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KAMALA HARRIS, OUT OF BIDEN'S SHADOW

It was not a candidature foretold. Until less than a month ago, incumbent Joe Biden was the presidential candidate for the Democratic party and Kamala Harris was set to be his running-mate, much like in 2020. Yet, since July 21 — when Biden withdrew from the race — VP Harris, the “accidental candidate” for the US presidency, has firmed up the nomination. Would Harris have been a US presidential nominee had Biden — whose age became his Achilles heel — withdrawn a year earlier? Given her underwhelming performance in the 2020 Democratic primaries, she would certainly have faced stiff competition. Whatever the circumstances of her elevation, Harris heads into the Democratic National Convention (DNC) — from August 19 to 22 in Chicago — to be crowned the leader of the ruling party with some momentum on her side.

On paper, Harris has several advantages. She was a senator from California — one of the largest, richest and politically significant US states — and was known for being a “smart on crime” public prosecutor. The party rank-and-file and leadership have stood behind her. And while Biden seemed frail in comparison to Donald Trump, the much younger Harris scores against her opponent in this regard. Democrats are also hoping she rallies young and minority voters behind the party. For now, they have reason to be optimistic: While Biden was trailing Trump in most polls, especially in “swing states” — crucial because of the US’s electoral college system, in which winning states and not necessarily the popular vote can be decisive — Harris has caught up. Most polls now show Harris either tied with Trump or give her a slight edge. She is likely to receive a boost from the DNC, which will see Biden, former presidents, prominent Democrats and others endorse her.

The Harris campaign must walk a fine line while trying to carve out its own path. The Vice President cannot avoid taking responsibility (and, arguably, credit) for the achievements and faults of the Biden administration. For now, it seems that the Democrats are trying to woo the middle and working classes, who have suffered the most from inflation by promising an “opportunity economy” and suggesting price controls. Republicans, including Trump, are trying to label these moves “communist”. The Gaza question, however, threatens to cast a pall over the Harris campaign and the DNC. Thousands are expected in Chicago to protest the US government’s support for Israel’s excesses in Gaza. At the Michigan Democratic primary in February, 13 per cent of Democrats voted “uncommitted” to show their anger against Biden’s perceived support for Benjamin Netanyahu’s war. As the conflict drags on and atrocities continue, those voters may become important in a tightly-fought election.

HILLARY CLINTON SAYS KAMALA HARRIS COULD BREAK THE ‘GLASS CEILING’ WITH HER NOMINATION. WHAT DOES IT MEAN?

Former US Secretary of State Hillary Clinton said Vice President Kamala Harris’ confirmation as the Democratic Party’s presidential candidate will help break through the “highest, hardest glass ceiling”.

During her speech at the Democratic National Convention in Chicago on Monday (August 19), Clinton said, “On the other side of that glass ceiling is Kamala Harris raising her hand taking the oath of office as our 47th President of the United States.”



The term “glass ceiling” has long been invoked as a shorthand for the barriers women face in advancing to senior professional positions. Clinton has used it frequently, like when she became the first-ever woman presidential nominee from either of the two main US political parties in 2016.

After Clinton lost that election to Donald Trump, she said in her speech, “To all the women, and especially young women... I know we have still not shattered that highest and hardest glass ceiling, but someday, someone will and hopefully sooner than we might think right now.” Where does the term come from? We explain.

What does ‘glass ceiling’ mean?

According to the Encyclopedia of Race, Ethnicity and Society, “...The word ceiling implies that there is a limit to how far someone can climb before he or she bumps up against a barrier... To say that the ceiling is glass suggests that, although it is very real, it is transparent and not obvious to the casual observer. It also implies that what is on the other side is both visible yet inaccessible to those facing it.”

While there may not exist obvious barriers, like policies prohibiting women from advancing in a profession, something nevertheless keeps them from reaching higher-level roles despite possessing the qualifications.

Who coined the term glass ceiling?

The most frequently cited source is the late American management consultant Marilyn Loden. In an article she wrote for the BBC in 2017, she recalled using it for the first time in 1978, at a panel discussion on women’s career progression.

Loden was then an HR professional. She listened to the women panellists discuss possible behavioural reasons for women’s inability to climb the corporate ladder: “Deficiencies in women’s socialisation, the self-deprecating ways in which women behaved, and the poor self-image that many women allegedly carried.”

However, Loden disagreed. She wrote, “I argued that the ‘invisible glass ceiling’ — the barriers to advancement that were cultural not personal — was doing the bulk of the damage to women’s career aspirations and opportunities.” Citing examples from her career, she added, “My boss made a point of commenting on my appearance at literally every meeting... On several occasions, I was told that the advancement of women within middle management was ‘degrading the importance’ of these positions.”

Why did the term become popular?

The term came as American society witnessed the Second Wave of Feminism in the 1960s and ’70s. Women demanded equality across fields, including in the workplace. Laws were then introduced to deal with these issues, such as Title VII of the Civil Rights Act, 1964, which prohibited employers from discriminating on the basis of sex.

Even without overt discrimination, few women were appointed heads of companies, universities, or political parties. US President George HW Bush established a Glass Ceiling Commission in 1991 to investigate these issues. It found that although women made up nearly 46% of the workforce then and earned more than half of all master’s degrees, 95% of senior-level managers were men.



While advances have been made, the trend continues even in major economies. A 2018 working paper from economist Marianne Bertrand found, “In Europe, only 23.3 percent of board members of the largest publicly listed companies are women and only 5.1 percent are CEOs (European Union 2016), despite women accounting for 45 percent of the labor force.”

In politics too, this underrepresentation is visible. In 2022, women held about 29 percent of seats in the US House of Representatives, the lower chamber of the national legislature. This was the highest percentage ever.

Therefore, a common feeling of persistent barriers drives continued usage of the term.

However, the term has also been criticised for mostly centring affluent, upper-middle-class white women. It ignores groups who are less likely to even get a foot in the door, such as poor women or those from racial minorities. In India, it applies to women from backward castes, who have historically been denied participation in the formal economy.

Why does the glass ceiling persist?

Several theories have attempted to explain it. Sheryl Sandberg, former Facebook COO, argued in her best-selling 2013 book *Lean In* that women needed to be more assertive, have greater ambition, and make other behavioural changes.

Loden criticised this idea and wrote in a response article in *The New York Times* at the time, “While Sheryl Sandberg’s advice may pertain to a privileged subset of women with Ivy League educations, ‘leaning in’ is no solution for the gender bias, inflexible work schedules and pay inequities that many working women still face.”

Data points to how men’s and women’s earnings start diverging right after a woman has a child since it requires her to devote extra time to childcare or drop out of the job market.

In her 2021 book, *Career & Family: Women’s Century-Long Journey Toward Equity*, economist Claudia Goldin discussed this “problem with no name”. She argued that the real issue is how lucrative, senior-level jobs are “greedy”, meaning they require substantial time commitments. As long as these jobs remain inflexible and policies don’t allow and normalise time-offs for men, the difference in career progressions will live on.

HOW WILL THE UPCOMING US PRESIDENTIAL ELECTION IMPACT CLIMATE CHANGE?

The choice of Tim Walz as the Democratic Party candidate for Vice President in the United States elections later this year is being strongly welcomed by the climate change community. His presence in a future administration, should Democratic presidential candidate Kamala Harris win the White House, is expected to ensure that the US remains committed to its climate pledges and possibly even strengthen them further. That is because of Walz’s past track record of climate action as Governor of Minnesota.

The climate community has no love lost for Donald Trump, who pulled the US out of the Paris Agreement as soon as he took over as President in 2016.

The prospect of Trump winning a second term is seen as a threat to the minor gains made by the US on the climate front during Joe Biden’s presidency. Trump’s recent remarks on climate change during a conversation with billionaire Elon Musk on social media were a further reminder that his views have not undergone any change.



But while Trump gets most of the blame for the lack of adequate climate action on the part of the US, the fact is that previous administrations haven't been very impressive either. The lacklustre performance of the US on climate action over the last three decades is not because of any lack of ability or resources but a result of a calculated strategy.

Tim Walz's record on climate change

As a two-time Governor of Minnesota, Walz's biggest claim to fame is a legislation that he signed on last year requiring Minnesota to generate all its electricity from non-fossil fuel sources by 2040, according to reports in the American news media. This law was enacted during a legislative session in which nearly 40 other climate initiatives were pushed through. These included tax rebates on electric vehicles and plans to expand the network of charging stations, The New York Times reported.

If the Democratic Party wins the presidential election, Governor Walz will bring to Washington DC the most substantive climate record of any incoming President or Vice President since Vice President Al Gore, who served two terms with President Bill Clinton from 1993 to 2001, The NYT report said.

Walz probably has even better credentials than Gore since he has already been successful in making policy changes, according to the report. Gore incidentally won the Nobel Peace Prize in 2007 for his climate activism — and shared that prize with the Intergovernmental Panel on Climate Change (IPCC), the United Nations body that advances scientific knowledge about climate change.

The laws and policies introduced by Walz in Minnesota were those that the Democrats would like to replicate nationally, according to a report by The Scientific American.

However, Walz is not unique in having pushed some climate-friendly legislation at the state level. Several other states in the US, most of them with Democratic Governors, have introduced similar policies. For example, New York has committed itself to 100 per cent clean energy by 2040, just like Minnesota, and so has Oregon. Several states have incentivised renewable energy and electric vehicles, and set targets for emission reductions.

But the focus on Walz's climate record is a good political strategy to score a point over Trump who has remained unapologetic in trivialising the climate crisis.

Major changes unlikely

It is extremely unlikely, however, that the Harris-Walz team, if it comes to power, would bring any drastic change in US climate policy, and go beyond the roadmap finalised by the Biden administration through the Inflation Reduction Act (IRA).

The trajectory that the US has taken on climate change in the last three decades has largely been a result of bipartisan agreement, with the exception of Trump. And even Trump is unlikely to be as disruptive this time. He has never spoken about withdrawing from the Paris Agreement once again after his previous act of 2016 was undone by Biden.

However, it is quite possible that climate action would not figure on Trump's list of priorities. An analysis by Carbon Brief, a UK-based climate-focused publication, earlier this year said Trump's presidency could result in an additional 4 billion tonnes of carbon dioxide equivalent being emitted into the atmosphere by 2030.



But to expect that the choice of Walz by the Harris team would energise global climate action would be unrealistic. The US has never been ambitious on climate action, and there is no reason why this would change if Walz becomes Vice President next year.

In fact, the failure of the US to act responsibly on climate change has been the major reason why it has become all but impossible to achieve the 1.5 degree Celsius temperature target. The US did not just walk out of the Paris Agreement, it had not joined the previous Kyoto Protocol either. Its emissions are almost the same level as that in 1990, the benchmark year to measure emissions reductions for developed countries. The US has instead chosen 2005 as the baseline year to show progress. Its current emissions are about 17% less than the 2005 levels, but between 1990 and 2005, its emissions had increased by about 15%.

The IRA is considered a major breakthrough, but it still commits the US to only a 50-52% reduction in emissions by 2030 on the 2005 baseline. This translates to a 46% reduction on 2019 levels.

The most recent IPCC assessments show that the world as a whole needs to cut at least 43% of global emissions by 2030 if hopes of meeting the 1.5 degree Celsius target are to be kept alive. That means the US, if it meets its own emissions reduction target for 2030, would be doing only what is expected of the world as a whole, and not more as is required of the country that has the largest historical responsibility. And even this might not be achieved. An analysis by Rhodium Group, a research firm based in the US, last month showed that the US was not on track to achieve its 2030 targets. It said at the current rate, the US would be able to manage only about 32% to 43% reductions in its emissions by 2030. The 52% target could be achieved only by 2035.

WHAT INFLAMED THE FAR-RIGHT RIOTS IN BRITAIN?

The story so far:

The recent far right riots in Britain are a continuation of the phenomenon of urban rioting that the country regularly experiences, especially in the summer months such as the 1981 violence in Brixton in London and Toxteth in Liverpool; or in northern deindustrialised towns such as Burnley and Oldham in 2001. While previous rounds of violence witnessed youngsters from black and ethnic minority backgrounds in pitched battles with the police who were accused of being racially motivated and discriminatory, this year's summer violence involved men from white working-class backgrounds attacking, in some cases a mosque and hotels where immigrants were staying.

What led to the riots?

In this round of race riots, social media played an almost incendiary role, exponentially spreading misinformation. The immediate spark to the violence was the rumour that the perpetrator of the knife attack in the town of Southport, which killed three young girls, was Muslim and an immigrant who had recently arrived on a boat. Controversial far-right figures like the English Defence League co-founder, Tommy Robinson, took to social media on the issue, resulting in many of his followers violently taking to the streets.

The riots are a culmination of decades of dehumanising immigrants. Former U.K. Prime Minister, Theresa May, when she was Home Secretary in the David Cameron government, created what was called a 'hostile environment' in order to bully illegal immigrants into leaving. This reached even more extreme levels under Home Secretaries Priti Patel and Suella Braverman. Indian origin



Prime Minister Rishi Sunak contributed his share with his pull-up-the-drawbridges mentality and stop-the-boats-from-arriving sloganeering.

Signals from the highest levels of the British political establishment reinforce the unfounded belief that immigrants are harmful for British economy and society. The highlighting and headlining of immigration also serves to obfuscate the manner in which unemployment has arisen through a deliberate deindustrialisation, rather than immigrants snatching jobs; how there has been a shortfall in building social housing; and a general stretching, to breaking point, of public services such as the National Health Service (NHS) through systematic under-investment.

How has right-wing media reacted?

A curious phenomenon of these riots has been the concern towards the English working class by the right-wing media and commentariat. This plight was itself created through the declaration of a veritable class war when Margaret Thatcher during the miners' strike, called the National Union of Miners (NUM) as the 'enemy within', drawing a parallel to the 'enemy without' in the form of the Argentine junta that had been defeated in the 1982 Falklands War. Historically, working class unrest in Britain such as the 1819 Peterloo massacre, or the 1984 miners' strike has had the potential to challenge and change the British establishment on more equitable and socially just grounds. The right wing commentariat does not visualise their working class framing of the current riots in this transformative manner. They have not been worried about the aggravation of working-class conditions owing to 14 years of austerity measures imposed by Conservative governments since 2010.

The current riots must also be understood as a far-right reaction to pro-Palestine protests across British cities that have called for a ceasefire in the face of Israeli military actions in Gaza. These protests were labelled as hate marches and anti-Semitic by the right-wing media. The possibility of further far-right violence was thwarted by anti-race protesters on the streets that the Labour government tended to be frigid towards. The Keir Starmer led government is unlikely to challenge the far-right, fearing a shift of support towards the immigration obsessed Reform U.K. Party, that received four million votes in the July elections. The Starmer government's ability to handle the violence is undermined by the prolonged austerity measures that have generally compromised the capabilities of the British state.

BACK FROM THE BRINK

Sri Lanka's ninth presidential election, scheduled for September 21, has attracted a record 39 candidates, signalling a return to "business as usual" despite the severe economic crisis of 2022. The number of contenders, four more than in 2019, suggests a robust democratic process. There are familiar faces and some surprises. Incumbent President Ranil Wickremesinghe, traditionally with the United National Party, is running as an independent. At 75, he aims to garner broad support by highlighting the political and economic stability achieved during his two-year tenure, made possible by backing from the Sri Lanka Podujana Peramuna (SLPP), led by former President Mahinda Rajapaksa. In early 2022, Sri Lanka faced the full effect of an economic meltdown, brought on by, among other things, the COVID-19 pandemic and the 2019 Easter Sunday bombings. The central bank announced a debt repayment moratorium amid unsustainable debt and critically low reserves. The Russia-Ukraine conflict further worsened the situation. The Aragalaya movement resulted in the ousting of President Gotabaya Rajapaksa in 2022. Since then, Sri Lanka has secured an extended fund facility with the IMF, supported initially by India and now with an "agreement in principle" with India and the Paris Club creditors on a debt treatment plan.

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



During the early recovery phase, people faced price hikes. Recently, prices of electricity, fuel, and cooking gas have decreased, but people are still struggling. Earnings from tourism, a major contributor, amounted to around \$328 million in July against \$219 million a year ago. However, in a move seen as part of electioneering, the government announced a monthly cost of living allowance of LKR 25,000 for public service employees, effective January 2025.

Mr. Wickremesinghe faces Sajith Premadasa of the Samagi Jana Balawegaya (United People's Front), Anura Kumara Disanayake of the Janatha Vimukthi Peramuna, and Mahinda Rajapaksa's son, Namal of the SLPP. Mr. Disanayake, who visited India in February, hopes to capitalise on public frustration with traditional political parties, a sentiment that fuelled the Aragalaya movement. Other candidates include P. Ariyanethran, a "common Tamil candidate", Sarath Fonseka, former Army Commander, and Nuwan Bopage, a nominee of the Aragalaya activists. The leading candidates should push for the restoration of provincial councils, which represent a measure of autonomy as envisaged in the 13th Amendment. It is a sad commentary on the Sri Lankan political leadership that the councils have been rendered non-functional for years. Whoever is elected by about 17 million voters as President should revive the provincial councils, which are not Tamil-centric but are intended to infuse an element of agency for the people in the running of their affairs. A functional democracy is the first step to fixing the economy.

RETURN OF THE ISLAMISTS

In the tsunami of slogans that swept away the Sheikh Hasina government earlier this month, this particular one ("We asked for our rights but became razakars"), dripping with sarcasm, stood out as the summary of the political history of Bangladesh's independent existence. As her law and order machinery overplayed their hands, Ms. Hasina described the protesters as 'razakars', the anti-liberation forces of 1971 who opposed Bangladesh's freedom. But it turned out that Ms. Hasina, despite her best efforts, failed to contain the anti-liberation forces that were most effectively represented by the Jamaat-e-Islami Bangladesh.

During her 15-year prime ministerial tenure, one of the most dramatic moments came in the early morning of May 11, 2016 when Motiur Rahman Nizami, the leader of JeI Bangladesh, was hanged to death in the Dhaka central prison. That Nizami, once one of the most powerful figures in the country, could be hanged showed that the JeI had become weak after relentless attacks by the Hasina government.

The JeI's weakness was further proved when its footsoldiers failed to mobilise themselves in protest against Nizami's death. Nizami represented the might of the JeI in Bangladesh. On May 13, 1971, as the Pakistani military's 'Operation Searchlight' rolled on, attacking those who opposed the freedom movement of Bangladesh, a large contingent of the Pakistan Army reached Demra in the western part of the country and, with the help of the collaborators, killed a large number of civilians. A War Crimes Tribunal set up by the Hasina government conducted an inquiry and found that it was the Al Badr militia, led by Nizami, that supported the Pakistan military in carrying out the Demra massacre.

The JeI Bangladesh is an offshoot of the Jamaat-e-Islami, which was established on August 26, 1941 in Lahore. Soon after its emergence, the JeI opposed the Pakistan movement of Mohammed Ali Jinnah. However, after the formation of the state of Pakistan, it reinvented itself by demanding an Islamic Constitution and Islamic regime. In East Pakistan, Ghulam Azam spearheaded the Islamic movement.



In 1954, Ghulam Azam joined the JeI and with his leadership the JeI became a strong movement in East Pakistan as well. It was during this time that the JeI founded its student wing (today Chhatra Shibir in Bangladesh). The JeI in East Pakistan faced the first crackdown under the government of President Ayub Khan, who banned the organisation under an order which remained in force until 1962. In 1963, the outfit revived itself as part of a campaign against the Muslim Family Laws Ordinance 1961, which was opposed by the anti-Ayub Khan parties. In the next election of 1965, Fatima Jinnah, sister of Mohammed Ali Jinnah, contested against Ayub Khan. This marked a dramatic turn in the history of the JeI as the outfit, including its chief ideologue Maulana Maududi, went against their fundamental tenets and supported a woman candidature in an election. This experiment with democracy would be an example that the outfit would subsequently replicate.

Mujib's opponent

It was after the defeat of Fatima Jinnah that the JeI's East Pakistan wing became more focused on the politics in Dhaka where it emerged as the chief opponent of Sheikh Mujibur Rahman. Sheikh Mujib wanted a federal system for East and West Pakistan which would include two separate currencies and separate forex reserves for the two wings. He also demanded a separate paramilitary for East Pakistan. The recasting of the JeI's political position against Mujib brought the movement closer to its former arch enemy, President Ayub Khan. As Pakistan moved towards the polls of December 7, 1970, the JeI contested the polls and won four seats in the National Assembly. As the movement for Bangladesh intensified, the JeI became part of the official move to preserve Pakistan in its undivided form.

After the defeat of the Pakistan military in the 1971 war, Ghulam Azam, leader of the JeI, left Bangladesh and for sometime lived in London and Pakistan while campaigning for the re-establishment of East Pakistan. Azam's citizenship was nullified by the Mujib government in 1973 when the country held its first election. After a period of uncertainty, the JeI Bangladesh was launched in 1979 with Azam as the emir and Abbas Ali Khan as the emir-in-charge. In 1986, the JeI Bangladesh contested the election and got 10 seats. It campaigned against the government of President Hossein Mohammed Ershad. In 1990, during the stormy anti-Ershad movement that was led by Sheikh Hasina-led Awami League and Khaleda Zia's Bangladesh Nationalist Party (BNP), JeI leaders delivered speeches in support of popular democracy. In the election of 1991 that brought Ms. Zia to power, the JeI Bangladesh won 18 seats.

The biggest turnaround in the history of the JeI Bangladesh came on December 6, 1992 when the Babri Masjid was demolished in Ayodhya. The outfit took advantage of public sentiment and established itself as a voice of the religious majority in Bangladesh. Through a court ruling, Ghulam Azam got back his Bangladesh citizenship. In a twist of irony, in 1996, the JeI joined hands with the Awami League and launched a movement for establishing a caretaker government that would hold the next election. The two parties, however, did not form a coalition during the election that brought Ms. Hasina as the Prime Minister for the first time. From the margins, the JeI came into the core of Bangladesh politics in 1998 when it reached an understanding with the BNP.

In 1999, the JeI joined a BNP-led four party alliance. With the JeI becoming a mainstream political player, Ghulam Azam withdrew from active politics and Motiur Rahman Nizami became the emir. In the 2001 election, the JeI won 18 seats and Nizami became a Minister, holding the portfolios of agriculture and industry. It was during this time that the outfit warmed its ties with the JeI Pakistan. As the Zia government became unpopular, the JeI Bangladesh also bore the brunt and its leaders were caught in the vortex as they repeatedly made derogatory remarks about the 1971



liberation war that infuriated the public and prompted Ms. Hasina to pledge that the Awami league would set up a war crimes tribunal if she returned to power. The opportunity to form this tribunal came in 2009 when the Jatiyo Sansad passed the unanimous resolution setting up the war crimes tribunal.

New tactics

After the execution of Nizami, the JeI, under the leadership of Shafiqur Rahman (in picture), has renovated its tactics and replaced its earlier anti-liberation rhetoric with sophisticated social media outreach. It also strengthened its presence in coaching centres and liberal universities where the heavy handed policies of the Hasina government had triggered a backlash. Ms. Hasina, in one last acts of reprisal, banned the JeI. But she was too late.

The JeI has taken revenge for the execution of Nizami. Just like the 1990 movement against the military dictatorship, this time too the JeI participated in a pro-democracy movement. In 1990, the JeI joined hands with the Awami League and the BNP to overthrow the Ershad regime. In 2024, they joined hands with students to overthrow Ms. Hasina.

HASINA'S EXIT AND INDIA'S HOUR OF RECKONING

In August 2024, Bangladesh witnessed one of the most significant political upheavals in its recent history.

What began as a protest against a controversial quota system in government jobs evolved into a nationwide movement that ultimately led to the ouster of Prime Minister Sheikh Hasina, Bangladesh's longest serving political leader (from 1996-2001 and 2009-2024). The irony is that both the government and the students were initially aligned in their desire for quota reform, with the government preparing to appeal against the court order that led to the restoration of the quota system. The inevitable question then is what could have gone so wrong that the world's longest serving female head of government was ousted within a week?

This movement was primarily led by students not affiliated with any political party, making it a genuinely organic uprising. The spark that ignited the protests came on June 5, when the High Court re-established a job quota reserving 30% of civil service posts for the children and grandchildren of freedom fighters of Bangladesh's liberation war. This reignited a long-standing debate about the fairness of the quota system in government employment.

Initially, protests were peaceful and as the movement gained momentum, by July 7, students had escalated their actions, staging blockades and demanding rescinding of the quota. On July 10, a student's blockade severely affected Dhaka's transport system. As the movement grew, so did the tension between the protesters and authorities. On July 14, a controversial statement by Prime Minister Hasina, referring to protesters as the "children of Razakars" (collaborators of Pakistani forces during the 1971 war), inflamed the situation. Ms. Hasina's aggressive stance and derogatory comments aggravated the protesters, and the government had to shut down the internet to disrupt communication among protesters.

The last nail in the coffin was unleashing the Bangladesh Chhatra League, the much despised student wing of the ruling Awami League, who attacked protesters, which rapidly escalated and galvanised the movement as protests spread nationwide, with students from schools, colleges, and private universities joining. Major highways and railway lines were blocked, bringing much of the country to a standstill.



The government announced indefinite closure of all educational institutes. The situation reached a critical point on July 18 when approximately 20 students were killed amid clashes between the protesters and police. Thus, negotiations between the government and protest leaders began on July 19. However, these talks were marred by allegations of government coercion and the disappearance of key coordinators.

The beginning of the end

On July 21, the Supreme Court reduced the quota percentage from 30% to 7%. This was seen as a potential breakthrough, but it failed to quell the unrest due to the arrests of student protest coordinators. The movement persisted, with protesters resuming large-scale demonstrations on July 29 after the government ignored an ultimatum to release their leaders.

On August 2, the situation escalated with renewed clashes between protesters and police. The movement reached its climax on August 3 when the students movement announced their single key demand — the resignation of Sheikh Hasina. They called for a non-cooperation movement from August 4, effectively marking the end of the quota protests and the beginning of a broader anti-government movement. Violence shook the nation, with the death toll climbing to a nearly 100 people — the highest and deadliest death toll for a single-day protest in the nation's history.

Public anger mounted, and on August 5 the “March to Dhaka” brought hundreds of thousands to the streets in Dhaka and other surrounding towns. It was at this point that law enforcers realised the situation was beyond control and advised Ms. Hasina to step down. She reportedly refused and urged for more forceful measures to subdue the crowd. In a crucial turn of events, the army refused to comply. Faced with a refusal from the military and a massive public uprising, Ms. Hasina finally fled the country. A revolution spearheaded by students succeeded in toppling an increasingly authoritarian regime that had been in power for 15 years.

The opposition and India's position

Throughout this period, protests were marked by a complex interplay of various actors. Students formed the core of the movement, but with the loss of innocent lives, it increasingly became a mass popular movement joined by parents, teachers, lawyers, cultural activists, artists, professionals and civil society members. The international community also took notice, with organisations like UNICEF expressing concern over the deaths of at least 32 children during the crackdown. The protests highlighted deep-seated issues in Bangladesh's political and social fabric, including concerns about authoritarian rule, lack of participative democracy, nepotism, corruption, and suppression of dissent.

In the aftermath of Ms. Hasina's departure, there was an outpouring of pent-up anger towards anything associated with her and the Awami League. This included desecration of statues and murals of Sheikh Mujibur Rahman, father of Sheikh Hasina who led Bangladesh's war of liberation. Even if there is some element of truth in Awami League's claim that the student movement was exploited by opposition parties, led by the Bangladesh Nationalist Party (BNP) and the right wing Jamaat-e-Islami, it does not take away from the fact that anger and discontent had been fuelling below the surface for a long time due to Ms. Hasina's repressive style of governance wherein she suppressed opposition and presided over three controversial, non-participative elections in 2014, 2018, and 2024. If the opposition took advantage, hiding behind the cloak of the student movement, and unleashed unacceptable violence resulting in the loss and damage of public property and killing of law enforcers, Awami League can't avoid responsibility by letting a one-



point quota reform movement spiral out of control because of the sheer arrogance and high handedness it displayed from the very beginning.

The Indian government's response, articulated by Foreign Minister S. Jaishankar on August 6, was notable for its omission of human rights violations and killings that had occurred. It appeared to downplay the democratic nature of the movement, instead framing it in a way that aligned with the Awami League's narrative of external instigation. This approach has been criticised for failing to recognise the genuine grievances and widespread public discontent that fuelled the protests. India's policy of turning a blind eye to Ms. Hasina's exercise of hard power, often justified by some of the commendable economic progress and relative stability achieved during her rule, did not go well in Bangladesh. Most Bangladeshis view India's relations as being aligned with one particular party and one person as opposed to the people of Bangladesh. This presents a challenge for India's diplomacy and the need for having a more nuanced understanding of Bangladesh's socio-political landscape.

As aptly stated by Shivshankar Menon, India's former National Security Adviser and Foreign Secretary, "Primarily, it was a people's movement. It was a revolution on the streets, and we should recognise it as such rather than looking for foreign influences or purely political explanations." Additionally, the role of a section of the Indian media did not go well in Bangladesh where exaggerations and at times outright fake news, as verified by credible sources like BBC, about the persecution of Hindu minorities generated anger and resentment in Bangladesh when policies such as the Citizenship (Amendment) Act, 2019 and the persecution of Muslims in India in the last decade are fresh in their minds. While there may have been instances of attacks on minorities, what was notable is the open public vigil by students, activists, and even opposition parties against attack on minorities, particularly Hindus, with helplines and phone numbers given out for seeking support should any such attack take place. Professor Muhammad Yunus visited the Dhakeshwari National Temple, exchanged greetings with leaders of the Hindu community, and assured them of their safety and security.

What next?

As the movement transitioned from quota reform protests to a broader call for political change, Bangladesh is entering uncharted territory. Depending on how things unfold in the coming months as the interim government takes the reign of power, South Asia's rising star is facing one of its biggest challenges on the path to achieving a pluralistic society based on democratic principles, rule of law, good governance, inclusive growth, and human rights. The events of 2024 would have far-reaching implications for the country's political landscape, governance structures, and social dynamics.

Given the open enmity Ms. Hasina displayed against the interim government leader Prof. Yunus, including the alleged corruption charges brought about by her government against the Nobel laureate, which he termed as politically motivated, the challenge for Prof. Yunus would be to rise to the occasion and hold a free, fair, and participative election in contrast to what the Awami League did for 15 years.

For India, the takeaway is the importance of engaging with the broader population rather than relying solely on relationships with one individual or party. Embracing the truth helps in the long run as opposed to either being in a state of denial or continuing the justification of misperceptions. After all, Bangladeshis know their country better than outsiders, including their friends and neighbours.



NATION

INDIA TAKES UP ISSUE OF SEIZED COPIES OF SIKH SCRIPTURE WITH QATAR

India has taken up the issue of reported seizure of the two Swaroops (copies) of Holy Guru Granth Sahib with Qatar on high priority. The two copies were taken by Qatar authorities from two individuals, accused of running a religious establishment without approval of the government.

MEA spokesperson Randhir Jaiswal said, “We have seen reports regarding the Guru Granth Sahib seized by the Qatari authorities and the demand for their release by the Sikh community. The government has already taken up the matter with the Qatar side and our Embassy in Doha has kept the Sikh community abreast of developments in this regard.”

ON GLOBAL DISPUTES, INDIA & JAPAN REAFFIRM PEACEFUL SETTLEMENT NEED

India and Japan Tuesday said they reaffirmed their commitment to maintaining and strengthening rules-based international order founded on the principles of the UN Charter, respect for national sovereignty and territorial integrity, and peaceful settlement of disputes.

— This was stated in a joint statement released by both countries following the third Japan-India 2+2 Foreign and Defence Ministerial Meeting in New Delhi on Tuesday.

— They have decided to hold the next 2+2 Ministerial Meeting in Japan.

— As per the joint statement, the ministers welcomed the Japan Maritime Self Defense Force and Indian Naval Force exploring future cooperation in the area of ship maintenance in India and agreed to explore discussions for coordination and cooperation in the field of defence and security assistance to third countries for peace and stability in the Indo-Pacific region.

— “The Ministers reiterated their strong support for ASEAN’s unity and centrality and their full support for the ‘ASEAN Outlook on the Indo-Pacific (AOIP)’ which upholds the principles such as openness, transparency, inclusivity, a rules-based framework and respect for international law.”

— They also agreed to continue working together on Security Council reform with a view to strengthening the UN.

— Both the ministers appreciated the progress in the defence cooperation and exchanges among each component between the two sides since the last meeting in September 2022.

— They took note of the first air visit by Japanese fighters and their participation at Tarang Shakti—which is the first multilateral exercise hosted by the Indian Air Force.

— They welcomed the conduct of the inaugural edition of the bilateral fighter exercise ‘Veer Guardian 2023’ between the Japan Air Self Defence Force (JASDF) and Indian Air Force (IAF) and conduct of the bilateral exercises of all the three services in one calendar year for the first time in 2023.

— They also agreed to deepen bilateral cooperation in fields of space and cyber and reaffirmed the importance of multilateral defence cooperation and exchanges in the Indo-Pacific region, while expressing their commitment to continuing bilateral and multilateral exercises including “Dharma Guardian”, JIMEX and “Malabar”.



— Both the ministers valued their cooperation in Quad and reaffirmed their commitment to advance it further based on the discussion at the Quad Foreign Ministers' Meeting in Tokyo on July 29 this year.

CAN SHEIKH HASINA BE EXTRADITED TO BANGLADESH? WHAT ARE INDIA'S OPTIONS?

With former Bangladesh Prime Minister Sheikh Hasina facing multiple criminal cases back at home, it is likely that India's eastern neighbour may push for her extradition.

— India and Bangladesh signed an extradition treaty in 2013, which was then amended in 2016 to ease and hasten the exchange of fugitives between the two countries.

— According to the treaty, India and Bangladesh are supposed to extradite individuals “who have been proceeded against... or have been charged with or have been found guilty of, or are wanted for... committing an extraditable offence” by a court of the requesting country.

— An extraditable offence, the treaty says, is one which carries a minimum punishment of one year imprisonment. This includes financial offences. Crucially, for an offence to be extraditable, the principle of dual criminality must apply, meaning that the offence must be punishable in both countries.

— The treaty says that extradition may be refused if the offence is of “political nature”. But this is limited by the nature of offence. And the list of offences which cannot be deemed as “political” is rather long. These include murder; manslaughter or culpable homicide; assault; causing of an explosion; the use of a firearm with intent to resist or prevent arrest; damaging property with intent to endanger life; kidnapping or taking of a hostage; incitement to murder; and any other offence related to terrorism, etc.

— Article 8 lists out multiple grounds for refusal including cases in which an accusation has not been “made in good faith in the interests of justice” or in case of military offences which are not “an offence under the general criminal law”.

— India has the option of refusing Hasina's extradition on the ground that the accusations made against her are not “in good faith in the interests of justice”. But this has the potential to adversely impact New Delhi's relations with Dhaka's new ruling dispensation.

— “India has to look to build relations with whoever comes to power in Dhaka, and secure its long term strategic and economic interests in Bangladesh. At the same time, it must also be seen to be standing by Sheikh Hasina, a long time friend and ally to New Delhi.”

WERE BANGLADESH FLOODS CAUSED BY INDIA RELEASING WATER FROM A TRIPURA DAM? HERE'S WHY THE GOVERNMENT SAID NO

The Ministry of External Affairs on Thursday (August 22) clarified that the floods that have hit several districts in eastern Bangladesh were not triggered by release of water from Dumbur dam in Tripura, as has been claimed by some social media accounts.

Nearly 18 lakh people belonging to 1.9 lakh families were marooned in 43 upazilas of the districts of Comilla, Feni, Chattogram, Khagrachhari, Noakhali, and Moulvibazar, according to the Department of Disaster Management and Relief of Bangladesh, The Daily Star reported. Five of these districts share borders with Tripura.



Rumour and denial

Following heavy rain in Tripura from August 19 onward, unsubstantiated claims appeared on social media about the opening of the Gumti hydro-electric project floodgates. Some Bangladeshi handles alleged without evidence an Indian “conspiracy” to “punish” the country’s post-Hasina rulers.

Tripura Power Minister Ratan Lal Nath clarified on Wednesday that no flood gates had been opened; instead, excess water from the Gumti reservoir had automatically escaped through the spillway after crossing the 94-m mark, which is the reservoir’s full capacity.

The Gumti project, which was commissioned in 1976 and has an installed capacity of 15 MW, is the only hydroelectric power project in the state. The river on which the Dumbur dam stands is formed at the confluence of the smaller Raima and Sarma rivers, and is Tripura’s most significant river. After flowing into Bangladesh, the river merges with the Meghna.

Rainfall in Tripura

On August 19, South Tripura district received 288.8 mm of rain in a single day. The capital, Agartala city, recorded 233 mm of rainfall in the 24 hours from Wednesday morning to Thursday morning. The heavy rain, among the highest the state has ever received, has had the worst impact in Khowai, West Tripura, Sepahijala, Gomati, and South Tripura.

At least 24 people are feared dead in the rain and floods. Some 1.28 lakh people have been sheltered in 558 relief camps since August 19.

NOT TAKING SIDES

Six weeks after his visit to Moscow, Prime Minister Narendra Modi’s trip to Kyiv and meeting with Ukrainian President Volodymyr Zelenskyy on Friday was largely seen as an exercise in balancing India’s position on the Russia-Ukraine war. Since Russia first invaded Ukraine in February 2022, India has maintained a uniquely distant position from the war: abstaining from all resolutions at the United Nations that dealt with the conflict and were critical of Russia. India also ignored western sanctions, particularly on payments for oil imports and defence hardware from Russia, and did not accept Mr. Zelenskyy’s requests to include Ukraine in the G-20 summit last year or to send a high-level political participation to the Swiss peace summit in June this year. India’s disapproval of Russia’s actions was instead couched in the language of peace, all of cold comfort for Ukraine, which was seeking a clear alignment with its cause, and deeply critical of Mr. Modi’s Moscow visit. That Mr. Modi made the visit at all, the first by any Indian Prime Minister since Ukraine’s independence in 1991, is significant, and is being watched for signals of any major change in India’s policy on the war. During his short visit, the two leaders discussed the conflict, and later visited a memorial for children killed in the war. Unlike other international leaders visiting Kyiv since 2022, Mr. Modi did not meet with any war casualties or injured soldiers and civilians. The two sides signed agreements on cooperation in agriculture, culture, medical products and assistance for community development projects. The leaders did not, however, speak of progress on other outlooked issues, including a strategic partnership, or supplies of telecom and medical infrastructure, and construction equipment that Ukraine has requested.

The broader question around the visit was whether India would now play a larger role in resolving the conflict which includes an idea propounded by Kyiv for another summit in November. Mr. Modi has also become one of a handful of world leaders, from Indonesia, Türkiye, South Africa and



Hungary, to have visited Kyiv and Moscow, and, hence, in a position to reach out to both with peace initiatives. As a leader of the Global South, India has a stake in ensuring that the impact of the war in Europe and sanctions do not continue to imperil the developing and under-developed nations. However, New Delhi has thus far not shown an interest in more than passing messages when required, sending officials to Doha and Būrgenstock when invited to attend peace dialogues, and encouraging the two parties to deal directly with each other. Unless that understanding of India's interest changes, it would seem Mr. Modi's visit followed form, but did not fundamentally move the needle on the global peace effort. Nor did the substance greatly outweigh the symbolism of the much-awaited visit.

BHISHM

— After his bilateral talks with President Volodymyr Zelenskyy in Kyiv on Friday, Prime Minister Narendra Modi gifted four BHISHM cubes — compact, mobile medical units aimed at providing emergency care — to his government.

— Bharat Health Initiative for Sahyog Hita & Maitri (BHISHM) cubes have been developed under the government's Project Aarogya Maitri, a programme to provide essential medical supplies to developing countries as humanitarian assistance.

MODI ATTEMPTS A TRICKY BALANCE IN KYIV, AS U.S., RUSSIA WATCH CLOSELY

Balancing India's position on the Russia-Ukraine war will be at the top of the agenda for Prime Minister Narendra Modi as he arrives by train in Kyiv on Friday morning, for the first such high-level visit from India since the war began in 2022. While making the trip, six weeks after he visited Moscow and met with President Vladimir Putin is a part of that process, the outcomes of the visit will also be weighed carefully, say experts, given Ukraine's "disappointments" with India's position in the past.

In particular, India's position on the war in Ukraine, Mr. Modi's response to Ukraine's requests for reconstruction and equipment supplies, as well as a possible Indian role in ending the conflict and starting a peace process will be watched most closely, both in Moscow and in Washington. Mr. Modi is one of very few leaders to have personally visited both Kyiv and Moscow during the war (apart from leaders of Turkey, South Africa, Indonesia, Guinea-Bissau and Hungary).

"The visit comes at a time when the Swiss peace summit failed to decisively impact the war, European nations are increasingly worried about the rising costs associated with the war, and the U.S. is preoccupied with its domestic politics," said Happymon Jacob, professor at JNU and Director of the Council for Strategic and Defence Research.

"This context presents an opportunity — if the Indian establishment chooses to pursue it — to initiate a new global conversation about bringing the warring parties to the negotiation table. India could play a small, though not insignificant, role in that process."

The optics of Mr. Modi's Ukraine visit, expected to span about 6-8 hours in the war-hit capital of Kyiv, will be significant. While in Moscow, Mr. Modi had paid respects at the Tomb of the Unknown Soldier, and not visited any memorial for Russian soldiers in the war, this may be more difficult in Kyiv, given the significant casualties and toll the war has taken in Ukraine.

Ukrainian President Volodymyr Zelenskyy had been particularly critical of PM Modi's embrace of Mr. Putin in July, calling it a "huge disappointment and a devastating blow to peace efforts".



Position at the UN

India's abstention from all UN resolutions critical of Russia's actions since 2022, and its decision to disassociate itself from the outcome document at the Swiss Peace conference in June was also received with some dismay in Kyiv.

According to Manav Sachdeva, a "goodwill ambassador" for Ukraine, appointed by President Zelenskyy to promote the "Grain from Ukraine" initiative after Russia's blockade of wheat exports, India could still seize the "strategic opportunity" in ensuring that Russia attends the next peace summit due to be held in November, and offering to mediate or promote dialogue. "India can play a critical role in facilitating peace, thereby reinforcing its global influence and commitment to a stable international order," Mr. Sachdeva, a former UN official who has served in several conflict areas and is now based in Delhi, told The Hindu.

He said India's willingness to participate in Ukraine's reconstruction will be key to future cooperation, especially in the areas of infrastructure, technology and healthcare. Thus far, while it has provided tents and medicines to Ukraine, New Delhi has yet to approve exports of items like telecom towers, medical equipment and construction and digging machinery, that have been requested, including during Ukrainian Foreign Minister Dmytro Kuleba's Delhi visit in March this year.

TRADE, DEFENCE, CULTURAL TIES TO BE IN FOCUS DURING PM'S VISIT TO POLAND

Prime Minister Narendra Modi's visit to Poland and Ukraine will be high on symbolism, even as geopolitical issues, trade, and defence aspects will be discussed at the highest levels. Mr. Modi is scheduled to be in Warsaw on August 21 and 22, the first by an Indian PM in 45 years, and the shared cultural ties will be in focus.

Poland can be a gateway to India to Europe and there is lot of potential to expand trade, but there is not enough clarity on how the system works in India, an Indian businessmen based here noted.

Defence ties are also on the upswing with India recently posting a defence attaché at its embassy here and some Polish companies securing orders and looking to set up joint ventures in India.

Poland has an Indian population of around 25,000, out of which around 5,000 are students. Poland played a pivotal role in helping India evacuate its 4,000 Indian students from Ukraine during the onset of the Russian invasion in early 2022, Secretary (West) in the Ministry of External Affairs Tanmaya Lal noted. "One of the unique bonds between our countries relates to the time in the 1940s during the Second World War when more than 6,000 Polish women and children found refuge in two princely states in India — Jamnagar and Kolhapur," he said on Monday.

Poland has the sixth largest economy in the European Union and the bilateral trade of around \$6 billion makes Poland the largest partner in Central and Eastern Europe for India. Poland will hold the next presidency of the council of the EU.

Indian companies have investments in IT, pharmaceuticals, farm vehicles, electronics, steel and chemicals. Similarly, nearly 30 Polish companies have presence in India.

An Indian businessman established in Poland, Amit Lath says that India has to showcase itself better and educate Polish businesses on how to work in India. "In fact, Polish entrepreneurs are quite keen to develop business with India, but there is no road map, a clear road map for them on



how to actually navigate within India. India has not promoted the way it should be promoted, especially when I see other countries the way they are actively, aggressively promoting themselves, we need to do the same,” he told The Hindu. “India has got a great image, but that image has to be encashed by India in terms of promoting and putting it in a right sense.”

JAMSAHEB MEMORIAL YOUTH EXCHANGE PROGRAMME

— Recently, the Prime Minister of India visited Poland. This was the first visit by the Indian Prime Minister after 45 years.

— During the visit, he noted that the **Dobry Maharaja, Kolhapur**, and **Battle of Monte Cassino memorials** were shining examples of vibrant people-to-people ties

— He paid tribute to the Dobry Maharaja Memorial in Warsaw, which honors the Jamsaheb of Nawanagar, Digvijaysinhji Ranjitsinhji Jadeja, for sheltering over a thousand Polish children during World War II. The Jamsaheb, from modern-day Jamnagar in Gujarat, is fondly remembered in Poland as the “Dobry (Good) Maharaja.

— PM Modi also paid tributes at the monument dedicated to the Battle of Monte Cassino. This Monument commemorates the sacrifice and valour of soldiers from Poland, India, and other countries who fought alongside each other in the famous Battle of Monte Cassino in Italy during the Second World War.

WHAT IS ‘RAIL FORCE ONE’, THE TRAIN PM MODI TOOK FROM POLAND TO UKRAINE?

The Ukrainian airspace has been closed ever since Russia launched its invasion in February 2022. World leaders, such as US President Joe Biden and French President Emmanuel Macron, have since used trains to visit the country.

Prime Minister Narendra Modi arrived in Ukraine’s capital Kyiv from neighbouring Poland by train on Friday (August 23), an unusual mode of transport for a head of government, but one that has been used earlier by other global leaders as well.

Foreign dignitaries visiting Kyiv have been taking the train ever since Ukraine’s airspace was closed following the Russian invasion in February 2022. After Joe Biden rolled into Kyiv last year instead of flying in on Air Force One, the US President’s iconic Boeing 747 aircraft, the train was dubbed “Rail Force One”. Here’s what to know about it.

The train has luxury compartments

The train, which is run by the state-owned Ukrainian Railways or Ukrzaliznytsia, is painted blue and yellow, the colours of Ukraine’s flag.

The train has several luxury compartments, one of which was likely built just before Russia annexed Crimea in 2014, and was previously used to ferry wealthy tourists to the peninsula on the Black Sea, according to a report by the US government-funded Radio Free Europe.

Pictures from trips taken by foreign dignitaries show wooden panels, cream and blue curtains, leather sofas, king-size beds, wall-mounted flatscreen TVs and other modern amenities on the train.



The train's 10-hour, 700-odd-km journey begins at Przemyśl Główny station in Poland, located around 400 km southeast of Warsaw, close to the country's border with Ukraine, and ends at Kyiv.

The first foreign dignitaries to travel to Kyiv by the train were the prime ministers of Poland, Slovenia, and the Czech Republic, who visited in 2022.

Thereafter, the train was used by the former British Prime Minister Boris Johnson, French President Emmanuel Macron, President of the European Commission Ursula von der Leyen, and Prime Minister Justin Trudeau of Canada, besides Biden and now Modi.

A symbol of 'Iron diplomacy'

Alexander Kamyshin, Ukraine's Strategic Industries Minister who is in charge of Ukrzaliznytsia, has often used the hashtag #IronDiplomacy to refer to the world leaders' train trips.

In 2023, Kamyshin posted on X about President Biden's 20 hours on the train and just four in Kyiv, and apologised to the public when Biden's travel led to some other trains on the network being delayed.

"We had to delay some of our trains to give a way to #RailForceOne. It was painful for me and my team, but I had to do that. So only 90% of our trains arrived on time yesterday. I apologize," he wrote.

Why trains matter to Ukraine

This train, and other trains in the Ukrainian railway network, have played an important role in the war effort, including helping transport aid across the country, and Kamyshin has spoken repeatedly about the importance of the railways to his country.

As the war broke out, many Ukrainians rushed to train stations in an attempt to escape to safer places, or to leave the country. "When allowed to board, they folded their bodies into the compartments: luxury sleeper carriages made for 18 would hold 150, a second-class carriage, made for 54, would carry 500," The New York Times reported on the rush.

"For a country that has skillfully mastered the Western media narrative...the railways' triumph quickly became another public relations boon and a morale booster," the report said.

Ukraine's widespread railway network has always been popular, and domestic travellers often favour trains over planes. Ukrzaliznytsia is the sixth-largest railway passenger transporter in the world, and seventh for freight, according to a CNN report.

INDIA, US SIGN KEY DEFENCE SUPPLY PACT AS RAJNATH BEGINS 4-DAY VISIT

As Defence Minister Rajnath Singh reached Washington DC on a four-day official visit, India and US on Thursday signed two key pacts — a non-binding Security of Supply Arrangement (SOSA) and a Memorandum of Agreement regarding Assignment of Liaison Officers.

— The Security of Supply Arrangement (SOSA) will mandate the US and India to provide reciprocal priority support for goods and services that promote national defence.

— "The arrangement will enable both countries to acquire the industrial resources they need from one another to resolve unanticipated supply chain disruptions to meet national security needs," said a statement issued by the US Department of Defence.

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



— The SOSA signed in Washington DC encourages the defence industrial ecosystems of both countries to work together, and enhances the supply chain resilience.

— India is the 18th SOSA partner of the US after Australia, Canada, Denmark, Estonia, Finland, Israel, Italy, Japan, Latvia, Lithuania, the Netherlands, Norway, Republic of Korea, Singapore, Spain, Sweden, and the UK.

For Your Information:

— The SOSA represents a pivotal moment in the US-India major defence partner relationship and will be a key factor in strengthening the Defence Technology and Trade Initiative (DTTI) between the two countries.

— Under the Arrangement, the US and India have committed to support one another's priority delivery requests for procurement of critical national defence resources, the statement said.

— It said the US will provide India assurances under the US Defense Priorities and Allocations System (DPAS), with programme determinations by DoD and rating authorisation by the Department of Commerce (DoC).

— India will in turn establish a government-industry Code of Conduct with its industrial base, where Indian firms will voluntarily agree to make every reasonable effort to provide the US priority support.

— The US industrial base policy states that the SOSA is conducted under overarching Declarations of Principles for Enhanced Cooperation in matters of defence equipment and industry that have been signed with select nations.

CAG REPORT SUBJECT TO PARLIAMENT SCRUTINY: SUPREME COURT

Reports of the Comptroller and Auditor General (CAG) are “subject to scrutiny by Parliament and the Government can always offer its views on the said report”, the Supreme Court said on Friday while setting aside a Delhi court order framing charges against a Karnataka-based private firm accused of facilitating illegal sale of coal rejects.

The court referred to Article 151(1), which says that the reports of the CAG are required to be submitted to the President, who shall cause them to be laid before each House of Parliament, and Article 151(2), which says that in the case of states, the reports are submitted to the Governor, who shall cause them to be laid before the legislature of the state.

PANEL ON SC STATUS FOR DALIT CONVERTS RACING AGAINST TIME AS DEADLINE NEARS

The Commission of Inquiry set up by the Centre to look into the possibility of granting Scheduled Caste (SC) status to Dalit Christians and Muslims is racing against time to submit its report as its two-year term is about to expire in October 2024.

The panel is likely to seek a “short extension” from the government to complete its task.

The commission was unable to start its field visits — a crucial aspect of its work — until August this year as the required staff had not been made available to the panel, multiple sources aware of its functioning told The Hindu.



The three-member Commission of Inquiry, headed by former Chief Justice of India K.G. Balakrishnan, was set up in October 2022, to examine the possibility of granting SC status to Dalits who have converted to any religion other than the ones mentioned in the Constitution (Scheduled Castes) Order, 1950. Currently, only Dalits of Hindu, Sikh, and Buddhist faiths are entitled to be categorised as SCs.

REBEL WITH A CAUSE

What started as a small movement for the sub-categorisation of the Scheduled Castes in united Andhra Pradesh three decades ago in the village of Eedumudi has come to centre stage after the Supreme Court earlier this month gave a historic verdict that the SCs and the Scheduled Tribes can be divided into sub-groups for the purpose of reservations. The man credited with this achievement is 59-year-old Manda Eliah, popularly known as Manda Krishna 'Madiga', founder of the Madiga Reservation Porata Samiti (MRPS), the movement that rocked A.P. for years.

INSULT AN OFFENCE UNDER SC/ST ACT ONLY IF BASED ON CASTE: SC

The Supreme Court on Friday reiterated that “insults or intimidations” of a member of Scheduled Castes (SC) or Scheduled Tribes (ST) are not an offence under the SC and ST (Prevention of Atrocities) Act, 1989, unless it is on the ground that the victim belongs to an SC or ST.

— In its ruling, a bench of Justices J B Pardiwala and Manoj Misra also said that Section 18 of the Act does not impose an absolute fetter on the power of the courts to examine whether a prima facie case attracting the provisions of the 1989 Act is made out or not.

— “The courts should not shy away from conducting a preliminary inquiry to determine if the narration of facts in the complaint/FIR in fact discloses the essential ingredients required to constitute an offence under the Act, 1989,” the bench said.

— The court’s ruling came as it granted anticipatory bail to Shajan Skaria, the editor of the Malayalam YouTube news channel ‘Marunadan Malayalee’ who was booked by Kerala Police for making alleged derogatory remarks against CPI(M) MLA PV Sreenijan.

For Your Information:

— The court said that the phrase “intent to humiliate” under the Act’s Section 3(1)(r) (intentional insult or intimidation with intent to humiliate a member of a SC/ST within public view) is “closely linked to the caste identity of the person subjected to intentional insult or intimidation”.

— “It is not the purport of the Act, 1989 that every act of intentional insult or intimidation meted by a person who is not a member of a SC or ST to a person who belongs to a SC or ST would attract Section 3(1)(r) of the Act, 1989 merely because it is committed against a person who happens to be a member of a SC or ST. On the contrary, Section 3(1)(r) of the Act, 1989 is attracted where the reason for the intentional insult or intimidation is that the person who is subjected to it belongs to a Scheduled Caste or Scheduled Tribe,” the court said.

— However, the judgement said, “if the necessary ingredients to constitute the offence under the Act, 1989 are not disclosed on the prima facie reading of the allegations levelled in the complaint or FIR, then in such circumstances, as per the consistent exposition by various decisions of this court, the bar of Section 18 would not apply and the courts would not be absolutely precluded from granting pre-arrest bail to the accused persons”.



SC VERDICT ON STATES TAXING MINING ACTIVITIES: UNFOUNDED SPECTRE OF RETROSPECTIVE TAXATION

On July 25, a nine-judge bench of the Supreme Court ruled that states in India have the power to tax mining activities, and that their collecting “royalties” from mining leaseholders does not violate the Constitution. This ruling has wide-ranging ramifications not just for India’s federal polity but also for the mining companies. The apex court was soon moved by mining companies with the aim of convincing it to apply this ruling prospectively — that is, starting 2024. Last week, the SC ruled that the ruling will be applicable from 2004. This has raised concerns about the spectre of retrospective taxation, but a close reading of the latest verdict suggests that this is not the case.

Retrospective taxation essentially implies raising a new tax demand for a time in the past when such a tax did not exist. But the facts of the current case are substantially different. In 1989, in the India Cements case, a seven-judge SC bench ruled that royalty is a tax and the states can’t raise any such revenue demands. In 2004, in the Kesoram case, a five-judge bench revisited this issue and concluded that there was a “typographical error” in the India Cements judgment. While this judgment by a smaller bench could not overturn the 1989 ruling, it set the precedent for different states to raise demands for royalty payments from companies. In 2011, the SC took notice of the continuing confusion on the matter and sent it to a bigger nine-judge bench, the Mineral Area Development Authority or MADA case. The MADA ruling in July conclusively overturned the 1989 India Cements judgment. In its ruling last week, the same nine-judge bench chose to start the application of its ruling from 2004 — the date of the Kesoram case verdict. The court explained that it applies prospective overruling when a law is found to be ultra vires to the Constitution. But, “In the case of taxing statutes, such a declaration would make the State liable to refund all amounts collected under the invalid legislation.”

While the SC has softened the financial setback for companies — they are required to pay only the principal amount, not the interest, and the payment can be staggered over 12 years — it is undeniable that this protracted judicial process and reversal of verdicts can undermine business confidence. However, the primary responsibility of creating a stable policy environment lies not with the court but with policymakers — both at the Centre and states. In this regard, it is all the more important that policymakers ensure that — as the sole dissenting voice, Justice B V Nagarathna, warned — this verdict does not lead to the “breakdown of the federal system” in the context of mineral development.

APOLOGISE TO ALTNEWS CO-FOUNDER FOR COMMENT, DELHI HC TELLS X USER

Dealing with a plea by AltNews co-founder Mohammad Zubair seeking quashing of an FIR registered against him under charges of the POCSO Act, the Delhi High Court Thursday directed an X (formerly Twitter) user to put out an apology on the social media platform, where he had called Zubair a ‘jihadi’.

Justice Anup Jairam Bhambhani orally remarked, “We want people to be temperate on social media and if you get carried away, then the first thing you have to do is at least apologise... When you make a mistake on a platform, you apologise on the platform.”

The court instructed that the apology post be put up within a week and be retained on his handle for another two months, to which the man agreed.



In 2020, the Delhi Police had registered an FIR against Zubair for allegedly threatening a minor girl on the social media platform after he responded to the Twitter user, who was using a picture with his minor daughter as a display picture on the platform.

The FIR was lodged based on a complaint filed by the National Commission for Protection of Child Rights (NCPCR).

In January 2023, police informed the court that they had not found Zubair committing any criminal act upon the completion of the investigation, and so, his name was not included in their chargesheet.

The NCPCR in its affidavit, had, however, opposed the police's stand and said that it "indicates the casual attitude of police" in this case.

In April 2024, police told the High Court that it had not registered any case against the man accused of allegedly posting "offensive tweets" against Zubair.

Police mentioned in their status report that they had examined the accused to inquire about his intention and purpose of commenting "Once a jihadi is always jihadi" on Zubair's tweet.

On recording his statement, "nothing incriminating" came up for further proceedings in the matter, states the report.

SC REFUSES TO PERMIT EUTHANASIA FOR AGED COUPLE'S COMATOSE SON

The Supreme Court on Tuesday refused to grant an aged couple's plea to allow "passive euthanasia" for their 30-year-old son, who has been lying comatose at home for 11 years after a fall from the fourth floor of a building.

A Bench headed by Chief Justice of India D.Y. Chandrachud was visibly moved by the plight of the parents, who said they had exhausted both their savings and willpower taking care of their son.

A recent Supreme Court judgment reveals the legal and ethical confusion surrounding euthanasia in India... While withdrawal of life-support in cases deemed terminal is allowed in India as per the SC's 2018 judgment, a bench headed by CJI DY Chandrachud observed on August 20, "Ryles tube is not a life support system."

— A Ryles tube is a device through which food can be passed through the nose into the stomach. Permission to remove the tube was denied to parents of Harish Rana, a 32-year-old who has been in a vegetative state for the past 11 years with no chance of recovery.

— The term "passive euthanasia", adopted by the Supreme Court in 2018, refers to allowing natural death by withholding or withdrawing life-prolonging measures in patients with terminal illnesses. This term is not ideal. Withholding of futile life-sustaining measures, or withdrawing them allows for natural death, while euthanasia implies an intent to kill.

— Ventilators, drugs that force the heart to beat, and dialysis machines, indisputably come under the category of life-prolonging measures. However, clinically assisted nutrition and hydration... including the Ryles tube — is also a life support measure that can be withdrawn in the terminally ill.



— Medical ethics has four broad pillars. First, “beneficence”, which makes it moral incumbent on the physician — or the bench, in this case — to act in the patient’s benefit. Second, “non-maleficence” makes it obligatory on the decision-maker to not harm the patient. Third, “justice” demands that the rights of the patient should not be exploited. Fourth, “autonomy” gives the patient the right to choose.

— Why are judges extending themselves to make medical decisions that they are not trained for? Why were palliative care physicians not consulted before arriving at this judgment? Why did the family have to go to court? Could the early involvement of palliative care physicians prevented their suffering?

— The SC decision also reflects the general fear and negative impression of death and dying in our culture... As in many cultures, the act of feeding is not merely a function of survival but is conflated with care giving, hospitality, and love. Denying this is taboo at a social and existential level.

— The Honourable Court parenthesised the denial of permission to remove the Ryles tube with the idea that it would lead to death by starvation... but we do know that extending life that is of such poor quality for both the patient and his caregivers is a travesty of medical ethics. Discussions around death and dying need to happen not just with people when they are unwell, but also within families during times of good health.

— It is high time to bring legal clarity to the difference between euthanasia and the withdrawal of futile life-sustaining interventions in India by involving medical and ethical experts... A good quality of life and death are everyone’s rights.

For Your Information:

— The Supreme Court allowed passive euthanasia while recognising the living wills of terminally-ill patients who could go into a permanent vegetative state, and issued guidelines regulating this procedure.

— A five-judge Constitution Bench headed by then Chief Justice of India (CJI) Dipak Misra said that the guidelines would be in force until Parliament passed legislation on this. However, this has not happened, and the absence of a law on this subject has rendered the 2018 judgment the last conclusive set of directions on euthanasia.

DESPITE THE LAWS

Ever since the infamous gang rape that rocked the country in December 2012, much has been done to strengthen the laws on rape. Where then lies the malaise? Why is the law failing to act as a sufficient deterrent? One answer is that laws on rape cannot be examined in isolation and be expected to regulate men’s mentality.

— As per the statistics of 2022, annual dowry deaths in India stand at 6,516 — claiming one victim every 90 minutes... What is more distressing than the large number of victims is the pitifully low conviction rate in such cases due to the shocking norm of the accused paying “blood money” to the victim’s family. Such “compromises” are routinely allowed by the police and the courts.

— Domestic violence is undisputedly the most underrated crime perpetrated against women across all socio-economic strata. The relevant sections of the law prescribe a punishment of up to three years of imprisonment, rendering it nearly impossible for the police to arrest the accused.



— Similar is the case with other serious sinister crimes like stalking or harassment. The lax bail norms pose a serious impediment to correcting and curbing the criminal instincts of the accused before they graduate to committing bigger crimes.

— It is no surprise, therefore, that the first accused apprehended in the Kolkata case had a history of violently assaulting his wife, including when she was three months pregnant. Yet, there was no appropriate legal response at the time despite two complaints.

— A liberal bail regime cannot be sustained independent of other judicial reform. Of the 3,449 cases of dowry death cases disposed off by the courts in 2022, 64 per cent were disposed of without a trial and only 35 per cent of the tried cases resulted in a conviction.

— Of the staggering 85,2598 cases of cruelty by husbands pending trial, a mere 7.7 per cent were disposed off, of which 87 per cent were disposed of without a trial. Then we wonder why men have no fear of the law.

— There is a crying need to develop a criminal justice system equipped to investigate and try cases of crimes against women in a fast-track mode... The Courts must crack down heavily on extra judicial compromises forced upon victims because of the tedium of the legal process or a brazen socio-cultural sanction to the compounding of such cases. Until then, we will continue to harbour and embolden abusers.

For Your Information:

— A government's crackdown on gender crimes may bring results that are short-lived unless patriarchy is nipped in the bud. A man will not treat a woman as equal out of mere fear of punishment. It is a recognition of our biases and failings that can bring about change. And this can only start at home.

— As no man is born a rapist, it's upon families, and society as a whole, to make a child (male and female) understand notions of equality, choice, and consent at an early age. They should be offered equal opportunities, at home and outside.

— Be it a school trip or a college fest that rolls into late at night, the parent's permission to join in should not be based on their gender – so that the next generation of boys do not see a girl at night as a rare species at an odd time of the day.

PARIS TO KOLKATA, PHOGAT TO DOCTOR: WHAT MAMATA AND ALL OTHER POLITICIANS DON'T GET

The only daughter of parents who scraped and saved to educate her to become a post-graduate doctor who, as per her colleagues, was a fine and dedicated doctor. She too aspired to be a gold medallist. But her life was cut short by the rape and murder at R G Kar Medical College and Hospital, in a seminar hall next to the Emergency, where she had been on duty.

— For the first time in the history of India, there are more women doing MBBS today, and in a few years time, most doctors in the country may well be women.

— The anguished, spontaneous and widespread response to the doctor's rape-murder — and before her to Nirbhaya's death who was gangraped in a moving Delhi bus in 2012 and then thrown off it — shows that India is moving on, with many more women today unwilling to take things lying down.



- The Nirbhaya protests helped change the country's political trajectory even though it was a leaderless movement. It led to the constitution of the J S Verma Committee which led to changes in the rape laws.
- A safe workplace for women in India of 2024 is surely the least that any government should ensure, whether it is helmed by a man or a woman.
- Even as they try and attract women votes, political parties have essentially viewed women as “labharthis”, who must be given free bus tickets, or gas cylinders in place of smoky chulhas, or be part of the Self Help Groups to earn and be hailed as “lakhpati didis”— or as recipients of the
- Ladli Behna Yojana which brought the BJP back to power in Madhya Pradesh, and is being operationalised in Maharashtra ahead of the polls.
- Such measures are important—and women welcome them. They take them a step closer to economic independence.
- But women now want to be not just beneficiaries of schemes or sops doled out to them. They want their due place under the sun – as citizens, as equals. And this is something political parties will have to factor in the policies they frame.
- Days after the Calcutta High Court, expressing displeasure over the handling of the case relating to the alleged rape and murder of a junior doctor at the R G Kar Medical College in Kolkata, transferred the probe to the CBI, the Supreme Court has taken suo motu cognizance of the August 9 incident.
- Sunday was supposed to be a derby match between the two teams in the Durand Cup but it was cancelled on Saturday due to the prevailing unrest in the city and concerns over the law and order situation.

REGRESSIVE MOVE

The last thing that a rape and murder need are platitudes, and a predictably tiresome one is being peddled after the brutal killing of a woman doctor on duty at Kolkata's R.G. Kar Hospital on August 9. One of the guidelines issued by the West Bengal government calls for minimising night duty for women. How will this dictum — “wherever possible, night duty may be avoided for women to the extent possible” — secure safety at the workplace? This regressive move will only end up removing women from the workforce, instead of ensuring a stop to violence. With the labour force participation rate for urban women in India, ages 15 and above, pegged at an abysmal 25.2% in April-June 2024, according to the Periodic Labour Force Survey's quarterly bulletin, the governments at the Centre and States must ensure that women, employed as health-care professionals, gig and factory workers, call centre staff, auto drivers, hotel duties and journalists, are able to work safely, anywhere, and at anytime. Reducing their time at work will only lead to women losing jobs and their financial independence. The other guidelines, as part of the programme called 'Rattirer Shaathi (helpers of the night)', include the call for separate rest rooms and toilets for women, creating safe zones with CCTVs, and a special mobile phone app — measures which should have been already in place.

The Supreme Court, taking suo motu cognizance of the Kolkata case, in its hearing on Tuesday announced a national task force to look into the safety of doctors and medical professionals. Gender violence should be a matter of serious concern in every sphere, not least the informal



sector, where women are employed in large numbers. The sweeping changes brought into the system after the 2012 Delhi rape, such as harsher laws and stringent punishment, have not been enough. The National Crime Records Bureau's (NCRB) annual report of 2022, the latest one available, shows that 4.45 lakh cases of crimes against women were registered, which is equivalent to nearly 51 FIRs every hour. Protocols cannot be just on paper, the Chief Justice of India D.Y. Chandrachud said. In 2017, when the Court was confirming the death penalty of four men, who were accused in the 2012 Delhi rape, Justice R. Banumathi had said that apart from effective implementation of laws, a change in the mindset of the society at large and creating awareness in the public on gender justice would go a long way to combat violence against women. Campaigns led by women after the R.G. Kar rape, to "reclaim the night" in Kolkata and other parts of the country, should serve as wake-up calls to governments, and society, to do it right by women.

SC TAKES SUO MOTU COGNISANCE OF RAPE AND MURDER OF DOCTOR

Top court will hear case tomorrow; protests continue after doctors' strike ends; IMA to back Resident Doctors' Association's plan for agitation, submit safety document with road map to make healthcare institutes safe to Health Ministry this week

The Supreme Court on Sunday took suo motu cognisance of the rape and murder of a postgraduate trainee doctor at R.G. Kar Medical College and Hospital in Kolkata on August 9.

A three-judge Bench headed by Chief Justice of India D.Y. Chandrachud is scheduled to hear the case, instituted on the court's own motion, on Tuesday.

The matter will be called for hearing on the top of the board of cases listed for the day before the Bench.

The court's suo motu intervention follows an August 13 order of the Calcutta High Court transferring the case to the Central Bureau of Investigation from the Kolkata Police.

DO DOCTORS NEED A CENTRAL PROTECTION ACT?

The story so far:

Resident doctors across India are on strike demanding laws that ensure their safety while on duty. This follows the rape and murder of a young doctor at R.G. Kar Medical College and Hospital in Kolkata on August 9. The protests started after the discovery of the doctor's body in the seminar room of the emergency building where she had been working. Doctors point out that while the hospital administration and State government attempted to underreport the incident, there is no Central law that protects healthcare workers.

What is the ground reality?

As per constitutional provisions, health and law and order are State subjects, and, therefore, it is the primary responsibility of the State government or Union Territory administration to take note of events and eventualities, and do what is necessary to prevent violence. The Union government has admitted that details of the number of fatalities of medical professionals due to attacks by families of patients are not maintained centrally.

Violence against healthcare workers at the workplace is not new in India. In 1973, Aruna Ramchandra Shanbaug working as a junior nurse at King Edward Memorial Hospital, Mumbai,



was sexually assaulted by a hospital sweeper. She died in 2015 after spending over 41 years in a vegetative state following the attack. Years later, doctors and other healthcare workers continue to demand specific and basic safety measures at hospitals including improved lighting, increased security, and installation of properly monitored security cameras.

What are the doctors demanding?

The Indian Medical Association (IMA), a national level association of allopathic doctors, maintained that at a policy level, the reluctance to acknowledge the violence on doctors at healthcare centres has to change. In a list of demands submitted to the Union government, it has sought hospital security protocols that are no less than those at an airport and that healthcare centres should be declared safe zones with mandatory security entitlements including CCTVs and deployment of security personnel. "The victim was on a 36-hour duty shift, and had no safe space to rest. The working and living conditions of resident doctors need a complete overhaul," the IMA said. IMA national president R.V. Asokan said doctors are also seeking a meticulous and professional investigation of the crime within a timeframe and also justice. "We want proper identification of the hooligans of vandalism and they should be awarded exemplary punishment. Appropriate and dignified compensation should be given to the bereaved family."

"The U.K.'s NHS enforces a zero-tolerance policy on violence, supported by a dedicated security team and a comprehensive reporting system. In the U.S., some States classify assaults on healthcare workers as felonies, acting as a strong deterrent. Australian hospitals have introduced safety measures like security personnel, panic buttons, and mandatory de-escalation training. India must urgently introduce a Central protection Act and adopt similar measures to take stringent actions to ensure a safer environment for its healthcare workers," said Dr. Sunita Kapoor, director, City X Ray & Scan Clinic.

What are provisions brought in by Centre?

On August 16, the Ministry of Health and Family Welfare issued an order that "in the event of any violence against any health care worker while on duty, the head of the institution shall be responsible for filing an institutional FIR within a maximum of six hours of the incident."

The order was issued in view of the fact that violence has become common against doctors and other healthcare staff in government hospitals. "A number of health workers suffer physical violence during the course of their duty... most of this violence is done by either [the] patient or patient's attendants," it said. Meanwhile, earlier this week, the National Medical Commission (NMC) directed all medical colleges to develop a policy for a safe work environment within the college and hospital campus for all staff members. It also said any incident of violence against medical students should be promptly investigated by the college management and an FIR should be lodged. "A detailed action taken report on any incident of violence should invariably be sent to the NMC within 48 hours of the incident," said the order.

KOLKATA JUNIOR DOCTOR RAPE-MURDER: WHY IS CBI PSYCHOLOGICALLY ASSESSING THE ACCUSED?

The CBI is doing a psychological profile of the accused in the Kolkata junior doctor's rape and murder case.



The exercise, rarely conducted by the agency, is aimed at ascertaining not just the mental state of the accused but also trace what prompted him to allegedly indulge in the violence against the deceased trainee doctor, The Indian Express has learnt from CBI sources.

A psychological profile is a character assessment of the accused, which can be produced in a court of law. The exercise helps understand the psyche of criminals to prevent serious crimes in the future, said the sources.

The profile of the accused, Sanjay Roy, will help the investigators understand the root cause of his violent behaviour. It will also reveal whether the accused had planned the act or if he had the support of co-conspirators or other accused, CBI sources said.

The profiling is being undertaken by a team led by psychological and behavioural experts of Central Forensic Science Laboratory (CFSL), Delhi. The CFSL team, which reached Kolkata a few days ago, first collected evidence from the crime scene, the sources said. "A joint team of CFSL and of AIIMS Delhi are in charge of collecting forensic evidence from the site," a CBI source said. "We have enough material evidence to back up the case," the source said.

Asked why the investigators thought of a psychological profile in this particular case, a former CBI officer said the technique is used when either the accused or the witness is not forthcoming with information. "If the investigating officers think that there is more to the confession or statement of the accused, a psychological profile can be undertaken. The exercise is also undertaken when the accused is seemingly uncooperative," the former officer said.

Besides the investigators, the exercise involves forensic experts and psychologists, who ask questions to the accused and gauge their response.

"In some cases, some questions could elicit an emotional response from the accused, which is noted to understand his character traits. If most questions elicit muted responses, it could be ruled that the accused has no empathy," a CBI official said.

But psychological profiling is just one of the tools for assessing the character of an accused. The other methods of doing this include polygraph, brain mapping and narcoanalysis. These three tests need the consent of the accused, as per Selvi vs State of Karnataka judgment of the Supreme Court in 2010. "The three tests can be used to collect further evidence in the case," a CBI official said.

The CBI has not released any statement on its findings so far, though it has re-registered the FIR after taking over the case.

PROBE BEGINS INTO 'NCC CAMP' SEXUAL ASSAULT CASE IN T.N.

The special investigation team (SIT) that was set up to probe the sexual assault on schoolchildren at a fake NCC camp, along with the multi-disciplinary team (MDT) that was constituted to recommend measures to prevent the recurrence of such incidents, commenced the inquiry in Tamil Nadu's Krishnagiri district on Thursday.

Addressing the media, the head of the MDT and Secretary to the T.N. Department of Social Welfare and Women Empowerment, Jayashree Muralidharan, said that the Chief Minister had directed that the investigation be completed within 15 days and the chargesheet be filed within 60 days to fast-track the case and ensure punishment for the accused.



The SIT, headed by Inspector-General of Police (West Zone) K. Bhavaneeswari, is investigating the case to ensure that the perpetrators, those who tried to subvert the law by suppressing evidence, and those who failed to alert the police face the law, Ms. Jayashree said.

Meanwhile, the Krishnagiri police registered another POCSO case against the accused, Sivaraman, who had been remanded in custody in connection with the sexual assault on a 12-year-old girl at the fake NCC camp.

CM FORMALLY LAUNCHES LADKI BAHIN YOJANA, SAYS SCHEME PERMANENT

The Mahayuti government in Maharashtra on Saturday formally launched its Mukhyamantri Majhi Ladki Bahin Yojana for eligible women from Pune's Shree Shiv Chhatrapati Sports Complex with Chief Minister Eknath Shinde telling beneficiaries that if the ruling alliance is voted to power in the upcoming Assembly election, it may double the monthly stipend from ₹1,500 to ₹3,000. The Shiv Sena chief also assured women that the scheme is "permanent". "The financial plan for the scheme is in place, and allocations have been made accordingly up to March 2025," he said.

First announced during the State budget presentation in the Assembly, the government started transferring benefits from August 14 of a monthly ₹1,500 assistance to women in the 21-60 age bracket having up to ₹2.5 lakh annual family income.

LONG BEFORE 'LATERAL ENTRY', HOW NEHRU GOVERNMENT RECRUITED BUREAUCRATS FROM 'OPEN MARKET'

In 1946, with independence from British rule imminent, the Central Cabinet, following a conference of Premiers, decided to establish the Indian Administrative Service (IAS) and Indian Police Service (IPS) to replace the Indian Civil Service (ICS) and Indian Police (IP) respectively.

Post-Independence, the country needed officers to help frame policies and to implement them on the ground. Not many qualified officers were available, as the last batch of ICS was recruited in 1943, and the first batch of the IAS came only in 1948.

Contemporary reports suggest that until the mid-1950s, some 7,000 applicants appeared on average in the annual civil service exams, and about 200 were selected. Besides the central government, various state governments were also in dire need of good officers to frame and implement policies.

Addressing the shortage

To address the shortage of officers, especially those with specialised skills, special recruitment drives were undertaken in 1948-49 — when Sardar Vallabhbhai Patel was Deputy Prime Minister and Home Minister — and in 1956. This was in addition to the annual recruitments through examinations conducted by the UPSC.

The special selections too, were made by the UPSC, but on the recommendation of an Emergency Recruitment Board.

The 1949 special recruitment was based on a scrutiny of the applicants' records and an interview. The 1956 recruitment took place on the basis of a written examination and an interview. These emergency recruitments were made not only for the IAS but also for the IPS and several central services.



The special recruitment was designed to select the best brains in India and from Indians living abroad to deploy in the service of the newly independent nation. G B Pant, who was Home Minister during the second round of special recruitments, told Lok Sabha on May 30, 1956: “The brilliant cadre has been depleted and exhausted and here at the Centre we have no men who can be appointed to the posts of Deputy Secretaries etc from the IAS.”

Process of recruitment

The upper age limit to appear for the civil services examination in the early days was 24 years. Open market recruitments were made from among individuals who had completed the age of 25 but not the age of 40. For Scheduled Caste and Scheduled Tribe candidates the age ceiling was 45 years. (The now-cancelled lateral entry initiative had the same age ceiling for applicants.)

In the first round of special recruitments in 1948-49, 82 officers were hired on the recommendation of the Emergency Recruitment Board. During the second round, Minister of State for Home Affairs B N Datar explained the rationale for open-market recruitments:

“This emergency recruitment will be open and candidates would be taken from what is known as the open market, not only from the services. The services also can come in provided they possess the qualifications and the eligibility required... A larger number (of IAS) is necessary, and a larger number has to be taken from a larger sphere,” he said in Lok Sabha on March 23, 1956.

For the 1956 round, the government fixed an income floor of Rs 300 for open-market candidates to apply — a requirement that caused an uproar in Parliament.

Communist leader A K Gopalan argued that unemployed youth would not be able to apply. “This is an attempt to revive the old tradition of the ICS. Recruitment to the ICS was only done from the aristocracy and feudal families. Ordinary citizens were not eligible for enrolment to the ICS. This IAS recruitment with this rule revives that old tradition. It tries to restrict the field of recruitment to the most important administrative service of the country to the sons and daughters of the rich and the influential people in the country,” Gopalan told Lok Sabha on May 30, 1956.

More than 22,161 applications were received for these recruitments in 1956, including 1,138 from the SCs and 185 from the STs. To enable Indians residing abroad to appear, 22 examination centres were set up outside India. The exam was held on December 28, 1956.

Quotas in appointments

Reservation for SCs and STs was implemented in the open-market recruitments. However, there was no reservation among officers who were promoted from the state civil services.

The SC quota was 12.5% and the ST quota was 5%, both for vacancies filled normally through competitive exams and in the special recruitment from the open market. The filling of the quota was subject to the availability of suitable candidates. According to the government, the conditions for recruitment of SCs and STs were relaxed to the extent possible.

Home Minister Pant informed Lok Sabha on April 24, 1958: “So far as special emergency recruitment from the open market is concerned, in the original list that was prepared by the UPSC there were only 26 members of the Scheduled Castes. So, we asked them to relax the standard so that a larger number might be admitted. They did so and another, I think, 133 were added. After that, the candidates were interviewed and the UPSC published its list.”



In the final recruitment from the open market, 7 SC candidates and 3 ST candidates were selected in 1956. Of the 82 IAS officers hired from the open market in 1949, 12 were SCs, and 1 was an ST.

TO ABIDE OR NOT

The decision of Karnataka Governor Thaawarchand Gehlot to grant approval to a private complainant to open an investigation and prosecute Chief Minister Siddaramaiah on corruption charges raises familiar politico-legal questions. Foremost is the constitutional question whether a Governor can use his role as a sanctioning authority for prosecution against a serving Chief Minister in a manner contrary to the advice of the Council of Ministers. And in political terms, one may ask whether the Governor's action against a Chief Minister is desirable in a time of increasing conflict between the two offices. In his writ petition challenging the order, Mr. Siddaramaiah has sought to highlight that the Governor was bound to abide by the advice given to him — to refuse sanction in this case. Some judicial precedents say a Governor may arrive at an independent conclusion if the Council demonstrates bias or fails to consider relevant material. However, political realities would suggest the possibility of Governors being selective in pursuing this course of action. Amidst the Opposition's demands for Mr. Siddaramaiah's resignation, the Karnataka High Court has asked the trial court to defer any precipitate action until it hears his challenge to the Governor's order. The allotment of sites by the Mysore Urban Development Authority to landowners who had lost their land in the course of acquisition may or may not involve corruption, and allegations in this regard will require a thorough investigation.

The State government believes that the judicial inquiry it has ordered is enough for now, a step the Governor thinks is inadequate. The Chief Minister's wife was given 38,284 square feet of land in lieu of an extent of 1,48,104 sq.ft she had lost. However, whether it amounts to any illegality would depend on whether Mr. Siddaramaiah had anything to do with the decision. He vehemently denies being involved in any way and has repeatedly said that the sites were sanctioned when the BJP was in power in the State. Private complainants have obtained sanction for prosecution of public servants in the past, but whether it can be given to them after the Prevention of Corruption Act was amended in 2018 has to be considered. Section 17A was introduced then as a filtering mechanism to deter vexatious complaints. It bars police officers from opening a probe without approval from the appropriate authority, making it reasonable to suggest that private parties cannot be given such approval. Public discourse on corruption in the last few decades has hovered between a hankering for punishing political leaders involved in it and deep suspicion over the motives of regimes and agencies that seek to prosecute them. Any criminal process will have to be credible and independent, but contemporary events, politically tainted as they are, contain little evidence of independence or credibility.

TWO STATES

Assembly elections for Haryana and Jammu and Kashmir (J&K), to be held from September 18 to October 1, will test India's democratic institutions and, especially, the Election Commission of India (ECI), to the fullest extent. This will be the first election for J&K since it lost its statehood and Ladakh was carved out as a separate UT without an Assembly in 2019. After a three-phase poll in J&K and a single-phase one in Haryana, the counting of votes will be on October 4. Curiously, the ECI has said that elections that are due in Maharashtra and Jharkhand will be announced later. In 2019, Haryana and Maharashtra went to the polls together. Security concerns and festivals have been cited as the reason for holding these elections in batches of two each. Falling within the first year of the 2024 general election, these four Assembly elections, and then the one in Delhi, will be



notable for the political signals that will emanate. Of import will be the J&K exercise, as a new elected government can be the first step to a durable political process after J&K's reorganisation five years ago. The enthusiasm that the electorate showed in the general election and the recurring incidents of violent insurgency are two aspects of the situation in Kashmir. Elections could open the possibility of the emergence of new political actors. An election process that is demonstrably fair and transparent is essential for a healthy democracy, and in Kashmir's case, no less so.

The Bharatiya Janata Party (BJP) went in for a changing of the guard in Haryana ahead of the general election to dilute the discontent against the party and its governments at the Centre and the State. The Agnipath short service scheme that was introduced by the Centre is a topic of intense interest in a State where many young people look to the military for a career option. The Congress is hoping to benefit from the double anti-incumbency and a disarray in the non-Jat social coalition that propelled the BJP to the top in 2014. The impact of the Assembly elections will not be limited to the two States/UTs. The general election had loosened the BJP's grip over the country's politics and given the Opposition a fresh lease of life. Whether that trend holds or there is a reversal is to be seen. Politics within the BJP, among the National Democratic Alliance partners, between the BJP and the larger Sangh Parivar, and between the BJP and the Opposition, could all be influenced by these elections. The BJP and the Congress both know that the stakes are high, giving this round of elections an added edge.

SOREN VS SOREN

Former Jharkhand Chief Minister Champai Soren's exit from the Jharkhand Mukti Morcha (JMM) follows a familiar pattern. He was the trusted lieutenant who was hand-picked by party supremo Hemant Soren to be his placeholder in his absence. That act of high trust, or political gamble, soon deteriorated into a mismatch of expectations of loyalty and rewards from both sides. Champai has been a veteran of tribal mobilisation in Jharkhand and has played second fiddle to Shibu Soren and his son Hemant Soren, the former and current Chief Ministers of the State, respectively, all his life. When Hemant resigned as the Chief Minister on January 31, 2024, minutes before he was arrested by the Enforcement Directorate on charges of corruption, Champai took over the reins. It was a bold and decent move on the part of Hemant to choose a party veteran instead of a family member, as it usually happens in such situations, but, perhaps, it was too good to last. As soon as he was released on bail in June by the High Court, after spending nearly five months in jail, Hemant wanted to be back in the saddle. Champai's removal turned out to be abrupt, and he found it humiliating. He had wielded power as the chief executive for the first time and expected to be treated more respectfully by his leader.

The JMM, like most parties in India, is controlled by one leader or family, and there is little room for the separate ambitions of individual leaders. Champai himself has played that game for a long time, but after being the Chief Minister, he thought a tipping point had been reached. External factors too may have played a role in his decision. While Champai cried of "bitter humiliation" by Hemant, Hemant insinuated that Champai was being lured by the Bharatiya Janata Party (BJP). The BJP is pushing hard for a political return in Jharkhand where elections are due soon. Its strategy is to fragment the tribal vote and consolidate the non-tribal vote in its favour while inciting resentment among the tribal communities against Muslims. To this end, the BJP is arguing that in its absence, the State has undergone unchecked changes in its demography. And, as a counter, the JMM has questioned the BJP's intent in delaying the 2021 Census, further putting the onus of checking "infiltrators" squarely on the Centre.



DECODE POLITICS: WHY NEW DISTRICTS CREATED IN 2016 TALKING POINT NOW IN STRIFE-TORN MANIPUR

- During the recently concluded Session of the Manipur Assembly, Chief Minister N Biren Singh said it was necessary to reorganise districts in the state, terming the 2016 decision of the Okram Ibobi Singh-led Congress government to carve out seven new districts as “driven by political interests”.
- Citing the need for administrative efficiency and the long-standing demands of locals,, the Ibobi Singh government, through a notification in December 2016, created new districts by bifurcating seven of the nine districts of the state, months ahead of the Assembly elections.
- The most contentious issue was the creation of the Kuki-Zomi dominated Kangpokpi district, carved out from the Naga-dominated Senapati district in the Sadar Hills region of the state.
- Ahead of the 2017 Assembly polls, the Congress, in power in the state since 2002, faced an exodus of prominent leaders, including its former vice-president (and current BJP CM) Biren Singh.
- The Okram Ibobi government was also reeling under massive protests in the hills, which had left eight people dead in Churachandpur, over the three Bills passed by it to replace the Inner Permit Line (IPL) regime in 2015.
- The IPL would stay eventually till 2020 as tribal groups kept opposing its removal, due to apprehension that their lands – which enjoy Constitutional protection – could be infringed upon.
- The United Naga Council along with the largest insurgent group of the northeast, the NSCN (I-M), opposed the creation of the new districts, accusing the Okram Ibobi government of “appropriating” Naga villages and merging them with non-Naga areas. They also claimed that the Hills Areas Committee, which comprises all MLAs from the hill areas of the state, was not consulted on the issue.

For Your Information:

What are Manipur’s hill councils?

- Although Manipur went through the same phase of governance division when the British took over the region in 1891, somehow its hill areas were never covered under the Sixth Schedule. The Maharaja of Manipur had in 1939 agreed with the British to exclude the hill areas of the region from his direct control and governance. In fact, the demand for a separate administration for hill areas has been raised in the region since the early 1960s.
- It was in this context that in December 1971, Parliament passed The Manipur (Hill Areas) District Council Act, paving the way for creation of ADCs in Manipur’s hill areas. These regions constituted 90% of its geographical area, inhabited by tribes such as Nagas, Kukis, Zomis, Hmars, etc. At that time, Manipur was a Union Territory.
- Here too the stated aim of the legislation was to grant the hill people a chance at self-governance, protect their identity and culture, and to give them rights over the management of their resources.



— The councils are to have not more than 18 members who are to be elected and enjoy powers of taxation, maintenance of properties, allotment of land, management of forests, regulation of cultivation, and legislative authority on matters of marriage, inheritance, social customs and appointment of chiefs.

DEATH AT WORK

The blast at pharma company Escientia's plant in the Atchutapuram Special Economic Zone (SEZ) in Anakapalli district, Andhra Pradesh, is the worst industrial accident in the region in recent times. Seventeen workers have died and many have been injured. On the same day, about 10 workers suffered injuries in a fire accident at a chemical factory in the same SEZ. Last year, on June 30, a massive explosion rocked a pharma plant, at the same SEZ, leading to deaths and injuries. The Atchutapuram SEZ, among the State's largest SEZs, is home to the factories of more than 100 companies. The rash of accidents revives memories of another deadly accident on May 7, 2020 — 12 people died after a styrene monomer vapour leak from a polymers unit at Venkatapuram village on the outskirts of Visakhapatnam. These accidents raise serious questions about the state of industrial safety in Andhra Pradesh, more specifically in the SEZ. State Home Minister V. Anitha has said that at Escientia, workers had tried to plug a solvent leak of the chemical/solvent MTBE (Methyl tert-butyl ether). Before the leak could be plugged, it fell on an electrical panel, leading to a fire and blast, she said. Meanwhile, the typical safety data sheet of MTBE — that operating personnel should have been familiar with — says that it is highly flammable and its vapour can also cause skin and eye irritation. In case of accidental release, it specifically cautions against the serious risk of fire and explosion and lays down the use of explosion-proof electrical/ventilating/lighting equipment.

Trade unions and activists are calling for stringent punishment to lax managements. They also complain of abysmal safety standards. Their demand is for an immediate and thorough safety audit of all units at the SEZs and elsewhere in Andhra Pradesh. A key complaint is exemption from government inspection given to units in SEZs and Export Processing Zones in a 2016 order that brought into force the system of online inspections. This exemption will apparently apply to high-risk ones also, such as pharma and chemicals, in SEZs. Another is exemption from inspections given to medium-risk industries which can self-certify, based on third party audits, regarding compliance with safety norms. Such government moves are intended to facilitate ease-of-doing business as frequent inspections by government staff may only lead to bribes and harassment without necessarily improving safety. While the intent is a well worked out practice across the world, the series of accidents calls for a broader probe including in SEZs in Andhra Pradesh so that any loopholes present can be fixed. Swift delivery of justice by punishing non-compliance of norms and the award of punitive damages will be a deterrent against ignoring safety.

A SNAPSHOT OF MIGRATION IN INDIA

The Multiple Indicator Survey of the National Sample Survey Office's 78th Round, conducted in 2020-21, offers a detailed look at the reasons for intra and inter-State migration across India, and the problems faced by migrants. We parsed unit-level data from the survey (more than 11.63 lakh respondents) to arrive at the tables.

Maharashtra hosted the highest share of external migrants, followed by Uttar Pradesh, and West Bengal. U.P. also contributed the highest number of migrants, followed by Maharashtra, West Bengal, and Bihar. These States also hosted a significant number of internal migrants.



If we look at pairs of regions, migrants going from U.P. to Maharashtra formed the largest chunk of all external migrants, followed by migrants from the Gulf countries (some returning to Kerala), and migrants going from U.P. to Delhi. Suburban Mumbai remains the district that hosts the highest number of migrants, followed by Pune and Thane in Maharashtra.

Among migrants moving States for economic reasons (who constituted roughly 22% of all reasons), which include better employment prospects, business, service transfers, etc., migrants going from U.P. to Maharashtra formed the largest chunk of all migrants, followed by those moving from U.P. to Delhi and from Bihar to West Bengal. Marriage was one of the main reasons (68.2% of all reasons) for migration as well, with migrants from U.P. to Maharashtra, Bihar to Jharkhand, and Madhya Pradesh to U.P. accounting for the top three highest numbers.

REVISED MODEL FOSTER CARE GUIDELINES

Doing away with the rule that limited foster care to married couples, the Women and Child Development (WCD) Ministry has now permitted single individuals — including those who are unmarried, widowed, divorced, or legally separated — aged 35 to 60 years, to foster a child and adopt after two years, according to the recently released revised Model Foster Care Guidelines.

— However, while a single woman can foster and eventually adopt a child of any gender, a man can only do so for male children. Previously, under the 2016 Model Foster Care Guidelines, only married couples, referred to as “both spouses” in old documents, were permitted to foster a child.

— Fostering is an arrangement in which a child temporarily lives with either extended family or unrelated individuals. In India, children who can be fostered have to be above the age of six years living in child care institutions and having “unfit guardians”. Minors who are placed in the category of “hard to place or children having special needs” can also be fostered.

— Apart from opening up fostering to any person “irrespective of their marital status (single/unmarried/widow/divorcee/legally separated)” and whether or not they “have biological son or daughter”, the revised guidelines have also allowed the foster parent to adopt a child after she has been in her foster care for minimum of two years, as opposed to five years earlier.

— In case of married couples who want to foster, the new guidelines state that “no child shall be given in foster care to a couple/spouse” unless they have had a “stable marital relationship of two years”. Earlier, there was no such caveat for couples.

— The 2016 guidelines have been revised in accordance with the amendment to Juvenile Justice (Care and Protection of Children) Act in 2021 and the Juvenile Justice (Care and Protection of Children) Model Rules of 2022.

— An official in the WCD Ministry said the change in guidelines made sense since single individuals were allowed to adopt children, but were not allowed to foster, as per the earlier guidelines.

— In terms of age of the foster parents, the 2016 guidelines stated that both spouses must be above the age of 35. The revised guidelines are more specific – to foster a child in the six to 12 years and 12 to 18 years age brackets, the “composite age of the married couple” is to be a minimum of 70 years, while a single foster parent is to be of minimum 35 years.



— It also specifies the maximum age for prospective foster parents — up to 55 years for a single individual to foster a child in 6 to 12 age bracket and till 60 years to foster a child in 12 to 18 age bracket.

— The official said the foster parents can now register online through a platform — Child Adoption Resource Information and Guidance System (CARINGS). The platform was already being used by prospective adoptive parents for registration.

— The 2024 foster care guidelines provide for a designated online portal where prospective foster parents can upload their documents for the District Child Protection Units to access them.

BROAD DEFINITIONS IN TELECOM ACT PIT TELCOS AND OTTS AGAINST EACH OTHER YET AGAIN

A war over interpretation of what a telecommunication service is under the new Telecommunication Act has broken out between telecom operators and social media companies, with the former arguing that over-the-top (OTT) communications platforms like WhatsApp and Google Meet are indeed covered under the definition of a telecom service.

This points to the vague manner in which telecom services have been defined under the Act, and despite the government's clarification to the media earlier that OTTs don't fall under the definition, experts believe media statements do not have the same sanctity as the legal word – and see this as the key reason behind this new divergence in the interpretation.

In response to the Telecom Regulatory Authority of India's (TRAI's) ongoing consultations on service authorisations, all the three major telecom operators have made a case that OTT platforms fall under the definition of telecom services, and therefore, should require licensing from the government the same way telcos do.

In the Act, telecom services have been defined as: “transmission, emission or reception of any messages, by wire, radio, optical or other electro-magnetic systems, whether or not such messages have been subjected to rearrangement, computation or other processes by any means in the course of their transmission, emission or reception”. And ‘messages’ has been further defined as “any sign, signal, writing, text, image, sound, video, data stream, intelligence or information sent through telecommunication”.

When the Act was tabled in Parliament last year, various stakeholders had raised concerns that this particular definition was broad enough to potentially include OTT communications platforms. However, former telecom minister Ashwini Vaishnaw had, at the time, clarified publicly to the media that OTTs are not under the ambit of the law.

But telecom companies seemingly have a different interpretation, almost eight months after the Act was passed in Parliament.

To be sure, this is the interpretation of the telecom companies, and TRAI or the telecom department may or may not entertain them.

Tech companies are pushing back against this interpretation. The Broadband India Forum (BIF), a think tank which represents companies like Meta, Google, and Amazon, has opposed the telecom operators body's understanding and has said that such an authorisation requirement “will change



the definition of the market altogether as certain entities would then possess an unprecedented market advantage, stifling competition, innovation and consumer choice”.

For Your Information:

— The Telecom Act has replaced the Indian Telegraph Act (1885), the Wireless Telegraphy Act (1933), and the Telegraph Wires (Unlawful Possession) Act (1950).

— There are some concerns too, primarily surrounding interception requirements for communication over telecom networks, and whether or not the Act conclusively excludes Internet-based communication platforms like WhatsApp, Signal and Telegram from its ambit.

PM WANI REVIVAL: TRAI PROPOSES REDUCTION IN HIGH INTERNET COSTS BY TELCOS

The Telecom Regulatory Authority of India (Trai) on Friday proposed reduction in broadband connection rates charged by telcos and Internet service providers (ISPs) from public data offices (PDOs) under the Prime Minister Wi-Fi Access Network Interface (PM Wani) programme.

PDOs are local shops/ retailers, kiranawalas, storekeepers, etc that deploy public Wi-Fi hotspots and connect the last mile under the PM Wani programme.

The proposal by Trai, as part of the draft telecommunication tariff (70th Amendment) Order, 2024, aims at reviving the PM Wani programme. The programme was launched in 2020 to democratise content distribution and broadband access at affordable rates through public WiFi hotspots.

The project, however, did not take off as expected owing to the extremely high cost of connectivity through Internet leased lines charged by TSPs and ISPs from PDOs.

Simply put, telcos and ISPs have been charging up to Rs 8 lakh a year from PDOs and public data office aggregators (PDOAs) for supplying Internet-leased lines for bandwidth and other fibre resources needed to deploy public Wi-Fi hotspots, industry executives said.

The same when compared to broadband for personal use comes at rates starting at as low as Rs 300-400 a month. This, even as the public Wi-Fi hotspot project is crucial for Internet penetration.

A high bandwidth cost for PDOs does not make a viable business owing to higher costs and less revenue. Data sachets under PM Wani are being provided at Rs 5-10 per day.

According to Trai, a comparison of 100 Mbps of Internet leased line tariff with 100 Mbps of FTTH broadband connection shows that the annual tariffs for Internet leased line are 40 to 80 times higher than a retail connection.

“PDOs, specifically the small scale PDOs viz small establishment, local shops/ retailers, chaiwalas, kiranawalas, storekeepers etc, generally having low revenue potential, neither need an ILL connection nor they can afford high backhaul rates which are applicable for large commercial entities,” Trai said.

The government data as on July 22 suggests that there are 207,642 deployed PM-Wani Wi-Fi hotspots in the country and 199 PDOAs and 111 app providers. The same is below the target set by National Digital Communications Policy, 2018 to enable deployment of 5 million public Wi-Fi hotspots by 2020 and 10 million by December 2025.



Further, for Digital India 2030 mobile and broadband policy objectives, the Bharat

6G Vision has set the goal of 50 million public WiFi hotspots by 2030.

Infact, the average daily data usage per Wi-Fi hotspot was of the order of 1 GB, till last year, and now it has come down to a few MBs, which is quite less than the monthly average data limit being provided to retail broadband customers, Trai said, adding that to pace up PM Wani project it is essential to rationalise the costs.

EXPRESS VIEW ON SSLV LAUNCH: INDIA'S SPACE

On August 16, a 120-tonne rocket, about five times smaller than India's largest satellite launch vehicle, took off from ISRO's Satish Dhawan Centre in Sriharikota, heralding a major milestone in the country's space research. The Small Satellite Launch Vehicle (SSLV) can carry payloads weighing up to 500 kg. These space capsules had to earlier wait for months, even years, to hitch a ride on vehicles designed for large satellites. But in the past decade, the miniaturisation of satellites has enabled the entry of universities, corporates and even individual innovators in a field once dominated by large enterprises and state institutions such as ISRO and NASA. The SSLV can prove to be a game changer for these micro and nano space stations. The launch vehicle can be assembled in less than a week by a much smaller team. With ISRO planning to transfer technology to private players, the country's space sector is poised for a significant expansion.

The utility of small satellites is increasingly expanding in a variety of sectors, including weather forecasting, communications, defence, urban planning and disaster management. They are also crucial enablers in the growing Internet of Things. There is near unanimity that the market for space tech is set to increase in the next five years. US and EU companies are currently the biggest players, while China, Australia and Russia are beginning to expand their footprint. China plans to launch more than 13,000 satellites by 2030 to establish a network supporting high-speed 6G communications. India currently is a relatively smaller participant — its current share in the space economy is about 2 per cent. With the SSLV and related endeavours, the government aims at a four-fold scale-up in the country's stakes by 2033. In the past two years, start-ups such as those by the Hyderabad-based Skyroot and the Chennai-based Agnikul have ticked several boxes, including working closely with ISRO. Agnikul, for instance, has built its own launch pad inside the Sriharikota range with ISRO's help. The IIT-Madras incubated company is working on a launch vehicle to carry payloads smaller than ISRO's SSLV and it has ambitious plans to launch one rocket every week.

India's space policy, introduced in April last year, recognised the country's need to transition from the ISRO-dominated ecosystem. At the same time, the policy took care to underline the premier agency's enabling role in expanding the country's footprint in the space economy. ISRO's work remains crucial to diverse social objectives of the government — education, healthcare, agriculture, climate-change mitigation and environment protection. Space tech is also critical to the country's security objectives. The challenge now is to frame a regulatory mechanism that complements ISRO's work, enables manufacturers of small satellites and rockets to unlock their potential while also making sure that the country's welfare imperatives are not crowded out. The SSLV's launch should be a prelude to conversations on such a mechanism.



ISRO: CHANDRAYAAN-4 DESIGN FINAL, SAMPLES FROM MOON BY 2027

The designs of India's next mission to the Moon, Chandrayaan-4 — which will bring rock and soil samples back to the Earth — has been finalised, and will most likely happen in 2027, said ISRO chairman S Somanath said on Friday on the occasion of National Space Day.

The Chandrayaan-4 spacecraft will have five separate modules, officials said. The Chandrayaan-3 spacecraft, which made a historic landing near the South Pole of the Moon, had three modules — the propulsion module (or the engine), a lander and a rover.

The Chandrayaan-4 sample return mission would be a complex mission involving several stages. After getting into lunar orbit, two of the modules will detach from the main spacecraft and make a landing on the Moon. They will help each other in collecting samples from the lunar surface. One of the modules will launch itself from the Moon's surface and travel back to the main spacecraft in the lunar orbit. The samples will be transferred, and then flown back to an Earth re-entry vehicle that will be launched separately from the ground. The samples will be transferred again, and it is this re-entry vehicle that will bring them back to the Earth.

Somanath said designs for this mission have been finalised, and the project was awaiting the final government approval. ISRO has also finalised designs for the next Moon mission, Chandrayaan-5, but did not specify the objective or timeline of the mission, he said.

Chandrayaan-4 would involve docking of space modules twice during the Mission — when the modules fly back from the Moon to unite with the main spacecraft, and when the samples are transferred to the re-entry vehicle. ISRO has never docked spacecraft earlier. This capability will be demonstrated for the first time later this year, with the Spadex mission. Docking is a process where two spacecraft moving at extremely high speeds are aligned in a precise orbit and joined together.

For Your Information:

— On the occasion of National Space Day on Friday, President Droupadi Murmu appreciated India for its commitment to conduct debris-free space missions by 2030. Speaking at the celebration of the maiden National Space Day celebrations to mark the first anniversary of the landing of India's Chandrayaan-3 project, Murmu said that research conducted to solve issues during space exploration accelerates the development of Science and improves human life, with sectors like health, transportation, security, energy, environment and information technology — all benefiting from it.

— According to senior ISRO scientists, two key capabilities required for the Chandrayaan-4 success had been demonstrated during the Chandrayaan-3 mission. "The hop experiment that was performed on the last day of Chandrayaan-3 mission (lander of Chandrayaan-3 was made to jump about 40 cm from the lunar surface and land 30-40 cm away) was done to understand whether we can lift off from the lunar soil. There were concerns about the legs of the lander getting deep inside the lunar surface, which would have made the 'hop' difficult to execute. But Chandrayaan-3 did that exceedingly well. There were no problems, and the results were according to our expectations."



A LOOK AT ONGOING INDIAN SPACE MISSIONS

The story so far:

After a busy 2023, things have been quiet at Sriharikota, India's spaceport. But silence here doesn't mean India's space programme itself has been dormant. A lot has been happening since the Indian Space Research Organisation (ISRO) successfully landed the lander of its Chandrayaan 3 mission, Vikram, on the surface of the moon. Prime Minister Narendra Modi has declared this date, August 23, India's National Space Day.

Highlights in the last year

Aditya L1: India followed its lunar success with the successful launch of its solar science mission Aditya-L1 on September 2, 2023. The launch was the easiest part of the mission, onboard ISRO's Polar Satellite Launch Vehicle (PSLV). The spacecraft executed a series of manoeuvres to move into an orbit around the first earth-Sun Lagrange point (L1) on January 6, 2024. It completed its first orbit around L1 on July 2, 2024. It studied a solar storm in May 2024 together with observatories on the ground and spacecraft in lunar orbit.

Gaganyaan TV-D1: ISRO used a modified L-40 Vikas engine to build its Test Vehicle (TV) that it used to perform the first abort mission on October 21, 2023, as part of its 'Gaganyaan' human spaceflight mission. The mission demonstrated the ability of the Crew Escape System (CES) to separate from the TV, take the crew module to safety, and the crew module's ability to decelerate before splashing down in the Bay of Bengal. The crew module at the test's end was recovered by the Indian Navy vessel INS Shakthi.

XPoSat: ISRO celebrated the new year with the launch of its X-ray Polarimeter Satellite (XPoSat) on January 1, 2024. The satellite will study how radiation from various celestial objects is polarised. It is the second such space-based observatory after NASA's Imaging X-ray Polarimetry Explorer (IPEX), launched in 2021. The two instruments on board XPoSat, called XSPECT and POLIX, began operating on January 5 and 10.

INSAT-3DS: ISRO launched the meteorological satellite INSAT-3DS on February 17 onboard a Geosynchronous Satellite Launch Vehicle (GSLV). This mission was important to prove the vehicle's credibility before the critical NASA-ISRO Synthetic Aperture Radar (NISAR) mission, now expected to launch in early 2025. This version of the GSLV had previously successfully launched the NVS-01 satellite in 2023.

RLV-TD: ISRO used a downscale version of the Reusable Launch Vehicle, called Pushpak, to conduct two landing experiments — LEX-02 and LEX-03 — on March 22 and June 7 at its Aeronautical Testing Range in Challakere, Karnataka. The tests simulated landing conditions from space by dropping the Pushpak vehicle from a Chinook helicopter, in LEX-02 along its landing path and in LEX-03 500 metres to one side. Successes in these tests gave ISRO the confidence to move on to the 'Orbital Return Flight Experiment'.

SSLV: On August 16, ISRO launched the third and final development flight of the Small Satellite Launch Vehicle (SSLV), placing the EOS-08 and the SR-0 Demosat satellites in orbit. With two consecutively successful test flights, ISRO declared the SSLV's development complete and green-lit its transfer to industry. EOS-08 carried three payloads: one for earth observation in the infrared range, one to demonstrate the use of reflections from a global satellite navigation system for earth



observation, and one ultraviolet dosimeter and alarm to be tested ahead of their use in the Gaganyaan crew module.

ISRO roadmaps

After handing over operational responsibilities to NewSpace India, Ltd. (NSIL), ISRO has prioritised research. In December 2023, ISRO Chairman S. Somanath announced a 25-year roadmap until 2047 for Gaganyaan. It intersects with the lunar exploration roadmap in the form of an Indian landing on the moon by 2040. Mr. Somanath also shared a lunar exploration roadmap that includes — apart from a crewed lunar mission — a sample-return mission, a long-duration mission on the moon's surface, docking with NASA's Lunar Gateway (under the Artemis programme), and building moon habitats.

Gaganyaan

One of ISRO's primary focus areas of late has been to train its astronaut-candidates, or Gaganyatris, for spaceflight.

Prime Minister Modi revealed the candidate's names on February 27: Wing Commander Shubhanshu Shukla and Group Captains Prashanth Nair, Ajit Krishnan, and Angad Pratap.

Earlier this month, Mr. Shukla and Mr. Nair travelled to the U.S. for advanced training ahead of a flight to the International Space Station (ISS). Mr. Shukla is likely to fly in this mission, with Mr. Nair as his designated backup. The mission will be conducted by Axiom Space, a private company, with inputs from NASA and using SpaceX's launch vehicle and crew capsule. The flight is scheduled for 2025.

ISRO has also planned at least four more abort tests using its Test Vehicle before the historic crewed flight. The first uncrewed Gaganyaan flight is expected in late 2024.

Mr. Somanath's roadmap also includes plans to build an Indian space station called the 'Bharatiya Antariksh Station' (BAS) by 2035.

Next-generation Launch Vehicle

Since India is aspiring to both the BAS and a full-fledged lunar programme, it requires a new launch vehicle that can deliver heavier payloads per launch than its PSLV or GSLV rockets. This is set to be the Next Generation Launch Vehicle (NGLV).

ISRO set up a team led by S. Sivakumar that submitted a project report to the Union Cabinet in February with a request for funding and details of the NGLV, including manufacturing requirements.

ISRO has planned for NGLV to be a three-stage launch vehicle powered by a semi-cryogenic engine, a liquid engine, and a cryogenic engine. ISRO doesn't plan to continue the use of the GSLV once the NGLV is ready. The PSLV is already under production by a private consortium led by Larsen & Toubro and Hindustan Aeronautics, Ltd.

This said, ISRO is developing a semi-cryogenic engine for the LVM-3 rocket — another name for the GSLV Mk III — to enhance its launch capability. On May 2 and 21, it successfully tested the engine's pre-burner ignition test article.



NSIL missions

ISRO is focusing on research because NSIL has been tasked with conducting missions and chaperoning commercial activities. On May 1, ISRO transferred all commercial activities related to Indian Remote Sensing satellite data and products to NSIL.

NSIL signed an agreement with SpaceX to launch the GSAT-20/GSAT-N2 satellite. LVM-3 currently can't launch this 4,700-tonne machine. SpaceX is expected to launch it in August 2024.

On May 10, NSIL released a request for qualification for the production of LVM-3 through a public-private partnership and signed a dedicated launch service agreement with an Australian private space company to launch the SSLV.

Private space missions

Agnikul Cosmos successfully launched its SoRTeD-01 vehicle from its launch pad at the Satish Dhawan Space Center in Sriharikota on March 21. This was the first launch of a vehicle powered by a semi-cryogenic engine as its first stage from Indian soil.

Skyroot Aerospace is progressing towards the launch of its Vikram 1 rocket. It had previously pressure-tested solid-fuel engines between May and July 2024 and launched a test vehicle called Vikram S from Sriharikota on November 18, 2022.

Dhruva Space and Bellatrix Aerospace flew their experiments on the fourth and final stage of the PSLV-C58 mission on January 1.

IN-SPACE

In the last year, there have been several notable policy updates and licences issued by India's new space regulator, IN-SPACE. Most importantly, it released the 'Norms, Guidelines, and Procedures for Authorisation of Space Activities' on May 3.

It also granted the country's first satellite broadband licence to Eutelsat OneWeb on November 21, 2023, and the first licence for a ground station as a service to Dhruva Space on July 15.

Finally, on February 21, the Government of India amended its foreign direct investment (FDI) policy to allow 100% direct FDI in all space and spaceflight segments except for a 74% ceiling in satellite manufacturing and operations and 49% in launch infrastructure.

ARMY FIELDS TACTICAL 'ASSAULT CANINE' ZAC AT BILATERAL EXERCISE IN SRI LANKA

The Armies of India and Sri Lanka have deployed canines — “K9s” in military parlance — in the bilateral exercise Mitra Shakti under way in the island nation. The Indian Army has deployed Zac, a Belgian Malinois, while Sri Lanka has fielded two canines.

The 10th edition of Exercise Mitra Shakti is being held from August 12-25 at the Army Training School, Maduru Oya, Sri Lanka.

Zac, an “assault K9”, was trained at the dog training facility of Remount Veterinary Corps (RVC) Centre and College, Meerut. “He is a force multiplier and first responder in majority of tactical operations,” said Major Rishi Sharma, the K9 Detachment Commander.



The Indian contingent comprising 106 personnel is represented by a battalion of Rajputana Rifles along with personnel from other arms and services. The Sri Lankan contingent is being represented by personnel from Gajaba Regiment of Sri Lankan Army.

“The aim of the exercise is to enhance joint military capability of both sides to undertake counter-insurgency operations in a sub-conventional scenario under Chapter VII of the United Nations Mandate,” the Army said in a statement at the start of the exercise.

CALIFORNIUM

— On August 9, Bihar’s Gopalganj police seized what they suspected was a highly ‘radioactive’ substance Californium.

— Californium is a silvery-white synthetic radioactive metal with the atomic number 98 on the periodic table.

— It was first made in 1950 at Berkeley, California — from where it derives its name — Californium is a very strong neutron emitter and is used in portable metal detectors for identifying gold and silver ores, to help identify water and oil layers in oil wells, and detect metal fatigue and stress in aeroplanes.

— It is highly radioactive and prohibitively expensive, with one gram costing Rs 17 crore in the international market.

RAILWAYS TO ADJUST ITS CLOCKS TO MAINTAIN THE RIGHT TIME

In a first, the Indian Railways will develop a master clock system for synchronising time with the applications and systems across its network, with plans to demonstrate a prototype by Gandhi Jayanti. The necessity of keeping uniform time across all systems and applications involved in train operations arose following difficulties in accident investigations.

According to official sources, the Railways will soon dispense with its current manual method of stationmasters setting time on the instructions of section controllers. The Railway Board had constituted a high-level committee to coordinate with the Research Designs and Standards Organisation (RDSO), the Railways research arm, to finalise the architecture for the master clock system.

Under the existing system, Zonal Railways across the country use various systems, sourcing time from different sources. With the advent of technology, the need for time synchronisation arose not only for proper working of the system of train operations and management, but also for post-facto analysis of rail accidents.

Sourcing time

Officials said that the time for the master clock system would be sourced from Navigation with Indian Constellation (NAVIC) or the National Physical Laboratories.

The high-level team, led by the Railway Board’s Director for Telecommunications, will study the existing system of time synchronisation and its impact on various applications in terms of proper functioning and post-incident analysis.



The team will finalise the architecture for the master clock system and the time dissemination for different functioning assets spread across various Zonal Railways, production units, workshops, and data centres.

The RDSO has been asked to demonstrate a prototype for the master clock system and the synchronisation between different applications and systems by October 2, officials said.

TO BOOST RESEARCH, CABINET CLEARS VIGYAN DHARA, BIOTECH INITIATIVES

The Centre Saturday approved two key science initiatives to strengthen the research base and accelerate search for science and technology solutions to some of the country's pressing needs in sectors like clean energy.

— The Union Cabinet decided to merge several existing science promotion programmes being run by the Department of Science and Technology (DST) under a new initiative called Vigyan Dhara that, it hopes, would result in better fund utilisation, and improve efficiency. It also approved a biotechnology initiative that will push for research and development, industrialisation and manufacturing in the biotechnology sector.

— Vigyan Dhara merges several existing DST schemes including the INSPIRE programme that works to attract young talent to science research. It has three broad components — human and institutional capacity building, research and development, innovation and technology development, and also deployment.

— On the biotechnology side, the new initiative aims to support innovation-driven research and development across six thematic areas.

1. The first will focus on bio-chemicals, bio-enzymes, and bio-polymers, which will mainly have industrial, consumer, and scientific applications.
2. The second pillar will focus on smart proteins and functional foods.
3. The third will focus on bio-therapeutics. Targeted therapy is emerging as the cutting-edge treatment for several genetic conditions and cancers.
4. The fourth will focus on agriculture, supporting development of bio-fertilizers and bio-pesticides.
5. The fifth will focus on developing bio-fuels and bio-chemicals, especially those that are developed from captured carbon emissions.
6. The last area was marine and space application to focus on developing products from marine ecosystems.

A HEALTH GAP

“On August 16, *The Indian Express* reported that the National Medical Commission has constituted a Task Force for the Mental Health and Wellbeing of Medical Students in response to the alarming incidents of 122 suicides by medical students in the last five years.”



— “The Commission’s online survey showed that a whopping 27.8 per cent of undergraduate students had mental-health conditions and 31.3 per cent of postgraduate students had suicidal thoughts. Clearly, mental health cannot be neglected anymore — it needs a calibrated policy.”

— “The human resources required to deal with the condition and treatment facilities are woefully inadequate. This means that the treatment gap in the country is an extremely disquieting 80 per cent.”

— “It has been apparent for some time now that mental health is low priority for policymakers....Poor policy attention is often ascribed to the “lack of political will”. However, the more important reason is the substantial knowledge gap – “how-to” intervene and “when-to” intervene are often difficult challenges for policymakers.”

— “The rights-based National Mental Health Policy of 2014 and the Mental Health Act of 2017 did indicate a shift in policy towards ensuring that the mentally ill receive as much priority as those suffering from physical ailments and are treated with dignity. While the policy and the Act delineate a clear vision, there is a lack of clarity on implementation, the financial and physical resources required, and by when.”

— “A common critique of India’s policymaking system is the substantial hiatus between what needs to be done and what is actually feasible and doable. Formulating strategic interventions requires a nuanced understanding of the challenges and constraints within which a system works. Such initiatives require consultation and dialogue among all stakeholders.”

— “India’s success in stemming HIV-AIDS can offer lessons in the country’s endeavours to tackle mental health-related challenges. The HIV-AIDS story has lessons in four key realms.

1. Crafting strategic interventions based on epidemiological evidence drawn from a concurrently operating surveillance system.
2. The importance of modelling different options and the wide array of interventions required in different geographies among different target groups.
3. Advocacy related to systemic issues and removal of stigma – here, parliamentarians, media, judiciary, police and other government departments were involved.
4. Engagement with leaders of the community and civil society – this endeavour was allocated 25 per cent of the budget.

— The programme was centrally funded. Most importantly, however, the interventions were designed with active participation and dialogue with states and affected communities.

Such an approach is urgently needed to craft an implementable strategy for mental-health patients.”

NIRF: IS QUANTITY TRUMPING QUALITY?

The 2024 rankings of the National Institutional Ranking Framework (NIRF) show some interesting trends in the standing of Indian universities compared to 2023. This article explores the factors contributing to these shifts in the rankings.



Institutions that seen a significant drop in their ranking are shown on the left; those that have shown a striking improvement are depicted on the right. In general, many more private universities have seen improvements in rankings, while many prominent public institutions, such as the IISERs and NITs, have experienced significant setbacks.

Of the 29 private universities that have seen changes in their rankings, 22 (76%) have seen an improvement, while only seven (24%) have experienced a decline. In contrast, among the 70 public universities with changes in ranking, 43 (61%) have seen a decline, and only 27 (39%) have shown improvement. At least on paper, private universities seem to be outperforming their public counterparts.

This raises questions about the underlying factors driving these changes. Are private institutions genuinely improving, or have they some found a way of gaming the research metrics? While we delve deeper into this question, one clear trend is the considerable drop in rankings for IISERs. On the other hand, the universities that have seen improvements in rankings include a mix of private and public institutions. We examine parameter-wise data to identify which factors contributed most to these changes.

NIRF 2024 rankings unveils a clear divide between private and public universities. Private universities that have improved their rankings have excelled in research metrics, particularly in the number of publications and citations. However, this success possibly comes at the expense of reputation, with several institutions accused of gaming citations — a concern highlighted by reports published in international journals such as Nature and Science. Public institutions such as IISERs, NIT Trichy, and IIT Ropar have seen their rankings decline, primarily due to poor performance in these same research metrics. Despite their status as Institutes of National Importance, these universities have struggled to compete, possibly because they prioritise research quality over quantity. This focus on quality, while commendable, may be costing them in the rankings. The decline in citation counts and modest gains in publications have impacted their positions, highlighting a broader issue in how research output is evaluated.

There is phenomenal growth in the number of publications by private universities, which is quite perplexing compared to the modest increase seen at premier institutions such as IIT Bombay or IISc.

Overall, the NIRF 2024 rankings point to a troubling trend: some universities are possibly gaming the NIRF rankings by manipulating the research metrics, which potentially have long-term harmful effects on India's scientific research landscape. As research misconduct becomes increasingly rampant, the emphasis on ranking parameters may be driving institutions to prioritise quantity and manipulation of metrics over quality. In any case, there is little doubt that some universities have cracked the code to better rankings, which is to publish en masse, whether by hook or by crook.

CCPA IMPOSES FINE ON IAS COACHING CENTRE FOR MISLEADING AD

The Central Consumer Protection Authority (CCPA) has imposed a penalty of ₹3 lakh on Sriram's IAS, a coaching institute, for publishing a misleading advertisement.

The institute, in its advertisement, had made claims of "200 plus selections in UPSC Civil Service Exam 2022" and "We are India's No.1 Prestigious UPSC/IAS Coaching Institute".



Nidhi Khare, Chief Commissioner of CCPA, said in a statement that an advertisement should contain truthful and honest representation of facts by disclosing important information in such a manner that they were clear, prominent, and extremely hard to miss for consumers.

The institute, in its response to the CCPA, submitted the details of only 171 successful candidates against its claim of 200-plus selections.

“Out of these 171 candidates, 102 were from Free Interview Guidance Programme (IGP), 55 were from Free Test Series, nine were from GS Classroom course and five candidates were from different States under the MoU signed between the State Government and the Institute to provide free coaching. This fact was not disclosed in their advertisement, thereby deceiving consumers,” the CCPA said in a release.

The CCPA observed that the total marks for the main exam and personality test are 1,750 and 275, respectively.

“Thus contribution of Personality Test is 13.5% in the total marks. Majority of candidates had already cleared Preliminary and Mains examination by himself/herself, with no contribution of Sriram’s IAS,” it said.

Such false and misleading advertisement creates a huge impact on the consumers who are UPSC aspirants, the CCPA said, adding that the advertisement had violated the consumer’s right to be informed to protect himself against unfair trade practice.

GOOD, NOT UGLY

The National Film Awards appeared to be facing a credibility crisis in recent years following some questionable choices and glaring omissions. For instance, last year, the award for ‘Best Feature Film on National Integration’, for The Kashmir Files, encapsulated the general political thrust of the awards, where, during the screenings, cinema theatres became platforms for communal sloganeering. Thus, the 70th National Film Awards, declared earlier this week, came as a sort of surprise, somewhat redeeming the prestige associated with the highest cinematic honours. Malayalam film Aattam, directed by debutant Anand Ekarshi, became an interesting choice for the Best Feature Film, Best Screenplay and Best Editing winner, especially in the era of the #MeToo movement. Without ever slipping into preachiness, the film-maker uses the subtle chamber drama to analyse male behaviour after a woman raises an allegation of sexual abuse within a theatre group. The award also comes at a time when protests and debates are roiling the country after the rape and murder of a doctor in Kolkata. Kannada film Kantara, which won Best Popular Film, and also fetched its director Rishab Shetty the Best Actor Award, taps into folk traditions to raise contemporary environmental concerns. Bhoota Kola, a tribal ritualistic performance from coastal Karnataka, is the centrepiece, with Shetty’s frenzied interpretation in the climax going a long way towards the film’s success as well as getting him the national award.

One commonality between these films is the lack of a formula, especially the kind dictated by corporate studios. Aattam, in fact, originated from a theatre group, giving its working-class members a chance at cinema; they play themselves in the film. Nithya Menen’s Best Actress award is also an unconventional choice — as the effervescent Shobhana in Thiruchitrambalam, hers is not a typical award-bait role. Yet, within the film’s scheme, it was a stunning performance which raised its overall effect by several notches. The awards reinforce the recent trend of South Indian cinema surpassing Bollywood, which, despite its humongous budgets, has been finding it hard to



match the consistent quality of content from regional industries. It is also heartening that the juries and the larger public have started discovering more meaningful content from the southern industries. The National Awards in the 70th edition seem to have fulfilled, to an extent, the purpose for which they were instituted: to celebrate good cinema.

IMD RAIN FORECASTS FOR MUMBAI WRONG BY 42% IN JULY. WHAT EXPLAINS THESE EXTREME MISSES?

WHEN Mumbai woke up on July 8, it was taken by surprise – large parts of the city were inundated in the 200 mm overnight rains. But nothing about the India Meteorological Department's (IMD) prediction, issued the previous day, had prepared the city for the downpour. The agency had issued a yellow alert, which meant the city was expected to receive up to 115 mm of rainfall in 24 hours. But the metropolis ended up getting 267 mm rain in the period.

This wasn't a rare miss by the IMD. Data reviewed by The Indian Express shows that the agency, despite being equipped with some of the most advanced instruments, issued inaccurate district forecasts for Mumbai on at least 13 days in July, of which, on eight days, the forecast warnings were off by more than 25 per cent.

On July 24-25, the rains caught Mumbai, and the IMD, unawares once again. This time, on July 24, the IMD had issued a yellow alert (heavy rainfall, 64.5-115.5 mm) for the following day. But that day, July 25, going by the heavy rainfall in some parts, the IMD upgraded the alert for the day from yellow to red (extremely heavy, above 200 mm). But by then, the rains had receded.

The IMD issues its daily forecast at 1 pm, for a 24-hour period starting 8.30 am that day to 8.30 am the following day. There are five-, two- and three-day advance forecasts as well, but the 24-hour forecasts are considered the most accurate.

In a city where local trains — and therefore, lives — often come to halt during the monsoons, there have been demands that the forecasts be issued earlier in the day. In July, the IMD's forecasts for the city were off nearly 42 per cent. Besides this, data showed that on at least four days in July, the IMD had changed its forecast and warnings twice within a 24-hour window.

Forecasting mechanism

Mumbai is home to two doppler weather radars, one of the most sophisticated instruments in modern meteorology. One of them, a S-band radar, sits atop IMD's Colaba observatory and the other one, a C-band radar, is in Veravali. "Alongside tracking cyclones, radars are also very useful for tracking other weather developments like thunderstorm activities. For thunderstorms, the radars undertake scanning every 10 minutes. Through the regular scans, the radars help in providing localised forecasts depending on the cloud developments and other factors," IMD Mumbai Director Sunil Kamble told The Indian Express. Together, the two radars are more than sufficient for Mumbai (603.4 km area), agreed weather scientists.

Unlike other districts, the metropolitan region of Mumbai is also home to the BMC's over 140 automatic weather stations, besides the IMD's own observatories at Santacruz and Colaba. Yet, as the data reflects, the weather bureau often fails to issue accurate and timely forecasts, leaving residents in a lurch.

IMD acknowledges that its forecasts, particularly the city-specific forecasts, have not been perfect, but says its accuracy levels are improving. "IMD's forecasting systems have improved by 40-50



per cent in the last decade compared to previous years. But it needs to be understood that weather forecasting is a nonlinear science, which means that unlike other sciences, weather has greater unpredictability,” said Mrutyunjay Mohapatra, Director General of Meteorology.

In the last one decade, IMD has seen a significant increase in its observational network. It operates more than 400 weather stations, besides having over 1,000 automatic weather stations and 1,300 automatic rain gauges. That has enabled IMD to provide much better forecasts. But the weather systems have also become much more unpredictable in the last few years. This is particularly true of extreme weather events, exposing the inadequacies of the IMD.

According to Met scientists, IMD models often fail to capture extremely localised weather systems which bring extremely heavy rain within a short span of time, making them difficult to forecast. “That is what happened on the intermittent night of July 7 and 8. While there are about three to four types of weather systems which typically bring rain to Mumbai during monsoons, some small-scale systems, being very localised, are not easy to capture,” explained a senior IMD scientist.

“On July 7, there were no systems which ideally bring rain in the city, and the rain was a result of an off-shore vortex, which is a very localised system, and thus our models couldn’t capture it,” they added.

A senior scientist from IMD said that Mumbai’s proximity to seas and ghats makes the weather prone to dynamic changes, making forecasting even more challenging. Raghuram Murtugudde, professor of climate studies at IIT Bombay, said: “What makes forecasting even more challenging in the tropics is that ocean and land temperatures as well as urban areas can amplify convection. Even irrigation and other activity can add to the rainfall processes because of warm temperatures, with warm air holding a lot of moisture. This moisture acts like a steroid for heavy rainfall.”

Meanwhile, on the question of the yellow alerts in Mumbai, despite only light rain, another IMD scientist said, “We issue the forecasts on the basis of the rainfall amount and impact, which means the rain in the past days and the probability. During monsoons, if we see a conducive weather system and see a likelihood of any rainfall, we issue the warnings as an SOP.”

‘Work in progress’

Mohapatra, the IMD head, said improving forecast accuracy was a continuing exercise. “Over the past years, we have strengthened our mechanisms. Since the weather forecast depends on the observational network, Mumbai and neighbouring areas have now been deployed with over 160 automatic weather systems which provide data every 15 minutes. We have also started issuing impact-based forecasts for five days, which tries to predict the likely impacts of a heavy rainfall event, for example,” he added.

HOW THE BANNI GRASSLANDS OF KACHCHH, GUJARAT CAN BE RESTORED

Grasslands are one of the largest ecosystems in the world. They are distributed mainly in semiarid and arid areas, and include savannahs, grassy shrublands, and open grasslands. They harbour a large number of unique and iconic species and offer a variety of material and intangible advantages to people, including several ecosystem services such as carbon storage, climate mitigation, and pollination. Like other types of biodiversity, they face the problem of degradation due to deforestation, overgrazing, agriculture, urbanisation, and other natural and human-made



reasons. As much as 49% of grassland areas worldwide are estimated to be experiencing degradation.

In India, grasslands account for approximately eight lakh sq. km, or about 24% of the country's total land area (32.8 lakh sq. km). They are increasingly threatened by agricultural conversion, tree-based plantation projects, invasive species, and mega-development projects. The issue is exacerbated by the strong bias of government and non-profit organisations for the conservation and protection of forests.

The Kachchh district in Gujarat, in the western part of the country, houses one of the largest tracts of grasslands in the country. Popularly known as 'Banni', it once covered an area of approximately 3,800 sq. km but it has now decreased to about 2,600 sq. km.

Many bird species — such as the great Indian bustard and the Bengal florican — prefer to breed in grasslands, but grassland areas are shrinking constantly due to anthropogenic activities, threatening biodiversity as well as the ecosystem services they provide.

POWER PLAY

While Wayanad in Kerala limps back to normal life after the devastating landslide last month, a landslide on Tuesday in Sikkim caused damage to six houses and a building of the National Hydroelectric Power Corporation (NHPC) at its Teesta-5 hydropower station in Gangtok. There is no comparison of the impact of the event in both places, as there was no loss of lives or injuries reported in Sikkim. However, the cause for concern is that this is the second natural-disaster-led assault on a hydropower project along the Teesta. A deluge from the South Lhonak glacier in North Sikkim last October washed away the Chungthang dam that was critical to the Teesta-3 power station (which is not operated by the NHPC). The Teesta-3 (1,200 MW) power project was the largest hydroelectric power project in the State until it was effectively grounded after the outburst. Only a tenth of the power originally being supplied by the project is now available. The Teesta-5 project, at 510 MW, has also been made non-functional since the glacial lake outburst.

The disaster shines a new light on an old, but never quiescent, conundrum posed by hydropower projects. From initial proposals nearly three decades ago to have 47 power projects along the run of the Teesta in Sikkim and West Bengal, only five projects exist and about 16 are in various stages of consideration. A tributary of the Brahmaputra, the Teesta river originates from the Tso Lhamo Lake at an elevation of about 5,280 metres in north Sikkim. The river travels for about 150 km in Sikkim and 123 km in West Bengal, before entering Bangladesh from Mekhligunj in Cooch Behar district; it flows another 140 km in Bangladesh and joins the Bay of Bengal. In theory, the river's course through undulating terrain is what tempts governments to extract as much benefit as possible for power projects. Through the decades, several companies have bid for projects auctioned out by State governments but the process has rarely been without complications. It has been a complicated exercise in balancing the environmental risks, costs of properly insuring for those risks, public perception and aiming for profit. In the case of the Teesta-3 project, reports have emerged that the developers, in order to save on costs, built a concrete-faced rock fill dam as opposed to a concrete gravity dam — one reason why it was completely washed away. Environmental impact assessments of hydropower projects in the region must give a clear estimate of the actual costs involved. This will not only bolster public faith in these projects but also be environmentally sustainable.

NDMA TO MONITOR 189 HIGH-RISK GLACIAL LAKES TO PREVENT DISASTERS

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

50

Telegram: http://t.me/DreamIAS_Jamshedpur



Following disasters inflicted by overflowing glacial lakes in the Himalayas, the National Disaster Management Authority (NDMA) has finalised a list of 189 “high-risk” glacial lakes for mitigation measures to reduce the risk emanating from them.

Some of the proposed steps include constituting teams to investigate these lakes and attempt “lake-lowering measures”, which are done to buffer against any overflow, and mitigating potential damage in downstream States.

Last October, the South Lhonak Lake in Sikkim, a glacier-formed lake, overflowed and inundated several parts of the Northeastern State killing at least 40 people and destroying the Chungthang dam.

The National Glacial Lake Outburst Floods Risk Mitigation Programme was approved by the Centre on July 25.

There are nearly 7,500 glacial lakes in the Himalayan mountain ranges located in India and some of them are being monitored through remote sensing. However, fully assessing their impact is only possible with site visits, which is difficult owing to inhospitable terrain. There are only a few months in a year — July to September — when expeditions can be mounted to access them.

This week, for instance, the Arunachal Pradesh State Disaster Management Authority has sent two teams to six high-risk glacial lakes in the Tawang and Dibang Valley districts to study them. The Central Water Commission in an October 2023 report stated that 902 glacial lakes and waterbodies are being monitored via satellite.

The programme aims at detailed technical hazard assessments, installing automated weather and water level monitoring stations, and early warning systems at the lakes and in downstream areas.

So far, 15 expeditions have been conducted, including six in Sikkim, six in Ladakh, one in Himachal Pradesh and two in Jammu and Kashmir.

AFTER YEAR IN ENCLOSURES, KUNO CHEETAHS SET TO BE FREED INTO THE WILD

After spending a year inside enclosures, the African cheetahs brought to India as part of the world’s first intercontinental translocation of the wild cats will soon be released into the wild again at Kuno National Park.

— The cheetahs were brought to the enclosures on August 13, 2023 after three adult cheetahs “died due to septicaemia after wounds beneath their dense winter coat on the back and neck regions became infested with maggots” in July. It was a major setback to the translocation project that began in September 2022.

— Currently, there are 25 cheetahs at Kuno — 13 adults and 12 cubs, born at the national park. Under the translocation project, 20 cheetahs were brought to India in two batches — eight from Namibia in September 2022 and 12 from South Africa last February — of which seven have died until this January. The adult cheetahs gave birth to 17 cubs, of which 12 survived.

For Your Information:

— Cheetahs are the fastest land animals and can, in short sprints on open ground, reach speeds in excess of 100 kph. Asiatic Cheetahs were once abundant in India but their numbers dwindled over



the centuries due to loss of habitat and widespread hunting. The last cheetah in the country died in 1952.

THE VALLEY'S BREW

August in Srinagar is almost always pleasant during the day and slightly chilly at night. Residents choose to spend time outdoors when they get a chance. One beverage that is a signature of Kashmir is the nunchai, a salted pink-coloured tea, which is a culturally significant part of Kashmiri life and its unique cuisine.

Its distinctive taste, creamy texture and elaborate preparation in the copper utensil known as samovar sets it apart from other teas across the world.

Most people who consume nunchai like it pink, but there are also those who prefer to consume it without the addition of baking soda that gives it the pink colour. The salt in the tea provides electrolytes to its consumer and helps prevent dehydration at high altitudes.

Nunchai is traditionally made from green tea leaves, milk, salt and baking soda. The leaves are boiled for about an hour with baking soda until it turns burgundy, then ice or cold water is added to 'shock' it to stay in that colour. When milk is added, it combines with the burgundy to yield its signature pink. It is then aerated by ladling out some of the tea and pouring it back into the pot to draw in tiny air bubbles, a process that yields a froth and that may take hours to do by hand. Green cardamom or star anise can be added for aroma and taste.

Nunchai has remained an integral part of Kashmir's hospitality and culture, representing a gesture of warmth and respect. This tea is traditionally served with locally made breads — sheermal, a mildly sweet bread, and sometimes with makke ki roti (flattened rotis made of corn flour), making it a memorable part of the Kashmir experience even for the visitors. Its soothing taste helps to wash down the breads.

With tourist descending on Kashmir, nunchai is ubiquitous: it is served in resorts across Kashmir Valley where the guests enjoy the beverage in the picturesque locales. The local people enjoy the tea during their picnics.

Nunchai has managed to reach the menus of elite restaurants and hotels outside the Valley, and overseas too, where the beverage is sold as a unique representative of Kashmir's identity.

KEEPING AN EMPIRE ALIVE

Earlier this year, when the *saalu mantapa*, a pavilion at the Virupaksha temple in Hampi, collapsed in torrential rainfall, questions were raised about the alleged neglect of the World Heritage Site. Monuments are everywhere in Hampi. Some stand tall and elegant against the backdrop of giant granite boulders, others lie low and truncated. There are sculptures of elephants with missing trunks, court musicians with an amputated limb or nose – reminding the visitor of the devastation caused by a 16th century war to this once thriving metropolis that was at the centre of the Vijayanagara Empire. Then there are the other monuments – those that peek out from behind thick foliage and debris, waiting to be rescued through the exploration and conservation efforts that have been on since the 18th century.

— A variegated list of around 1,600 monuments, spread across an area of 250 square kilometres, makes Hampi one of the largest such sites in India to receive a UNESCO World Heritage tag.

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



— Known to be the last great Hindu medieval kingdom, the Vijayanagara empire was established in 1336 by brothers Harihara-I and Bukka Raya-I of the Sangama dynasty. At its peak, the empire is known to have extended across almost all of southern India.

— The spectacular city of Vijayanagara — or what we today know as Hampi — was the empire’s capital. Its magnificence was noted by several foreign travellers visiting the region, among them Portuguese Domingo Paes, who visited Vijayanagara in 1520 and wrote about the city that was “as large and beautiful as Rome”.

— The glorious days of Vijayanagara, though, came to an end in 1565 when the combined armies of the Deccan Sultanates are said to have ransacked the capital after defeating Rama Raya, the de facto ruler of the empire then.

— Although historians say that the nature and scale of destruction carried out at Hampi after the Battle of Talikota is debatable, everyone agrees that the site was practically untouched and largely forgotten till the end of the 18th century when the British first began exploring it.

— The British antiquarian Colin Mackenzie, who went on to become the first surveyor-general of India, made the first map of Hampi in 1799. He also produced a number of watercolour paintings of the monuments in the city.

— It is only in the 1970s, though, that the first concentrated effort to excavate and conserve Hampi began under the directions of Saiyid Nurul Hasan, then Union minister of state of education, social welfare and culture. What followed was the Hampi National Project in 1976, which threw up some of the most extraordinary remnants of the 14th century metropolis that had hitherto been hidden under thick piles of debris and vegetation.

For Your Information:

— An immediate impact of the 1986 World Heritage tag for Hampi was that both the ASI and the State Department of Archaeology intensified their conservation efforts.

— A part of the conservation was directed at repairing the destruction caused by the war centuries ago. The chariot at the centre of the Vitthala temple, for instance, shows remnants of a pair of horse sculptures that was in all probability destroyed. Ali informs that the ASI replaced the horses with two elephants plucked out from some other part of the monument.

— With Hampi’s UNESCO tag bringing in tourists, the inhabitants of the 30 villages that constitute the heritage site saw opportunities for themselves. The economy and infrastructure of the region improved as visitors streamed into the site, bedazzled by the monuments. Last year, Hampi attracted more than 83,000 Indian tourists and over 20,000 foreigners. “At present, there are 175 tourist guides approved by the Department of Tourism in Hampi and about 300 autorickshaws that run in the World Heritage area,” says Das.

— But in 1999, Hampi had a scare when UNESCO put the site on the ‘World Heritage in Danger List’. The whip had followed the Karnataka government’s attempt to construct a bridge across the Tungabhadra, a violation of UNESCO’s policies for a protected archaeological area. Consequently, the government halted work on the bridge and set up an overarching body, the Hampi World Heritage Area Management Authority (HWHAMA), tasked with providing an integrated solution to the protection of Hampi.



SHORT NEWS

INDIA-MALAYSIA

- Malaysian Prime Minister Anwar Ibrahim is on a three-day visit to India. This is Ibrahim's first visit to India as the Prime Minister.
- Malaysia appreciated India's initiative in hosting the Voice of the Global South Summit (VOGSS), providing a platform by which countries of the Global South could deliberate and address their concerns, interests, and priorities as well as exchange ideas and solutions.

INDIA-JAPAN

- The third Japan-India 2+2 Foreign and Defence Ministerial Meeting was held in New Delhi. The next 2+2 Ministerial Meeting will be held in Japan.
- In defence cooperation, both countries welcomed the first air visit by Japanese fighters and their participation at Tarang Shakti.
- Tarang Shakti-2024 is the Indian Air Force's first multinational air exercise. The phase-2 of the exercise is scheduled to be held in Jodhpur.

SAUDI EX-OFFICIAL SAYS MBS FORGED KING'S SIGNATURE ON YEMEN'S WAR DECREE: REPORT

A former Saudi intelligence official, Saad al-Jabri, has accused Crown Prince Mohammed bin Salman of forging his father's signature on the royal decree that initiated Saudi Arabia's ongoing war in Yemen, reported the Associated Press.

TANAGER-1

- A coalition of companies and organisations developed tanager-1 which was launched by SpaceX Falcon 9 rocket on August 16.
- The satellite will use imaging spectrometer technology developed at Jet Propulsion Laboratory to track methane and carbon dioxide emissions.
- Methane is an invisible but strong greenhouse gas, and the second largest contributor to global warming after carbon dioxide that's why researchers want to track it.

MARIA BRANYAS

- Maria Branyas, the world's oldest person, passed away at the age of 117 in a Spanish nursing home.
- Branyas became the world's oldest person in January 2023 and celebrated her 117th birthday on March 4.
- According to the Guinness World Record, Tomiko Itooka became the world's oldest living person at age 116.



RAKESH PAL

- The Director General of the Indian Coast Guard Rakesh Pal dies of cardiac arrest on August 18.
- He had taken charge as the 25th Indian Coast Guard Chief on July 19 last year.
- Dinesh Kumar Tripathi is the Chief of the Naval Staff.

CHECHNYA

- Russian President Vladimir Putin recently visited Chechnya, a mainly Muslim republic within the Russian Federation. This marked his first visit in nearly 13 years.
- It is situated on the northern flank of the Greater Caucasus range. Grozny is the capital of Chechnya.

POKROVSK

- Civilians in Ukraine's eastern strategic logistics hub of Pokrovsk have no more than two weeks to evacuate as Russian troops press towards it.
- The Pokrovsk front remains the area with the most intense fighting in eastern Ukraine.
- Myrnohrad (Ukraine), less than five kilometres further northeast of Pokrovsk, has also been under Russian artillery fire for three days now.

DIPU DARA

- A massive landslide at Dipu Dara near Singtam in the Gangtok district of Eastern Sikkim damaged a dam on the Teesta river and affected the hydroelectric project.
- Teesta is a 414 km-long river flowing through the Indian states of Sikkim and West Bengal, before flowing into the river Meghna in Bangladesh. It is the fourth-largest trans-boundary river shared between India and Bangladesh after the Ganges, Brahmaputra and Meghna river systems.

MAGIC FESTIVAL – MAYONG

- A 'magic festival' was organised by the district administration in Assam's Mayong on 18th August.
- Mayong, a region in Central Assam's Morigaon district, has long been associated with mysticism and 'magic' practices, including 'magical healing' and folk medicine.

RAIL FORCE ONE:

Prime Minister Narendra Modi arrived in Ukraine's capital Kyiv from neighbouring Poland by train on August 23. This train is nicknamed as "Rail Force One." The Ukrainian airspace has been closed ever since Russia launched its invasion in February 2022. Political leaders have since used trains to visit the country.



— LONG-PIMPLE RUBBER:

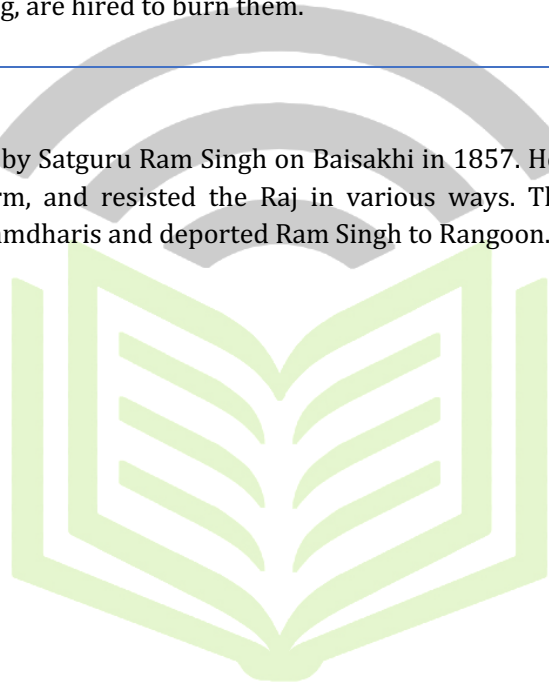
It is a defensive ploy used in Table tennis. It puts the opposite effect on the spin that the opponent plays. If the opponent plays a backspin shot, when one returns with this rubber, the ball will have topspin and vice-versa.

— FAHRENHEIT 451:

It is a book written by American writer Ray Bradbury which was published in 1953 at the height of the “McCarthy era” of political repression and persecution of left-wing individuals and ideas in the United States. It is about a dystopian society where books are banned, and “firemen” like the protagonist Guy Montag, are hired to burn them.

— NAMDHARIS:

This sect was founded by Satguru Ram Singh on Baisakhi in 1857. He challenged the status quo, advocated social reform, and resisted the Raj in various ways. The British inflicted terrible punishments on the Namdharis and deported Ram Singh to Rangoon.



DreamIAS



BUSINESS & ECONOMICS

CHINA OPENS INVESTIGATION INTO EU DAIRY EXPORTS AS TRADE TENSIONS FLARE

The Chinese Commerce Ministry said on Wednesday that it would launch an investigation into subsidies given by the European Union and EU member countries for dairy products that could lead to tariffs on their export to China.

The announcement came one day after the EU released a draft decision to finalise tariffs on electric vehicles made in China, in a follow-up to provisional tariffs announced last month. The tariffs have been denounced by the Chinese government and automakers and threaten to set back the industry's efforts to go global.

The dairy investigation will cover a range of products including fresh and processed cheese, blue cheese and milk and cream with a fat content of more than 10%. It will look at subsidies under the EU's Common Agricultural Policy as well as those given by eight European Union countries including Italy, Finland and Croatia.

China previously opened investigations into European brandy and pork exports at various stages of the EU investigation into Chinese subsidies for electric vehicles. The tit-for-tat investigations have raised fears that a full-blown trade war could be gradually emerging.

DUAL-USE GOODS: US ALERTS INDIAN COMPANIES ON EXPORT OF DEFENCE TECH TO RUSSIA

US government officials are sensitising Indian companies and exporters to deter them from supplying Russia with items and technology that could end up being used in Russian missiles and other defence equipment, which would attract Western sanctions, a government official said on condition of anonymity.

This follows reports of sanctions on Bengaluru-based Si2 Microsystems in November last year for its alleged role in supplying dual-use technology to Russia.

Electronic components, machine tools, drones, and software for drones are some of the dual-use items that can be used for both civil and military applications and are included in the sanctions list imposed by the West in the backdrop of the Ukraine war.

Moreover, a US Treasury official had also warned India's banks that financial institutions that do business with Russia's military industrial base risk losing access to the US financial system, Reuters had reported in July this year. "We know that the Russian military relies on importing sensitive goods, like machine tools and microelectronics, and it looks to foreign financial institutions to facilitate these transactions," Deputy Treasury Secretary Wally Adeyemo said in the letter to the Indian Banks' Association, as per the Reuters report.

Also, US Treasury Secretary Janet Yellen in June this year had expressed concerns over Chinese exports of dual-use goods. By placing over 300 companies on an export blacklist, the US said that China is the top supplier of machine tools, microelectronics, and nitrocellulose, which are critical for manufacturing munitions and rocket propellants, as well as other dual-use items that Russia is using to bolster its defence capabilities.



The Ministry of Commerce and Industry in January 2024 had said that the government is working to liberalise export norms for certain products with dual-use applications. However, the official clarified that the items identified by the US are not Special Chemicals, Organisms, Materials, Equipment and Technologies (SCOMET) items, which require licensing for trade. Dual-use goods are categorised under the SCOMET list in India. India's exports of machines, auto parts, steel and aluminium products, internal combustion (IC) engines, pumps, and other items to Russia are on the rise.

Official data from the ministry showed that India's total exports to Russia in 2023 surged by 40 per cent to exceed \$4 billion, largely driven by engineering goods, which nearly doubled to \$1.32 billion in 2023 from \$680 million in 2022. Significant gains were also seen in the drugs and pharmaceutical category, as well as in organic and inorganic chemicals.

This increase in exports comes as Russia has ramped up its defence investments. In July, the World Bank reported that economic activity in Russia was influenced by a significant increase in military-related activity in 2023. Russia's military spending grew by 24 per cent in 2023 to an estimated \$109 billion, as per Stockholm International Peace Research Institute (SIPRI) states.

RISING DEMAND, STAGNANT OUTPUT PUSHES OIL IMPORT DEPENDENCY BEYOND 88% IN APRIL-JULY

India's reliance on imported crude oil to meet its domestic consumption needs climbed to over 88 per cent in the first four months of the current financial year due to rising demand for fuel and other petroleum products amid flagging domestic oil production. The country's oil import dependency in April-July was 88.3 per cent, up from 87.8 in the year-ago period as well as for the full financial year 2023-24 (FY24), per latest data from the oil ministry's Petroleum Planning & Analysis Cell (PPAC).

India's energy demand has been rising briskly, leading to higher oil imports and increasing dependence on imported crude. Reliance on imported oil has been growing continuously over the past few years, except in FY21, when demand was suppressed due to the COVID-19 pandemic. The country's oil import dependency stood at 87.8 per cent in FY24, 87.4 per cent in FY23, 85.5 per cent in FY22, 84.4 per cent in FY21, 85 per cent in FY20, and 83.8 per cent in FY19.

Heavy dependence on imported crude oil makes the Indian economy vulnerable to global oil price volatility, apart from having a bearing on the country's trade deficit, foreign exchange reserves, rupee's exchange rate, and inflation. The government wants to reduce India's reliance on imported crude oil but sluggish domestic oil output in the face of incessantly growing demand for petroleum products has been the biggest roadblock.

India's crude oil imports rose to 81.6 million tonnes in April-July from 79.7 million in the year-ago period, per PPAC data. In value terms, the growth was even more due to relatively higher prices of oil in the international market. The country's gross oil import bill in the first four months of FY25 rose nearly 17 per cent year-on-year to \$49 billion from \$41.9 billion.

Rising demand, stagnant output pushes oil import dependency beyond 88% in April-July

In early 2015, the government had set a target to reduce reliance on oil imports to 67 per cent by 2022 from 77 per cent in 2013-14, but the dependency has only grown since. Cutting costly oil imports continues to be a key focus area for the government, which has taken a number of policy measures to incentivise investments in India's oil and gas exploration and production sector.



Reducing oil imports is also one of the fundamental objectives of the government's push for electric mobility, biofuels, and other alternative fuels for transportation as well as industries. Over the past few years, the government has also intensified efforts to raise domestic crude oil output by making exploration and production contracts more lucrative and opening vast acreages for oil and gas exploration. While there has been a pick-up in electric mobility adoption and blending of biofuels with conventional fuels, it is not enough to offset petroleum demand growth.

The computation of the level of import dependency is based on the domestic consumption of petroleum products and excludes petroleum product exports as those volumes do not represent India's demand. With a refining capacity of almost 257 million tonnes per annum, India—the world's third-largest consumer of crude oil and also one of its top importers—is a net exporter of fuels and other petroleum products. Export of crude oil from India, however, is not permitted.

India's domestic consumption of petroleum products in April-July rose 4.8 per cent year-on-year to 80.9 million tonnes, underscoring robust demand, particularly for transportation fuels petrol and diesel. Domestic crude oil output for the first four months of FY25 declined marginally to 9.7 million tonnes from 9.8 million tonnes in the corresponding period of last year.

Total production of petroleum products from domestic crude oil was 9.5 million tonnes in April-July, which means that the extent of India's self-sufficiency in crude oil was just 11.7 per cent, down from 12.2 per cent in the corresponding period a year ago. In April-July of last year, consumption of petroleum products sourced from indigenous crude oil was 9.4 million tonnes, while total domestic consumption was 77.2 million tonnes.

For Your Information:

— India's crude oil imports from Iraq touched a 21-month high in January as refiners turned to West Asia to replace volumes from the United States (US). The oil supply from Washington remains disrupted due to the spurt in freight rates in view of the Red Sea crisis, an analysis of ship tracking data shows.

— The US has been among India's top-five crude suppliers for some time now, with domestic refiners buying an average of 205,000 barrels per day (bpd) of crude in 2023. However, in the first month of 2024, Indian refiners did not receive any US crude, according to preliminary data from commodity market analytics firm Kpler.

— Russia remains India's top oil exporter.

WERE 8 CRORE NEW JOBS CREATED IN THREE YEARS?

Employment, or the lack of it, has been a major issue of debate among economists and policy makers in India in recent years. Recently, Prime Minister Narendra Modi claimed that India created "eight crore new jobs in the last three to four years". The Prime Minister was using data from the India-KLEMS database hosted by the Reserve Bank of India (RBI). As per this database, the total number of workers in India rose from 56.6 crore in 2020-21 to 64.3 crore in 2023-24, that is, a net rise by 7.8 crore workers. Tailing this claim, the research team of the State Bank of India (SBI) published a validating report that claimed a match between the total number of workers in the India-KLEMS database and in the NSSO's Annual Survey of Unincorporated Sector Enterprises (ASUSE), 2022-2023.



What lent an element of surprise to these claims was the rise in the number of workers over the two COVID-19 years and after. According to the International Labour Organization (ILO), the employment-to-population ratio between 2019 and 2023 was stagnant, if not falling, in East Asia, South-East Asia and the Pacific. Given such trends elsewhere, analysts have had serious methodological and empirical suspicions in relying on the India-KLEMS database to posit an outlier status for India in employment creation.

The India-KLEMS project began as an academic exercise financed by the RBI in 2009. From 2022, the RBI hosts the database. KLEMS stands for Capital (K), Labour (L), Energy (E), Material (M) and Services (S). It is a framework used to measure industry-level “total factor productivity” (TFP), which is considered by mainstream economists as a measure of the efficiency of all the inputs to produce a unit of output.

In other words, the objective of the KLEMS framework is not to produce data on employment. The employment figures are merely inputs into the database’s modelling framework. Further, the the RBI does not directly collect data on any input, including employment, that enter the India-KLEMS database. It sources sectoral data on employment, input usage and output from official sources, including the Central Statistics Office, Census of India, Annual Survey of Industries and the Periodic Labour Force Surveys (PLFS). It is amusing then that data sourced by the RBI from other official sources, and used as inputs to estimate TFP, are portrayed as “RBI jobs data” to make political statements on employment generation in the economy.

The method in India-KLEMS

India-KLEMS borrows employment data from the PLFS, but not as absolute figures of the number of workers. The PLFS provides only the share of workers in the population, or the Worker Population Ratio (WPR). To obtain the number of workers, the WPR is multiplied with the total population. This is where the problem begins, as there is no official population figure for India after 2011.

To obtain a population estimate for the intercensal years, demographers typically interpolate population numbers from the last available Census. But here, India-KLEMS adopted a strange solution. The estimates of population in 2017-18, 2018-19 and 2019-20 were borrowed from the Economic Survey (ES), 2021-22. The ES projected these populations by assuming that population growth rates between 2001 and 2011 were the same for the years after 2011. The WPRs were multiplied by these population projections to obtain the number of workers for each corresponding year.

But for the years between 2020-21 and 2023-24, India-KLEMS used a totally different source and method. It used population projections from 2011-2036 published by the Ministry of Health & Family Welfare (MoHFW) in 2020. From the Census figures of 2011, this publication arrived at annual population projections using demographic models that factored in the Total Fertility Rates (TFR) and the mortality rates reported in the Sample Registration System (SRS) of 2017. The simple question is why the India-KLEMS database did not use the MoHFW’s population projections for all the years after 2017-18. It appears that while the RBI adds new estimates to the series after 2022, it does not correct or update older estimates published before it began hosting the database.

There are two major issues here. Firstly, population projections from the ES and the MoHFW disregard the sharp fall in fertility rates in India over the last decade. The replacement TFR is canonically assumed to be 2.1 children per woman. However, results from the most recent



National Family Health Survey (NFHS) show that India's TFR had fallen to 2.0 in 2019-21. Similarly, a 2024 study published in The Lancet argued that the "reference TFR values in Bangladesh and India are projected to decrease below 1.75 by 2026 and 2027, respectively". These falls in TFR are not considered in the population projections in the ES or by MoHFW.

Secondly, the population projections in and by the ES and the MoHFW are not available separately for rural and urban areas. So, the India-KLEMS managers took the national sex-wise populations, assumed population growth rates for rural and urban populations and obtained separate rural and urban population projections. However, it is well-known that India's rural population is growing at a slower rate than the urban population. Assuming uniform growth rates for both is likely to lead to an overestimation of the rural population. For these two reasons, the population figures with which the WPRs were multiplied by in India-KLEMS, and the number of workers obtained thus, are likely to be overestimates.

Shifts in employment structure

When PLFS data are readily available for analysis, one fails to understand the need to depend on India-KLEMS for a temporal analysis of employment. PLFS data show that India's WPR fell from 38.6% in 2011-12 to 34.7% in 2017-18, and then rose to 41.1% in 2022-23. The rise in overall WPR was largely due to a rise in the rural female WPR, which rose from 17.5% in 2017-18 to 30% in 2022-23. WPRs for other population segments also rose, but not as much as for rural women.

These changes are the basis for two claims of the government: one, that crores of new jobs were generated during and after the pandemic; and two, that this phenomenon was gender friendly as women occupied the jobs vacated by men in the rural workforce.

Both the claims are flawed. The rise in rural female WPR was largely due to an increase in unpaid forms of self-employment among rural women in agriculture. Between 2018-19 and 2022-23, the share of rural women employed in agriculture rose from 71.1% to 76.2%, and the share of rural women who were self-employed rose from 67.8% to 78.1%. Among female workers in agriculture, the share of those who were employed purely on a subsidiary basis (that is, those who worked only irregularly, and on a minor scale) rose from 15.6% in 2018-19 to 27.7% in 2022-23. And within all subsidiary employment in agriculture, the share of unpaid family work was about 65% in 2022-23.

But a rise in unpaid subsidiary work can show up as higher WPRs for women. When these rising WPRs are multiplied on with an increasing projected population, we obtain a steady rise in the total number of workers. Even if the WPRs were constant, one would have obtained a rise in the number of workers because of the increase in the projected population. This is what we see in the projected workforce figures in India-KLEMS. In short, there was little expansion of meaningful and paid employment in India after 2017-18. The departure of men from agriculture hardly changed the status of rural working women.

The ASUSE comparison

This leaves us with one outstanding matter — the SBI report's claim that the number of workers in India-KLEMS and ASUSE 2022-23 broadly match. The ASUSE covers only unincorporated non-agricultural establishments in manufacturing, trade and other services. Apart from agriculture, it explicitly excludes a range of manufacturing and trading establishments from its sampling frame. The number of workers in the unincorporated non-agricultural establishments — defined and covered as above in ASUSE — was 11 crore in 2022-23. The SBI report, however, estimates the



total number of workers from ASUSE as 56.8 crore, and claims comparability with the figures in India-KLEMS.

Clearly, the SBI report assumed a certain number of workers employed in sectors not covered in ASUSE — such as agriculture, construction, registered factories, corporate sector, government and cooperatives — using other household surveys that employ different concepts and methodologies. It then added those numbers to the number of workers in ASUSE to arrive at the inflated estimate of 56.8 crore workers. But there is no scientific basis for such an indirect method, that too to make an inane and motivated validation.

To sum up, data from India-KLEMS, which was designed for very different purposes and uses questionable methods, are being used to drive a specific political narrative on employment generation. But the real culprit in this episode is the Government of India, which has refused to organise the new decadal Census till date.

The absence of accurate population figures has led analysts and institutions to use many erroneous projections based on heroic assumptions. Consequently, we end up needlessly politicising economic debates and restricting the space for reasoned studies of important trends in the Indian economy.

LACK OF INDUSTRIES IN BIHAR PUSH YOUTH TO VIE FOR GOVERNMENT JOBS

According to the Periodic Labour Force Survey (PLFS) for the year 2021-22, unemployment rate in Bihar was at 5.9%, higher than the national average of 4.1%. For the 15-29 age group, the unemployment rate was 20.1%, against the national average of 12.4%.

As per PLFS 20-21, the unemployment rate in the State was 4.6%. The Union government on July 29, cited data in Parliament stating Bihar had the lowest (25.6%) worker population ratio in 2021-22.

Former director of Patna-based A. N. Sinha Institute of Social Sciences D. M. Diwakar told The Hindu that “the major reason behind high unemployment rate in Bihar is the lack of industries. So, agriculture continues to have a crucial space in the State’s economy. Lack of employment opportunities have also pushed lakhs of migrants into leaving their native State for livelihood.”

AMID DESPAIR, A RUSH FOR GOVERNMENT JOBS IN U.P.

On July 29, the office of Uttar Pradesh Secondary Education Service Selection Board in Prayagraj had some unexpected visitors. They were sit-in protestors — holders of degrees like Diploma in Elementary Education (D. El. Ed) and Bachelor’s in Education (B. Ed), eligible to teach in government schools.

The Ministry of Statistics and Programme Implementation said U.P. had the second-lowest per capita income of all States at ₹70,792 in 2021-22 (measured in terms of Net State Domestic Product at 2011-12 constant prices). Hence, any government job is viewed by those from poor, lower-middle and middle-class families as the best option for upward social mobility with millions taking the recruitment tests.

U.P. constable recruitment examination notified in December 2023, for 60,244 posts in the lowest category of the police workforce, highlighted the seriousness of unemployment in India’s most populous State. As many as 48.17 lakh aspirants filled the form to write the test at 2,385 centres

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across 75 districts, despite the eligibility criteria to appear in the test being only a higher secondary graduate. Mr. Sharma was one of the aspirants. Of the total registered candidates, roughly 43 lakh hailed from U.P.

When asked what led to so many of the State's youth to apply for a constable's job, Mr. Sharma replied, "hope of a stable income and a better social status; I will get low-paying jobs without social security in the private sector." The 24-year-old's father is a farmer with five acres of land.

U.P. contributes just 8% to the nation's manufacturing output, despite having 18% of its population.

Paper leaks

The police constable recruitment exam held on February 17 and 18, was cancelled over paper leak allegations. The State government in the last six months has cancelled two major recruitment examinations after conducting them. The Review Officer/Assistant Review Officer (RO/ARO) examination conducted by the U.P. Public Service Commission (UPPSC) on February 11, was cancelled two weeks after 10,76,004 candidates took it to fill only 411 jobs. U.P. will hold the constable re-examination in August.

Weeks after the 2024 poll outcome, in which the ruling Bharatiya Janata Party's (BJP) tally witnessed a sharp decline, the U.P. government's focus turned toward 'youth' with the Chief Minister Yogi Adityanath holding meetings with chairpersons of State recruitment commissions and announcing plans to implement a new law that would 'stop' paper leaks. He also issued directions to speed up the appointment process for vacant posts across departments and to send immediate requests where posts were vacant.

New laws

"The government is dedicated to safeguarding youths interests, valuing their hard work and talent. It's imperative to enact laws to address such criminal activities," Mr. Adityanath said at a meeting with chairpersons of various selection commissions.

Experts points to the lack of industrialisation as the main factor behind the race for government jobs.

INTERNSHIP PORTAL IN THE WORKS, WILL MATCH SKILL SETS WITH OPPORTUNITY

A new portal is in the works to enable youth to apply for internships directly with the country's top 500 companies under a special package announced in the Budget. The portal will facilitate matching of skill sets of the applicants with the type of internship opportunities provided by the companies.

— The Ministry of Corporate Affairs (MCA) will announce the guidelines for the internship scheme over the next two weeks, following which the portal will be made active for the prospective applicants, officials involved in the exercise said.

— In the Union Budget for 2024-25 presented by the NDA government on July 23, Finance Minister Nirmala Sitharaman had announced the Prime Minister's Package for Employment and Skilling with an overall outlay of Rs 2 lakh crore. The government is keen to ensure that those at the margins, especially those less skilled and less employable, are able to make the most of this internship scheme.



— “They will gain exposure for 12 months to real-life business environments, varied professions and employment opportunities. An internship allowance of Rs 5,000 per month along with a one-time assistance of Rs 6,000 will be provided. Companies will be expected to bear the training cost and 10 per cent of the internship cost from their CSR funds,” Sitharaman had said.

For Your Information:

— The new apprentice scheme seeks to provide internships to 1 crore youth over the next five years. The government is keen to ensure that those at the margins, especially those less skilled and less employable, are able to make the most of this internship scheme.

— The scheme is part of the central government’s larger focus in the Union Budget 2024 on creating employment avenues for the country’s youth, and comes after the issue became a hot button during the Lok Sabha polls held earlier this year.

PRONOUNCED INCOME GAPS EVIDENT IN CASE OF STIGMATISED-CASTE BUSINESS OWNERS: NEW STUDY

Business owners from stigmatised groups such as Dalits experience a business income gap of around 16 per cent compared with others, including those business owners who are from communities that are disadvantaged but are not similarly stigmatised, a new study has revealed.

— The report, which states human capital and social capital as two potential tools to facilitate economic mobility and to reduce inequalities, has attempted to find out whether these tools work equally well for stigmatised groups, particularly in societies with systemic inequalities.

— There is a high income gap for stigmatised groups and instead of getting reduced, this gap increases at higher levels of social capital. However, Dalits can reap similar income benefits as others from human capital, the report said, adding that human capital helps stigmatised groups mitigate the implications of stigma, but social capital does not.

— To address income disadvantages faced by the marginalised groups, that is, OBCs, adivasis/STs and muslims, it is adequate to provide them opportunities, for example, in the form of business leads, credit facilities, collaterals for large orders, Hari Babuji, the co-author of the study, said.

— While noting that the government has developed several initiatives for the mobility of Dalits and other disadvantaged communities, the study states that the stigmatised groups (Dalits) and other historically disadvantaged—but not similarly stigmatised groups) face different social processes, which need to be considered in designing initiatives to reduce inequalities.

— “Since Dalits/SCs not only face marginalisation but also experience institutional stigma, it is necessary to counter the social processes that stigmatise them...” Babuji said.

— Business owners who face institutional stigma, that is, Dalits, have a lower income compared to those who do not face such stigma, that is, non-Dalits including those who face socioeconomic disadvantage such as OBCs, adivasis, and muslims, the study released this month said.

For Your Information:

— Earlier in March this year, the high economic and income inequality prevalent in India was flagged by a paper released by the World Inequality Lab. As per that report, top 1 per cent income



and wealth shares have reached historical highs in India and are among the very highest in the world.

— By 2022-23, the top 1 per cent income share in India was 22.6 per cent and the top 1 per cent wealth share rose to 40.1 per cent, with India's top 1 per cent income share among the very highest in the world, higher than even South Africa, Brazil and the US, the report had said.

TIME TO RESET THE GST SYSTEM

Most states don't seem to be in favour of changes to the existing five main goods and services tax (GST) rate slabs: 0, 5, 12, 18 and 28 per cent. The general argument being advanced is that since gross GST revenues have been growing — from a monthly average of Rs 94,734 crore in 2020-21 to Rs 1,23,608 crore in 2021-22, Rs 1,50,640 crore in 2022-23, Rs 1,68,187 crore in 2023-24 and Rs 1,84,724 crore in April-July 2024-25 — and the rate structure has “stabilised”, why disturb it? It should actually be the other way round. When GST collections are robust, thanks to improved compliance and plugging leakages through measures such as making e-invoicing mandatory for firms with turnover exceeding Rs 5 crore and use of artificial intelligence and machine learning, that is precisely the time for embarking on rate rationalisation. That includes both reducing the number of slabs from five to not more than three, and also reviewing the list of items under each slab.

The incongruity and, probably unfairness, of the GST rates applicable on several items are well known. Why should GST on cement, a basic construction material, be 28 per cent? The same goes for the 18 per cent GST payable on medical and life insurance policy premium, which, in Union Minister Nitin Gadkari's own words, amounts to taxing individuals seeking to purchase cover against “life's uncertainties”. There's similarly no logic to milk not attracting any GST, but skimmed milk powder being taxed at 5 per cent and butter and ghee at 12 per cent. So while dairies pay no tax on milk procured from farmers, they have to shell out GST on both powder and fat used for reconstitution into milk. A 12 per cent GST on milk fat is also an anomaly when vegetable fat (edible oil) is taxed at 5 per cent. Multiple slabs are clearly a recipe for confusion, adding to the complexity of doing business.

Most states may be averse to rate rationalisation, fearing loss of revenue. But a simplification of the current slabs will also promote economic activity, particularly consumption, that would ultimately lead to higher tax revenues. States should, moreover, explore raising more non-tax revenues through revision of user charges on water, electricity and other utility services, besides resetting stamp duty rates and registration fees along with guidance values on property for better compliance. The Indian economy today needs a fiscal stimulus, in the form of lower indirect taxes, rather than higher government spending.

WHAT US FED CHIEF SPEECH IN JACKSON HOLE SYMPOSIUM SIGNALS FOR THE WORLD, AND FOR RBI

Jerome Powell, the head of the US central bank, on Friday said that “the time has come for [monetary] policy to adjust”, setting the stage for interest rate cuts in the near future.

— In his keynote address at the annual Economic Policy Symposium in Jackson Hole, Wyoming, Powell said “the direction of travel is clear,...timing and pace of rate cuts will depend on incoming data, the evolving outlook, and the balance of risks”.



— The impacts of Powell’s observation will not be limited to the US alone, and it can be expected that stock markets around the world will jump when they open next.

What is the Jackson Hole symposium?

— Every year since 1978, the Federal Reserve Bank of Kansas City has hosted a symposium to explore a specific issue confronting the US and global economy.

— The symposium brings together central bankers, finance ministers, researchers, and financial market participants from all around the world to examine economic issues, consequences, and policy alternatives related to the year’s theme. Symposium proceedings consist of papers, commentary, and discussions.

— Since 1982, the symposium has been held at the Jackson Lake Lodge in Grand Teton National Park, Wyoming.

— The symposium, particularly the comments made by the Federal Reserve’s chairman, are closely monitored by policymakers and market participants throughout the world because they provide insight into what is going on in the global economy and where things might go.

— “Reassessing the Effectiveness and Transmission of Monetary Policy” is the theme for this year. According to the website for the symposium: “This year’s theme will explore lessons learnt from the response of monetary policy to both the pandemic and the subsequent surge in inflation.”

— The theme also includes the term “effectiveness,” which relates to how successful monetary policy has been in managing inflation.

For Your Information:

Does the statement find an echo in RBI?

— There are several points of divergence between the US Fed and RBI:

(i) The target inflation rate is 2% for the US and 4% for India.

(ii) In the last few years, the quantum of increase in the policy interest rate in the US has been almost double that of India, partly because US interest rates were close to zero before the rate cycle.

(iii) In terms of percentage points, inflation has fallen more in the US than in India.

— The RBI hasn’t cut rates yet but as the minutes of the latest Monetary Policy Committee show, there is a growing sense among members that interest rates may be too high. At least two out of the six members of the MPC voted for a cut.

WHY THE GAP BETWEEN BANK CREDIT AND DEPOSITS IS WORRYING

In recent weeks, both Finance Minister Nirmala Sitharaman and RBI Governor, Shaktikanta Das, have raised the issue of the gap between deposit and credit growth of banks. The latest data from the RBI shows that as on July 26, 2024, deposit growth stood at 10.6 per cent, while credit growth was at 13.7 per cent. The credit to deposit ratio has been around 80 per cent since September last year. This divergence has prompted banks to increasingly rely on other sources of funding — issuance of certificates of deposits has amounted to Rs 3.49 lakh crore so far in this financial year,

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“significantly higher” than the Rs 1.89 lakh issued over the same period last year as per data from the RBI’s recent state of the economy report. A greater reliance on short-term non-retail deposits, as RBI Governor Shaktikanta Das noted in his comments on the recent monetary policy committee, “may potentially expose the banking system to structural liquidity issues”.

For banks, current and savings accounts (CASA) are a low cost source of funds. The greater the CASA book, the higher their net interest margins tend to be. However, the shift away from low cost deposits makes banks more sensitive to interest rate movements. This trend is being observed in both the public and private sector, in varying degrees. Challenges on the funding front have been linked to other investment avenues which are becoming a more lucrative proposition for households. However, as per an analysis by economists at the Bank of Baroda, the causal relationship between mutual funds and bank deposits is not clear. The gap can also be due to changes in currency in circulation and interventions in the currency market. Such episodes of diverging credit and deposit growth have in the past persisted for two to four years, with the average duration of these cycles being 41 months as per the most recent RBI financial stability report.

Higher credit to deposit ratios could prompt competition among banks for deposits. As per a report in this paper, banks are now resorting to special deposit schemes and innovative plans to mobilise funds. This could in turn drive up their funding costs, and have implications for their margins. Banks may align their credit with their deposit growth. With credit offtake moderating, as per a CareEdge Ratings report, there may be some indications of this.

WHY IS SEBI’S CREDIBILITY UNDER A CLOUD?

The story so far:

Over a year and a half after U.S.-based Hindenburg Research alleged corporate malfeasance, stock price manipulation and breach of minimum public shareholding norms against the Adani Group of companies, the firm issued another report late last Saturday. It argued that India’s stock market regulator, the Securities and Exchange Board of India (SEBI), is reluctant to follow the trail on its charges about the use of offshore funds linked to “the Adani money siphoning scandal” because its own chairperson had a conflict of interest, having jointly invested in the same fund with her spouse.

How has SEBI responded to the charges?

SEBI Chairperson Madhabi Puri Buch and her husband, Dhaval Buch, in a statement last Sunday, said their investment in the fund flagged by Hindenburg was made during their stint as “private citizens” in Singapore, and almost two years before she joined as a SEBI member in 2017. This investment was spurred by Mr. Buch’s proximity to the fund’s Chief Investment Officer, Anil Ahuja, who was a “childhood friend”, and was redeemed in 2018 when Mr. Ahuja moved on from the role. They also cited a confirmation from Mr. Ahuja that the fund in question did not invest in any bond, equity or derivative of any Adani Group firm at any time. Mr. Ahuja was also a director of Adani Enterprises till 2017. On the U.S. firm’s charges that the SEBI chief owned two consulting firms, in Singapore and India, and transferred 100% of the Singapore outfit’s shares to her spouse in March 2022, the Buchs said these firms “became immediately dormant” on her appointment with SEBI. The transfer of the Singapore entity to Mr. Buch, who was said to have used both the entities since 2019 for his “own consultancy practice” with “prominent clients in the Indian industry”, was disclosed to SEBI as well as tax authorities in India.



In a separate statement, SEBI said that relevant disclosures required in terms of holdings of securities and their transfers have been made by Ms. Buch from time to time, and she has “also recused herself in matters involving potential conflicts of interest”, ostensibly referring to charges that the SEBI chief oversaw changes to regulations for Real Estate Investment Trusts (REITs) while her husband was an adviser to Blackstone with interests in the asset class.

SEBI also said it has completed 23 of the 24 investigations it had undertaken against the Adani Group, under the top court’s scrutiny, and the final one is close to completion.

What about the other entities?

The Adani Group reiterated that its “overseas holding structure is fully transparent, with all relevant details disclosed regularly in numerous public documents”, and noted that Mr. Ahuja was a nominee director of 3i investment fund in Adani Power (2007-08) and, later, a director of its flagship, Adani Enterprises, until 2017. 360 One, a wealth management firm formerly known as IIFL Wealth, which managed the fund IPE Plus Fund-1, named by Hindenburg, said Ms. Buch and Mr. Buch’s holdings in the fund were less than 1.5% of its total inflows, and it had made zero investments in any shares of the Adani Group either directly or indirectly through any fund.

Have fresh questions arisen since last Sunday’s set of clarifications?

Yes. Hindenburg Research said the Buchs’ statement contains important ‘admissions’ regarding the SEBI chief’s investment in an obscure fund structure run by a person who was an Adani director at the time, confirms a “massive conflict of interest” when it comes to SEBI’s probe into funds related to the Adani Group, and raises fresh questions. On the consulting firms owned by Ms. Buch, Hindenburg pointed out that Ms. Buch only transferred her stake in Singapore-based Agora Partners Singapore to her husband “two weeks after her appointment as SEBI chairperson”, and continued to hold 99% of the Indian firm that reported revenues of about \$3,12,000 over three years till this March, while she was the SEBI chief. It asked if some of Mr. Buch’s consultancy clients in these were entities that SEBI is tasked with regulating, and whether they will release a full list of such clients and details of their engagements with both the consulting firms. “Finally, will the SEBI chairperson commit to a full, transparent and public investigation into these issues?” it asked.

There has been no response yet from SEBI or the Buchs on these issues yet, while the Finance Ministry has maintained a stoic silence on the matter. While Opposition parties have continued to question the government over these allegations, fresh reports this week suggest that more sunlight may be necessary to quell any lingering doubts about any capriciousness in the administration of India’s booming securities markets. On Friday, Reuters reported that revenues accruing to Ms. Buch from the consultancy firms during her stint in SEBI, could constitute a potential breach of a SEBI policy in place since 2008. The ‘Code on Conflict of Interests for Members of Board’ says a SEBI member shall take all steps necessary to ensure that “any conflict of interest to which he may be subject to does not affect any decision of the Board”. Moreover, a member shall disclose interests which may conflict with their duties, and a whole-time member (including the chairman) shall not hold any other office of profit, nor engage in any other professional activity, which entails receipt of salary or fees.

A separate report by The Morning Context suggested that Ms. Buch did not recuse herself from a case pertaining to a firm called Essel Propack, in which a Blackstone subsidiary had acquired a 75% stake in 2019.



What may one look out for next?

Eight months ago, the Supreme Court had exuded “confidence” in SEBI’s investigation into the allegations against the Adani Group, brought to the fore by Hindenburg early last year. While noting its power to transfer an investigation from the “authorised agency” to the CBI or constitute a Special Investigation Team, the court had said this was a rare power, to be used only if there was strong evidence on record that the investigation was prima facie tainted or biased and its continuation would lead to a “failure of justice”. One of the grounds the court had highlighted for transferring an investigation was when accusations were levelled against the “top officials of the investigating agency thereby allowing them to influence the investigation”.

Ms. Buch, the first private sector executive to lead the market watchdog, has a three-year tenure that ends next March, and is eligible for a fresh term. While more clarity on the allegations around SEBI’s administration would help clear the air, expediting the sole pending investigation into the Adani Group, and swiftly following the closure of the 24 probes with enforcement proceedings culminating in “speaking orders” put in the public domain, could be the best way forward for the market watchdog.

ADANI, BIRLA KEEN TO TAP MONGOLIAN COPPER, BUT FACE LOGISTICS CHALLENGE

Two large companies Adani Enterprises Ltd and Aditya Birla group-owned Hindalco Industries Ltd are keen to source raw material from copper-rich Mongolia, but are concerned about the logistics of transporting copper concentrate from the landlocked Central Asian country to India.

Copper concentrates is a key input for refined copper, and India relies on imports for nearly 90 per cent of its supply due to limited domestic mining of this critical mineral. India imports its requirements almost entirely from Indonesia, Chile and Australia.

Mongolia exported copper ore worth \$2.7 billion in 2022 and was the world’s 10th largest exporter of the commodity. Much of its exports go exclusively to China.

INCREASING ITS SHARE, CENTRE ROLLS OUT NEW PLAN, GUARANTEES 50% OF SALARY AS PENSION

The Union Cabinet on Saturday approved a new Unified Pension Scheme (UPS) for Central government employees which assures 50 per cent of the average salary drawn over the last 12 months of their service as pension.

— To ensure this, the government has decided to raise its contribution towards the pension corpus to 18.5 per cent of the basic pay and dearness allowance of employees from 14 per cent now. This is estimated to entail an additional cost of Rs 6,250 crore in the first year. The employees’ contribution will, however, remain unchanged at 10 per cent of basic pay plus dearness allowance.

— To be effective April 1, 2025, the UPS will be available to all those who have completed 25 years of service in the government. Its other key features include a family pension to the spouse equal to 60 per cent of an employee’s pension income after death, a minimum pension of Rs 10,000 for those who have completed a minimum 10 years of service, inflation indexation to take care of price rise of goods and services, and a facility to withdraw a lump sum amount at retirement.



— The Cabinet announcement comes more than a year after the government had announced the formation of a four-member committee under the then Finance Secretary and now Cabinet Secretary TV Somanathan in April 2023 to review the pension system for government employees.

For Your Information:

— Under UPS, the pension corpus would be divided into two parts and separately invested. The first part equal to 10 per cent of the contribution of the employee and the government towards the corpus will be invested as per the choice of investment made by the individual employee. The second part equal to 8.5 per cent of the government's contribution towards the pension will be pooled and invested separately.

— Other features of the UPS include minimum pension of Rs 10,000 to employees whose service tenure is less and sufficient amount would not be there for pension for central government employees or those associated with the existing National Pension System (NPS). An assured minimum pension of Rs 10,000 per month would be given on superannuation after minimum 10 years of service to employees, an official statement said.

EXPRESS VIEW ON 'PREDATORY PRICING': MARKET FACTS AND SPECTRES

On Wednesday, Minister of Commerce and Industry Piyush Goyal raised the issue of “predatory pricing” by e-commerce platforms and the possibility of “social disruption” as their rapid growth could adversely impact millions of small retailers across the country. E-commerce platforms in India have been in the regulatory glare for some time now. In 2020, the Competition Commission of India (CCI) had initiated an investigation against Amazon and Flipkart over allegations of deep discounting and the practice of preferred sellers. Allegations of predatory pricing were also levied against e-commerce firm Shopee and taxi aggregator Ola, subsequently dismissed by the Competition Commission.

Predatory pricing involves selling goods or services at a price lower than their cost of production. This is an anti-competitive practice that works to the disadvantage of the firm's existing competitors and also dissuades prospective new entrants in the market segment. Driving out competitors could result in the creation of a monopoly-like market structure. While consumers benefit in the short-term via lower prices, the long-term consequences are less market competition, less choice for buyers, and the possibility of the dominant firm later raising prices to the detriment of consumers. However, considering the dynamics of online pricing, the cost structures of these platforms and the advantages that economies of scale tend to offer, determining if a firm has engaged in predatory pricing is not a straightforward exercise. Moreover, even brick and mortar stores often offer huge discounts to clear their stock. The report by the Pahle India Foundation, at the launch of which Goyal made the comments, presents data that counters some of the charges that have been levied against such platforms. As per the report, while e-commerce is indeed growing at a fast pace, it comprised only 7.8 per cent of total retail sales in 2022. The report estimates that around 1.76 million retail enterprises take part in e-commerce activity in India, with the online vendors generating 15.8 million jobs, including 3.5 million for women. A significant share of e-commerce vendors surveyed in the report said that their sales and profits have increased after they started selling online. Integration with such platforms has, in fact, delivered benefits to vendors in smaller cities. Contrary to oft-repeated claims, the report finds that the growth of this segment is “not at the cost” of the traditional brick and mortar stores. Not only do consumers feel they have more choice, but they also feel that pricing is in their favour.



The e-commerce market in India is a fast growing segment. With more and more consumers and businesses onboarding such platforms, the Competition Commission should ensure that firms do not indulge in unfair practices, that there is fair play and a level playing field. There should be greater transparency in pricing and lesser information asymmetry. Policy should be guided by the objective of safeguarding competition.

A CHANGE IN INDIA'S POWER EXPORT RULES

The story so far:

On August 14, Reuters reported on the introduction of an amendment to India's power export rules. Purported to hedge against political risks in Bangladesh, it allows Indian power exporters to reroute their output to Indian grids if there is a delay in payments from partner countries. Adani Power's plant in Godda (Jharkhand) supplies its entire generated power to Bangladesh. In a statement, a spokesperson of Adani Power emphasised their commitment of supplying electricity to Bangladesh, stating that the amendment does not affect its existing contract.

What is the Godda project?

The Jharkhand-subsiary of Adani Power supplies 1,496-megawatt net capacity power to Bangladesh from the ultra super-critical thermal power plant in Godda. This is facilitated under a Power Purchase Agreement (PPA) entered with the Bangladesh Power Development Board (BPDB) in November 2017 for a period of 25 years.

The Godda plant is India's first transnational power project that supplies all the power generated to another nation. In a statement on July 15 last year, Adani Power stated that the electricity supplied from Godda will have a positive impact on the neighbour's power situation by replacing costly power generated using liquid fuel. It elaborated that the transition would help reduce the average cost of power purchased. As per the Bangladesh Power Development Board's (BPDB) annual report for 2022-23, the total installed generation capacity of the country was 24,911 MW in June 2023. Of this, 2,656 MW was imported from India (more than 10% of overall) with the Godda plant contributing 1,496 MW (about 6% of overall). On the policy prerogative for power export, India's Ministry of Power illustrating the guidelines for power export in 2016 said the exchange of electricity across South Asia would promote "economic growth and improve the quality of life for all the nations".

Why was the project criticised?

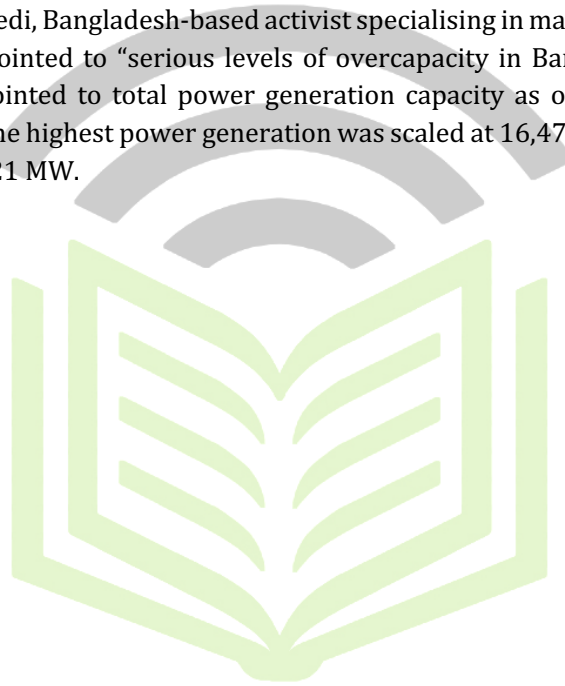
The criticisms emanated from the use of coal imported from the Carmichael mine in Australia into India to produce power for Bangladesh. Thermal plants utilise coal as a primary fuel. The Institute for Energy Economics and Financial Analysis (IEEFA), analysing the PPA back in April 2018 held that it allowed Adani Power to "push the high cost of importing and transporting coal into India, plus the cost of transmitting the electricity across the border onto Bangladesh." United News of Bangladesh had reported in February 2023 about the BPDB writing to Adani Power for a revision in the PPA. The publication, quoting an official with anonymity, reported that in BPDB's view the coal price quoted at \$400/MT was "excessive", adding, "it should be less than \$250/MT, which is what we are paying for the imported coal at our other thermal plants". The other concern, as stated in the Bangladesh-based Daily Star in February last year, entailed the high capacity and maintenance charges regardless of whether it generates any electricity. The reportage held it was "very high" by industry standards.



Why does Bangladesh need imports?

The answer is underutilisation. In a separate context, Soumya Bhowmick, public policy analyst and economist, explained to The Hindu that Bangladesh has made notable progress in expanding electricity access, especially in rural areas. However, notwithstanding the increase in electricity generation, India's South Asian neighbour continues to experience fuel and gas supply constraints, thus, contributing to the underutilisation of its power plants. In fact, in July 2022, Bangladesh had sought support from the International Monetary Fund (IMF) to cushion itself against a financial shock originating from volatile energy prices after Russian actions in Ukraine. This was after the country experienced blackouts, sometimes up to 13 hours a day, as utilities struggled to source enough diesel and gas to meet demand, AFP had reported.

Separately, Hasan Mehedi, Bangladesh-based activist specialising in matters relating to power and climate change, also pointed to "serious levels of overcapacity in Bangladesh". Quoting official figures, Mr. Mehedi pointed to total power generation capacity as on June 30 this year being 28,098 MW, of which the highest power generation was scaled at 16,477 MW — an unutilised idle capacity of about 11,621 MW.



DreamIAS



LIFE & SCIENCE

JUPITER PROBE TO STAGE FIRST LUNAR-EARTH DOUBLE FLY-BY MANOEUVRE

Just over a year after it was launched, the European Space Agency's Jupiter Icy Moons Explorer (JUICE) is returning towards the earth on August 19–20 and will use the braking effect of its gravity to take a shortcut to Venus and onwards to Jupiter.

In a novel double manoeuvre, the Airbus-built JUICE probe will first use the gravity of the moon to swing towards the earth on exactly the right trajectory.

That's risky because the slightest error at that stage would be amplified by the second part of the routine, which involves using the earth's gravity to slow down. Scientists warn that this could derail the eight-year odyssey to reach Jupiter and its moons.

"Inherently, this is a bit tricky, because you would need to correct any error, and you would need propellant for that," Nicolas Altobelli, JUICE Mission Manager, said in an interview.

Scientists have used the "gravity assist" method for decades to navigate the solar system while saving propellant.

It involves brushing past a planet or moon and using the power of its gravity to speed up, slow down, or alter course.

But this week's lunar-earth fly-by involves the first ever attempt to carry out two such manoeuvres back-to-back.

If successful, it will put JUICE on course to reach Jupiter and its three large ocean-bearing moons — Callisto, Europa and Ganymede — in 2031 with the help of three further single gravity assists: Venus in 2025, and then the earth again in 2026 and 2029.

ESA scientists had weighed several options for getting Juice to Jupiter without the unrealistically large rocket that would be needed to get it there without any gravity assistance at all.

Using the moon's gravity to change course allowed them to catch the earth in front of its orbit around the Sun, which has the effect of slowing down the probe, whereas passing behind the planet would speed it up, Altobelli said.

That in turn allowed ESA's planners to target Venus and take advantage of its exceptionally powerful slingshot effect.

"It's a very good configuration of the moon's position around the earth... So we are being opportunistic," Altobelli told Reuters.

Following up on NASA's 1990s Galileo mission to Jupiter, the ESA-led JUICE mission will orbit the solar system's largest planet, perform fly-bys of its three large icy moons, and finally orbit Ganymede to study its potential to support life.

"It means studying the conditions and understanding whether those moons could be a potential habitat, and could have conditions favourable for life as we know it," Altobelli said.



EARTH WHISTLES WHEN LIGHTNING STRIKES, AND THERE'S A NEW MELODY

During a solar storm, the Sun shoots out charged particles with more than usual energy through the space around it. Without the magnetosphere, these particles could have rendered life as we know it on earth impossible. But because the magnetosphere is there, these particles become trapped in it and zip around the earth rather than towards the ground in two large doughnut-shaped radiation belts in the upper atmosphere. These are called the Van Allen radiation belts.

The American astrophysicist James Van Allen discovered these belts in 1958 and studied them in detail. Van Allen's work was important for humans to go to the moon, and today we contemplate visiting even more distant parts of space. Van Allen found that some parts of the radiation belts were weaker than others and that flying through these parts would be less damaging to spacefaring humans and instruments.

When lightning strikes, electrical energy flows in a path through the atmosphere that we see as a bolt. As it cuts through the air, the bolt releases its energy as electromagnetic waves with a range of frequencies. The earth's magnetic field can guide some of these waves up and into a layer of ionised gas above the atmosphere, where they travel along magnetic field lines — like a train moving on tracks — between the earth's northern and southern hemispheres. The higher the frequency of these waves, the faster they travel (even up to a tenth of the speed of light).

The frequencies of these waves are often within the human hearing range (20–20,000 Hz) and can be heard as whistling noises through a receiver. When the lower frequency waves among them travel, they can shed some energy via parts of the upper atmosphere, so their sounds have a declining tone.

In a paper published in the journal *Science Advances* on August 16, scientists from the University of Alaska Fairbanks reported discovering a new type of whistler wave produced by a previously unknown wave generation mechanism. They found lightning energy injected into the ionosphere at low latitudes could get reflected like a light from a mirror into the magnetosphere. This contradicted previous claims that energy insertion at low latitudes can't escape the ionosphere.

The discovery has significant implications because including this new form of whistlers could double the amount of lightning energy going into the magnetosphere, which in turn means scientists may have to revise their calculations of lightning's effects on the Van Allen radiation belts.

After all, it's a question of humans' doorway to outer space.

BLUE MOON: A BALEFUL SEQUELA?

WHAT IS IT?

The blue moon is a common example of an invented tradition — something someone has claimed is an old, time-honoured practice but which was in fact invented more recently. A second full moon in a single month is usually called a blue moon. But there are other ways in which the moon can be blue, such as literally.

For example, on April 5, 1815, Mt. Tambora in contemporary Indonesia produced the most powerful volcanic eruption in recorded history. The previous year, the Mayon volcano had erupted powerfully in the Philippines.

4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



The effects of these volcanoes, combined with other climatic factors, lowered the temperature of the earth by 0.4–0.7 °C in 1816, producing what has since been called the “year without summer”. The dust and other small particles lingering in the air could have caused the moon to look blue, as indicated by a description in the poem *Alastor*, written by Percy Bysshe Shelley that fateful year.

After the Krakatoa caldera exploded in 1883, the Royal Society in London recorded that the moon appeared blue, and the Sun a shade of green, in many parts of the world.

The use of ‘blue moon’ as a metaphor for a long period of time emerged in the early 1820s, and its use to describe the second full moon of a month came about in a farmers’ almanac published in the U.S. in 1937. August 2023 had such a blue moon.

HOW A FOREIGN COVERT GROUP WAS USING CHATGPT TO INFLUENCE U.S. ELECTIONS

The story so far:

On August 16, OpenAI said it banned ChatGPT accounts linked to an Iranian influence operation that used the chatbot to generate content to influence the U.S. presidential election. The Microsoft-backed company said it identified and took down a “cluster of ChatGPT accounts” and that it was monitoring the situation.

What is Storm-2035?

OpenAI assigned the group the Storm-2035 moniker, and said the operation was made up of four websites that acted as news organisations. These news sites exploited issues like LGBTQ rights and the Israel-Hamas conflict, to target U.S. voters. The sites also used AI tools to plagiarise stories and capture web traffic, as per a Microsoft Threat Analysis Center (MTAC) report issued on August 9. Some named sites included EvenPolitics, Nio Thinker, Westland Sun, Teorator, and Savannah Time. The operation allegedly targeted both liberal and conservative voters in the U.S.

How did the group use ChatGPT?

According to OpenAI, the operatives used ChatGPT to create long-form articles and social media comments that were then posted by several X and Instagram accounts. AI chatbots such as ChatGPT can potentially assist foreign operatives fool gullible internet users by mimicking American users’ language patterns, rehashing already existing comments or propaganda, and cutting down the time it takes to create and circulate plagiarised content meant to sway voters.

Apart from the upcoming U.S. presidential election, the Storm-2035 operation covered world issues such as politics in Venezuela, Hispanic rights in the U.S., the destruction in Palestine, Scottish independence, and Israel taking part in the Olympic Games. The network also exploited popular topics like fashion and beauty. OpenAI shared screenshots of some of the news stories and social media posts it attributed to the operation; one article claimed that X was censoring former president Donald Trump’s tweets, while separate social media posts asked users to “dump” Trump or Vice President Kamala Harris.

How severe is the impact of Storm-2035?

OpenAI has downplayed the severity of the incident, claiming that audiences did not engage much with the uploaded content on social media. Using Brookings’ Breakout Scale, which measures the impact of covert operations on a scale from 1 (lowest) to 6 (highest), the report shared this operation was at the low end of Category 2, meaning it was posted on multiple platforms, but there



was no evidence that real people picked up or widely shared their content. However, OpenAI stressed it had shared the threat information with “government, campaign, and industry stakeholders.”

While OpenAI presented the discovery and disruption of the Iran-linked influence operation as a positive development, the use of generative AI tools by foreign operatives against U.S. voters is a gravely urgent issue that highlights multiple points of failure across OpenAI, X, Instagram, and the search engines ranking the sites.

Were there other similar issues OpenAI faced in the past?

In May, the AI firm posted a report revealing it had been working for over three months to dismantle covert influence operations that used its tools for generating comments on social media, articles in multiple languages, fake names and bios for social media accounts, and translating or proofreading text.

A Russian outfit that OpenAI called ‘Bad Grammar’, used Telegram to target Ukraine, Moldova, the Baltic States and the U.S. Separately, another Russia-based operation titled ‘Doppelganger,’ an Israeli operation that OpenAI nicknamed ‘Zero Zeno,’ a Chinese network called ‘Spamouflage,’ and an Iranian group called ‘International Union of Virtual Media’ or IUVM, used ChatGPT to write comments on social media platforms like X and 9GAG, and to post articles and news stories. The investigation found that the content covered issues like Russia’s invasion of Ukraine, the Gaza conflict, Indian and European elections, and criticism of the Chinese government by dissidents or foreign governments.

Besides hunting down influence networks, OpenAI also found incidents of state-backed threat actors abusing AI to attack enemies. Other serious cases exposing OpenAI’s vulnerabilities followed. In July, the Microsoft-backed firm revealed that early last year, a hacker gained access to OpenAI’s internal messaging systems and stole information related to its AI technologies. While the hacker was found to be an individual, the incident raised alarms that Chinese adversaries could easily do the same.

What is OpenAI doing to safeguard its tech?

While studying these cases, OpenAI found that its AI tools refused to generate text or images for some prompts due to the safeguards already built into them. The firm also developed AI-powered security tools to detect threat actors within days instead of weeks.

While not explicitly discussed by OpenAI, the AI company has become enmeshed with prominent figures from U.S. federal agencies or government bodies. In June, OpenAI picked cybersecurity expert and retired U.S. Army General Paul M. Nakasone to be a part of its Board of Directors. Mr. Nakasone led the U.S. National Security Agency and has served in assignments with cyber units in the U.S., Korea, Iraq, and Afghanistan. A couple of weeks ago, the firm also announced it will be teaming up with the U.S. AI Safety Institute, so that its next big foundational model GPT-5 can be previewed and tested by it.

MANDYAM SRINIVASAN OF BEE STUDIES FAME FACES MISCONDUCT ALLEGATIONS

Two scientists have flagged what they have called evidence of “problematic behaviour” in multiple scientific papers co-authored by Mandyam Srinivasan,emeritus professor of visual neuroscience



at Queensland University, Brisbane. The papers are concerned with the honeybee waggle dance, a mode of communication between bees that plays a crucial role in pollination.

Based on his work on bees, Dr. Srinivasan received Australia's Prime Minister's Prize for Science in 2006, a Distinguished Alumni Award of the Indian Institute of Science in 2009, and a membership in the Order of Australia in 2012, among other honours.

The waggle dance

Bees use two kinds of dances to communicate information: the waggle dance — at the heart of the new controversy — and the circle dance. The purpose of either dance is for some honeybees to communicate to others the location of a flower patch with more nectar or pollen. One bee dances while the others watch it to figure out the directions.

During a waggle dance, the bees move in a figure of eight formation, roughly, while in a circle dance, the bees move in a circle. The waggle dance indicates both the distance and the direction to the patch. In this the straight line in the roughly figure of eight formation is called the waggle run. The circle dance indicates only the distance to the hive.

The allegations against Dr. Srinivasan are detailed in a report prepared by Laura Luebbert, a geneticist-turned bioinformatician, and Lior Pachter, the Bren Professor of computational biology, both at the California Institute of Technology.

Papers from 1996 to 2010

The report with the allegations is titled 'The miscalibration of the honeybee odometer'. Drs. Luebbert and Pachter uploaded it to a repository of preprint papers on the internet called arXiv (pronounced 'archive') in May 2024. But it wasn't until Dr. Pachter published a post on his personal blog about their findings and then a series of posts on X in July, including one calling the implicated papers "junk", that the allegations made headlines.

The two scientists have alleged in their report that multiple papers published between 1996 and 2010, and co-authored by Dr. Srinivasan, contain "erroneous information" and that "many of them contain duplicated and manipulated data," as Dr. Pachter wrote on his blog.

Dr. Srinivasan however disagreed with their conclusions. The two scientists "have pointed out minor typographical errors, which I regret," he told this reporter. "But these errors are purely typos: they have not played a role in the analysis of any of the data."

DIFFERENTLY AFFECTED

A recent study details how trees in New York City, Boston and Baltimore, Maryland are more negatively impacted by heat waves and drought than trees of the same species in nearby rural forests. The urban trees in the three cities experienced greater negative impacts from heat waves and drought compared to rural trees. Also, the growth rates and carbon storage capabilities of urban trees are significantly reduced during extreme weather conditions. The growth of oak trees, but not red maple trees, in the urban sites of Boston and New York City, were more adversely impacted by heat stress than their rural counterparts. But such urban-rural differences in the growth of oak trees was not seen in Maryland. The finding highlights the challenges urban trees face in the context of climate change and, underscores the importance of tailored urban forestry management as a tool for protecting tree species and reducing urban heat islands.



WHY HAS MALAYSIA TWEAKED ITS 'ORANGUTAN DIPLOMACY'?

Malaysia's Plantation and Commodities Minister Johari Ghani on August 18 tweaked his earlier proposal of sending critically endangered orangutans as gifts to palm oil-purchasing countries. According to the latest proposal, importers of Malaysian palm oil will be offered to "sponsor" one or more orangutans and the funds will be used for their conservation within Malaysia — instead of sending the adopted primates aboard.

Ghani revised his policy after it faced widespread criticism, especially from wildlife conservationists who called it "obscene" and "repugnant".

Why was this policy proposed? Why was it criticised?

'Orangutan diplomacy'

Ghani first announced his plans to gift orangutans to palm oil-buying countries in May this year, saying the policy was inspired by China's "panda diplomacy" — the practice of sending pandas from China to other countries as a tool of diplomacy and wildlife conservation.

Malaysia, the world's second-largest palm oil producer, has been under immense pressure to make its palm oil industry more sustainable. The industry has been linked to deforestation, causing the loss of habitat for orangutans.

These apes are found in the rainforests of the islands of Borneo and Sumatra — shared by Malaysia, Indonesia, and Brunei. Currently, the orangutan population stands at about 120,000 and is threatened by rapid deforestation primarily due to palm oil plantations, according to a report by the World Wildlife Fund.

With his proposed "orangutan diplomacy", Ghani wanted to alleviate concerns regarding the impact of palm oil production on orangutans. While making his policy public, the minister said, "Malaysia must not take a defensive stance on palm oil... Instead, we have to show the world that Malaysia is a producer of sustainable palm oil and is committed to safeguard forests as well as environmental sustainability."

Notably, his announcement came not long after the European Union banned the import of goods linked to deforestation.

The criticism

The animal welfare groups severely criticised Malaysia's initial strategy, saying it was hypocritical to destroy forests (for palm oil production) where orangutans live and give them as gifts in exchange for "getting favours" from trading countries.

"Protecting the forest, which is the natural habitat of orangutans, is the most important step that needs to be taken," the organisation Justice for Wildlife Malaysia told The Guardian.

In an interview with CNN in May, Stuart Pimm, chair of conservation ecology at Duke University, said that there was a huge difference between Malaysia's proposed "orangutan diplomacy" and China's "panda diplomacy".



“China has state-of-the-art facilities for pandas and more importantly, has established protected areas that safeguard wild panda populations. What Malaysia’s government is proposing is hardly anything comparable,” he said.

Under the revised scheme, Ghani said orangutans would be kept in their natural habitats and the funds received by their sponsors would be used for conservation programs. The programs would include “collaborating with a team of rangers, comprising experts, to monitor the presence, safety and condition of these wild animals,” he said.

— Orangutans are found only in Indonesia and Malaysia.

— IUCN Red List of Threatened Species: **Critically Endangered**

— Species: Bornean (*Pongo pygmaeus*), Sumatran (*Pongo abelii*), and Tapanuli orangutan (*Pongo tapanuliensis*).

WHAT A PENGUIN’S DEATH TELLS US ABOUT LOVE AND LOSS

In *The Year of Magical Thinking* (2005), Joan Didion writes of the year loss came home to her with the deaths of her husband and daughter: “Grief turns out to be a place none of us know until we reach it.” In the gut wrench of bereavement, she tells herself how wild things do not suffer such heartbreaks and seeks comfort in that. Only, it turns out, that they do. At Sydney’s Sea Life Aquarium, when Sphen, the gentoo penguin known for his devotion to his same-sex partner, died last week, grief became a song. When Magic, Sphen’s younger partner, with whom he had raised two chicks, was brought to say his final goodbye, he broke out in what could only be described as a dirge.

Sphen and Magic had spent six years together but grief seems to be an emotion that transcends sentience. Elephants have been known to grieve the loss of their partners, parents and cubs; bald eagles and black vultures mate for life; dogs remain emblematic of a rare kind of fealty to their owners — for nine years until his own death, Hachiko, a Japanese Akita dog, waited at a railway station every evening for his master to return from work. He had never gotten over the loss of his owner, an academic at Tokyo Imperial University. But if grief is pervasive across species, there are also lessons in resilience from the animal kingdom.

Dealing with the shock of the untimely death of her father, writer and naturalist Helen McDonald channels her anger and hurt into becoming a falconer. In *H is for Hawk* (2014), she writes of the lesson that the fierce and unyielding goshawk teaches her that grief would not allow her to see: “You see that life will become a thing made of holes. Absences. Losses. Things that were there and are no longer. And you realise, too, that you have to grow around and between the gaps, though you can put your hand out to where things were and feel that tense, shining dullness of the space where the memories are.”

ICAR, PENN STATE TEAM MAKES A TOOL SMALL ENOUGH TO EDIT PLANT GENOMES

With the help of the CRISPR gene-editing tool, scientists today can precisely edit genomes to introduce desirable genetic traits or remove undesirable ones.

CRISPR holds the potential to revolutionise agriculture in particular by allowing agricultural scientists to increase crop yields and improve resistance to disease and anomalous weather



through gene-editing. However, there has been a critical obstacle: a commonly used form of the CRISPR system is too big for plant genomes.

This system uses one of two proteins, Cas9 or Cas12, to target specific parts of the DNA. But they are too bulky for plant cells to accommodate

Smaller is better

A team of researchers led by Kutubuddin Molla from the ICAR-National Rice Research Institute in Cuttack and Mirza Baig from the Pennsylvania State University in the U.S. presented an alternative that could solve this major problem in plant genome editing in a recent paper in the journal *Plant Biotechnology Journal*.

They reported developing a plant genome editor consisting of a protein called ISDra2TnpB, derived from bacteria called *Deinococcus radiodurans* (famous for being able to survive extreme environmental conditions). ISDra2TnpB is less than half the size of Cas9 and Cas12.

TnpB's editing chops

TnpB is a protein made up of around 400 amino acid units (different combinations of the 20 amino acids make up all proteins). It belongs to a family of transposable elements, or transposons. Sometimes called “jumping genes”, transposons are parts of a genome that can move from one location to another.

The genome consists of two strands of DNA bonded to each other. Each strand is made up of building blocks called nucleotides. In turn, each nucleotide has three pieces; two are common to all of them whereas the identity of the third one can be one of four options: adenine (A), thymine (T), cytosine (C) or guanine (G). The DNA's ‘sequence’ refers to the order in which nucleotides containing these four compounds are arranged.

In the new system, TnpB hitches a ride on a piece of RNA that guides it to the target DNA sequence. Once there the TnpB binds with the sequence and eliminates it. The cell that houses this DNA repairs the cut by restoring the “correct” sequence. Thus, the genome is modified to replace an undesirable sequence with a desirable one.

The researchers behind the new study exploited the genome editing abilities of a TnpB-based system to achieve a 33.58% editing efficiency in an average plant genome on targets that Cas9 or Cas12 couldn't reach. They demonstrated that the genome editor was effective on both types of flowering plants—monocots (like rice, which have one seed leaf) and dicots (like *Arabidopsis*, a plant related to cabbage and mustard that has two seed leaves).

HAYFLICK LIMIT: WHY IMMORTALITY REMAINS OUT OF HUMANS' REACH

Biomedical researcher Leonard Hayflick, who discovered that normal somatic cells can divide (and thus reproduce) only a certain number of times, died on August 1 at the age of 98. Hayflick's discovery fundamentally changed the understanding of aging — especially the thesis that cells are capable of being immortal, and aging is simply a factor of externalities such as disease, diet, and solar radiation.



What is the Hayflick limit?

In the early 1960s, Hayflick, at the time a researcher at the University of Pennsylvania, discovered that cell division in somatic (non-reproductive) cells stopped after roughly 40-60 times. This cessation in cell division is what Hayflick posited causes aging — as senescent cells (those that have stopped dividing) accumulate, one's body begins to age and decline.

This means that there is an in-built cellular clock in the human body (and that of other organisms) which determines how long one can live. This “ultimate Hayflick limit”, as scientists have termed it, is around 125 years for humans, beyond which no amount of diet, exercise, or even genetic tweaking against diseases can extend the human lifespan.

Since the discovery was made, Hayflick and other scientists have documented the Hayflick limits of cells from animals with varied life spans, from Galapagos turtles to laboratory mice. The cells of the former species, which can live for a couple of centuries, divide approximately 110 times before senescing, whereas cells of the latter become senescent within 15 divisions.

Correlation or causation?

Hayflick's discovery got further weight after researchers in the 1970s discovered telomeres. As cells divide, they create copies of DNA strands. Telomeres are repetitive DNA sequences at the very end of these strands, meant to protect the chromosome. Crucially, with each cell division, these telomeres get slightly shorter. Eventually, the telomere loss reaches a critical point at which cell division ends.

That said, while shortening telomeres is related to aging, the exact relationship between telomere length and lifespan remains unclear. Lab mice, for instance, have telomeres that are five times longer than humans, but their lives are 40 times shorter.

This is what has led to some researchers arguing that telomere loss and the Hayflick limit are not limits on aging, but rather symptoms of aging. Theoretically, it might be possible to thwart telomere loss or replace telomeres, as the differential rates of telomere loss among different species indicates.

The discovery in the 1980s of a protein called telomerase, capable of producing new telomeres, has strongly suggested this possibility. Telomerase is present in all cells, but it is seemingly “turned on” in only cancer cells. This is why, as Hayflick himself said, cancer cells are not subject to his limit.

Although scientists have been able to synthesise telomerase, and some in vitro studies have indicated that they may slow down telomere loss in normal human cells, any practical application for this seems some distance away.

WHY IS MPOX A GLOBAL HEALTH EMERGENCY?

The story so far:

On August 14, the World Health Organization (WHO) declared the mpox outbreak in the Democratic Republic of the Congo and other African countries as a “global health emergency”. WHO Director-General Tedros Adhanom Ghebreyesus made the declaration on the advice of an International Health Regulations (IHR) emergency committee. The WHO had regraded the mpox outbreak to an “acute” grade 3 emergency, according to a report published on August 12. The

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outbreak, which first started in 2022, has continued unabated with a recent surge in cases reported from around the world.

What is mpox?

Mpox, or monkeypox, is a rare zoonotic disease (disease that spreads from animals to humans) caused by the monkeypox virus which belongs to the Orthopoxvirus genus in the Poxviridae family. Other diseases caused by viruses from this family include smallpox, cowpox, and more. The mpox virus is transmitted to humans through physical contact with someone infectious — it can happen through direct contact with infected blood, fluids, or skin or mucus lesions (damaged or broken areas). Mpox can also spread through contact with contaminated materials, or infected animals' bites or scratches, or through activities like hunting, skinning, cooking, dealing with carcasses, or eating infected animals.

Currently, two clades or genetic groups of mpox exist: clade I which is mostly found in central and east Africa, and clade II which is linked to more cases in west Africa. The exact source of mpox remains unknown, but small mammals like squirrels and monkeys are believed to be carriers.

What are the symptoms?

The mpox virus in humans mostly presents as rashes, which can develop into blisters filled with liquid which may be itchy or painful. Other symptoms include fever, sore throat, headache, muscle aches, back pain, low energy, and swollen lymph nodes. Infectious people can pass the disease on to others until all sores have healed and a new layer of skin has formed.

Symptoms of mpox usually begin within a week of infection, but can start 1-21 days after exposure as well. Symptoms typically last 2-4 weeks. Most people have less severe symptoms, but some may develop more serious illness and need care in a medical facility. Children, pregnant women, and immunocompromised people are at a greater risk of getting the virus.

What is the line of treatment?

Currently, there is no specific treatment for mpox. WHO recommends supportive care, such as medication for pain or fever for people who need it, but symptoms usually go away on their own. People suffering from mpox are advised to stay hydrated, eat well, get enough sleep, avoid scratching their skin, take care of their rash by cleaning their hands before and after touching lesions, and keep their skin dry and uncovered.

An antiviral developed to treat smallpox (tecovirimat) was approved in January 2022 by the European Medicines Agency for the treatment of mpox under exceptional circumstances, but experience with such therapeutics is limited.

Three vaccines — MVA-BN, LC16 and OrthopoxVac — developed against smallpox are also approved for prevention of mpox. However, only people who are at risk are considered for vaccination. WHO does not recommend mass vaccination against mpox.

What about the current outbreak?

Mpox infections have been found closer home — Pakistan detected three patients with the virus, the health department of the northern Khyber Pakhtunkhwa province said on August 16. On Thursday, Sweden announced the first mpox case outside Africa of the clade I variant of mpox. According to the WHO, more than 15,600 cases and 537 deaths have been reported this year. The



outbreak has affected 116 countries, and is the worst in the Democratic Republic of the Congo and neighbouring countries. Out of the cases reported in June 2024, Americas accounted for 19% of those, while 11% were reported in Europe.

The WHO has regraded the global mpox outbreak to an acute grade 3 emergency in accordance with the WHO Emergency Response Framework, which is the highest on the list. A grade 3 emergency requires a major to maximal response from the WHO. A public health emergency of international concern (PHEIC) is an extraordinary event that relates to the international spread of a disease and which would potentially require a global, coordinated response. The purpose of the PHEIC, the highest level of alarm by the WHO, is to coordinate immediate international action before the event becomes bigger and turns into a pandemic.

WHO'S SLOW PROCESS UNDER FIRE AS MPOX VACCINES NOT REACHING HARD-HIT AFRICA

There are no vaccines for mpox available in the Democratic Republic of Congo, the epicentre of a global health emergency declared last week, even though the country first asked for the shots two years ago and the manufacturers say they have supplies.

— Three years after the last worldwide mpox outbreak, the W.H.O. still has neither officially approved the vaccines — although the United States and Europe have — nor has it issued an emergency use license that would speed access.

— One of these two approvals is necessary for UNICEF and Gavi, the organization that helps facilitate immunizations in developing nations, to buy and distribute mpox vaccines in low-income countries like Congo.

— While high-income nations rely on their own drug regulators, such as the Food and Drug Administration in the United States, many low- and middle-income countries depend on the W.H.O. to judge what vaccines and treatments are safe and effective, a process called prequalification.

— A new variant of the virus, spread by close intimate contact, has now crossed Congo's eastern border into 13 countries, prompting the W.H.O. to declare a global health emergency on Aug. 14.

For Your Information:

— Mpox, previously known as monkeypox, is a self-limiting viral infection caused by mpox virus (MPXV). The most common symptoms of mpox include fever, headache, muscle aches, back pain, low energy, and swollen lymph nodes, along with pox-like rashes that last for two to three weeks. It is a self-limiting disease but can lead to death, especially among children and those with weak immune systems.

— This is the second time that mpox has been declared a Public Health Emergency of International Concern (PHEIC). The global outbreak of mpox was first declared a PHEIC on July 23, 2022.

FMRI MAY REVEAL DEPRESSION 'SUBTYPES' AND TREATMENTS THAT COULD WORK

Antidepressants and therapy can provide much needed relief to people with mental health illnesses.



But there are many people whose symptoms don't respond to treatment and whose road to recovery often begins after trial and error with different medicines and/or modes of therapy. And in this time, their symptoms could get worse. According to one estimate, people with such treatment-resistant depression make up 30% of seekers of mental healthcare.

A recent study by an international team of researchers, published in Nature Medicine, offers a solution — and it requires reimaging psychiatric diagnoses.

The brain is the seat of our mind, and people with depression manifest it in their brains in different ways. These manifestations appear as faulty brain patterns that, the study's researchers said, psychiatrists often don't account for.

Dr. Tozzi et al. showed that these patterns can be grouped into six unique subtypes of depression. The team also found that at least three of these subtypes could predict the antidepressants and/or the modes of therapy that may work to treat these people.

Brain biomarker

Dr. Tozzi joined Stanford Medicine's Center for Precision Mental Health and Wellness as a postdoctoral researcher in 2018. He likened the study's purpose to cardiologists using electrocardiogram data to evaluate a patient's heart condition. "We're trying to turn psychiatry into that."

Like the heart, the brain has electrical activity, too. A functional magnetic resonance imaging (fMRI) machine can capture this activity and the way it changes over time through electric signals.

In those with mental illness, the underlying brain circuits that connect different regions don't activate normally. One region can have more intense electrical activity than it does in a healthy person.

Different people have different patterns, both normal and abnormal. When some of them were shared between people with a specific mental illness, the researchers called it a subtype.

In this way, many studies have subtyped depression based on brain activity. But the new study used a "theory-driven" approach to create subtypes that are also clinically relevant.

The team was subsequently able to prove the subtypes were real, not artefacts in the data, by validating them with people's reported symptoms and their performance on behavioural tests.

The team also analysed treatment response data of 250 participants from the clinical trials. These individuals had been randomly assigned some common antidepressants — sertraline, venlafaxine XR, and escitalopram — and therapy. The team members found that people bearing three of the six depressive subtypes could avail of treatment and expect their symptoms to improve.

One subtype the study discovered features a hyperactive cognitive circuit. The researchers determined that people with this subtype reported a lot of anxiety, a lack of interest in engaging with the outside world, and general feelings of being threatened. Their analysis suggested they could respond better to venlafaxine XR.

Individuals with the two other subtypes could fare well against therapy, per the analysis, although one of them that featured a hyperactive attention circuit had a "worse response to behavioural treatment," the paper stated.



The researchers couldn't associate people with the other three subtypes with treatment options that could help them. However, for one of these subtypes, the researchers couldn't find much associated faulty brain activity, and there wasn't enough data to reliably gauge the treatment responses for the other two.

Dr. Tozzi said the next step would be to find more treatments that could address symptoms of depression across all subtypes. In fact, he said Stanford has been running a clinical trial for a year now — after the team's study concluded — to test the subtypes' ability to help predict treatment response.

"People get scanned, their [subtype] gets determined, and then they get a medication that is designed to target that specific [subtype]," Dr. Tozzi said about the new trial's vision.

HOW BLOOD-BASED TESTS FOR CANCER SCREENING COULD SAVE LIVES

Cancer is responsible for 18% of deaths from non-communicable diseases, making it the second leading cause of mortality in India. In 2022, around 14 lakh new cancer cases were recorded in India, a number expected to rise by 12% by 2025. According to the World Health Organization, breast, cervical, ovarian, and colorectal cancers are most common among women while lung, esophageal, colorectal, and stomach cancers dominate among men.

The importance of cancer screening

When cancer is detected late, survival rates plummet while the cost of care skyrockets. On the other hand, early detection makes cancer easier to treat and causes less suffering. This is why many countries have set ambitious targets to ensure no cancer goes undetected. For instance, the U.K. National Health Service plans to increase the proportion of people diagnosed at an early stage from 50% to 75% by 2028. Early detection through screening is a cornerstone of an effective national cancer strategy.

On the back of evidence that organised cancer screening reduces mortality, many countries have established national screening programmes for breast, cervical, and colorectal cancers. Lung cancer screening is expanding worldwide, while prostate cancer screening is available but not widely recommended as a formal programme.

Most European countries, North America, Australia, and parts of Asia have adopted organised cancer screening, but such programmes are still uncommon in India. According to the fifth National Family Health Survey, cancer screening in India is limited to cervical, breast, and oral cancers, with only 0.2-2% of people having been screened.

The success of any cancer screening programme turns on the percentage of people who complete a screening test and receive their results within a set time after being invited. High uptake is essential to detect cancers early enough to reduce deaths and ensure that the programme is cost-effective. Its barriers include anxiety about test results, embarrassment, and lack of support (especially for women) from family members. Structural barriers such as limited health infrastructure and access to screening facilities further hinder the effectiveness of screening programmes, exacerbated by disruptions like a pandemic. Campaigns to increase uptake have shown only modest impact over time, highlighting a need for more innovative solutions.



How blood tests can help

Blood-based tests offer one way forward. These tests can be adapted for cancer screening with high specificity and reasonable sensitivity at an affordable price. A multi-cancer early detection (MCED) test detects cancer signals such as circulating tumour DNA or circulating tumour cells — released by cancerous cells into the blood — at early stages, when treatment is most effective. If a signal is found, the test can often pinpoint the cancer's location and help doctors plan. The test can detect up to 50 cancer types, including ovarian, liver, stomach, pancreatic, and esophageal cancers, which currently lack reliable early-screening tests. It can also alert individuals to aggressive cancers.

MCED tests are not yet approved by the U.S. Food and Drug Administration (FDA). A few tests have received a 'Breakthrough Device Designation', but this doesn't mean they have gone through the FDA's rigorous premarket review process.

In India, MCED tests are still new and are not yet in the approved Central Drugs Standard Control Organisation list. Some companies are currently offering them to doctors and consumers as Laboratory-Developed Tests (LDTs), that is they are created, manufactured, and used within a single lab. They cost up to ₹15,000 per test. While labs must prove these tests perform their intended function, regulations don't require them to prove the tests actually benefit patients, such as by diagnosing cancer early.

MCED tests are also not without their challenges. One significant risk is when a test indicates cancer when there is none. When multiple tests are used for screening, the false positive rate can be as high as 50%. But combining traditional screening with an MCED test can significantly reduce this rate. A 2021 study in the British Journal of Cancer estimated that such a combination could reduce the rate from 43 false positives for every true positive to 14 for breast, lung, cervical, and colorectal cancers. Studies have demonstrated that with 25-100% uptake, MCED tests can detect up to 4,00,000 additional cancer cases that traditional methods might miss. While MCED tests generally report high specificity (>96%), their sensitivity remains variable and influenced by study design, population, reference standard test used, and the follow-up duration.

They also carry risks of overdiagnosis and overtreatment, which can lead to unnecessary physical, psychological, and financial strain.

The FDA thus recommends patients and clinicians receive quick, comprehensive instructions on diagnostic evaluations required to confirm and understand a suspected cancer after a positive result.

Since MCED tests are still mostly LDTs in India, post-test support is crucial to alleviate the anxiety of a positive result. To address this, clear patient information guides should be provided to explain the results, outline the next steps, and set expectations for further diagnostic procedures. Decision support tools can help evaluate the benefits and risks of additional testing or treatments, especially considering the potential for overdiagnosis and overtreatment.

Access to counselling services, such as genetic counsellors or oncologists, can help patients understand their results and manage the psychological impact. Interactive digital platforms can offer personalised education, track patient progress, and send reminders for follow-up appointments. Healthcare providers would also benefit from specialised training modules focused on interpreting MCED results, effective patient communication, and managing the diagnostic process.



POLIO VACCINE DRIVE IN GAZA HAMPERED BY VIOLENCE

Polio was eradicated in Gaza 25 years ago, but vaccinations plunged after the war began 10 months ago, and the territory has become a breeding ground for the virus, aid groups say. Hundreds of thousands of displaced Palestinians are crowded into tent camps lacking clean water or proper disposal of sewage and garbage. At least 225 informal waste disposal sites and landfills have cropped up around Gaza.

To avert a widespread outbreak, aid workers are preparing to vaccinate more than 600,000 children in the coming weeks. The World Health Organization and UNICEF said in a joint statement on August 16 that at least seven days' pause is needed to carry out a mass vaccination plan.

The U.N. aims to bring 1.6 million doses of the polio vaccine into Gaza, where sanitation and water systems have been destroyed, leaving open pits of human waste in crowded tent camps. Families living in the camps have little clean water or even soap to maintain hygiene and sometimes use wastewater to drink or clean clothes and dishes.

Polio, which is highly contagious and transmits mainly through contact with contaminated faeces, water, or food, can cause difficulty breathing and irreversible paralysis, usually in the legs. It strikes young children in particular and is sometimes fatal.

WHO and UNICEF said that three children are suspected of being infected and that their stool samples were being tested by a laboratory in Jordan. The Ministry of Health in Ramallah in the West Bank said on August 16 that tests conducted in Jordan confirmed one case in a 10-month-old child in Gaza.

A mass vaccination campaign beginning in late August plans to immunise 640,000 children under the age of 10 over two rounds of vaccinations, according to the WHO.

The alarm over polio was first raised when the WHO announced in July that sewage samples collected from six locations in south and central Gaza tested positive for a variant of the virus used in vaccines.

While more than 440,000 doses of polio vaccine, were brought into Gaza in December, that supply has diminished to just over 86,000, according to Hamid Jafari, director of polio eradication for the WHO Eastern Mediterranean Region. The 1.6 million oral doses being brought into Gaza will be a more advanced version of the vaccine less prone to mutating into an outbreak, the WHO said.

Vaccines must also be kept refrigerated, which has become difficult in Gaza, where electricity is scarce. About 20 refrigerated trucks serve all of it, and they also must be used to transport food and other medical supplies, a senior Israeli army official said.

INTRIGUING SILENCE

The case of acute flaccid paralysis, likely due to polio, in a child from Tikrikilla in Meghalaya, and in the media spotlight, was reported by the State government on August 14. In April 2022, a case of vaccine-derived poliovirus was detected from an environmental sample collected in Kolkata. After genetic sequencing, it was considered likely to be immunodeficiency-related vaccine-derived poliovirus (iVDPV), excreted by an immune-deficient individual. In the Meghalaya incident, even after the government confirmed the case, there is still no official report on whether



it is vaccine-derived and not caused by wild poliovirus. With the global eradication of the wild poliovirus (WPV) type 2 in 2015 and the WPV type 3 in 2019, respectively, and no WPV type 1 found in environment samples in India for years, it is highly unlikely that it is due to the WPV type 1 unless it has been imported into India. As of August 13, Afghanistan and Pakistan have reported 14 WPV type 1 cases this year. If vaccine-derived, there is again no official confirmation on whether it is iVDPV or from circulating vaccine-derived poliovirus (cVDPV). This information is key as cVDPV would mean that the virus is in circulation in the community, while iVDPV is restricted to the single immunodeficient child. Also puzzling is the absence of any official report on whether the case has been caused by the type-1, type-2 or type-3 vaccine-derived virus. India made the globally synchronised switch in 2016 from trivalent to bivalent oral polio vaccine that has only live, attenuated type 1 and type 3 virus. So, while it is impossible that the child has the type 2 virus from the oral vaccine given in India, the chances of cVDPV type 2 virus imported into India cannot be ruled out. In 2024, 68 cVDPV2 and four cVDPV1 cases were recorded globally. Many countries have reported cVDPV in environment samples.

The long delay in confirming these crucial details is intriguing as samples from the child were sent to the ICMR-NIV Mumbai unit, which is a part of the WHO network of 146 accredited polio laboratories worldwide and conducts research on diseases caused by enteroviruses, especially paralytic poliomyelitis and acute flaccid paralysis. Unlike in the case of IPV, immunodeficient children are not supposed to be administered OPV. Since identifying such children prior to administering OPV is a challenge in India, India will continue to have such cases in the future. The Meghalaya case again brings into focus the urgent need for India to stop using OPV and switch over exclusively to IPV. Most developed countries switched to IPV decades ago. There is no reason why India should not switch to IPV at the earliest.

WHAT IS VACCINE-DERIVED POLIO?

The story so far:

A two-year-old child in Tikrikilla, Meghalaya, has been infected with vaccine-derived polio. This is not a case of wild poliovirus, but an infection that presents in some people with low immunity, the Union Health Ministry said on Tuesday, August 20.

“The two-year-old child from Tikrikilla was found to have symptoms of poliomyelitis more than a week ago. The child was diagnosed with acute flaccid paralysis at a hospital in Assam’s Goalpara,” Meghalaya Chief Minister Conrad K. Sangma said. Officials in the State’s West Garo Hills district are on high alert following the confirmation of the case.

Vaccine-derived polio

Vaccine-derived polio is a rare condition that occurs when the weakened (also called attenuated) strain of poliovirus used in the oral polio vaccine (OPV) mutates and regains the ability to cause paralysis.

OPV contains a live, attenuated virus that is used for immunisation against the disease. This weakened virus triggers an immune response when administered, thus protecting people from the disease. The attenuated virus replicates in the intestines for a limited period and is excreted in the stool. In rare cases, the virus can mutate enough to cause the disease again and circulate in areas where either immunisation is low, where immunocompromised people reside, or where sanitation and hygiene are poor. This is how vaccine-derived poliovirus (VDPV) spreads.



According to the World Health Organization (WHO), the virus is classified as “circulating” (cVDPV2) if it is detected in at least two different sources, at least two months apart, that are genetically linked, showing evidence of transmission in the community.

Types of poliovirus

Polioviruses are enteroviruses that are transmitted primarily by the faecal-oral route. Three types — wild poliovirus type 1 (WPV1), wild poliovirus type 2 (WPV2), and wild poliovirus type 3 (WPV3) — have been known to exist. Symptomatically, all these strains are identical.

More about vaccines

The first successful polio vaccine for poliovirus was made by Jonas Salk in the early 1950s. Salk inactivated the virus using formaldehyde and injected it into the muscles of test subjects. This inactivated polio vaccine (IPV) induced systemic immunity (relating to the blood, brain, and all other organ systems) in the subjects.

After Salk, Albert Sabin developed another vaccine that contained live polio strains weakened by growing them serially in macaque cells, making them unfit for human infection. Since this vaccine contained the live virus, it had to be administered through its natural mode of infection — in this case, oral. This is what we today know as the OPV.

OPV is usually preferred over IPV because of its ease of administration — it does not require syringes or medical training and is inexpensive. However, the weakened virus in OPV can occasionally revert, causing the disease it is meant to prevent. IPV, on the other hand, is a less potent vaccine, but contains inactivated virus particles and hence has no risk of causing vaccine-associated paralytic poliomyelitis (VAPP) — a rare, adverse reaction to OPV. IPV is comparatively tougher to manufacture, too, as it contains a chemically inactivated virus.

On World Polio Day, October 24, 2019, the WHO declared that WPV3 has been eradicated worldwide. The last case was detected in Nigeria in 2012, the WHO said. WPV2 was officially declared eradicated in 2015. However, more than 90% of vaccine-derived poliovirus outbreaks are due to the type 2 virus present in oral polio vaccines. VAPP constitutes 40% of cases caused by the type 2 oral polio vaccine. Many cases of VAPP from the type 3 virus also occur in countries using OPV.

The Indian government does not count VAPP as polio since these cases are sporadic and pose little or no threat to others, even though the number of VAPP-compatible cases showed a rising trend.

After the global switch from trivalent (containing all three variants) to bivalent (type 1 and type 3) oral polio vaccine in 2016 to prevent any more type 2 vaccine-derived poliovirus, the number of vaccine-derived type 2 poliovirus outbreaks has only increased sharply.

The WHO authorised a genetically modified type 2 novel oral polio vaccine under Emergency Use Listing in November 2020, it was first used in the field in March 2021, and received WHO prequalification in December 2023. The vaccine is less likely to revert to neurovirulence unlike the Sabin vaccine and therefore cause less type 2 VDPV.



GOVT TO ROLL OUT TRAINING PROGRAMME FOR NOVEL TB DRUG REGIMEN: WHAT IT MEANS FOR DRUG-RESISTANT PATIENTS?

Nearly two years after the World Health Organisation (WHO) recommended the use of the novel oral regimen for drug-resistant tuberculosis (TB), which offers better, faster treatment outcomes and improves patients' quality of life, India is set to roll out training of healthcare professionals in administering this treatment.

Senior health ministry officials told The Indian Express that the training for the new drug regimen, called BPalM, will begin by the end of August or the first week of September, starting in Mumbai, Maharashtra, and extend to five other locations in various states. "There will be six training sites. Each site will cover around six states," said Dr Urvashi Singh, Deputy Director General (TB) at the Central TB Division, Union Ministry of Health and Family Welfare.

What is the BPalM regime?

It is composed of bedaquiline, pretomanid, linezolid and moxifloxacin (BPalM) for treating multi-drug-resistant or rifampicin-resistant tuberculosis (MDR/RR-TB). Currently, TB patients in nearly 40 countries have access to this new regimen.

The BPalM protocol is more effective, has a shorter duration of treatment (six months versus the prevailing 18-24 months), fewer side effects and, most importantly, prevents transmission, making it a pivotal tool in containing and managing TB. India, which accounts for 27 per cent of global TB cases, stands to benefit significantly.

How will this help in the National TB Elimination Programme?

This move is expected to boost the country's National TB Elimination Programme, which aims to eliminate the disease by 2025. "The Health Ministry decided to roll out the BPalM regimen for drug-resistant tuberculosis based on encouraging findings from an Indian Council of Medical Research (ICMR) study," said Dr Soumya Swaminathan, Principal Advisor to the Union Ministry of Health and Family Welfare for the National Tuberculosis Elimination Programme.

"A study coordinated by the ICMR and the National Institute of Research in Tuberculosis, Chennai, has shown over 90 per cent cure rates. Mortality, which is usually 14 to 17 per cent, drops to about three to four per cent," said Dr Rajesh Solanki, co-chairman of the national technical expert group of the National TB Elimination Programme, highlighting why this drug protocol could be a game-changer in public health management.

What's the training module like?

The training will cover monitoring patients for adverse effects and determining the appropriate line of treatment. It will be provided to state TB officers, medical officers, and master trainers, who will then train others at the district and community levels. This ensures that chest physicians are well-equipped to prescribe the correct drug regimens. "The sites will likely be in Maharashtra, Uttar Pradesh, Goa, Karnataka, and the cities of Kolkata and Chandigarh," Dr Solanki said.

Dr Singh emphasised the importance of clarity in the new treatment during the training. "While the newer regimen offers better outcomes, the current regimens are also effective. It is crucial to be cautious during the transition from the previous regimen and to identify where the patient, who is resistant to TB drugs, fits within the spectrum," she said.



What about drugs?

While drugs like bedaquiline, linezolid and moxifloxacin are already being procured, pretomanid is being sourced under the National TB Elimination Programme. “Rate contracts have been established,” Dr Singh confirmed. Dr Swaminathan is also keen about scaling up molecular tests like the nucleic acid amplification test (NAAT). “Currently, we are finding about 65,000 patients of multi-drug resistant TB a year and hence scaling up NAAT coverage is essential,” she said.

IS IT DENGUE, CHIKUNGUNYA OR MALARIA? HOW YOU CAN IDENTIFY SIGNS AT HOME

With mosquitoes buzzing everywhere, dengue, chikungunya and malaria are among the most common diseases transmitted by them. Although they share some symptoms, each disease has distinct characteristics that can help in their identification. Understanding these differences is crucial for timely diagnosis and treatment.

Dengue: The ‘Breakbone Fever’

Dengue is often referred to as “breakbone fever” due to the severe muscle and joint pain the viral infection causes. The incubation period of the virus is usually four to 10 days after the mosquito bite. The illness typically begins with a sudden high fever, often reaching 104°F (40°C), accompanied by severe headache, pain behind the eyes and a skin rash. The rash appears within two to five days of the fever, often spreading across the body. Other symptoms include nausea, vomiting, and mild bleeding (such as nosebleeds or gum bleeding). The most distinctive feature of dengue is the presence of severe pain behind the eyes and a characteristic two-phase fever, where the temperature spikes, then drops, only to rise again.

When to get tested: If you experience high fever along with severe pain behind the eyes, joint pain and a rash, it is advisable to get tested for dengue. The test is usually a blood test on the fourth day to detect the presence of the virus or antibodies. Early detection is essential as dengue can progress to severe dengue, leading to complications like plasma leakage, fluid accumulation, respiratory distress and organ failure.

Chikungunya: The Debilitating Joint Pain

Symptoms typically appear four to eight days after a mosquito bite. The disease is characterised by an abrupt onset of fever, often reaching 102°F (39°C) and severe joint pain. The joint pain in chikungunya is more intense and prolonged compared to dengue, often lasting weeks or even months after the fever subsides. This is the most distinguishing symptom of chikungunya and can become chronic. Other symptoms include muscle pain, headache, fatigue, rash and swelling around the joints.

When to get tested: If you experience a sudden high fever with intense joint pain, get tested. Blood tests can detect the virus within the first few days of symptom onset. Early diagnosis is vital for managing symptoms as there is no specific antiviral treatment for chikungunya. Management focuses on relieving joint pain.

Malaria: The Cyclic Fever

Malaria symptoms typically appear 10 to 15 days after the mosquito bite. It has a cyclic pattern of fever, which can be classified into three stages: cold stage (shivering), hot stage (fever), and sweating stage (sweating and a return to normal temperature). The fever often recurs every two



or three days, depending on the parasite species which causes infection spread. Other symptoms include chills, headaches, muscle pain, fatigue, and in some cases, jaundice (yellowing of the skin and eyes). Severe cases can lead to complications such as anaemia, seizures, kidney failure, and coma.

When to Get Tested: If you experience cyclic fever patterns with chills and sweating, especially after traveling to or living in an area where malaria is common, it is essential to get tested immediately. Malaria diagnosis is confirmed through a blood test, which can detect the presence of the parasite. Early treatment is critical to prevent severe complications.

If you experience symptoms consistent with any of these diseases, seek medical attention immediately and get the appropriate tests to ensure timely and accurate treatment.

US FDA APPROVES FIRST NASAL SPRAY TO TREAT SEVERE ALLERGIES: HERE'S HOW IT CAN CHANGE TREATMENT

The United States Food and Drug Administration (FDA) recently approved the first-ever nasal spray for treating anaphylaxis, a severe and life-threatening allergic reaction that demands immediate medical attention and an injection of epinephrine, a hormone shot that fights the allergen.

So now you can replace these shots and treat the condition painlessly and conveniently with the new epinephrine nasal spray called Neffy, developed by the US-based ARS Pharmaceuticals. It has been designed for the emergency treatment of Type I allergic reactions, including those that are life-threatening and are caused by food, medication and insect bites. This approval applies to both adults and children who weigh at least 30 kg. The US FDA has approved the 2 mg version for treatment.

What is epinephrine?

This is a hormone medication that relaxes the muscles in the airways and constricts the blood vessels, making it the only life-saving treatment for anaphylaxis. As an injection, it is administered alongside emergency medical care to treat life-threatening allergic reactions triggered by insect bites or stings, foods, medication, latex or other causes.

Why is the US FDA approval significant?

Dr Pravin Hissaria, Head of Clinical Immunology and Allergy at Royal Adelaide Hospital, Australia, and a consultant at Zydus Hospital in Ahmedabad, says Neffy could be transformative in low- and middle-income countries which lack auto-injectors, compelling patients to manually draw and administer adrenaline. "Epinephrine auto-injectors must be kept at a specific temperature and carried in an ice pack because severe allergic reactions can occur anytime. However, in places like India, where we need to teach patients how to draw the correct amount of adrenaline and inject it themselves — a time-consuming process — a nasal spray could be a game changer," says Dr Hissaria.

Allergy consultant Dr Raj Bhagat says a spray could benefit children the most. "They fear injections and they cannot manually draw and inject adrenaline on their own. Parents also worry about leaving these children unsupervised because they might develop anaphylaxis and need precise dosing. An easy-to-use nasal spray could resolve the issue," he says.



What's the efficacy of Neffy?

Neffy's FDA approval was based on four studies conducted with 175 healthy adults who did not have anaphylaxis. These compared the levels of epinephrine in the blood of subjects after using Neffy with those who used the traditional epinephrine injections. Neffy delivered similar levels of epinephrine in the blood as the approved injection products. Additionally, Neffy had similar effects on increasing blood pressure and heart rate, which are critical in treating anaphylaxis.

What is the incidence of severe allergic reactions reported in India?

Dr Hissaria points out that the incidence of anaphylaxis in India is under-reported, largely because the field is spread across various medical specialities and there haven't been enough studies in the country. "While anaphylaxis caused by venom and medicines is well-known, food-induced anaphylaxis is becoming more common in India, possibly due to globalisation and changing lifestyles. So a nasal spray shows great promise," he adds.

The three most common allergens are foods such as nuts, milk, fish, and certain fruits; medications including vaccines, anti-inflammatories, antibiotics and insect venom, particularly from wasps and bee stings. Foods affect children more, drugs affect more adults.



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