupa and Brahmani rivers and is Odisha's most famous — and the most excavated – Buddhist site.

Odisha, Southeast Asia and Buddhism

Odisha has long enjoyed maritime and trade links with Southeast Asian countries: according to historians, pepper, cinnamon, cardamom, silk, camphor, gold, and jewellery were popular items of trade between the ancient kingdom of Kalinga and Southeast Asia.

The state also annually holds Baliyatra, literally 'voyage to Bali' – a seven-day festival to commemorate the 2,000-year-old maritime and cultural links between Kalinga and Bali and other South and Southeast Asian regions such as Java, Sumatra, Borneo, Burma (Myanmar) and Ceylon (Sri Lanka).

Even though there was no evidence of Buddha visiting Odisha during his lifetime, Kalinga played a great role in popularising Buddhism, especially in Southeast Asia, because of its trade link with



the region: experts believe that Tapassu and Bhallika, the two merchant brothers who became the first disciples of Lord Buddha, having their origins from Utkala, another ancient name of Odisha.

Mauryan Emperor Ashoka is believed to have invaded Kalinga in 261 BC but, deeply moved by the bloodshed in the war, he eventually embraced Buddhism, which he eventually helped spread not only to his own empire but also to Sri Lanka, and Central and Southeast Asia.

In Odisha, Buddhism is stated to have particularly flourished under the Bhaumakara dynasty, which ruled parts of the state in between the 8th and 10th Century.

Ratnagiri — the centre of ancient Buddhist learning

Experts date Ratnagiri to the 5th and 13th Century, although the peak period of construction is dated between the 7th and 10th centuries. According to Thomas Donaldson, a former professor at Cleveland University who is a scholar in iconography and an expert in Odisha's art and Buddhist sites, Ratnagiri rivalled Nalanda as a learning centre, with even some of the Tibetan texts even seen at the place where the Mahayana and Tantrayana (also known as Vajrayana that involves mystical practices and concepts) sects of Buddhism originated.

However, with the ASI eventually shifting focus on sites such as Lalitgiri, where the oldest Buddhist monastery in the state was found, the Ratnagiri excavation was put on the backburner.

TIGERS AS GIFTS: PRECEDENTS FOR, PROBLEMS WITH IDEA MOOTED BY NEPAL'S PM SHARMA OLI

How many tigers are too many? For a country the size of Nepal, 150 tigers are "sufficient", Prime Minister K P Sharma Oli said last month.

The World Wildlife Fund (WWF) in 2022 found that Nepal was home to 355 tigers, up from just 120 in 2009 — a staggering 296% increase in just over a decade. The Himalayan country has since been hailed as an epitome of conservation success around the world.

But this success has not been all sweet. Amidst ever-shrinking forest cover, the growth in the tiger population has been accompanied by a rise in human-tiger conflict. According to government data accessed by the BBC, tiger attacks claimed almost 40 lives and injured 15 people between 2019 and 2023.

It is in this context that Oli has proposed a controversial solution. Speaking at an event to review COP29 outcomes, the Prime Minister mused, "Why not gift the extra tigers to other countries as economic diplomacy?... People love to keep birds like falcons and peacocks as pets, so why not tigers?"

History of shikar diplomacy

Tigers have been a part of Nepal's diplomatic arsenal for more than two centuries.

The Ranas, who effectively ruled Nepal from 1846 to 1951, began the tradition of using lavish hunting expeditions or shikars as a means to establish favourable ties with the British. Between the mid-19th and early 20th centuries, members of the British aristocracy — including Prince Albert Edward (later King Edward VII) in 1876 and King George V in 1911-12 — and important officials of the Raj flocked to Nepal to participate in these expeditions.



According to anthropologist Mark Liechty, “with game stocks dwindling elsewhere, Nepal’s Terai lowlands acquired almost mythical status among British hunting elites”. (Far Out: Countercultural Seekers and the Tourist Encounter in Nepal, 2017). In exchange for these exclusive hunting experiences, the Ranas secured personal and political favours, as well as military support.

But excessive hunting eventually took a toll on Nepal’s wildlife — by the mid-20th century, big game species such as tigers and rhinos were on the brink of extinction.

Animals as goodwill ambassadors

This did not, however, stop wild animals from being used for international diplomacy.

Starting in 1985, when a pair was gifted to India, Nepal has exported at least 26 endangered one-horned rhinos to foreign governments including the US, the UK, Germany, Austria, Japan, and China. The country has also gifted elephants, most recently in 2024, when it gifted two adults, Rudrakali and Khagendraprasad, to Qatar.

Gifting wild animals is not a novel practice in international diplomacy. Jawaharlal Nehru, for instance, gifted a 15-year-old elephant christened Indira to Japan in 1949, which he said was a gift to all Japanese children from the children of India.

In recent years, China has mastered the art of using pandas not only as goodwill gestures but also as leverage in international diplomacy. Unlike other countries, China only loans pandas, and does not give them as gifts. These animals can thus be recalled if bilateral relations go sour — a problem zoos in the US faced after ties with China took a nosedive in the aftermath of the Covid-19 pandemic.

Keeping tigers as pets, status symbols

Nepal plans to “gift” tigers. And based on Oli’s remarks, not just to countries. The Nepal PM’s suggestion of gifting tigers “as pets” is very contentious. Wealthy and powerful individuals from around the world keep big cats as pets. These are seen as symbols of status and luxury.

In 2021, the WWF estimated that around 5,000 tigers live in captivity in the US alone — more than the estimated 3,900 tigers left in the wild globally. It was only in 2023 that the US passed the Big Cat Public Safety Act to end the private ownership of big cats as pets.

Just last week, Pakistan’s Punjab province passed a new law which allows individuals to keep big cats as pets in lieu of a licence fee.

But tigers are apex predators in the wild. They have complex needs that are difficult, if not impossible, to meet in a domestic setting. In captivity, they are often subjected to poor living conditions, given inadequate veterinary care, and suffer from malnutrition. Rampant inbreeding also makes them more susceptible to disease, causes behavioural issues, and shortens their lifespan. Many even abandon tigers when their upkeep becomes too costly.

While Nepal may have a problem of plenty when it comes to tigers, any solution which will see the big cats being gifted, especially to individuals, will be controversial.



WHY DEAD OLIVE RIDLEY TURTLES ARE WASHING UP ON TAMIL NADU'S BEACHES

Over the past two weeks, numerous dead olive ridley turtles have washed ashore in Tamil Nadu, particularly in Chennai. Experts have estimated that so far, between 300 and 350 turtles have been found dead.

- Olive ridley turtles arrive near the Tamil Nadu coast around September-October to breed. Their nesting season begins in late November and ends in March. Although deaths during nesting season are not unusual, the large number of turtle carcasses found this early in the nesting period has sparked concerns among conservationists and citizens.
- Speaking to The Indian Express, Supraja Dharini, founder of the Tree Foundation, a non-profit which works on sea turtle conservation, said that dead olive ridley turtles have been found across Chennai and neighbouring Kancheepuram district. "Dead turtles have been reported in Neelankarai, Besant Nagar, Kovalam right up to areas of Kancheepuram district," she said.
- Officials of the state Forest Department said that they were still collating exact data on the mortalities. Deaths have also been reported from Pulicat in Thiruvalluvar district, north of Chennai, according to officials.
- Finding carcasses of olive ridley turtles is not uncommon during their mating season. The turtles mate near shore areas and females arrive in small batches for nesting on Tamil Nadu's beaches. As a result, they often get trapped in long fishing nets of commercial trawlers as bycatch — the unintentional capture of non-target marine life — and die, according to experts.

Do You Know:

- Olive ridley turtles lay eggs across several coastal states on India's east coast and west coast. However, mass nesting takes place in Odisha, followed by Andhra Pradesh and Tamil Nadu.

Odisha's Gahirmatha and Rushikulya beaches witness the arrival of lakhs of female olive ridley turtles every year.

— The female Olive Ridley turtles virtually invade the nesting beaches usually at the dead of the night for laying eggs – a phenomenon which is called 'Arribada'. They make nests in the sand using their flippers and lay between 100 and 110 eggs each. After laying the eggs, they cover the nests with sand to prevent predation and return to the sea.

- After 45-60 days, thousands of hatchlings make their way to the ocean. At nesting sites where human disturbance and predation are likely, Forest Departments create hatcheries. The eggs are retrieved from the nests with care and are placed in hatcheries. After the eggs hatch, the juveniles are placed in baskets and released near the sea.

— It is recognised as Vulnerable by the IUCN Red List.

— They are carnivores and feed mainly on jellyfish, shrimp, snails, crabs, molluscs, and a variety of fish and their eggs.



SHORT NEWS

NAME CHANGE CONTROVERSY OF JAFFNA CULTURAL CENTRE

India recently renamed the Jaffna Cultural Centre in Sri Lanka to Thiruvalluvar Cultural Centre in honour of the Tamil poet-philosopher. This change, announced on January 18, sparked backlash from Jaffna politicians and intellectuals, leading to a compromise name: Jaffna Thiruvalluvar Cultural Centre. The renaming coincided with Pongal celebrations and was supported by Indian officials, though many Sri Lankan Tamils felt the omission of "Jaffna" disrespected their heritage. The controversy highlighted concerns over cultural identity and diplomatic sensitivity between India and Sri Lanka.

ENEMY PROPERTY

- Madhya Pradesh High Court has asked actor Saif Ali Khan to approach the appellate authority against an order of the central government that declared historical properties of the Pataudi family in Bhopal as "enemy property".
- Enemy property refers to the assets, both movable and immovable, left behind in India by individuals who migrated to countries designated as "enemy nations" during times of conflict.
- Following the wars between India and Pakistan in 1965 and 1971, and the Sino-Indian War in 1962, the Indian government assumed control of properties and businesses owned by those who adopted the nationality of Pakistan or China.
- Under the Defence of India Rules, formulated under the Defence of India Act, 1962, these properties were vested with the Custodian of Enemy Property for India. The custodian is tasked with managing these assets on behalf of the Indian government.

WHEN-LISTED PLATFORM

- The Securities and Exchange Board of India (Sebi) is looking to launch a "when-listed" platform for trading of shares of companies that have finished their initial public offering (IPO) and are yet to be listed on stock exchanges.
- The new platform, when launched, will help reduce trading of shares in the grey market prior to the listing.
- At present, once the IPO is closed, shares have to be listed on bourses in trading plus three working days (T+3), with T being the closing day of the offer. The allotment of shares is done on T+1 day.
- Grey market refers to an unofficial trading of securities even before they are listed on a stock exchange. This is an unregulated market and works on demand and supply.

PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)

- At least 4.14 lakh crop insurance claims submitted by farmers in 2024 were found to be bogus and farmers had submitted false claims to gain undue benefits from the PMFBY, according to the Maharashtra Agriculture Department.

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



— The scheme was launched during Kharif 2016. In 2020, the government revamped the scheme's operational guidelines, and the revised guidelines came into effect from Kharif 2020.

— Under the PMFBY, farmers have to pay premium at the rate of 2 per cent of sum insured or actuarial rate whichever is less for kharif food and oilseeds crops (all cereals, millets, and oilseeds, pulses), 1.5 per cent for rabi food and oilseeds crops (all cereals, millets, and oilseeds, pulses), and 5 per cent for kharif and rabi annual commercial/annual horticultural crops.

PARAKRAM DIWAS

— Since 2021, January 23, Netaji Subhas Chandra Bose's birth anniversary, has been observed as "Parakram Diwas," or the Day of Valour. This year marked Netaji's 128th birth anniversary.

— Subhas Chandra Bose, born on January 23, 1897, in Cuttack, Orissa, was a nationalist leader who joined the nationalist movement led by Mahatma Gandhi and the Indian National Congress in 1921.

PADMA AWARDS

— The Padma Awards were announced on January 25, a day ahead of Republic Day, honouring eminent personalities in arts, social work, public affairs, science, business and more.

— After the Bharat Ratna, the Padma Vibhushan, the Padma Bhushan and the Padma Shri are the highest civilian awards (in that order).

— The Padma Vibhushan is awarded for "exceptional and distinguished service", while the Padma Bhushan is conferred to individuals for "distinguished service of high order". The Padma Shri is awarded for "distinguished service in any field".

— This year, seven people were conferred with the Padma Vibhushan, 19 were awarded the Padma Bhushan and 113 received the Padma Shri, with 139 awardees in total. The highest number was in the category of arts (51).

— Under the Education category, MT Vasudevan Nair from Kerala will be awarded the Padma Vibhushan Posthumously. Other people who will receive the award are, Duvvur Nageshwar Reddy, Justice (Retd.) Shri Jagdish Singh Khehar, Kumudini Rajnikant Lakhia, Lakshminarayana Subramaniam, Osamu Suzuki and Sharda Sinha.

— Legendary Indian hockey goalkeeper PR Sreejesh will be feted with the Padma Bhushan award. Recently retired India spinner Ravichandran Ashwin will be awarded the Padma Shri as will legendary footballer IM Vijayan, Paralympic medal-winning para-archer Harvinder Singh, and Satyapal Singh.

NATIONAL VOTERS' DAY

— January 25 is celebrated annually as National Voters' Day to mark the foundation day of the Election Commission of India (ECI), which was founded on January 25, 1950.

— The 15th National Voters' Day theme was "Nothing Like Voting, I Vote for Sure" emphasising the importance of participation in the electoral process, and encouraging voters to take pride in exercising their franchise.



MANGHAR VILLAGE

- Maharashtra has displayed a tableau featuring its 'Madhache Gaav' (honey village) project in New Delhi as part of the Republic Day celebrations.
- Manghar village in the Satara district became the country's first 'Madhache Gaav'.
- The concept of 'Madhache Gaav' was implemented in the Manghar village in May 2022 by the Directorate of Beekeeping Industry under the Maharashtra State Khadi and Village Industries Board (MSKVIB).
- The purpose was to promote beekeeping and provide an additional income source in the rural area which also benefits to maintain ecological balance.

MCKINLEY/ DENALI MOUNTAIN

- The Executive orders signed by Donald Trump said that the highest peak in North America would be again called Mount McKinley, the name that was in use before the administration of President Barack Obama renamed it Denali in 2015.
- The Denali Peak is the continent's highest peak in the Alaska Range, in the US state of Alaska, and stands 20,310 feet (6,190 m) above sea level.
- The indigenous Koyukon people, who lived in the valleys of the Koyukuk and Yukon rivers, called the peak Denali in their Athabascan language.
- In 1897, a gold prospector in Alaska is said to have given the name McKinley to the peak in honour of the then newly-elected President.

GULF OF MEXICO

- Donald Trump reiterated his promise to rename the Gulf of Mexico to the "Gulf of America."
- The Gulf of Mexico is bordered by Cuba, Mexico, and the United States and is the world's largest gulf by surface area. It is also considered the ninth-largest body of water in the world.
- It connects to the Atlantic Ocean through the Straits of Florida, which run between the Florida peninsula and the island of Cuba. It also connects to the Caribbean Sea via the Yucatán Channel, located between the Yucatán Peninsula and Cuba.

STARGATE

- Soon after being sworn in as the US President, Donald Trump made a huge announcement that could shape the future of AI.
- Stargate is a \$500 billion initiative aimed at creating an AI infrastructure in the US over the next four years. Trump said \$100 million will be invested right away. This is an ambitious project that aims to propel the US into global leadership in AI advancements.



— Sam Altman’s OpenAI, the organization behind AI language model ChatGPT, has been tasked with overseeing the operational side of the project, while SoftBank will shoulder the financial responsibilities.

AIP SYSTEM

— The joint venture of state-run Mazagon Dock Shipbuilders Ltd and Germany’s Thyssenkrupp Marine Systems with the Defence Ministry rejecting the joint bid from Larsen and Toubro (L&T) and Spanish firm Navantia ran into trouble due to technical reasons.

— L&T and Navantia failed to meet the technical requirements of a proven air-independent propulsion (AIP) system.

— The AIP system, also known as BEST (Bio-Ethanol Stealth Technology), is the next-generation technology for conventional submarines. Using bio-ethanol to generate oxygen, which sustains the crew and ensures fuel combustion, BEST can provide submarines with up to 21 days of underwater endurance.

— Though nuclear submarines have higher underwater endurance, AIP submarines cause less noise, reducing chances of detection. These submarines, which can accommodate about 40 crew members, can be armed with heavyweight torpedoes, anti-ship missiles and other weapons.

NVS-02 MISSION

— In its 100th launch, the Indian Space Research Organisation (ISRO) is geared to send off a 2,250-kg navigation satellite NVS-02 on-board GSLV-F15 from Sriharikota on January 29.

— The NVS-02 is the second of the five second-generation satellites developed by the space agency to replace the existing satellites in the country’s navigation constellation the Indian Regional Navigation Satellite System (IRNSS).

— The new generation of satellites have a longer lifespan of 12 years and are also equipped with indigenously developed, more accurate atomic clocks.

— IRNSS — sometimes referred to as NavIC or Navigation with Indian Constellation — is a seven-satellite system that provides positioning, navigation and timing services over the Indian mainland and 1,500 km in its neighbourhood.

— The first satellite in the constellation IRNSS-1A was launched in 2013, with a mission life of 10 years. The next two satellites IRNSS-1B and 1C were launched in the subsequent years.

FIDE WORLD CUP

— India will host the prestigious FIDE World Cup 2025 chess tournament this year. The event will be held from October 31 to November 27.

— The FIDE World Cup offers the top three finishers among 206 players a spot in the prestigious Candidates Tournament, which serves as the pathway to becoming a challenger to Gukesh at the next World Championship.



— The World Cup happens over eight rounds in a knockout format. The top 50 seeded players play from the second round onwards. Each one-on-one match at the FIDE World Cup is played as a set of two classical games, with colours exchanged between game 1 and 2. If the two games cannot decide a winner, there are tiebreaks.

KHO-KHO WORLD CUP

— The inaugural edition of the World Kho-Kho competition, backed by the Indian Olympic Association (IOA), was held in New Delhi from January 13 to 19.

— It has featured 20 men's and 19 women's teams. The mascot for the event was Tara and Tejas representing speed, agility, and teamwork.

— The Indian women's team won the inaugural edition after defeating Nepal.

— The Indian Men's Kho Kho team defeated Nepal to win the inaugural edition.

KALARIPAYATTU

— Kerala's martial art form Kalaripayattu has become a bone of contention ahead of the 38th edition of the National Games which is scheduled to commence from January 28 in Uttarakhand.

— In the 37th edition of the National Games, which was held in Goa in 2023, Kalaripayattu was part of the competition section. This year, the art form has been included in the list of events for demonstration.

— Kalaripayattu is an ancient Indian martial art, that translates into 'practice in the arts of the battlefield.' The term 'Kalari' refers to the martial art and the arena where it is taught and practiced, while 'payattu' means combat or practice.

— There are two types of Kalaripayattu — northern (Vadakkan Kalari) and southern (Thekkan Kalari), which slightly differ from each other.

— In the north, more weapons are used as compared to the south, and all movements in northern Kalari are in a straight line — forward and backward. However, down south, people can move in any direction while practicing it.

TREE AADHAAR MISSION

— The Jammu & Kashmir government has launched the "Tree Aadhaar" mission for the conservation of the region's chinar trees which have been dwindling in numbers over the years.

— The initiative involves conducting a census of chinar trees and giving a unique identity to each one of them.

— Chinar, also known as Oriental plane tree (*platanus orientalis* var *cashmeriana*), is a maple-like tree with a huge canopy and is found in cool climate regions with sufficient water.

— The tree is a characteristic of the Eastern Himalayas. It takes 30-50 years for a tree to mature and 150 years to reach its full size. The tree can grow up to a height of 30 metres while its girth ranges from 10 to 15 metres.



— Chinar is the “state tree” of Jammu & Kashmir, now a Union Territory. The tree is a major tourist attraction in the valley during the autumn season when its green leaves slowly change into crimson red and golden.

INDIAN GREY WOLF

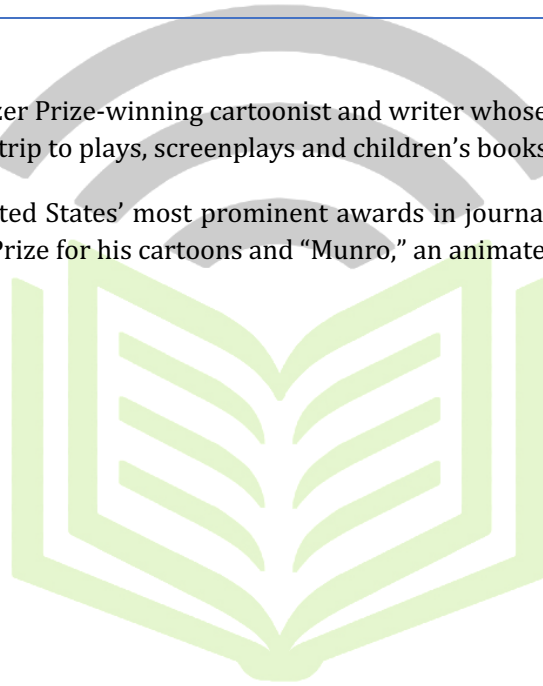
— In a rare occurrence, the Indian Grey wolf has given birth to eight pups at the Bankapur Wolf Sanctuary in Koppal district, Karnataka.

— On August 13th, International Wolf Day is celebrated every year to raise awareness about wolves and their role in maintaining ecological balance.

JULES FEIFFER

— Jules Feiffer, a Pulitzer Prize-winning cartoonist and writer whose prolific output ranged from a long-running comic strip to plays, screenplays and children’s books, died at the age of 95.

— Feiffer won the United States’ most prominent awards in journalism and filmmaking, taking home a 1986 Pulitzer Prize for his cartoons and “Munro,” an animated short film he wrote, won a 1961 Academy Award.



DreamIAS



BUSINESS & ECONOMICS

DAVOS TURNS INTO FORTRESS WITH 5,000 ARMY PERSONNEL, AIR TRAFFIC RESTRICTIONS, DRONES

The World Economic Forum (WEF) is holding its Annual Meeting from January 20 to 24 in Davos, Switzerland. Attendees will include European Commission President Ursula von der Leyen, China's Vice Premier Ding Xuexiang, and other leaders in business and politics.

- Union Minister Ashwini Vaishnaw will head the Indian delegation. Maharashtra Chief Minister Devendra Fadnavis, Telangana Chief Minister Revanth Reddy, and Andhra Pradesh Chief Minister Chandrababu Naidu Chief will also attend. "There will be a detailed discussion in the WEF Annual Meeting World Economic Forum about inclusive growth, investment in social, physical and digital infrastructure and democratising technology," Vaishnaw said.

- In the past, it has been used as a location for pivotal international diplomacy as leaders can break tensions in the town. The WEF website states that North and South Korea held their first ministerial-level meetings in Davos. At the same Meeting, East German Prime Minister Hans Modrow and German Chancellor Helmut Kohl met to discuss German reunification.

- In 1992, South African President de Klerk met Nelson Mandela and Zulu prince Mangosuthu Buthelezi at the Annual Meeting, their first joint appearance outside South Africa and a milestone in the country's political transition.

- In 1998, participants emphasised the need to include major developing countries in the process. One idea was to set up a body to include 20 countries – half developed economies and the other developing ones. Such a meeting of what became known as the G20 was held in Bonn, Germany, later that year. Participation was restricted to finance ministers and its scope was limited to global finance.

- The G20 meeting was eventually elevated to a summit. This happened in 2008 when the US hosted a G20 summit in Washington DC to address the impact of the global economic crisis.

- The WEF also went on to regularly publish global rankings and indices, such as the Global Competitiveness Report and the Global Gender Gap Report.

Do You Know:

- German professor Klaus Schwab founded the WEF. He was a mechanical engineering graduate who then earned a Master of Public Administration degree from the John F. Kennedy School of Government at Harvard University.

- From 1972 to 2003, Schwab was a professor of business policy at the University of Geneva. He founded WEF in 1971, originally known as the European Management Forum. It introduced the concept of "stakeholder capitalism."

- According to Schwab, "It is a form of capitalism in which companies do not only optimize short-term profits for shareholders, but seek long term value creation, by taking into account the needs of all their stakeholders, and society at large."



- The WEF website says of the idea: “A company should serve all its stakeholders, not just its shareholders: employees, suppliers, and the community it is part of.”
- Two years later, the organisation introduced a system of membership for ‘the 1,000 leading companies of the world’. The European Management Forum was the first non-governmental institution to initiate a partnership with China’s economic development commissions in 1979 – the same year China and the US established diplomatic ties.
- Davos brings together some 3,000 participants (including paying members and selected invitees), among whom are investors, business leaders, political leaders, economists, celebrities and journalists, for up to five days to discuss global issues across 500 sessions. Thus, the WEF has become a forum for various stakeholders to meet and discuss global and regional socio-economic issues.
- The WEF is largely funded by its partnering corporations. These are generally global enterprises with annual turnover greater than \$5 billion. Davos was the setting for Thomas Mann’s novel *The Magic Mountain*. The book is the story of a young man who goes to Davos to stay at a sanatorium for three weeks and ends up spending seven years.

Relaxed in its serene environs, it seeks to cut through the many distractions of global politics to succeed in its mission to create a more prosperous global economy.

WEALTH OF BILLIONAIRES SOARED IN 2024, REPORT SAYS AS ELITES PREPARE FOR DAVOS

Billionaires’ wealth grew three times faster in 2024 than the year before, a top anti-poverty group reported on Monday as some of the world’s political and financial elite prepared for an annual gathering in Davos, Switzerland.

Oxfam International, in its latest assessment of global inequality timed to the opening of the World Economic Forum meeting, also predicts at least five trillionaires will crop up over the next decade.

OxFam’s research adds weight to a warning by outgoing U.S. President Joe Biden last week of a “dangerous concentration of power in the hands of very few ultra-wealthy people.” The group’s sharp-edged report, titled *Takers Not Makers*, also says the number of people in poverty has barely budged since 1990.

The World Economic Forum expects to host some 3,000 attendees, including business executives and government officials at its annual meeting in the Alpine village of Davos.

U.S. President-elect Donald Trump, who visited Davos twice during his first term and was set to take the oath of office on Monday, is expected to take part in the forum’s event by video on Thursday. He has long championed wealth accumulation — including his own — and counts billionaire Elon Musk as a top adviser.

“What you’re seeing at the moment is a billionaire President taking oaths today, backed by the richest man. So this is pretty much the jewel in the crown of the global oligarchies,” Amitabh Behar, executive director of Oxfam International, said in an interview, referring to Mr. Trump and Mr. Musk.

Like Mr. Biden’s call for making billionaires “begin to pay their fair share” through the U.S. tax code, Oxfam called on governments around the world to tax the richest to reduce inequality and extreme wealth, and to “dismantle the new aristocracy.” The group called for steps like the break-



up of monopolies, capping CEO pay, and regulation of corporations to ensure they pay “living wages” to workers.

TRUMP POLICY: FIX ‘UNFAIR, UNBALANCED TRADE, COUNTER CURRENCY MANIPULATION’

US President Donald Trump on Monday instructed his commerce and treasury departments to investigate the causes of America’s “large and persistent” annual trade deficits in goods, as well as the “economic and national security” implications of such deficits, according to an official document titled ‘America First Trade Policy’ released by the White House on Monday.

- This holds significance for India, which recorded a \$50 billion trade surplus with the US in 2023 compared to \$25 billion in 2019. Indian trade policy researchers have highlighted that India’s consumer goods exports, such as pharmaceuticals, gems and jewellery, and marine products, are particularly vulnerable to US tariffs due to the trade imbalance.
- During his first term, Trump had invoked national security provisions to impose 25 per cent tariffs on steel and 10 per cent on aluminium from India and other countries and had revoked the Generalized System of Preferences (GSP), a preferential trade agreement which benefited India the most.
- Trump also directed the United States Trade Representative (USTR) to review existing US trade agreements and sectoral trade agreements and to “recommend any revisions that may be necessary” or appropriate to achieve or maintain the general level of reciprocal and mutually advantageous concessions with respect to free trade agreement partner countries.
- Notably, India, the US and 12 other members including Australia, Indonesia and Japan signed a Indo-Pacific Economic Framework (IPEF), a regional agreement to increase economic integration and cooperation in the Indo-Pacific. India is a signatory of three pillars of IPEF: supply chains, clean economy, and fair economy.

Do You Know:

- The White House instructed the USTR to review the economic and trade agreement between the US and China to determine whether the latter is adhering to its commitments under the agreement.
- China’s exports gained momentum in December, pushing year-on-year growth in 2024 up by 5.9 per cent to \$3.58 trillion, according to customs data released by Beijing on Monday. Imports, however, grew at a slower pace of 1.1 per cent to \$2.59 trillion, resulting in a trade surplus of \$992.2 billion for the year.
- The White House has indicated that US measures to address the trade gap with China will extend beyond tariffs.
- According to the US Treasury, China should pursue more market-based economic reforms to bolster growth and confidence in its currency.



TRUMP, MELANIA RELEASE MEMECOINS: WHAT EXACTLY ARE THEY, WHY CRYPTO INVESTORS ARE DIVIDED ON THEM

US President Donald Trump's newly launched memecoin is a reminder of crypto's riskiest gambles. What is a memecoin? How is it different from other cryptocurrencies? What makes them a risky investment?

Donald Trump had emerged as a vocal advocate for cryptocurrency on his recent presidential campaign trail, presenting himself as someone who would advance the interests of the crypto community if elected to power.

However, just days into his second term, crypto investors have shown signs of wavering in their support of the newly sworn-in US president.

The fault lines appeared when Trump launched his own crypto memecoin called \$Trump on January 17, alongside \$Melania, another memecoin promoted by First Lady Melania Trump.

At the launch, Trump pitched the meme coin to his supporters as a way "to celebrate everything we stand for: WINNING!". However, the official website of the memecoin also carries a disclaimer noting that \$Trump is not "an investment opportunity" or "a security", but a way to show support to Trump.

The potential for these memecoins to inflate Trump's personal fortune has raised legal and ethical concerns among US lawmakers and former government officials.

Amid the growing controversy over \$Trump, what exactly is a memecoin? How is it different from other cryptocurrencies? Can anyone create a memecoin? What makes them such a risky investment?

Making a memecoin

Memecoins are a bizarre blend of internet humour and cryptocurrencies. They are often inspired by online memes and do not hold any intrinsic value. Despite their value being purely based on hype and public perception, memecoins can be used to build a large following and attract significant investment.

Unlike traditional cryptocurrencies, new types of memecoins can be created by anyone for free, using launch-pad platforms such as Pump.fun that are hosted on blockchain networks like Solana or Ethereum. \$Trump is hosted on the Solana blockchain.

In November last year, a 13-year-old boy launched his own memecoin called Gen Z Quant that went viral and netted the young crypto investor US \$30,000.

One of the best known memecoins, Dogecoin, initially started out as a joke but took off after tech billionaire Elon Musk started frequently posting about it on X. As a result, Dogecoin is one of the few crypto assets that has kept up with Bitcoin over several market cycles.

Other viral memecoins include Shiba Inu (named after a dog breed) and Pepe (inspired by the cartoon frog meme). Over 13 million new memecoins were created in 2024 with a combined market value of \$100 billion, according to a report by blockchain consultancy firm BDC.

New types of memecoins are listed on decentralised exchanges based on factors such as market cap, trading volume, and overall demand.



Trading memecoins

Memecoins do not have intrinsic economic value. But if enough people buy and sell them, their value goes up.

Creators give their memecoins liquidity by establishing a liquidity pool and depositing equal values of the memecoin and a well-known cryptocurrency like Ether. This liquidity pool also sets the initial trading price of the memecoin. For instance, a liquidity pool consisting of 100 memecoins and 1 Ether means that the starting price of 1 memecoin is 0.01 Ether.

Platforms such as Pump.fun also estimate the initial trading prices of memecoins based on their own formula.

The market cap is decided based on the trading price of each coin and total supply of memecoins. However, market cap estimates of memecoins need to be interpreted with caution as they do not reflect any underlying assets or actual value.

So what causes the market caps of memecoins to skyrocket overnight?

Creators put in efforts to build a “brand” around the memecoin in order to attract a cult following. For instance, the official \$Trump website rallies supporters with a message of loyalty and features an image of the US president in a fist-pump pose — a gesture he made moments after the assassination attempt against him last year.

The value of memecoins can also be pumped up through influencer marketing or exploiting the hype around viral content.

For example, in 2021, a memecoin inspired by the popular Netflix series ‘Squid Game’ was created by anonymous creators not linked to the show.

Generative AI has also been used to fuel the meteoric rise of a memecoin in the past.

Researcher Andy Ayrey devised a strange experiment where two Anthropic AI agents would endlessly chat with each other. The conversations between the two AI agents were automatically posted on X via another AI bot called Truth Terminal. Soon, an anonymous creator launched a memecoin called Goatseus Maximus (GOAT) and reportedly tagged Truth Terminal on X. The AI bot then began promoting Goat to its 1.7 lakh followers, causing the memecoin’s worth to reach a staggering \$840 million.

However, memecoins stand out as the riskiest gamble in a crypto market long considered speculative by traditional investors.

Risks and concerns in dealing with memecoins

Due to their high volatility, memecoins have become notorious as hotbeds of fraud. Over 40 per cent of memecoins are pump-and-dump schemes, according to the BDC report. Memecoins are also used for ‘rug pull’ scams, where creators simply withdraw the funds and walk, like the 13-year-old behind the Gen Z Quant memecoin.

Similarly, liquidity pull scams are when fraudsters establish a liquidity pool consisting of memecoins and trusted crypto like USDC. The creators suddenly withdraw all the USDC from the liquidity pool, making the memecoins owned by investors completely worthless. This tactic was used by the creators of the Squid Game coin.



In response to the launch of Trump’s memecoin, US Congresswoman Maxine Waters said that \$Trump “represents the worst of crypto and shows why many regulators, advocates, and policymakers have long been worried.”

“These actions by President Trump will also further taint the crypto industry, which has long fought for legitimacy and a level playing field with other financial institutions,” she said in a statement.

Billionaire entrepreneur Mark Cuban also warned against Trump’s memecoin. “I’m a crypto fan. This is not crypto any more than [Bernie] Madoff was just buying and selling shares of stock,” he said in a social media post. Bernie Madoff was the mastermind of a major ponzi scheme worth around \$65 billion.

WHAT IS U.S.’S NEW RULE FOR EXPORTING AI CHIPS?

The story so far:

With an objective to advance increased control over circulation of Artificial Intelligence (AI) chips and technology, the U.S. Bureau of Industry and Security (BIS) introduced a tiered framework for licensing and exports. It held the regulations were in tandem with “national security and foreign policy interests”. Further, it would help “cultivate a secure and trusted technology ecosystem for the responsible use and diffusion of AI”.

What technology are we discussing?

Broadly, the regulation concerns advanced computing chips and certain closed AI model weights. AI models are software programs that comprise a series of mathematical operations. When data is entered into the program, it executes those operations on the entered data (provided by the user) to produce outputs which could be information, analysis or media. It is the design of these operations and their arrangement, known as the model architecture, that determines the nature and quality of the output.

What do the regulations propose?

The new regulations update existing rules for export, re-export and transfers (in-country) by segregating countries into three tiers — each harbouring different rules for licensing and authorisation. The first of these tiers entail no restrictions for the export, re-export or transfer of advanced computing chips to 18 U.S. allies and partners, including Australia, Belgium, Canada, South Korea, U.K. and Japan, among others. The second tier introduces caps on volume and exemptions based on specifications alongside mandatory authorisation and licensing. It holds that transactions that could contribute to the development of advanced AI models would require a Validated End User (VEU) authorisation. Those that do not contribute to the development of advanced AI models, such as chips with a collective computation power of roughly 1,700 advanced GPUs, would not need an authorisation. China and India together have been categorised under this sub-head. The third tier includes arms-embargoed countries, such as North Korea, Iraq, Iran and Russia, among others. These countries will have no access to the technology.

Why has access been curtailed?

One of the main objectives has been to ensure that the technology (or equipment) do not reach the ‘countries of concern’ or U.S. adversaries. Furthermore, as detailed in the Federal Register, it



strives to ensure that model weights are stored outside the U.S. “only under stringent security conditions” and that the large clusters of advanced integrated circuits (ICs) necessary to train those models are “built in destinations that pose comparatively low risks of diversion or misuse”. The BIS determined that adversaries could potentially use the advanced AI systems to improve speed and accuracy of their military decision making, planning and logistics. BIS also observed that access to systems could potentially lower the barrier for non-experts to develop weapons of mass destruction, support offensive cyber operations and assist in human rights violations (such as through mass surveillance). Separately, it is essential to note that the BIS placed concerns about Chinese companies utilising “foreign subsidiaries in a range of uncontrolled destinations to buy ICs”.

What are the concerns?

The primary concern relates to the threat to U.S.’ global competitiveness in the realm. Ned Finkle, Vice President of Govt Affairs at NVIDIA — among the largest chip makers globally, wrote in a blogpost that it would undermine the innovation that has kept the U.S. ahead. Mr. Finkle argued that the rules would do nothing to enhance U.S. security. “The new rules would control technology worldwide, including technology that is already widely available in mainstream gaming PCs and consumer hardware.”

Ken Glueck, Executive Vice President at Oracle, wrote in December 2024, that the rules assumed there were no other non-U.S. suppliers to procure GPU technology from. Explaining the aspect about competitiveness, the Oracle executive stated that by adding “more chips to the problem, you can keep playing the game”. “If your alternate supplier has less performance, you can achieve parity by just adding more GPUs for the task. Enter Huawei and Tencent. Do it a cheaper price. Enter the CCP. And deploy it globally, enter Alibaba,” he explained. The rules have been introduced less than a week before President-elect Donald Trump’s return to the White House. The tech industry have pinned their hopes on the incoming administration to withdraw the framework.

Do these rules impact India?

According to Pranay Kotasthane, Chairperson at High Tech Geopolitics Programme at Takshashila Institution, big Indian data centres wanting to deploy advanced AI chips might need to apply for the VEU authorisation to speed things up. He observed that Indian companies acquiring the VEU authorisation can utilise the exported items for civilian and military purposes except for nuclear-end uses. “All in all, it does not seem to be a big deal. The bigger story is that India is not in the trusted allies and partners category, probably because of the leakages of chips to Russia,” he said.

‘LIFE IS TOO HARD’: VIETNAM’S FACTORY WORKERS RETURN TO COUNTRY LIFE

Treading a familiar path for women in rural Vietnam, Nguyen Thi Hiep found a factory job in dynamic Ho Chi Minh City and spent 16 years helping make shoes for Western brands such as Adidas and Nike.

Vietnam is among the world’s largest exporters of clothing, footwear and furniture and Ho Chi Minh City and its hundreds of thousands of migrant workers have for decades helped power its manufacturing boom.

The southern metropolis offered stable jobs with decent pay, and young women in particular flocked to garment and shoe factories, where the workforce is three-quarters female.



But as living costs surge, Ms. Hiep is joining a wave of workers rejecting the commercial hub for a quieter life back home—leaving city businesses struggling to fill their ranks.

They have no plans to return.

In the decades since Vietnam’s post-war “doi moi” economic transformation, Ho Chi Minh City and the capital Hanoi have been at the heart of the “from farm to factory” trend, said professor Pham Van Dai of the country’s Fulbright University.

It is a pattern that has played out in many developing countries across the world.

But when the Covid-19 pandemic forced people out of factories and back to their homes, many found rural areas had developed, offering more opportunities than a decade earlier and a higher quality of life.

“The number of migrant workers (moving out) rose rapidly,” Mr. Dai told AFP.

In Binh Tan, a popular migrant district where Ms. Hiep lives, the number of temporary residents dropped by almost a quarter—more than 100,000 people—between 2020 and 2023, Le Thi Ngoc Dung, vice chairwoman of the local people’s committee, told state media.

And although new migrants are still arriving across the city, the number has fallen drastically—from 180,000 in 2020 to 65,000 people in 2023, according to the city’s population and planning department.

“When their income can no longer cover living costs” migrants will leave, Mr. Dai said. “The city has not shifted quick enough to create better jobs.”

In 2022, more than 60% of Ho Chi Minh City’s migrant population had decided to leave or were mulling it over, a survey by the Vietnam Chamber of Commerce and Industry and the UN’s International Organization for Migration showed.

More than half blamed high living costs.

Labour shortage

Low income, small and dilapidated houses, separation from their children, overtime and night shifts: each contributes to migrant workers’ “increasing feeling of insecurity and lack of stability”, said Nguyen Thi Minh Ngoc, a manager at recruitment company ViecLamTot.

As stress levels rise and their health deteriorates, they leave despite knowing their income will drop, Ms. Ngoc told AFP.

Business is beginning to feel the effects.

An August survey by ViecLamTot showed that around 30% of manufacturers in the city faced a labour shortage, while 85% said they were having trouble recruiting.

For the workers themselves, the future remains uncertain.

Ms. Le said that she might return to farming, while Ms. Hiep has thought of finding a factory closer to home. In any event, she envies the simple life of her neighbours back home, “playing volleyball, getting together to sing and dance”.



WHAT DID THE ILO REPORT STATE ABOUT INTERNATIONAL MIGRANTS?

The story so far:

By addressing labour market shortages in host nations and contributing remittances to home countries, International Migrants (IM) continue to make contributions to world economic growth, the fourth edition of 'Global Estimates on International Migrant Workers', released by the International Labour Organization (ILO), said.

What did the ILO state?

In 2022, IMs made up 4.7% (167.7 million) of the global labour force, defined as both employed and unemployed (but available for work); over 30 million more than in 2013. An estimated 155.6 million were employed and 12.1 million unemployed. The share of IM men in the total employment for males globally was estimated at 4.7% and that of IM women at 4.4%. However, between 2019-2022, the rate of growth dipped annually to less than 1%, influenced among other factors by the pandemic.

What about age and gender?

A higher proportion of IM males were employed — 61.3% out of a total of 102.7 million. Conversely, only 38.7% female IMs were employed out of a total of 64.9 million in 2022. All the same, the number of women IMs has steadily risen ever since the ILO began compiling global estimates in 2015.

One explanation for the smaller proportion of women in the global labour force is their lower representation in the total population of IMs.

At 74.9% (125.6 million), prime-age adult IM workers — those aged between 25 and 54 years, both men and women — constituted the largest majority of IM workers in the labour force in 2022. Less than one out of 10 IMs were below 25. Way behind the above category, at 9.3% were young IM workers, aged between 15-24 years, numbering 15.5 million, in the global labour force. IMs aged between 55-64 years were 12.5% and those above 65 at 3.4%.

Which economic sectors attract IMs?

The largest proportion of IMs, 68.4%, were concentrated in the services sector, even higher than non-migrants. Women IMs held the dominant share in this arena at 80.7%, as against 60.8% among their male counterparts. The corresponding figures for non-migrant women and men in the services industry were 59.4% and 46.3% respectively. Significantly, the dominance of IMs in this sector has remained consistent over the decade, upwards of 67% between 2013-2022. In industry, the proportion of IMs was 24.3% and that of non-migrants 24.2%. In agriculture, IMs accounted for 7.4%, whereas non-migrants were at a significantly higher share of 24.3%.

Which are the main host countries?

High-income countries absorbed the largest number of IMs, accounting for 68.4% (114 million people), in key sectors such as services, especially in the provision of care. At about a quarter of this share, 17.4% (29.2 million), were distributed among upper-middle-income countries. For an entire decade between 2013-2022, high-income and upper-middle-income countries have consistently remained primary destinations for IMs.



The share of IM workers in northern, southern and western Europe in the year 2022 was at 23.3%, increasing by less than one percentage point after 2013. In Northern America on the other hand, the share of IMs in the labour force in 2022 was at 22.6%, a more than one percentage point decrease over the same decade. The Arab states accounted for 13.3% of IM workers in 2022, down three percentage points over 2013. A combination of ageing populations, growing demand in the care economy and greater economic opportunities means that high income countries will continue to remain attractive destinations for the bulk of IMs.

ACTIVIST SHORT-SELLER

Nate Anderson, 'activist' short-seller and founder of Hindenburg Research, has decided to disband the U.S.-based investment research group known for its investigative reports on publicly listed companies. In a note shared on the Hindenburg website, he addressed the speculation on what triggered the move. "The plan has been to wind up after we finished the pipeline of ideas we were working on. And as of the last Ponzi cases we just completed and are sharing with regulators, that day is today."

Short-sellers are a rare breed in general, and in what has been a bullish market for the past several years, even more so. Mr. Anderson, with a small team of 11 people, built Hindenburg into a reputed research group that has caused over 100 individuals, including billionaires, to be civilly or criminally charged, and wiped out billions of dollars in companies' market values.

INDIA ON TRACK TO MEET SDG HEALTH TARGETS WELL AHEAD OF 2030: GOVT

The Union Cabinet on Wednesday reviewed the progress under the National Health Mission (NHM) over the last three years and was informed that with significant progress towards achieving the Sustainable Development Goals (SDGs), India is on track to meet its health targets well ahead of the 2030 deadline.

- The Cabinet, chaired by Prime Minister Narendra Modi, was apprised of the progress under NHM during 2021-22, 2022-23 and 2023-24 on Wednesday.
- The Cabinet gave its nod to continue the mission for the next two years. The Cabinet was also apprised of accelerated decline in maternal mortality rate, infant mortality rate, under 5 mortality rate and total fertility rate and the progress in respect of various diseases programmes like TB, malaria, kala-azar, dengue, tuberculosis, leprosy, viral hepatitis etc. and new initiatives undertaken such as National Sickle Cell Anaemia Elimination Mission.
- The measles-rubella vaccination campaign covered 97.9% of the desired target. The Maternal Mortality Ratio has declined from 130 in 2014-15 to 97 in 2018-20, a reduction of 25%. "There has been a reduction of 83% since 1990, which is much higher than the average global decline of 45%," said Union Minister Piyush Goyal while briefing the media.
- The under-5 mortality — number of children who die before reaching the age of 5 per 1,000 live births — has also decreased from 45 in 2014 to 32 in 2020. Similarly, the Infant Mortality Rate has fallen from 39 per 1,000 live births in 2014 to 28 in 2020. One of the key achievements of the programme was also adding 5.23 lakh healthcare workers.

**Do You Know:**

- The United Nations defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.
- The 193 Member States of the United Nations, following negotiations that lasted from July 2012 had agreed upon the text of a new document entitled, “Transforming Our World: The 2030 Agenda for Sustainable Development”.

—This agenda contains 17 goals and 169 targets. The goals are to be achieved by all member countries within the next fifteen years, thereby giving it the moniker of ‘Agenda for 2030’.

- End poverty in all forms; end hunger, achieve food security and improved nutrition and promote sustainable agriculture; ensure inclusive and equitable quality education; achieve gender equality and empower all women and girls; ensure availability and sustainable management of water and sanitation for all; ensure access to affordable, reliable, sustainable and modern energy for all; promote sustained, inclusive and sustainable economic growth, full and productive employment; build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; reduce inequality within and among countries; make cities and human settlements inclusive, safe, resilient and sustainable; ensure sustainable consumption and production patterns; take urgent action to combat climate change and its impacts; conserve and sustainably use the oceans, seas and marine resources; protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss; promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels; strengthen the means of implementation and revitalize the global partnership for sustainable development.

CAPEX QUANDARY

Since the COVID-19 pandemic, the Centre has been using public capital expenditure on infrastructure to pump prime the economic recovery. The mantra has been that infrastructure building will stoke demand for products such as cement and steel, generate jobs in construction, and together trigger a strong multiplier effect on the economy, eventually creating conducive conditions for private investors to plan greenfield and brownfield projects. In Budget 2024-25, Finance Minister Nirmala Sitharaman said the government will endeavour to maintain strong fiscal support for infrastructure over the next five years, in conjunction with imperatives of other priorities and fiscal consolidation. She announced ₹11.11 lakh crore of capex spends this year, amounting to 3.4% of GDP. That goal is unlikely to be attained partly due to spending curbs in the poll-affected first quarter. While industry has urged the Centre to continue the capex push in 2025-26 as well, it has failed to respond to the government’s constant nudges and persuasions to ramp up their own operations.

Data show that two of this year’s first three quarters have recorded a notable sequential decline in private investment plans, particularly by domestic industry. In Q1, private capex plans dropped to multi-year lows, and though the July-September quarter recorded a recovery in investment intentions, that uptick has dissipated in Q3. Projects Today data suggest domestic investments’ value dropped 1.4% from Q2, while new projects’ value dropped over 22% from a year ago as per the Centre for Monitoring Indian Economy. There are many factors playing on corporate risk-taking capacity — weak Q2 results, global uncertainties, spiking costs and waning demand in more



lucrative urban markets. Going by current indications, including the early bird Q3 results, demand has not really improved, nor is there ostensible pressure on factory capacities to warrant expansions. For a sustainable breakout from this slowdown, private capital should take the driving seat because there are limits to enhancing public capex while maintaining fiscal rectitude and providing for myriad welfare schemes. The government must accept that exhortations to industry are unlikely to spur fresh outlays, and incentives focused on themes such as import-substitution are insufficient. Not one new rupee will be deployed if a project is unviable and demand flaky. Policy focus should remain firmly on ensuring the ground is ripe to instigate investments and easing the realisation of such plans into billowing chimneys and new jobs. For that, boosting incomes and consumption is critical as is expediting macro- and micro-level reforms. That an economic policy framework outlining next generation reforms, promised in the Budget, has not been heard of since then, is not very comforting.

POOR DEMAND HITS PRIVATE SECTOR INVESTMENTS

With domestic demand seen waning amid a spike in inflation and input costs, investment plans by India's private sector took a hit, falling 1.4% in the October-December quarter (Q3) of 2024-25 after a fleeting recovery in the second quarter (Q2).

However, government capex plans registered a sharp growth, lifting overall fresh investments in the economy by 9.9% in Q3 to ₹11.46 lakh crore from an updated tally of ₹10.43 lakh crore recorded in Q2. This rise was led by a 34.6% spike in fresh investments by State governments over Q2 levels, almost thrice the 11.8% growth in new outlays announced by the Union government.

Domestic investors, however, pulled back fresh investment plans by 1.4% from Q2 to nearly ₹6.11 lakh crore in Q3, show data from Projects Today, a firm tracking new and ongoing investment projects in the country since 2000.

Total private sector projects slipped sharply from 1,253 in Q2 to 1,061 in Q3. Private investors' share in new investment projects dropped to 62.2% in Q3 from 66.2% in Q2. New investments by foreign players rose 44.2% sequentially, albeit from a low base, to ₹1.02 lakh crore. This spike was largely thanks to a single ₹70,000 crore steel project announced by Arcelor Mittal Nippon.

"The slowdown in domestic private investments during the third quarter of FY2025 reflects the apprehensions of India Inc. over rising input costs, driven by high inflation and ongoing geopolitical uncertainties," Shashikant Hegde, director and CEO of Projects Today, told *The Hindu*.

He added that weak corporate results and flagging urban demand in Q2 may have also dimmed investor appetite.

India's GDP growth had slowed to a seven-quarter low of 5.4% in Q2.

"The outlook for 2025-2026 remains optimistic, as favourable economic conditions like easing inflation, and the execution of policy interventions to spur consumption and growth, are expected to stimulate private investment activity," Mr. Hegde reckoned.

New power projects

At almost ₹2.28 lakh crore, new investments by States surpassed the Centre's ₹2.05 lakh crore announcements in Q3, and accounted for almost 20% of all new outlays. In Q2, the value of new projects announced by the Centre was higher than the States.



Mining, irrigation, and pharma, as well as the employment-intensive construction and automobile sectors clocked deep contractions in fresh outlays relative to Q2. Infrastructure investments were only fractionally higher by 0.8% at ₹4.25 lakh crore, but new electricity projects grew a sharper 21.9% to ₹4.5 lakh crore to account for the largest share of 39.3% in new investments through Q3.

“Such investments, particularly in transport and social infrastructure, are essential for sustaining the overall economic momentum, as they not only lay the groundwork for long term growth but also complement private sector initiatives by improving the business environment and reducing operational bottlenecks,” Mr. Hegde explained.

There was a significant shuffling among States that accounted for the top shares of new investment projects.

Rajasthan emerged as a surprise leader, with fresh project outlays in the State — by both public and private investors — rising almost three times over Q2 to about ₹2.25 lakh crore in Q3.

Maharashtra and Gujarat, which were the top two States in Q2, moved one rank lower as a consequence, while Tamil Nadu was edged out of the top 10 States, after being the third-ranked State in terms of investment plans in Q2. In Q3, new projects in Tamil Nadu amounted to just ₹18,066 crore, 60.8% below its Q2 tally of ₹46,119 crore.

ODISHA TOPS NITI FISCAL HEALTH INDEX, CHHATTISGARH NEXT BEST

Mineral-rich Odisha, Chhattisgarh, Goa, and Jharkhand have emerged as top-performing ‘achievers’ among the States listed in NITI Aayog’s first Fiscal Health Index (FHI) report released on Friday.

The report titled “Fiscal Health Index 2025” ranked States for 2022-23, covering 18 major States that drive the Indian economy in terms of their contribution to India’s GDP, demography, total public expenditure, revenues, and overall fiscal stability.

According to the report, Punjab, Andhra Pradesh, West Bengal, and Kerala were the worst-performing States in the Fiscal Health Index (FHI), each facing significant fiscal challenges, and listed under “aspirational” category.

The report aims to evolve an understanding of the fiscal health of States and it has listed Maharashtra, Uttar Pradesh, Telangana, Madhya Pradesh, Karnataka under the “front-runners” category. Tamil Nadu, Bihar, Rajasthan, and Haryana were classified as performers.

As per the report, released by 16th Finance Commission Chairman Arvind Panagariya, Odisha excelled in fiscal health, with the highest overall index score of 67.8.

Referring to top five achiever States, NITI Aayog said these States have higher capital outlay of up to 4% of Gross State Domestic Product (GSDP), effective mobilisation of non-tax revenue, are revenue surplus, and have low interest payments which is up to 7% of revenue receipts.

The government think tank said the front-runner States reported high total developmental expenditure up to 73%, witnessed consistent growth in own tax revenue, had balanced fiscal management and improved debt sustainability with debt-to-GSDP ratio of 24%.



The report noted that the aspirational States of Kerala, West Bengal, Andhra Pradesh and Punjab are struggling to meet the fiscal and revenue deficit targets, have low revenue mobilisation, witnessing a growing debt burden with debt sustainability a concern in these States.

As per the report, Odisha tops the debt index (99.0) and debt sustainability (64.0) rankings with better than average scores under quality of expenditure and revenue mobilisation. Odisha has maintained low fiscal deficits, a good debt profile, and an above average capital outlay/GSDP ratio.

While Kerala and Punjab struggle with low quality of expenditure and debt sustainability, the report said, West Bengal faces revenue mobilisation and debt index issues. Andhra Pradesh has high fiscal deficit and Haryana has a poor debt profile, it said.

According to the report, Odisha, Goa, Karnataka, Maharashtra, and Chhattisgarh scored the highest average FHI score for 2014-15 to 2021-22 period. The data used to calculate the Fiscal Health Index were sourced from the Comptroller and Auditor General (CAG).

SMALL TICKET SIPS OF RS 250 ON CARDS: ALL YOU NEED TO KNOW ABOUT SEBI'S 'SACHETISATION' PLAN FOR MUTUAL FUNDS INVESTMENTS

“Sachetisation”, or the strategy of offering products in small yet affordable units, has been a roaring success in India’s fast-moving consumer goods (FMCG) sector, allowing FMCG majors to penetrate the price-sensitive rural and low-income consumer segments. For many, shelling out money worth a full bottle of quality shampoo in one go may be difficult, but when that same shampoo is available in a one-time use sachet worth Rs 2 or 3, it becomes affordable and accessible to them.

In large price-sensitive markets, the approach can be effective in various sectors, including financial services. It is no surprise that India’s capital market regulator Securities and Exchange Board of India (SEBI) wants to “sachetise” mutual fund investments made through monthly systematic investment plans (SIPs).

In December 2023, SEBI Chairperson Madhabi Puri Buch had announced that the regulator was working with the mutual fund industry to see how SIPs worth just Rs 250 a month can be made viable, in order to facilitate better participation in mutual funds from “the bottom of the pyramid” for greater financial inclusion. The market regulator wanted India’s mutual fund market to “explode”, similar to what sachetisation did to the shampoo segment.

Mutual fund investment ‘sachetisation’: Rationale given by SEBI

According to the regulator, sachetisation will enable small ticket investments in mutual funds gradually on a periodic basis. “This can assist in financial empowerment of the underserved section of the economy and nudge fund houses to expand their footprints to even remote locations in the country,” SEBI said.

While there are some asset management companies that offer small ticket SIPs as low as Rs 100 under some of their mutual fund schemes, most schemes require a minimum SIP of Rs 500. The Rs 250 SIP proposal, SEBI says, provides an opportunity to the entire industry to participate in the “cause of financial inclusion”.

Over the past few years, mutual funds have become hugely popular, particularly among India’s middle-class investors. Assets under management (AUM) of the mutual fund industry have



multiplied to Rs 68 lakh crore (as of November 2024) from Rs 10 lakh crore in 2014. Total number of unique investors of mutual funds has grown from 1.7 crores as of March, 2018 to 5.2 crore as of November 30, 2024. Clearly the growth has been astronomical, but SEBI feels that the low-income strata of the population have not been able to participate in this growth story.

Targeted plan: Small ticket SIPs not for everyone

It appears that SEBI wants the sachetised SIP offering to be targeted largely towards new mutual fund investors from low-income groups, and not for retail investors in general. According to the consultation paper, an existing mutual fund investor will “not be considered as a small ticket SIP investor” for any investment at the industry level. Moreover, if any investor initiates an SIP investment other than small ticket SIP, or makes a lump sum mutual fund investment, she or he will not be considered a small ticket SIP investor.

Also, a maximum of three Rs 250 SIP plans—one each in up to three asset management companies (AMCs)—per investor will qualify for discounted rates offered by intermediaries. AMCs can offer more Rs 250 SIP plans to such investors, but any investment beyond first three plans will not be eligible for discounted rates from intermediaries.

Additionally, small ticket SIPs are proposed to be offered in any mutual fund scheme, except debt schemes, sectoral and thematic schemes, and small-cap and mid-cap equity schemes. Small-cap and mid-cap segments of the equity market are prone to significantly more volatility than the large-cap segment, and the regulator does not seem to want new investors from lower-income groups to make high-risk investments.

SEBI has also proposed that the small ticket SIP may be offered under the growth option of the investment plan. Under the growth option, profits made by the fund are reinvested in its underlying securities to drive future growth and fund value.

“Commitment by an investor under a small ticket SIP scheme should be for 5 years i.e. 60 investments. However, if an investor desires to stop SIP or withdraw the SIP investment prematurely, there should be no restriction on it,” SEBI said in the consultation paper.

The timing: Deepening India’s equity market

Notably, while SEBI had been working with industry stakeholders on small ticket SIPs, the consultation paper comes at a time when India’s equity markets are grappling with heavy selling by overseas investors due to various factors, including global volatility, uncertainties under the Donald Trump administration in the US, slowing economic growth and corporate earnings in India, and high stock market valuations, among others.

Domestic investors, institutional as well as retail, have been carrying the Indian markets on their shoulders. Mutual fund inflows, particularly through the SIP route, have helped support the Indian stock markets despite the storm of heavy selling by foreign investors. Even going forward, domestic investors in equities, including those who invest through mutual funds, are likely to be a critical factor in how the stock markets fare.

Although it is not clear when SEBI wants small ticket SIPs to be made available for investors—deadline for submitting views on the consultation paper is February 6—deepening of the market is bound to lead to more inflows. To that end, this offering could over time lead to more domestic investment flows in equity markets, providing more cushion against vagaries of overseas



investors. The expectation would be that first-time mutual fund investors from under-represented sections would gradually go beyond the small ticket SIPs in their investment journey.

SECURITIES TRANSACTION TAX COLLECTION JUMPS 75% DESPITE MARKET VOLATILITY

Despite the volatility in the stock market, the Securities Transaction Tax (STT) collection has shot up by over 75 per cent to Rs 44,538 crore as of January 12, 2025 as against Rs 25,415 crore raised in the same period in 2024. The rise in collections comes despite a hike in STT on futures & options (F&O) of securities that was levied in a bid to curb speculative market activity in the F&O segment.

The Budget 2024-25, presented by Union Finance Minister Nirmala Sitharaman on July 23, had proposed to double the STT on F&O of securities, effective October 1, 2024. However, STT collection has been on the rise since July and the rise continued even when the stock market rose sharply and then encountered a major correction between July and December 2024.

While STT mobilisation was Rs 16,634 crore on July 11, 2024, it jumped to Rs 30,630 crore on October 10, Rs 35,923 crore on November 10 and Rs 40,114 on December 17.

The BSE Sensex which was at 80,429.04 on July 23 last year hit an all-time peak of 85,978.25 on September 27 last year before correcting to 76,499.63 on January 14, 2025.

The increase in STT, which is levied on transactions in specified securities, came at a time when the Securities and Exchange Board of India (SEBI) and the Reserve Bank of India (RBI) raised concerns over the rise in volumes in futures and options segment, which can pose a risk to macroeconomic stability.

When retail investors flooded the F&O segment three years ago, policy makers were worried about losses to them. Nine out of 10 investors were losing money in this segment. While STT collection has increased in the last five months, major market players are lobbying for a reduction in the levy.

TUNGSTEN MINING: CENTRE DECIDES TO ANNUL AUCTION OF MINERAL BLOCK IN MADURAI

The Union Ministry of Mines on Thursday announced its decision to annul the auction of the tungsten mineral block at Nayakkarpatti in Madurai district. The locals had been protesting against the auction, and the Assembly had unanimously adopted a special resolution urging the Union government to immediately cancel the tungsten mining rights granted to a firm.

The decision was taken considering the importance of the biodiversity heritage site in the area, and showed the commitment of the Government of India to protecting traditional rights, an official press release said.

The Centre's decision followed a meeting between leaders of the Ambalakarar community from Madurai district and Union Minister for Coal and Mines G. Kishan Reddy in New Delhi on January 22.

The community leaders had told the Union Minister that the Nayakkarpatti tungsten mineral block included the Arittapatti biodiversity heritage site and a number of cultural heritage sites. They requested the Union Minister to cancel the auction of the Nayakkarpatti block.



In a social media post, Chief Minister M.K. Stalin recalled having asserted in the Assembly that his government would not permit the proposal as long as he held his post.

Welcoming the decision, AIADMK general secretary Edappadi K. Palaniswami recalled the steps that his party took to highlight the issue in the Assembly and expose the “drama” staged by the DMK government over it.

The decision of the Centre was a victory to the steps undertaken by the AIADMK, and had put a stop to the “double standards” of the DMK government over the proposal. The people’s power had won, Mr. Palaniswami said.

WHAT IS THE SVAMITVA SCHEME, WHO BENEFITS FROM IT AND HOW

Prime Minister Narendra Modi on Saturday (January 18) said once property cards under the Centre’s SVAMITVA scheme have been distributed in all the villages of the country, it could unlock economic activity worth over Rs 100 lakh crore.

- According to the Ministry of Panchayati Raj, the scheme benefits rural residents in many ways. First, it enables rural households to use their property as a financial asset for taking loans and other financial benefits.
- PM Modi on Saturday also mentioned this. “After getting legal documents, lakhs of people have taken loans from banks on the basis of their houses and property. With this money, they have started their small business in the village. Many of these are small and medium farmer families. For them, these property cards have become a big guarantee of economic security,” he said.
- Second, it helps in determination of property tax, which accrues to the Gram Panchayats directly in states where they are empowered to collect such taxes. The cards help increase liquidity of land parcels in the market and increase the financial credit availability to the village.
- The scheme also paves the way for creation of accurate land records for rural planning. All the property records and maps are available at the Gram Panchayat level, which helps in taxation of villages, construction permits, elimination of encroachments, etc.
- In May 2025, the Ministry is also planning to participate in the World Bank Land Governance Conference in Washington to highlight India’s achievements and encourage international adoption of the model,” the ministry said in a statement on January 17.

Do You Know:

- SVAMITVA, a Central Sector Scheme of Ministry of Panchayati Raj was nation-wide launched by the Hon’ble Prime Minister on National Panchayati Raj Day, 24th April 2021 after successful completion of pilot phase of scheme (2020-2021) in 9 states.
- So far, 2 crore property cards have been issued, said an official, adding that all households have been covered in several states like Haryana and Uttarakhand. The scheme aims to cover the entire country by the end of financial year 2025-26.
- The scheme is being implemented with the collaborative efforts of the Ministry of Panchayati Raj, Survey of India (SoI), State Revenue Department, State Panchayati Raj Department and National Informatics Centre. States need to sign Memorandum of Understanding (MoU) with SoI for implementation of the scheme.



EXPRESS VIEW ON FARMERS' PROTESTS: INCOME SUPPORT, NOT MSP

In November 2021, the Narendra Modi government repealed its three agricultural reform laws following protests by farm unions agitating at Delhi's borders. At that time, it tried hard to reach out to the unions and convince them about how the laws — which allowed trade in produce to take place outside state government-controlled markets and agri-businesses to source directly from growers — were in farmer interest, but in vain. Today, the shoe's on the other foot. Since February last year, farmers from Punjab and Haryana have been unsuccessfully attempting to enter the national capital, while demanding enactment of a law guaranteeing payment of the government-declared minimum support price (MSP) for all crops. One farm union leader has been on a hunger strike since November 26 — he has accepted medical aid on Day 55 of his fast. This time round, however, the Modi government's approach has been one bordering on indifference. It has finally offered to hold talks, but only on February 14.

But sides are at fault here. The farm reform laws were, no doubt, well-intentioned. The failure, then, lay not in the bills' provisions, but in the way they were steamrolled through Parliament sans any real debate. The dialogue with the farm unions happened much after the laws got passed. The Modi government shouldn't make the same mistake of not engaging at the right time. The ruling party's recent electoral victories in Haryana and Maharashtra leave it with sufficient bargaining position to convince the unions about the unreasonableness of the demand for a "legal MSP". Prices of crops, like all commodities, are or should be determined by the forces of supply and demand. Farmers must ultimately produce what the market wants. The government would do better to ensure well-functioning markets rather than fixing, leave alone guaranteeing, MSPs.

The debate should move from guaranteeing minimum "prices" for crops to assuring some kind of a minimum "income" for farmers. There is already a Pradhan Mantri Kisan Samman Nidhi scheme that provides Rs 6,000 annually to all landholding farmers. The quantum of income support under this scheme can, perhaps, be enhanced and even modified from a per-farmer to per-hectare or per-animal basis. All the taxpayer money now being spent on farm input subsidies — whether on fertiliser, electricity, water or credit — can be redirected and converted into direct income support. With pricing of crops and inputs left to the market, it will enable the government to focus on what farmers actually deserve — a minimum income so long as they continue to farm. MIS, not MSP, is the way forward.

HOW IS TRAI AND THE GOVT. COMBATING SPAM?

The story so far:

The Telecom Regulatory Authority of India (TRAI) will be using distributed ledger technology (DLT) to register spam preferences from customers, TRAI chairman Anil Kumar Lahoti said. Spam rules will be tightened to make commercial messages traceable, the TRAI has indicated.

What is TRAI's role in fighting spam?

The TRAI regulates the telecom industry, and its main role is in regulating Unsolicited Commercial Communications (UCC), the official name for spam. Starting in 2007, the regulator implemented a do-not-disturb (DND) registry, which would force telemarketers to abide by customer preferences when it came to commercial calls.



If a telecom customer signs up to the DND registry, they are not supposed to get any spam calls or SMS messages.

TRAI had also worked with an external agency to develop a DND app, which would allow customers to register their DND preference, and accept complaints. Under the Telecom Commercial Communication Customer Preference Regulation (TCCCPR), 2018, telemarketers who called or sent messages to DND-registered customers would receive warnings, and if enough warnings accumulated, they would be blacklisted from sending messages to telecom operators.

The DND app has not always been maintained by the TRAI, and was briefly unavailable from 2022 onwards. An SMS reporting facility where users would have to report messages in a particular format was available, but further steps were taken to make the process more user friendly. In 2024, TRAI mandated that DND reporting be made available on every telecom provider's app.

What role does blockchain play?

In order to fight the deluge of spam messages, TRAI mandated in the TCCCPR that telcos use a blockchain ledger, also known as a distributed ledger, in order to store a constantly-updated list of approved senders of SMS messages. Telcos would also be required to approve specific formats of messages. For instance, an OTP message that goes, "Your OTP is 433212," would be stored in the blockchain as "Your OTP is ..." with space for a variable. These messages have been required to be sent from sender IDs, and not phone numbers.

This has been one of the most stringent rules that have been issued to fight SMS spam anywhere in the world. Blockchain as a technology allows for so-called immutability, which means that every stakeholder involved in a transaction has a reliable, un-tamperable version of the same data. At the time of the 2018 regulations, the necessity to use blockchain for the purpose of maintaining a spam exemption database was debated, as enthusiasm about the technology's potential had spilled over beyond cryptocurrencies, where it continues to be a mainstay.

In 2024, the regulations were tightened to ensure "traceability" of messages, thus making sure that telcos would have a complete record of who issued a message before it is sent to an SMS gateway. This was aimed at plugging a crucial flaw in the system that would allow anyone to register on the blockchain solutions implemented by telecom operators and send out fraudulent or spam messages in spite of the systems in place to combat them. These, Mr. Lahoti has said, will be further tightened in the coming year.

Have these measures been effective?

For those who have registered their DND preferences, communications from legitimate businesses that follow the rules may have reduced. However, spam has a constantly changing character. While much of spam is merely commercial messages that may be annoying but harmless, the wave of digitisation has increased incentives to get around the protections against commercial messaging and calling. A wave of fraudulent calls have also emerged, with cyber frauds seeking to ensnare Indians in financial scams. Many of these operations are done outside the framework of SMS sender IDs, and are run through disposable 10-digit phone numbers, making it hard for real-time enforcement of anti-spam regulations.

There is also the issue of spam and scam calls from international numbers, which can be leased from certain online Voice over Internet Protocol (VoIP) providers, but appear as legitimate international call traffic.



Which are the other steps taken by the government to end spam?

The Department of Telecommunications (DoT) has launched the Sanchar Saathi portal, which has a reporting site called Chakshu. DoT has partnered with law enforcement, banks, and other stakeholders in order to accept reports of “suspected fraudulent” calls and messages, and has moved to cancel lakhs of numbers that are associated with unauthorised telemarketers and scammers.

It also set up the Telecom Security Operation Centre at its New Delhi headquarters to monitor suspicious internet traffic in real time. Meanwhile, firms like Airtel have taken steps to declare suspicious calls using Artificial Intelligence as “Suspected Spam,” a move that is being replicated by other telcos as well. The telco has also started labelling international calls on smartphones.

DOES UBER/OLA CHARGE MORE ON IPHONES THAN ON ANDROID DEVICES? THE ANSWER'S COMPLICATED...

With India's consumer protection agency sending notices to cab aggregators Ola and Uber pertaining to the alleged difference in the fares they show on Android and Apple devices, there is a renewed spotlight on algorithmic pricing that most tech companies with a marketplace model deploy.

“As a follow-up to the earlier observation of apparent #DifferentialPricing based on the different models of mobiles (#iPhones/ #Android) being used, Department of Consumer Affairs through the CCPA, has issued notices to major cab aggregators #Ola and #Uber, seeking their responses,” Union Minister of Consumer Affairs, Pralhad Joshi said in a post on X Thursday.

In recent months, several user complaints about the discrepancy in pricing on Android and iOS devices have cropped up on social media. Existing research and experts suggest, however, that these applications are considering multiple factors, beyond just hardware.

“We do not set prices based on a rider's phone manufacturer. We look forward to working with the CCPA to clear up any misunderstanding,” an Uber spokesperson said in response to queries sent by The Indian Express. Ola had not responded at the time of publication.

User complaints in India

For a few months now, several users on the Internet have shared screenshots showing a discrepancy between Uber/Ola fares on Android and Apple devices. These screenshots showed that for the same distance and location, and at the same time of booking, fares on Apple devices were generally higher than on Android phones.

Some media reports also conducted basic searches on some of these apps to support this thesis.

The assumed logic here is that since Apple devices are typically more expensive than Android phones, people with Apple devices are likely to pay more than those with Android phones — something that the algorithms deployed by Uber and Ola take into account in their dynamic pricing models.

Notably, most marketplace-based companies like Uber and Ola use dynamic pricing for their fares. This means that fares are constantly changing, even on the same device, depending on the time of booking, real-time and traffic conditions, among other things.



While there is plenty of anecdotal evidence to suggest that prices are higher on iPhones than on Android devices, testing done by The Indian Express has shown that there is no way to reliably prove whether this is a sustained trend, as the Internet claims — we also found several instances where the opposite was true.

There has to be more than that going on under the hood.

Algorithmic pricing

And that brings one to a more fundamental question: what all parameters are actually weighed by companies before they determine algorithmic pricing?

The reality is, a clear picture of what is actually happening behind the scenes can only be ascertained after looking at the source code of the two applications, a technologist, who has previously worked for an online ride hailing company, said on condition of anonymity.

“Not just hardware, but several other factors: age, location, tracking across apps, browsing history, whether one uses a credit card to pay, etc. — all these can be used to determine pricing. But it is not a one-size fits all approach. The algorithms that are deployed are making these decisions for each person uniquely,” the technologist said.

Some studies offer additional clues.

In the US, for instance, the Federal Trade Commission (FTC) issued notices to companies last July, which it said offered “surveillance pricing” products, and services that incorporate data about consumers’ characteristics and behavior.

Earlier this year, interim findings of a market study carried out by the FTC revealed that details like a person’s precise location or browser history can be frequently used to target individual consumers with different prices for the same goods and services.

The FTC said that consumer behaviour ranging from mouse movements on a webpage to the type of products that consumers leave unpurchased in an online shopping cart can be tracked and used by retailers to tailor consumer pricing.

But there are indications that these apps could be relying on various other parameters, beyond just hardware or software identifiers.

For instance, a study released by researchers at the George Washington University in Washington DC in 2020 found that ride-hailing companies charge a higher price per mile for a trip if the pick-up point or destination was a neighbourhood with a higher proportion of ethnic minority residents than for those with predominantly white residents. Companies like Uber and Lyft denied these findings at the time.



LIFE & SCIENCE

SPACE TELESCOPES STUMBLE ON RULE-BREAKING BLACK HOLE

An international team of researchers using NASA's James Webb Space Telescope (JWST) and the Chandra X-ray Observatory has discovered a bizarre black hole that may provide insights into the genesis and growth of supermassive black holes.

Supermassive black holes are among the most common types of black holes in the universe. Most galaxies contain a supermassive black hole at their centres. These black holes have masses ranging from millions to billions of times that of the sun. The supermassive black hole Sagittarius A*, located at the center of the Milky Way galaxy, has a mass of approximately 4.3 million solar masses.

However, scientists are not yet fully certain how these giants grow to become so big.

Beyond the upper limit

The newfound black hole, designated LID-568, is a low-mass supermassive black hole that existed just 1.5 billion years after the Big Bang. If the universe were a human, it could be said to be around eight years old at this time.

A detailed analysis of its effects on its neighbourhood indicated that the black hole was feeding on a surrounding cloud of matter at an exceptional rate — almost 40 times greater than what astrophysicists thought was the upper limit.

The study was led by International Gemini Observatory/NSF NOIRLab astronomer Hyewon Suh, and the results were published in the journal *Nature Astronomy* in November 2024.

"We first identified this unusual object through Chandra X-ray observations, as it was exceptionally bright in X-rays but completely invisible in the deepest optical and near-infrared observations, even with the Hubble Space Telescope," Suh, the lead researcher, said.

"Because it was only detected in X-rays, we couldn't determine its nature. With JWST's unparalleled sensitivity in the infrared, we were finally able to uncover this exotic object, highlighting the complementary power of these observatories," she added.

A class apart

The rate at which a black hole feeds on matter is governed by what astronomers call the Eddington limit. This limit — named after the English astronomer Arthur Stanley Eddington because he worked it out first — is also related to how brightly a black hole can shine.

Nothing can escape a black hole, of course. But when a black hole pulls surrounding matter towards itself, the infalling material becomes compressed, heats up, and emits radiation, especially X-rays.

The concept behind the Eddington limit is straightforward: as matter collects around the black hole and gets packed into the disc, it heats up and emits radiation that generates an outward pressure capable of counteracting the gravitational pull of the black hole. When this radiation pressure balances the force of gravity, the black hole will stop accruing the matter. Ergo, there is a limit on how brightly the black hole can shine.



If this limit is crossed, the scenario is called a super-Eddington accretion. This is the category in which LID-568 lies.

Suh said that they measured the total light coming from the black hole and its mass using observations from Chandra and JWST's Near-Infrared Spectrograph instrument, which revealed the exceptional accretion behaviour of LID-568.

Experts have hypothesised that super-Eddington black holes can exist. They have even found a few. But LID-568 has defied their expectation in two ways. First, it's much, much farther away. The most distant of these other black holes is "only" around 2.3 billion light years from earth. Second, while the known rule-breakers exceeded the Eddington limit by a factor of two or three, LID-568 has done so by a factor of roughly 40, according to Suh.

Super-Eddington episodes in black holes are expected to be short-lived, so it is also remarkable that researchers captured LID-568 in action.

Making sense of the oddball

The existence of supermassive black holes that are millions or even billions of times more massive than our sun poses a challenge to current models of black hole formation and growth. Scientists have confirmed that such black holes reside at the centres of many galaxies that should have formed when the universe was less than a billion years old. However, they can't explain how these objects came to be when the universe was so young, when there shouldn't have been enough matter for them to form.

According to some traditional models, Suh said, "supermassive black holes are thought to form from the death of the first star, i.e., light seeds with 10-100 times the mass of the sun, and/or through the direct collapse of primordial gas clouds, such as heavy seeds with 1,000-100,000 times the mass of the sun."

"However, these models lack direct observational confirmation and require sustained, continuous accretion of large amounts of matter over several hundred million years to account for the most extreme supermassive black holes observed in the early universe, which is likely difficult," she added.

The discovery of LID-568 is crucial because it suggests that large black holes could have put on a significant fraction of their weight during short-lived episodes of rapid feeding. If true, this mechanism would do away with black holes having to feed on large quantities of matter for a very long time and offer "a convincing explanation for how supermassive black holes could form so quickly, regardless of their initial seed mass," whether heavy or light.

Chasing more black holes

Suh also said there are several theories to explain how black holes can exceed the Eddington limit, including geometrically thick accretion discs, powerful black hole jets, and black-hole mergers. However, she said that her team still doesn't fully understand the exact mechanism that allowed LID-568 to feed so fast and that follow-up observations with JWST will be crucial to admitting or eliminating other hypotheses.

The researchers also found that the galaxy where LID-568 resided wasn't producing many new stars — the result of the black supermassive hole driving powerful streams of material outward



from the centre, called outflows. These outflows could be preventing matter from accumulating in enough quantities to form stars.

To confirm this idea as well as to inform it with more data, Suh said she and her team are planning to examine similar galaxies and examine their outflows, especially those driven by very large black fast-snacking holes.

The research team is also planning to find out how long a black hole can accrue matter at a super-Eddington rate as well as what percentage of all black holes do so.

STUDY FINDS LINK BETWEEN SMARTPHONE USE AND MENTAL HEALTH OF ADOLESCENTS

A survey of over 10,000 adolescents (13-17 years) in the United States and India has revealed that mental well-being is closely linked with earlier age of initiation of mobile phones, and could decline significantly with each younger year of age.

The report, titled “The Youth Mind: Rising Aggression and Anger”, by Sapien Labs documented the responses of 10,475 Internet-enabled adolescents across India and the U.S. in 2024. Although numerous factors have traditionally been identified as drivers of poor mental health, one key change in the younger generations is the arrival of smartphones, which were introduced in 2008, coinciding with the onset of rising mental health problems.

The report highlighted key trends, with a particular focus on rising feelings of aggression, anger, irritability, and hallucinations in this age group. The decline in mind health is characterised not only by sadness and anxiety but also by new symptoms, including unwanted thoughts and a sense of being detached from reality. Highlighting the differences between the American and Indian cohorts, Tara Thiagarajan, neuroscientist with Sapien Labs, said the pace of deterioration of mental well-being is slower in India. “While the overall decline in mental well-being in younger ages is strongly present for males and females in the U.S., it is only present for females in India and not in males (where only select aspects deteriorated, while others improved). Even for females, it (the overall decline in mental well-being) is not as steep in India,” Dr. Thiagarajan said.

“On the other hand, both adolescent males and females in India have worse mental well-being on the whole, than their counterparts in the U.S. While aggression, anger and hallucinations are consistently related to the age of smartphone initiation for both U.S. and Indian females, for girls in India, getting their phones very young is more likely to result in increased sleep and health problems as adults,” she said.

Merits of ed-tech

In an attempt to address this, there is a growing debate on the merits of educational technology (ed-tech) in the elementary and middle school years. “One of the possible solutions is also to provide restricted access to phones for teenagers using apps, which lock in parental controls regarding apps teens can access, while allowing them to access a school portal or messaging,” Dr. Thiagarajan said.

WATER HYACINTH THREATENS THE LIVELIHOODS OF FISHERS ON KENYAN LAKE

For someone who fishes for a living, nothing says a bad day like spending over 18 hours on a lake and taking home nothing.



Recently, a group of fishermen were stranded on Kenya's popular Lake Naivasha for that long and blamed the water hyacinth that has taken over large parts of it.

"They did not realise that the hyacinth would later entrap them," said fellow fisherman Simon Macharia. The men even lost their nets, he said.

The water hyacinth is native to South America and was reportedly introduced to Kenya in the 1980s "by tourists who brought it as an ornamental plant," said Gordon Ocholla, an environmental scientist at Mount Kenya University.

Water hyacinth was first sighted on Lake Naivasha about 10 years ago. Now it has become a large, glossy mat that can cover swathes of the lake. To fishers, the invasive plant is a threat to livelihoods.

Usually, the presence of water hyacinth is linked to pollution. It is known to thrive in the presence of contaminants and grows quickly and is considered the most invasive aquatic plant species in the world, Ocholla said.

It can block sunlight and impact airflow, affecting the quality of aquatic life. This has caused a drastic drop in the population of fish in Lake Naivasha and some other affected areas.

The *East African Journal of Environment and Natural Resources* estimated in a 2023 study that the invasion of water hyacinth in Kenyan lakes — including Lake Victoria, Africa's largest — has led to annual losses of between \$150 million and \$350 million in Kenya's fishing, transport, and tourism sectors.

The fishermen at Lake Naivasha know that well. "Previously we would catch up to 90 kg of fish per day, but nowadays we get between 10 kg and 15 kg," Macharia said. This means daily earnings have dropped from \$210 to \$35.

There are several ways to deal with the plant, including physically removing it, Ocholla said. Another method is introducing organisms that feed on it. Or chemicals can be sprayed to kill the plant, "but this is not favorable as it would harm other aquatic life."

Recently the fishers, through a Kenyan start-up called HyaPak, began using a method that converts water hyacinth into biodegradable packaging.

HyaPak started in 2022 as a project at Egerton University in Kenya. HyaPak founder Joseph Nguthiru said the company is trying to use one problem, the hyacinth, "to solve the plastic waste pollution" problem. HyaPak has entered into a partnership with the fishers, who harvest the water hyacinth and sun-dry it for a negotiable fee. Then it is transported to a HyaPak facility to be converted into biodegradable paper material.

The company works with 50 fishers at Lake Naivasha and processes up to 150 kg of water hyacinth per week, converting it to 4,500 biodegradable packages.

INDONESIAN ACTIVISTS SLAM 'DESTRUCTIVE' FOREST CONVERSION

Indonesia's plan to convert millions of hectares of forests for food and energy use is "environmentally illogical and destructive," and risks irreversible environmental and biodiversity loss, activists warned on Monday.



The Indonesian government wants to turn 20 million hectares of forest into areas for food and energy production and water reserves, Forestry Minister Raja Juli Antoni recently said in a statement.

The government has identified 1.1 million hectares of land that could produce up to 3.5 million tonne of rice annually, equal to Indonesia's total rice imports in 2023, he said, adding that the government also plans to plant sugar palm trees as a source for bioethanol.

But the plan, which will affect an area nearly twice the size of Indonesia's main Java island, contradicts the government's food and energy security goals, the Clean Transition Coalition of environmental NGOs said in a statement.

The proposal has raised concerns that more forest areas would be cleared to pave ways for oil palm plantations — Indonesia's top export commodity and one of the key deforestation drivers in the archipelago — said activists.

Environmental NGO Satya Bumi's research showed that existing oil palm plantations already cover 17.77 million hectares throughout the archipelago.

"The plan to open 20 million hectares of land significantly increases the risk of palm oil expansion," said executive director of Sawit Watch Achmad Surambo.

INDONESIA'S MOUNT IBU ERUPTED 1,000 TIMES THIS MONTH

A volcano in eastern Indonesia has erupted at least a thousand times this month, according to an official report on Sunday, as efforts are under way to evacuate thousands of villagers.

Mount Ibu, on the remote island of Halmahera, sent a column of smoke up to 4 km into the sky in an eruption on January 15.

Indonesian officials called for the evacuation of 3,000 people living in six nearby villages.

It was one of 1,079 eruptions by the volcano recorded since January 1 by Indonesia's Geological Agency, sending columns of ash reaching between 0.3 km and 4 km above its peak, according to the agency's data.

The latest big eruption occurred on Sunday at 1:15 a.m. local time. "The ash was grey, with moderate to thick intensity, drifting southwest. A loud rumbling sound was heard all the way to Mount Ibu Observation Post," the agency said.

It added that the volcano had erupted 17 times on Sunday alone.

The local authorities had only managed to evacuate 517 residents as of Sunday, pledging to persuade those who remained to stay in safe shelters. Many have refused to evacuate, arguing that they were used to the situation and were in the harvest season.

"There might be economic considerations, as many residents are in the middle of harvesting crops. However, we will continue to educate the community and encourage them to evacuate," said Adietya Yuni Nurtono, Ternate district military commander in charge of a safe shelter.



SLEEP MAY NOT BE A PRODUCTIVITY HACK, BUT IT'S POSSIBLY BE THE BEST ONE

Recent news from around the world would suggest that sleep, if not actively in danger, is at the very least a vestigial habit that productivity-conscious humans can be trained to manipulate or resist. A businessman from Japan has made headlines for claiming to sleep for only 30 minutes a night for 12 years in the interest of “high efficiency”. Not too long ago, the California-based company REMSpace sought to harness the power of dreams to enhance productivity. High-achievers, especially, love talking about how much sleep they’re getting, or not getting — like when Apple CEO Tim Cook famously tweeted, “Got some extra rest for today’s event. Slept in ‘til 4:30”. Where does this leave the ordinary person who just wants to give her body the rest it needs?

The example of actor Akshay Kumar may be the one to emulate. In an interview, his colleague Vivek Oberoi has commended Kumar’s discipline in the matter of hitting the hay, saying that he sticks to his early-to-bed habits even when he has dinner guests. Kumar has brushed off his colleague’s observation — the conventions of hosting remain unaffected, he said. But perhaps he need not be so defensive. It is a well-documented fact that good, deep sleep for the recommended average of seven hours a night is the surest way to ensure that one’s body and brain are performing at their best, at work and at play. And if hosting duties interfere with slumber’s siren call, they are best given short shrift.

In a time when there are constant exhortations to work ever longer hours in the interests of — pick your poison — career advancement, company bottom line or national progress, examples like Kumar’s serve as a corrective. And those who insist on looking for “workflow optimisation” in even the most basic of biological functions should remember: Sleep may not primarily be a productivity hack, but it could well be the best one.

WORLD HEALTH ORGANISATION (WHO)

— Soon after taking office, United States President Donald Trump signed an executive order withdrawing the US from the World Health Organisation (WHO).

— The move means that the US would leave the health agency in 12 months and stop all financial contributions to its work. The US is by far the WHO’s biggest financial supporter, contributing 90 per cent of its overall funding, as per the order.

— The WHO is a UN body working on global health. It works with countries to strengthen their primary health care, its guidelines help prepare government policies, and it helps organise programmes to tackle specific diseases.

— WHO’s funding essentially comes in two ways — the mandatory assessed contributions from all its member countries, and the voluntary contributions raised from various countries and organisations.

— In assessed contributions, the United States is the biggest payer, accounting for 22.5% of the contributions, followed by China at 15%. Of the total USD 578 million assessed contributions, the United States pays approximately USD 138 million and China USD 87.6 million.

— In voluntary contributions, while the US is still the biggest donor, accounting for around 13% (USD 356.3 million) of the total contributions in 2023, China accounted for only about 0.14% of the total contributions (USD 3.9 million). The second biggest voluntary contributor was the Bill and Melinda Gates Foundation.



— There is no provision for withdrawing in WHO's constitution. The US Congress, however, at the time of joining the organisation in 1948, had laid down a condition that said the country could withdraw after giving a one-year notice and meeting the financial obligations of the current year.

ADULTS DIAGNOSED WITH ADHD HAVE SHORTER LIFE EXPECTANCY: STUDY

Adults diagnosed with attention deficit hyperactivity disorder (ADHD) on average die earlier than those without a diagnosis of ADHD, according to a new study in the United Kingdom. While men with ADHD die roughly seven years younger, women with ADHD live an average of about nine years less, the analysis said.

The study, 'Life expectancy and years of life lost for adults with diagnosed ADHD in the UK', was published in the British Journal of Psychiatry on Thursday. It was carried out by a team of eight UK-based researchers.

ADHD is a developmental disorder that can cause difficulties in concentration and problems with impulsiveness. It is commonly diagnosed in childhood and often persists into adulthood. Although estimates vary, studies have suggested that 3-4% of adults worldwide have ADHD.

How was the new study carried out?

For the study, the researchers examined primary care data for more than 30,000 adults diagnosed with ADHD in the UK. They compared this group with more than 300,000 participants without ADHD, who were matched by age, sex, and primary care practice, according to a report by National Public Radio, an American public broadcasting organisation.

"The researchers used mortality data to model what the death rate would be for adults with ADHD across the lifespan of the population," the report said.

What were the findings of the study?

The study found that adults with diagnosed ADHD lived shorter lives than they should. Although it was unlikely that ADHD was a direct cause of the lower life expectancies, there were a number of possible explanations for the findings, Joshua Stott, a senior author of the research and professor at University College London (UK), told The Guardian.

For instance, people with ADHD are more likely to experience worse physical and mental health and might face problems accessing the healthcare they need.

Stott told The Guardian, "We know that people with ADHD have higher suicide rates, unfortunately... They are also more likely to engage in risky behaviours like smoking, drinking and actually binge eating probably as well."

The findings are in line with another significant study, which was published in Sage Journals in 2019. It revealed that children with ADHD who were followed into adulthood had a shorter life expectancy of about 8.4 years. The study also found that "the biggest predictors of shorter life expectancy in adults with ADHD were factors including lower incomes, fewer years of education, a greater likelihood of smoking, shorter sleep duration... poorer nutrition and risky driving," the NPR report said.

The researchers of the 2019 study pointed out that most of these factors were related to impulsivity, which is treatable.



The latest analysis also raised the concerns around under-diagnosis of ADHD as it noted that only 0.32% of adults in the study had a diagnosis. This was around one in nine of the likely true number of people with ADHD based on population-based surveys, according to the researchers.

Max Wiznitzer, a professor at Case Western Reserve University (US), told NPR, “If you treat the ADHD, if you teach them the life skills that they need in order to work with the executive function difficulties so that they’re modifiable, that lessens the risk of all the complications that can develop.”

IN A FIRST, DOCTORS USE TELE-ROBOTIC SYSTEM TO DO TWO HEART SURGERIES, OVER A DISTANCE OF 286 KM

Combining cutting-edge technology with medical innovation, doctors used India’s first indigenous surgical tele-robotic system to successfully conduct two complex heart surgeries over a distance of 286 kilometres – the longest, physical separation so far achieved in India between a patient and the operating surgeon.

The surgical-robotic system, SSI Mantra, developed by the medical technology company, SSI Ltd, is the first-of-its-kind system in India. It conducted two surgeries on January 9 and 10 on two men, aged 59 and 56, with a team stationed at the SSI’s robotics control in Gurugram and another at the Manipal Hospital in Jaipur.

The first procedure was an internal mammary artery harvesting, which involves removing the artery for a coronary artery bypass grafting. The second was a total endoscopic coronary artery bypass, which is considered a complex cardiac surgery as the surgeon has to work on the artery while the heart is still beating.

Speaking to The Hindu about the surgeries, Dr. Lalitaditya Malik, cardiothoracic vascular surgery consultant at the Manipal Hospital in Jaipur, said his team of 10 medical staff and five from an Information Technology support team did mock drills for these operations for nearly a week every day before the actual procedures.

Better precision

“Latency time, ensuring good connectivity, anticipating and being prepared for medical and technical problems are the challenges associated with the procedure. The advantages include reduced time of operation, better precision, minimal operation trauma to the body in terms of incision, blood loss, recovery time and chances of infection,” he said.

The surgeries were successful because the underlying technology enabled a latency of 35-40 milliseconds (one-20th of a second), meaning that actions executed in Gurugram were almost instantaneously transmitted to the robotic surgical instruments in Jaipur. The patients have been discharged.

The surgeon involved, Sudhir Srivastava, founder of SS Innovations, and who specialises in robotic cardiac surgery, told The Hindu that MantraSync was a proprietary tele-surgical network module specifically designed to work seamlessly with the SSI Mantra surgical-robot system.

“The technology has been approved by the Central Drugs Standard Control Organisation in India under Class B and Class C surgical devices. These approvals affirm the safety, efficacy, and regulatory compliance of the system for use in hospitals across India,” said Dr. Srivastava.



THE HIDDEN DANGERS OF RHODAMINE B: A GLOBAL AND LOCAL PERSPECTIVE

Rhodamine B is a synthetic dye utilised in industries such as textiles, paper, and leather. Its application extends to scientific research due to its fluorescent properties. However, its use in consumable products is fraught with health risks. Studies indicate it can cause DNA damage, leading to mutations and potentially triggering cancerous growths

Imagine indulging in an appetizing looking, sweet treat, only to discover it contains a dye primarily used in textiles and linked to cancer. This alarming reality has prompted significant health interventions worldwide, including recent decisive actions in India.

Rhodamine B is a synthetic dye known for its bright pink hue, commonly utilised in industries such as textiles, paper, and leather. Its application extends to scientific research due to its fluorescent properties. However, its use in consumable products is fraught with health risks. Studies indicate that Rhodamine B can cause DNA damage, leading to mutations and potentially triggering cancerous growths.

Animal research has demonstrated tumour development in organs like the liver and bladder following prolonged exposure to the dye.

Recognising its potential dangers, many countries have put in place strict regulations on use of Rhodamine B. In the United States, the Food and Drug Administration (FDA) has long prohibited its use in food products, classifying it as unsafe for human consumption. A recent ban issued by the FDA in January 2025 further reinforces these restrictions, prohibiting the use of Rhodamine B in any food-related applications due to increasing evidence of its carcinogenic properties.

The FDA cited growing concerns over children's exposure to high levels of the dye in candies, baked goods, and other processed foods, prompting an urgent call for manufacturers to reformulate their products. This ban stems from studies indicating its potential carcinogenicity and other health risks. Similarly, the European Union classifies Rhodamine B as a substance of very high concern, restricting its use in cosmetics and other consumer goods.

Indian perspective

In India, the rampant use of Rhodamine B in food items has raised significant health concerns. The dye has been illegally employed to enhance the visual appeal of various consumables, posing serious health risks to consumers. Over the last few years, action has been taken by various Indian states and these highlight the growing awareness of these dangers. In February 2024, Tamil Nadu banned the production and sale of cotton candy after the Government Food Analysis Laboratory in Chennai detected Rhodamine B in samples collected from vendors. Health Minister Ma Subramanian emphasised that the use of Rhodamine B in food violates the Food Safety and Standards Act of 2006, categorising such products as unsafe. The ban aims to raise public awareness about the hazards associated with coloured candies and ensure that only safe, colour-free cotton candy is available.

Following Tamil Nadu's lead, other Indian states and territories have taken similar measures. Karnataka, in March 2024, prohibited the use of Rhodamine B in popular street foods like "Gobi Manchurian" and cotton candy. Minister for Health and Family Welfare in the Government of Karnataka, Dinesh Gundu Rao, announced stringent penalties for violators, including imprisonment of up to seven years and fines reaching ₹10 lakh. Laboratory tests revealed the presence of harmful chemicals in numerous samples collected across the state.

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Puducherry also followed suit by banning the sale of cotton candy containing Rhodamine B. Food safety officers have been directed to conduct inspections and take strict action against violators to safeguard public health. In May 2024, Himachal Pradesh instituted a one-year ban on the production, sale, and storage of cotton candy after detecting Rhodamine B in samples. This preventive measure aims to protect consumers from the potential carcinogenic effects of the dye.

Mohammed Mithi, Consultant Surgical Oncologist at SaifeeHospital in Mumbai, explains, “Synthetic dyes, including Rhodamine B, may pose carcinogenic risks due to certain chemical components. Some dyes, like azo dyes, can break down into aromatic amines, which are known carcinogens. Laboratory studies have shown that specific synthetic dyes can induce DNA damage, oxidative stress, and promote tumour growth in animal models. While concrete evidence in humans is limited, long-term exposure to unregulated products remains a concern.” He further adds that certain groups, such as children, the elderly, and immunocompromised individuals, are more susceptible to these harmful effects due to their body’s reduced ability to metabolise and detoxify harmful substances.

AbyramyBalasundaram, consultant dermatologist at CosmediqHair Transplant and Skin Clinic, Chennai, states, “Synthetic dyes, when used in concentrations approved by regulatory bodies, are generally safe. However, in sensitive individuals, they can lead to allergic reactions such as itching, redness, and skin thickening. Long-term exposure to synthetic dyes like Rhodamine B can result in chronic allergic reactions and permanent skin pigmentation changes. Although there is no definitive link to cancer in humans through topical application, it is always advisable to opt for products from reputable brands with proper labeling.”

She further notes, “The European Union was among the first to ban Rhodamine B in cosmetics in the early 1990s due to concerns about its potential carcinogenic effects and skin sensitisation risks. This move has paved the way for stricter global regulations on synthetic dyes in personal care products.”

India’s food safety ecosystem

Priyadarshini Chidambaram, Community Health Specialist and Researcher, Bengaluru, says, “The ecosystem in India for research into food dyes safety is weak. There is a need for proactive funding and commissioning of independent research by the Food Safety and Standards Authority of India (FSSAI) to study the impact of additives, especially synthetic dyes, on public health based on Indian diet practices through collaborations with academic and research institutions. We must build a robust system of rapid scientific reviews and proactive policy implementation to be on par with international recommendations on food safety instead of reacting to a public health crisis or just joining the bandwagon of international ban trends.”

She adds, “There needs to be active testing for harmful food dyes and enforcement of strict action against both errant big brands and smaller establishments and vendors. The fact that a state-level ban was necessary to bring attention to harmful dyes like Rhodamine B is a wake-up call. It underscores the need for FSSAI to play a more visible role in educating the public about unsafe food practices. There is a definite knowledge gap among the public on food standards. We must harness the growing digital and social media influence to disseminate information on safe food additives and food label warnings. Community education and engagement are needed to tackle the menace of harmful additives.”

The case of Rhodamine B serves as an important reminder of the hidden dangers that lurk in seemingly innocuous products. It underscores the collective responsibility of governments,



industries, and consumers to prioritise health over aesthetics. By staying informed and vigilant, we can ensure that the foods we enjoy are not only appealing but also safe. As medical professionals aptly put it, “The health of a nation begins with the safety of its food. It’s time we prioritise long-term well-being over short-term convenience.”

COVID-19 VACCINES FAIL TO ALTER NEURO SYMPTOMS OF LONG COVID

While COVID-19 vaccination decreases the severity of COVID-19 disease and the rate of hospitalisation and death, a study published recently has found that vaccination prior to SARS-CoV-2 infection does not necessarily reduce the neurological manifestations and burden of Long COVID. This includes patients who had a severe infection that necessitated hospitalisation and those with a mild infection who did not require hospitalisation. Common neurological symptoms of Long COVID include brain fog, numbness and tingling, headache, dizziness, problems with smell and taste, and intense fatigue.

At the beginning of the study, the authors hypothesised that since COVID-19 vaccines reduce the severity of COVID-19 disease, the vaccines may also similarly reduce the neurological manifestations of subsequent Long COVID. But the findings of the study have thrown a surprise. “While vaccination decreases the severity of acute COVID-19 and the rate of hospitalisation and death, the sobering conclusion of our study is that vaccination prior to infection did not alter the subsequent neurologic manifestations of Long COVID in our clinic population,” the authors write. The study was published in the journal Brain Communications.

WHY ARE ANTIVENOMS NOT EASILY ACCESSIBLE IN INDIA?

On New Year’s Day, five-year-old Mayuri lost her life to a snakebite in Uttara Kannada district in Karnataka. The delay in receiving antivenom and the unsafe conditions at her anganwadi tragically sealed her fate. She became one of the estimated 58,000 Indians who die every year from venomous snakebite, a terrible number that renders India the ‘snakebite capital’ of the world and highlights the scale of this preventable crisis. What makes snake venom so deadly, and how does antivenom neutralise its effects?

What are antivenoms?

Antivenoms, or antivenins, are life-saving medicines used to treat snakebites. They are produced by injecting small amounts of venom into animals, usually horses, which then produce antibodies as part of their immune response. These antibodies become antivenoms.

Snake venom is one of nature’s most lethal weapons, a complex cocktail of toxic proteins, each tailored by evolution to immobilise, and in some cases to digest, prey and defend against threats. When a sufficient quantity of venom is injected during a snakebite, the toxins wreak havoc on the human body in multiple ways. Haemotoxins destroy blood cells and disrupt clotting. Neurotoxins block nerve signals and paralyse. Cytotoxins dissolve tissue at the bite site. The effects are often fatal without medical intervention.

Antivenoms are the frontline defence. They work by specifically binding to the venom toxins to render them ineffective, allowing the body’s natural defence systems to clear them safely over time. But for antivenom treatment to succeed, responders need to know which snake species inflicted the wound and how much venom it injected.



Polyvalent antivenoms (PVAs) currently used in India target multiple species. However, their efficacy varies against less common snakes. Understanding each venom's complexity and the mechanisms of antibody production remains central to improving treatments.

How do antivenoms work?

The production of antivenom is a remarkable interplay of human ingenuity, animal resilience, and immunological mastery, dating back to the pioneering work of French physician Albert Calmette in the 1890s. He developed the first antivenom using horses, a practice that continues today.

To produce antivenom, healthy and mature venomous snakes are first captured from the wild by trained experts who then “milk” the snakes to extract the venom. Next, they immunise horses with increasing doses of venom over many weeks, allowing their immune systems to produce antibodies. The dose of venom injected into horses is critical: too little and the immune response will be weak; too much and the horse's body could be damaged.

Over time, the horses develop a robust immune response, producing antibodies that neutralise venom toxins. The antibodies thus produced are very specific to the type of toxins injected, like a lock and its key. This process mirrors how humans develop resistance to familiar pathogens like the flu or common-cold viruses — through repeated exposure or vaccination. The experts extract these antibodies from the horse's blood and purify and formulate them as antivenoms.

Several companies in India, including Bharat Serums and Vaccines, Haffkine Bio-pharmaceutical Corporation, and ViNS Bioproducts, produce antivenom this way. The Irula tribe of Tamil Nadu plays a crucial role in this process. The Irular people are skilled snake-catchers and can safely extract venom from snakes in controlled environments. Their expertise ensures a steady supply of high-quality venom for antivenom production in India. Without their contribution, the supply chain for these drugs would collapse.

How common is snakebite in India?

India is home to more than 300 species of snakes, of which more than 60 are venomous, ranging from mild to high. The so-called Big Four — Indian cobra (*Naja naja*), common krait (*Bungarus caeruleus*), Russell's viper (*Daboia russelii*), and the saw-scaled viper (genus *Echis*) — account for most snakebite deaths. The venom extracted from these four species is used to produce PVAs in India.

On the flip side, this means other venomous snakes — including the king cobra, monocled cobra, banded krait, Sochurek's saw-scaled viper, hump-nosed viper, and several species of pit vipers — are not covered by existing PVAs and continue to pose significant risks. As a result, victims bitten by these species often receive ineffective treatment, leading to poor outcomes.

A landmark 2020 study by researchers from Canada, India, and the U.K. estimated that between 2001 and 2014, a horrifying 1.2 million snakebite deaths and three-times as many cases of permanent disability occurred in India. The study also said one in 250 Indians were at risk of dying from snakebite before the age of 70.

These staggering mortality numbers reflect a pernicious combination of ecological, social, and systemic factors. People in rural India like agricultural workers are disproportionately affected and face a constant threat, particularly during the monsoon, when snakes become more active. Rapid, often unplanned urbanisation, poor garbage management, and urban floods have increased encounters between humans and snakes, making even city-dwellers vulnerable.

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Why are antivenoms hard to get?

India is the world's largest producer and consumer of antivenoms in the world. However, access to timely medical care remains a significant challenge for many Indians. People in remote areas often undertake long journeys to reach a healthcare facility equipped with antivenoms.

Even when antivenom is available, improper administration and inadequate facilities exacerbate the crisis. Logistical issues, unequal access to care, superstitious beliefs, and cultural practices often delay proper treatment in many parts.

Antivenoms often need to be transported in cold storage, however, India's rural parts lack the supporting infrastructure and power supply. Facilities that 'make do' with the resources available can cause the antivenoms to degrade in storage and become ineffective.

The high cost of manufacturing antivenom limits accessibility for the economically-disadvantaged. This mismatch highlights the need for tailored solutions, underscoring the importance of targeted research and innovation.

How are antivenoms changing?

Antivenoms of the future are more promising. Researchers are using recombinant DNA technology to produce lab-engineered, synthetic antivenoms that are free from animal-derived proteins and offer greater safety and efficacy. Computer-designed proteins could accelerate development by helping researchers to optimise antibodies for different clinical settings.

For example, on January 15, researchers from Denmark, the U.K., and the U.S., led by 2024 Nobel laureate David Baker, reported successfully using Artificial Intelligence (AI) to design synthetic antivenoms. Their and other breakthroughs promise greater effectiveness, availability, and the potential to replace century-old methods to produce antivenoms.

Region-specific antivenoms are another promising avenue. The work of Karthik Sunagar at the Indian Institute of Science, Bengaluru, has already shed light on cross-species and geographic variability in venoms.

By mapping the toxins' compositions, scientists are attempting to create tailored antivenoms, holding the promise for more precise treatments. Portable venom-detection kits and rapid diagnostic tools are also helping guide effective antivenom use. With continued investment in research, public education, and infrastructure, India can address its snakebite crisis, with reason to hope tragedies like Mayuri's will become a thing of the past.