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9TH TO 15TH JULY 2023

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INTERNATIONAL

THE U.S. SC BAN ON RACE-BASED ADMISSIONS

The story so far:

The U.S. Supreme Court on June 29 struck down race-conscious student admissions at the University of North Carolina (UNC) and Harvard College, calling such affirmative action policies unlawful. The justices voted 6-3 and 6-2 in favour of Students for Fair Admissions, an organisation against race-based admissions in colleges. The case argued whether admissions systems used by Harvard College and UNC are lawful under the Equal Protection Clause of the Fourteenth Amendment.

What is affirmative action?

Affirmative action is a policy that aims to ensure equal opportunities for historically underrepresented demographics or minorities in educational or professional sectors.

In 1961, President John F. Kennedy became the first leader to link the term with racial equality. According to Smithsonian Magazine, President Kennedy signed an executive order, instructing the government contractors to take “affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, colour, or national origin”.

In 1969, President Richard Nixon signed yet another executive order, directing the U.S. government “to provide equal opportunity in federal employment for all persons, to prohibit discrimination in employment because of race, colour, religion, sex, national origin, handicap, or age, and to promote the full realisation of equal employment opportunity through a continuing affirmative program in each executive department and agency”. A landmark ruling in the matter came in 1978, in the Regents of the University of California versus Bakke case when the Supreme Court ruled that schools could not use affirmative action to rectify historical racial discrimination, but that they could weigh race as one of the many factors in admissions.

What does the judgment say?

The June 29 judgment of the U.S. Supreme Court says that admission programmes of both Harvard College as well as the UNC lack measurable objectives that would validate the use of race as a criterion. The court judgment also added that both these admission programmes “unavoidably” use race in a negative manner, and hence do not serve the guarantees of the Equal Protection Clause of the Fourteenth Amendment of the U.S. Constitution.

What is the Equal Protection Clause?

The Fourteenth Amendment of the U.S. Constitution addresses citizenship issues and the rights of citizens. The Equal Protection Clause, under the Fourteenth Amendment, requires the government to accord equality to all citizens and avoid denial of protection enjoyed by other people or demographics. The Equal Protection clause is considered crucial to the protection of citizens’ civil rights.



Was race a factor for college admissions?

According to Harvard, around 40% of U.S. colleges and universities consider race in some fashion, Reuters reported. The current judgment states that admissions applications at Harvard College are assigned a numerical score in six categories — academic, extracurricular, athletic, school support, personal and overall — during its initial screening. “Overall” is composite of five other ratings and can include the applicant’s race as a factor. UNC also has a similar process — the admissions office assigns a numerical rating to the applicant based on several categories, and race is considered a factor in the review.

What will be the impact of the decision?

This is not the first time that affirmative action has been declared unlawful for U.S. colleges. The State of California, for example, banned affirmative action in 1996 in public universities. Acting as amicus curiae in the recent case, the President and Chancellors of the University of California (UC) informed the Supreme Court that despite their extensive efforts, they have struggled to enrol a racially diverse student body into its programmes. The amicus curiae also said that since 1996, “freshmen enrollees from underrepresented minority groups dropped precipitously at UC, and dropped by 50% or more at UC’s most selective campuses”.

A study published in 2020 analysed long-run changes in the racial and ethnic composition of selected universities, including those in California, Washington, Florida, Arizona, Michigan, Nebraska, New Hampshire and Oklahoma after affirmative action was banned in these states. The study found that the ban led to steady declines in the share of underrepresented minorities among students in flagship universities in these states.

BLURRED LINES

The Biden administration’s decision to send cluster munitions to Ukraine to fight the Russian invasion shows both the challenges Kyiv and its western allies face in the prolonged war and the U.S.’s readiness to escalate it to push back the Russians. Cluster munitions are designed to explode on impact, but many remain “duds”, which can explode later, causing indiscriminate harm — the reason why over 100 countries have banned them. The U.S., though not a signatory to the Convention on Cluster Munitions, had criticised Russia in the recent past for using these munitions in the conflict as amounting to war crimes. But the U.S.’s U-turn now, as part of its 42nd aid package to Ukraine since the Russian invasion began, points to the strains Ukraine is facing on the battlefield. In a war dominated by artillery, Ukraine is entirely dependent on the West for weapons that include artillery shells and ammunition, while Russia’s industrial base has picked up, ensuring an uninterrupted supply of weapons to the front lines. The conventional war has strained western reserves, leaving Ukraine at a disadvantageous position when compared to Russia’s artillery superiority.

Before Ukraine began its counteroffensive a few weeks ago, the western calculation was that swift battlefield victories by Ukraine, like its lightning counter-advances in Kharkiv and Kherson last year, would change the dynamics and put Russia’s President Vladimir Putin under pressure. But the Russians, over the last few months, have built strong defence fortifications along the over 1,000-km long front line, from Kherson in the south to the outskirts of Kharkiv in the northeast, which the Ukrainians have found extremely difficult to break through. Ukraine has made some minor territorial gains in southeast, but at a heavy cost, and is far from achieving its perceived breakthrough of cutting off Mr. Putin’s landbridge in Zaporizhzhia, separating the Russian-



controlled Donbas in the east from Crimea in the south. It is this reality of the battlefield that led the U.S. to take what President Biden called “the difficult decision” of sending cluster munitions. However, this would still raise criticism. The alleged war crimes committed by Russia in Ukraine have been well documented and slammed internationally. Kyiv is also being accused of targeting civilian centres in the Donbas. But the U.S. has tried to draw a moral and ethical line, no doubt thin, by saying it was helping Ukraine defend itself. This line gets blurred with the decision to send the civilian killer munitions to the battlefield. It also shows that no side is willing to make a compromise as yet, irrespective of their battlefield positions, as the war, even after 16 months of fighting, still stays in an escalation spiral.

REFLECTIVE PAUSE

Members of the North Atlantic Treaty Organization (NATO) met in Lithuania to take stock of their military and financial support to Ukraine in the face of Russian aggression there, but came away without offering any timetable to induct Ukraine, much to the chagrin of Ukrainian President Volodymyr Zelenskyy. Mr. Zelenskyy, who vented his frustration after the summit, has only received reassuring words from U.S. President Joe Biden to the effect that Russian President Vladimir Putin “wrongly believes he can outlast Ukraine”. Mr. Zelenskyy’s apparent sense of disappointment is likely to have been multiplied by the fact that as of April, Finland became the 31st member, and with Turkey withdrawing its objections, it is only a matter of time until Sweden signs its documents of accession. In reality, NATO has not only gone to great lengths to support Ukraine’s war efforts directly but has also waived its Membership Action Plan. This plan is a series of political and military steps to ensure that the prospective new entrant is a functioning democracy based on a market economy, that its military is under tight civilian control, that it shows commitment to the peaceful resolution of conflicts, that it treats minority populations fairly, and that it has the ability and willingness to contribute to NATO operations.

While the summit meeting offered NATO a chance to take a reflective pause on the war, the Organization’s leaders appeared to have glossed over a critical existential question: would this not be an important time for NATO to consider going slow on its recruitment campaigns, the point of contention that Mr. Putin has used to make an argument for Russia waging war? Certainly, there is a chicken-and-egg dimension to this debate, and NATO has been particularly activated ever since Moscow’s unprovoked military incursion into Georgia in 2008 and subsequent annexation of Crimea in 2014. Yet war — even a war by proxies — is never a predictable prospect between the nuclear-armed rivals of the Cold War years. Rather than digging in their heels and setting the stage for further military escalation — now with the added cruelty of the cluster munitions promised by Mr. Biden to Mr. Zelenskyy — NATO leaders would have done well to explore potential pathways to a ceasefire and temporary cessation of hostilities. It is true that Mr. Putin is likely to remain undeterred in his ambition for territorial acquisition fuelled by the shadowy inner politics of the Kremlin — yet if NATO is a grouping that genuinely cares about market economies, democracy, human rights, and peace, it needs to work towards changing the very paradigm that set this avoidable conflict in motion in the first place.

MIGRANT CRISIS

The collapse of the Dutch government of Prime Minister Mark Rutte highlights how the issue of immigration has become a critical dynamic of European politics. Mr. Rutte, in power for 13 years, resigned after failing to win the support of his coalition partners for a proposed refugee policy. According to reports, it had two tiers — a temporary one for those fleeing conflicts and a



permanent one for those fleeing persecution — and a two-year waiting period for children of recognised refugees living in the Netherlands to join their parents. The coalition partners of Mr. Rutte’s centre-right People’s Party for Freedom and Democracy supported the two-tier system but opposed the two-year waiting period. Mr. Rutte, who decided to step down (and quit politics) rather than offer them a compromise, was known as “Teflon Mark” for his survival skills. With a domineering presence in politics, he turned the Netherlands, an affluent northern European country of 17.5 million, into a major voice in the continent. But controversies soon began to shadow his administration, denting his popularity. Tax authorities going after poor families over childcare benefits caused public ire while farmers were upset with his push to reduce emissions. The refugee policy was the last straw.

Like most of Europe, the Netherlands has seen an influx of migrants. In 2022, over 21,000 people from outside the EU sought asylum, while the overall migration figure for the year stood at 4,00,000. Immigration has strained housing capacity in the Netherlands at a time when the continent has been struggling with a cost of living crisis, and worsened by Russia’s invasion of Ukraine and western sanctions on Moscow. In several European countries, far-right and conservative parties with tough anti-immigrant policies have been making political gains. In France, Marine Le Pen finished a close second to Emmanuel Macron in the presidential election in 2022. In Italy, a party with neo-fascist origins is in power. In Greece, the conservative government of Kyriakos Mitsotakis has adopted brutal anti-migrant policies where immigrants are sent back to Turkey. Mr. Rutte was trying to ride this wave of anti-immigrant politics with his refugee policies. But a political programme that focused only on immigrants would only deepen the social cleavages of the Netherlands. The country’s political class, and Europe in general, should come up with a proper migration architecture to regulate asylum seekers. But they should also focus on easing the cost of living and housing crises and address widening inequality and other economic challenges, which are helping the far-right to blame the immigrants for the economic problems the country is facing.

WHAT WERE THE EVENTS WHICH LED TO THE RIOTS IN FRANCE?

The story so far:

On June 27, Nahel Merzouk, a 17-year-old unarmed French citizen of Algerian and Moroccan descent, was fatally shot by police after being stopped for a traffic violation in Nanterre, a western suburb of Paris. While initially the police justified the shooting, citing safety concerns, conflicting accounts emerged. A Twitter video shows the officers pointing a gun at the stopped car, which then sped away before crashing. On June 28, a peaceful “White March” protest took place in Nahel’s hometown of Nanterre, but tensions escalated as demonstrations spread to other cities. France witnessed violence across the country despite authorities detaining the police officer on charges of voluntary homicide.

What was the nature of violence?

The violence was primarily attributed to young individuals, including minors and migrants from Black and Arab communities. Over a span of five consecutive nights, France witnessed widespread riots, resulting in over 3,000 arrests nationwide. In response to the riots, mayors of affected cities organised rallies at town halls to condemn the violence, looting, and destruction of infrastructure. According to authorities, the intensity subsided by July 2.



What fuelled the violence?

Despite positive economic indicators, such as a low unemployment rate and increased foreign investment, France remains deeply divided. This incident has brought to the fore the extent of racial polarisation in France. Recent studies have highlighted the disproportionate targeting of individuals perceived as Black or Arab by police during identity checks. France has experienced multiple uprisings in its banlieues (suburbs), primarily during the 1980s and 1990s. These unrests frequently originated from societal challenges such as unemployment, poverty, discrimination, and strained relations between minority communities and law enforcement. Although Nahel's killing prompted a relatively swift response, concerns remain as previous cases have seen minimal convictions. Last year, 13 individuals who failed to comply with traffic stops were fatally shot by the police, most of them Black or Arab. This year again, three have lost their lives. While evidence may not suggest racial motivation in the shooting, it has amplified concerns about racial inequality and police misconduct, leading to widespread protests and calls for justice. Demonstrators argue that the shooting symbolises systemic racism within French law enforcement.

The shooting has also reignited the debate over police's use of deadly force, with left-wing lawmakers calling for the repeal or revision of a 2017 law that made it easier for officers to shoot at moving vehicles. The law was passed after lobbying from police unions following a series of terrorist attacks. Critics argue that the law's ambiguous wording allows for questionable interpretations.

How did the authorities respond?

To quell the violence, the Minister of the Interior of France Gérald Darmanin deployed more than 40,000 law enforcement officers, resulting in injuries to both officers and protesters. Keeping in mind the young age of the rioters, President Emmanuel Macron called on parents to take responsibility and keep their children indoors. He also suggested imposing restrictions on social media usage, leading to increased scrutiny of social media companies accused of exacerbating the unrest.

However, police unions have voiced their support for the arrested officer, claiming he was performing his duty. French police unions have consistently contended that their work has become more perilous due to the government's neglect in tackling underlying social issues, such as the prevalence of illicit drugs and the absence of employment and educational opportunities in disadvantaged regions. A crowdfunding initiative for the accused officer's family, raised nearly 1.6 million euros which was four times more than Nahel's funding.

President Macron faces challenges on multiple fronts, including protests over pension reforms, domestic discontent over inflation, and the ongoing riots. He is attempting to convey a message of appeasement, although its effectiveness remains uncertain. In the banlieues, tensions persist due to a perception that the country's meritocracy is failing.

WHY IS CHINA LIMITING EXPORTS OF RAW MATERIALS?

The story so far:

On July 3, in what is being seen as the country's retaliatory move in the 'chip war', the Chinese Ministry of Commerce announced that it would implement export controls on items related to gallium and germanium. It said that the controls were being imposed "in order to safeguard

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national security interests". The announcement led to a spike in the prices of essential raw materials with companies rushing to secure their supplies. The regulations will be enforced from August 1.

What are the curbs announced by China?

The Chinese Ministry of Commerce, in a bid to restrict the export of the two raw materials, ordered that export operators would now have to acquire a specific licence. The primary contention lies with the application process that requires operators to list the importers, end-users and end use. They would also have to produce the export contract in the original. Exporting without permission would constitute a violation — calling for administrative penalties. It would also be deemed a crime with the exporter being held "criminally responsible".

Why is it a matter of concern?

Gallium is used to make gallium arsenide which forms the core substrate for semiconductors. They are used to manufacture semiconductor wafers utilised in integrated circuits, mobile and satellite communications (in chipsets), and LEDs (in displays). It also used in automobiles and lighting, and for sensors in avionic, space and defence systems.

According to the European industry body, Critical Raw Materials Alliance (CRMA), 80% of gallium production takes place in China. The U.S. Geological Survey (USGS) had noted earlier, while talking about low-purity gallium production outside China, that producers have "most likely restricted output owing to China's dominant production capacity".

China also commands 60% of the total production of germanium. The element is used in fibre-optic cables, infrared imaging devices (used by enforcement agencies for surveillance, target acquisition and reconnaissance, particularly in the dark) and optical devices (to improve the ability to operate weapon systems in harsh conditions). They are also used in solar cells for their ability to withstand heat and higher energy conversion efficiency.

The European Commission, whose import dependency on China stands at 71% and 45% for gallium and germanium respectively, has recognised it as a 'critical raw material'. In India, the Ministry of Mines identified the two elements to be crucial for the country's economic development and national security.

How have countries responded?

Reuters reported that the U.S. "firmly" opposes the export controls and would consult its partners and allies to address the issue. "Their actions underscore the need to diversify supply chains. The U.S. will engage with our allies and partners to address this and to build resilience in critical supply chains," said the Commerce Department. The agency also reported that the European Commission has expressed concerns about the development, and doubts that the move was related to security.

What is the geopolitical backdrop?

In October 2022, the U.S. Department of Commerce had implemented a series of export control measures to protect its "national security and foreign policy interests". China has used the same reasoning for its latest order. Directed primarily at semiconductor manufacturing items, the U.S. measures were announced to restrict China's ability to obtain advanced computing chips, develop and maintain supercomputers, and manufacture advanced semiconductors. It said that Beijing was using the items and capabilities to produce advanced military systems including weapons of



mass destruction, improving the speed and accuracy of its military decision making, planning and logistics alongside committing human rights abuses. The statement also said that the threat environment was always changing and that the U.S. would continue its outreach and coordination with allies and partners.

Japan and the Netherlands followed suit this year. The Netherlands, home to the world's most important chip-making equipment manufacturer ASML, also held that the measure was necessary on "national security grounds".

How does China look at these allegations?

China has denied the assertions. A spokesperson at the Chinese Foreign Ministry Mao Ning has stated that the export measures were not targeted at any specific country. She suggested that Beijing was committed to keeping the global industrial and supply chains secure and stable, and that it has always implemented "fair, reasonable and non-discriminatory export control measures." However, the same was not resonated by former vice-minister of commerce, Wei Jianguo. He told China Daily in an interview, that this is "just the beginning" of China's countermeasures. If the restrictions become tougher in future, the counter-measures would also escalate. "Any attempt to promote decoupling through hegemonism, including suppressing Chinese enterprises, will ultimately be a stone thrown at one's feet," he said.

Will it impact India?

According to Soumya Bhowmick, Associate Fellow at the Observer Research Foundation (ORF), the Chinese export controls are expected to have a short-term impact on India and its industries due to the disruption in immediate supply chains. He states that the increased prices resulting from the export control order would affect the cost and availability of chips, potentially impacting India's chip-making plans. However, Mr. Bhowmick adds that the long-term consequences for India's chip-making plans and industries will depend on several factors, including alternative supply sources, domestic semiconductor production capabilities, and strategic partnerships like the India-U.S. Initiative on Critical and Emerging Technology (iCET). According to him, these factors would be crucial in ensuring a reliable supply chain for India's semiconductor industry.

Further, Rajib Maitra, Partner, Consulting at Deloitte India, told The Hindu that the scenario provides an opportunity for India, which is totally import-dependent for germanium and gallium. Pointing to the presence of the two critical minerals as by-products in the processing of zinc and alumina, Mr. Maitra argues that efforts should be made to focus on waste recovery from zinc and alumina production. Additionally, moving attention towards available substitutes as indium and silicon could also be considered. "There is some good quality of silica feedstock available in India, but that has to be converted to metallurgical-grade silicon for which you would require lower power (rates)," he points out.

THE GLOBAL SOUTH: ORIGINS AND SIGNIFICANCE

The unwillingness of many leading countries in Africa, Asia and Latin America to stand with NATO over the war in Ukraine has brought to the fore once again the term "Global South."

"Why does so much of the Global South support Russia?" inquired one recent headline; "Ukraine courts 'Global South' in push to challenge Russia," declared another.



But what is meant by that term, and why has it gained currency in recent years? The Global South refers to various countries around the world that are sometimes described as ‘developing’, ‘less developed’ or ‘underdeveloped’. Many of these countries — although by no means all — are in the Southern Hemisphere, largely in Africa, Asia and Latin America. In general, they are poorer, have higher levels of income inequality and suffer lower life expectancy and harsher living conditions than countries in the “Global North” — that is, richer nations that are located mostly in North America and Europe, with some additions in Oceania and elsewhere.

Going beyond the ‘Third World’

The term Global South appears to have been first used in 1969 by political activist Carl Oglesby. Writing in the liberal Catholic magazine *Commonweal*, Oglesby argued that the war in Vietnam was the culmination of a history of northern “dominance over the global south.”

But it was only after the 1991 breakup of the Soviet Union — which marked the end of the so-called “Second World” — that the term gained momentum. Until then, the more common term for developing nations — countries that had yet to industrialise fully — was ‘Third World’. That term was coined by Alfred Sauvy in 1952, in an analogy with France’s historical three estates: the nobility, the clergy and the bourgeoisie. The term ‘First World’ referred to the advanced capitalist nations; the ‘Second World’, to the socialist nations led by the Soviet Union; and the ‘Third World’, to developing nations, many at the time still under the colonial yoke.

Sociologist Peter Worsley’s 1964 book, *The Third World: A Vital New Force in International Affairs*, further popularised the term. The book also made note of the ‘Third World’ forming the backbone of the non-aligned movement, which had been founded just three years earlier as a riposte to bipolar Cold War alignment.

Though Worsley’s view of this ‘Third World’ was positive, the term became associated with countries plagued by poverty, squalor and instability. ‘Third World’ became a synonym for banana republics ruled by tinpot dictators — a caricature spread by Western media.

The fall of the Soviet Union — and with it the end of the so-called Second World — gave a convenient pretext for the term ‘Third World’ to disappear, too. Usage of the term fell rapidly in the 1990s. Meanwhile ‘developed’, ‘developing’ and ‘underdeveloped’ also faced criticism for holding up Western countries as the ideal, while portraying those outside that club as backwards. Increasingly the term that was being used to replace them was the more neutral-sounding “Global South.”

Geopolitical, not geographical

The term ‘Global South’ is not geographical. In fact, the Global South’s two largest countries — China and India — lie entirely in the Northern Hemisphere.

Rather, its usage denotes a mix of political, geopolitical and economic commonalities between nations.

Countries in the Global South were mostly at the receiving end of imperialism and colonial rule, with African countries as perhaps the most visible example of this. It gives them a very different outlook on what dependency theorists have described as the relationship between the centre and periphery in the world political economy — or, to put it in simple terms, the relationship between “the West and the rest.”



Given the imbalanced past relationship between many of the countries of the Global South and the Global North — both during the age of empire and the Cold War — it is little wonder that today many opt not to be aligned with any one great power. And whereas the terms ‘Third World’ and ‘underdeveloped’ convey images of economic powerlessness, that isn’t true of the “Global South.”

Since the turn of the 21st century, a “shift in wealth,” as the World Bank has referred to it, from the North Atlantic to Asia Pacific has upended much of the conventional wisdom on where the world’s riches are being generated.

By 2030 it is projected that three of the four largest economies will be from the Global South — with the order being China, India, the U.S. and Indonesia. Already the GDP in terms of purchasing power of the the Global South-dominated BRICS nations — Brazil, Russia, India, China and South Africa — surpasses that of the Global North’s G-7 club. And there are now more billionaires in Beijing than in New York City.

Global South on the march

This economic shift has gone hand in hand with enhanced political visibility. Countries in the Global South are increasingly asserting themselves on the global scene — be it China’s brokering of Iran and Saudi Arabia’s rapprochement or Brazil’s attempt to push a peace plan to end the war in Ukraine. This shift in economic and political power has led experts in geopolitics like Parag Khanna and Kishore Mahbubani to write about the coming of an “Asian Century.” Others, like political scientist Oliver Stuenkel, have begun talking about a “post-Western world.” One thing is for sure: the Global South is flexing political and economic muscles that the ‘developing countries’ and the ‘Third World’ never had.

IN UNHRC VOTE, INDIA STANDS AGAINST DESECRATION OF KORAN

The Geneva-based 47-member UN Human Rights Council adopted the draft resolution ‘Countering religious hatred constituting incitement to discrimination, hostility or violence’, with 28 members voting in favour, seven abstentions and 12 nations voting against.

India voted in favour of the resolution that “condemns and strongly rejects the recent public and premeditated acts of desecration of the Holy Koran, and underscores the need for holding the perpetrators of these acts of religious hatred to account in line with obligations of States arising from international human rights law”.

Rough tally

Those voting in favour of the resolution included Bangladesh, China, Cuba, Malaysia, the Maldives, Pakistan, Qatar, Ukraine and UAE.

Nations voting against the resolution included Belgium, Finland, France, Germany, the U.K. and the U.S.

The draft resolution was brought by Pakistan on “behalf of the States Members of the United Nations that are members of the Organisation of Islamic Cooperation” as well as by the State of Palestine.



NATION

PM MODI IN FRANCE: WHAT IS BASTILLE DAY, WHOSE CELEBRATIONS HE WILL ATTEND?

Prime Minister Narendra Modi landed in Paris Thursday (July 13) on a two-day visit, during which he will hold wide-ranging talks with French President Emmanuel Macron and attend the French National Day celebrations as the Guest of Honour. The national day of France is celebrated on July 14, also known as Bastille Day or Fête nationale française, and is marked by a long military parade, along with dancing and other merriment.

While July 14 is more popularly associated with the storming of the Bastille in 1789, it is also the anniversary of Fête de la Fédération, an event held in 1790 to celebrate the unity of the French people. Also, while Bastille Day is often seen as the symbol of the end of monarchy, kings and queens continued in France till long after that. So what exactly is the French national day the anniversary of, and why was the storming of the Bastille so significant?

What led to Bastille Day?

Bastille Day can be said to have set in motion the decade-long French Revolution, which fundamentally altered French political and social life and influenced the foundational ideas of democracy across the world, popularising slogans such as “Liberté, Egalité, Fraternité” (Liberty, Equality, Fraternity). This was the day on which ordinary people stormed Bastille, a 14th century fortress-prison in Paris that was used to incarcerate political prisoners (the famous writer philosopher Voltaire and the infamous Marquis de Sade had both been kept at the Bastille at various times).

Before the storming of the Bastille, both economic and social tensions had been building up in Paris for long. In the 1780s, the French economy was in dire straits, and King and Queen Louis XVI and Marie Antoinette were not helping matters with their image of irresponsible, profligate spenders. Crop failure and famine dealt further blows, and by 1788, even bread became unaffordable for a vast majority of people.

Under pressure, Louis XVI summoned the Estates-General, a body that had been around for almost 400 years by then, but could be summoned, heard, or ignored at the King’s will. This body consisted of the clergy (First Estate), the nobility (Second Estate) and the commoners (Third Estate). When called by Louis XVI, the body was dominated by the commoners in numbers, but not in influence. After their calls for greater say for commoners were ignored, one faction broke away and established a new body, called the National Assembly.

On June 20, 1789, this body took the Tennis Court Oath, that they would stay together till they wrote a new Constitution for France. Louis XVI, meanwhile, started moving more troops into Paris, adding to the uncertainty and tensions in the city. On July 11, he dismissed Jacques Necker, his popular and only non-high-born minister. Protests broke out, soon turning violent.

Then on July 14, a huge, armed mob began marching towards Bastille.

Storming of the Bastille

The reason the mob chose Bastille was because people imprisoned simply because the King said so, without trial and without publicly stated causes, were often housed here; although on July 14, 1789, the prison only had seven inmates, of no great consequence.



Bernard-René de Launay, the governor of the Bastille, at first tried to negotiate, and gave assurances that he would not fire upon the marching crowd. However, as the negotiations proceeded and no word was sent out, the mob grew restive. A drawbridge was lowered and people began marching in. Seeing this, a panicked de Launay allowed firing. The Bastille defenders may have succeeded in halting the protesters, but soon, the latter was joined by the armed and trained French Guards. The Bastille fell, de Launay and the Mayor of Paris were killed. The ‘public’ had drawn first blood.

As stated earlier, the French monarchy continued long after this, but Bastille Day had shown what an angry and determined group of common people was capable of.

In understanding how Bastille Day fired up Europe’s imagination, this excerpt from an article in England’s The Guardian, published 100 years after the storming, can help: “The assembling of the States General, the triumph of the Third Estate, and the oath of the Tennis Court were all immeasurably significant facts, but they had been victories for the people rather than by the people. But when the populace armed itself and rushed in its thousands to take and demolish the grim old stronghold of tyranny, the people for the first time revealed the immensity of their power, and feudalism was smitten hip and thigh by a mob acting almost instinctively.” One year later, while Louis XVI was still on the throne, the Fête de la Fédération was observed, to celebrate unity among the French people — a unity that would soon be guillotined in the bloodshed of the French Revolution.

July 14 celebrations over the years

Bastille Day celebrations had petered out in the intense political churn in post-Revolution France. However, by the 1870s, the need was felt for a national day of celebration of France and the French. While July 14, 1789 was a strong contender for its anniversary to be observed, the day was also one of violence and murder. Thus, July 14, 1790, was chosen as the day whose anniversary would be the national day. According to the BBC, the law to declare National Day was “deliberately ambiguous. It did not say which 14 July was being celebrated. And today, of course, everyone thinks of it as Bastille Day.”

India and Bastille Day

Before PM Modi, Prime Minister Manmohan Singh had attended Bastille Day celebrations in 2009. According to a French government website, “In 2009, Indian soldiers were invited to take part in the ceremonies and the military parade was opened by a contingent of 400 members of the Indian Army, Navy and Air Force.” PM Manmohan Singh and French President Nicolas Sarkozy watched this parade.

GRAND CROSS OF THE LEGION OF HONOUR: FRANCE’S HIGHEST DECORATION, MARK OF ITS GREATEST HONOUR, FOR PM MODI

French President Emmanuel Macron on Thursday (July 13) evening (early on Friday in India) conferred his country’s highest honour, the Grand Cross of the Legion of Honour, upon Prime Minister Narendra Modi. The Government of India described it as a “warm gesture embodying the spirit of the India-France partnership”.

The honour normally recognises the contribution of the French people in the “service of the nation”. Foreigners are honoured for their support to France, and the award is sometimes conferred upon high dignitaries on a state visit to France.

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PM Modi is on a two-day state visit to France, and will be the Guest of Honour at the French National Day (Bastille Day) parade in Paris.

What is the Legion of Honour?

The National Order of the Legion of Honour, or simply The Legion of Honour is the highest French decoration, both civil and military, and is one of the most famous national honours in the world.

The Order was established by Napoleon Bonaparte in 1802, and has been presented for more than the past two centuries on behalf of the French Head of State to its most deserving citizens in all fields of activity. The motto of the Order is Honneur et Patrie, French for Honour and Fatherland.

According to the official website of the Legion of Honour, 2,200 French and 300 foreigners are decorated every year, and the Order currently has 79,000 members.

What does the award entail?

There is no material or financial benefit attached to the award. The Legion of Honour cannot be applied for; the government identifies the potential honourees.

The award badge is a five-armed Maltese asterisk hung on an oak and laurel wreath. On the obverse is the effigy of the Republic and on the reverse two tricolour flags surrounded by the motto Honneur et Patrie. The colour of the ribbon is red.

The official website describes the award as a national emblem of France: “in a world losing its points of reference, the Legion of Honour remains a strong, understandable and unifying symbol. It is deeply anchored in French society.” It is “an invaluable source of pride for the recipients and their families and an example of civic service made public”.

What is the award that Prime Minister Modi has got?

The Legion of Honour has five degrees of increasing distinction: three ranks — Chevalier (Knight), Officier (Officer), and Commandeur (Commander) — and two titles — Grand Officier (Grand Officer) and Grand-croix (Grand Cross). The Prime Minister has been honoured with the highest French honour, akin to the Bharat Ratna in India.

The Legion of Honour is worn before any other French or foreign insignia, on the left-hand side. With informal attire, lapel insignia (ribbon or rosette) is worn. Pendants and small-size decorations are preferred for official ceremonies, says the Legion website.

WHAT IS THE RAFALE MARINE JET, WHICH INDIA IS GOING TO BUY FROM FRANCE?

As Prime Minister Narendra Modi’s two-day Paris visit began on Thursday (July 13), the Defence Acquisition Council (DAC) held a crucial meeting to clear proposals to buy 26 Rafale Marine fighter jets for the Navy, along with three Scorpene submarines for the force.

The approval by the DAC — which clears proposals for big-ticket capital procurements and is headed by defence minister Rajnath Singh — paves the way for a possible announcement on procuring the Rafale M aircraft during Modi’s Paris visit.

While the DAC has granted the Acceptance of Necessity (AoN) to procure the 26 fighter jets — which is the first step of the long defence procurement process — the price and other terms of



purchase will be negotiated subsequently with the French government, since they will be bought on an Inter-Governmental Agreement (IGA) basis.

Difference between Rafale jets and their Marine version

The Rafale Marine fighters are the naval variant of the Rafale fighter jets, 36 of which are operated by the Indian Air Force.

Manufactured by France's Dassault Aviation, the Rafales are advanced twin engine, multirole fighter jets are equipped with latest weapon systems — including Meteor-beyond visual range air-to-air missiles, Hammer air to surface smart weapon system, Scalp cruise missiles — and are fitted with modern sensors, and radar to detect and track and attack targets. The jets can carry exceptionally high payloads.

Additionally, the jets have also been equipped with certain India-specific enhancements and can carry out a range of missions.

The Marine version of the jets will be slightly different, given that they will operate from aircraft carriers on sea.

The differences include foldable wings, a longer airframe for landing on carriers, and a tail hook for arrested landing on a carrier. As per French firm Safran, the nose and main landing gears on the navy version have been reinforced to satisfy the difficult aircraft carriers landing and catapulting conditions for the aircraft.

The Rafale M nose gear also incorporates the “jump strut technology” in the shock absorber to give the aircraft an angle of attack during catapulting.

This naval version of the aircraft can also carry a wider range of weapons, including anti-ship missiles and air to surface missiles and radar meant for maritime operations.

Rafale M and MiG 29Ks

The Navy currently operates the MiG-29Ks from its aircraft carrier INS Vikramaditya. The Russian MiG-29Ks are a carrier-based multirole fighter aircraft and can have a maximum speed over twice the speed of sound (about 2,000 kmph) and can climb to an altitude of over 65,000 feet.

It is equipped with sophisticated weapon systems and is capable of engaging targets in air, at sea or on land. As per the Navy, the latest avionics, with data link capabilities coupled with its range of armament enables “true power projection” and its air-to-air refueling capability offer major extension to its ranges.

However, with some of them expected to retire in a decade and with the Navy now having two operational aircraft carriers at present, there was a need to procure additional deck-based fighters to meet its operational requirements until it acquires the indigenous Twin Engine Deck-Based Fighter (TEDBF) which is currently under development by the Aeronautical Development Agency (ADA) under the DRDO.

However, only two aircraft had managed to meet the criteria for the Navy's fighter jet deal—the Boeing's F/A-18 E/F Super Hornet and Dassault Aviation's Rafale-M. The Rafale M, having common spares and support as the Rafale operated by the Indian Air Force, thus had an edge over the other.



Rafale exports

As per Dassault Aviation, the Rafale is one of the key components of France's nuclear deterrence.

It said by the end of 2022, France had ordered a total of 192 Rafales, including 12 aircraft to compensate for those sold to Greece; out of these, 153 have already been delivered.

A further order (to be announced in 2023) for 30 more fighters is planned as part of the 2019-2025 military spending bill, to which 12 further Rafales will be added 12 further Rafales to offset those sold to Croatia, it said.

The aircraft has logged a total of 405,000 flight-hours– including 63,500 operational hours flown by French pilots since 2007.

NEW SCORPENE CLASS SUBMARINES FOR THE NAVY: WHY THEY ARE A CRUCIAL BUY

The Defence Acquisition Council, the apex decision-making body for the acquisition of military equipment for India's armed forces, on Thursday (July 13) cleared proposals worth thousands of crores to buy three additional Scorpene submarines and 26 Rafale Marine fighter jets for the Navy.

The decision coincides with Prime Minister Narendra Modi's two-day Paris trip, which began the on same day. The DAC decision has paved the way for an announcement on procuring the submarines during PM Modi's trip to France.

The three additional Scorpene submarines will be procured under Buy (Indian) category and will be built by the Mazagon Dock Shipbuilders Limited (MDL) in Mumbai.

The new submarines

The MDL is building six Scorpene class submarines under the Project-75, as part of a \$ 3.75 billion deal signed in October 2005, which allowed for transfer of technology from the French defence firm, Naval Group. Of these, five have already been commissioned and the last one will likely be commissioned early next year. This project saw significant delays, with the first submarine originally slated for delivery in 2012.

The fifth submarine under this project, INS Vagir, was commissioned in January this year. The others — INS Kalvari, INS Khanderi, INS Karanj and INS Vela were commissioned between 2017 and 2021. In May this year, the sixth submarine Vagsheer began her sea trials.

Now, the DAC has given clearance for three additional Scorpene submarines to be built by the MDL. These are likely to have the same specifications as the ones before.

The need for the three additional submarines

Officials privy to the development said the need to procure the three additional submarines was felt in the backdrop of the delayed deliveries of submarines under Project 75, as well as to bolster India's dwindling submarine fleet.

Currently, the Navy has 16 conventional submarines in service – seven of the Sindhughosh class (Russian Kilo class), four of the Shishumar class (modified German Type 209) and five of the Kalvari class (French Scorpene class). However, to carry out its full spectrum of operations the Navy needs at least 18 such submarines.



Moreover, at any given time, around 30 per cent of the submarines are under refit, thus further bringing down the strength of operational submarines. Even the latest Kalvari-class submarines are scheduled to go for upcoming refits very soon.

As per the Defence Ministry, the procurement of additional submarines, with higher indigenous content, will not only help in maintaining required force level and operational readiness of the Navy, but also create significant employment opportunities in the domestic sector.

It will also help the MDL in further enhancing its capability and expertise in submarine construction, it said in a statement issued on Thursday.

What are the capabilities of the Scorpene submarines?

The Scorpene submarines are conventional attack subs, meaning that they are designed to target and sink adversary naval vessels. Capable of launching a large array of torpedoes and missiles, they are also equipped with a range of surveillance and intelligence-gathering mechanisms.

They are around 220 feet long and have a height of approximately 40 feet. They can reach the top speeds of 11 knots (20 km/h) when surfaced and 20 knots (37 km/h) when submerged.

Scorpene class submarines use diesel electric propulsion systems, with an endurance – ability to operate independently without refuelling – of approximately 50 days. This sort of propulsion system alternates between using diesel (for functioning on the surface) and electric (for functioning underwater). However, these electric batteries need to be recharged by the diesel engine after prolonged submersion, meaning that the submarine has to periodically surface to continue operating.

How do they compare with nuclear submarines?

Nuclear submarines are coveted due to their theoretically unlimited endurance – a nuclear reactor on a submarine has an operational life of up to 30 years. As they are not propelled by batteries, these submarines only need to come to the surface for replenishing supplies for the crew. They are also able to move much faster than conventional submarines.

However, this is not to say that a navy should only choose to procure nuclear submarines. First and foremost, nuclear submarines are expensive and require a significant amount of specialised experience to operate. Second, with advancements in diesel electric technology, the range of conventional submarines as well as their stealth has gone up significantly.

As per a paper by the US Naval institute, “When operating on batteries, AIP-equipped submarines are almost silent, with the only noise coming from the shaft bearings, propeller, and flow around the hull.” The Indian navy will retrofit all of its Scorpene class submarines with air independent propulsion or AIP systems, beginning in 2024. This will boost their endurance as well as stealth.

Currently, India has 2 nuclear-powered submarines (SSBMs) of the Arihant class in service.

EXPERT WEIGHS IN | CHINA VIEW ON SCO SUMMIT: IRAN WELCOME, NEED TO ‘SAVE’ GROUP FROM INDIA

While the membership of the Shanghai Cooperation Organisation (SCO) is growing — with Iran being the newest entrant at the just-concluded 23rd leaders’ summit in New Delhi — debate is also heating up over the role of India in the China-dominated grouping.

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



India's association with the SCO began in 2005 as an Observer country, and it became a full Member State at the Astana Summit in 2017. Interestingly, in China, despite the government eventually "allowing" India's accession, the strategic affairs community was opposed to the membership, comparing India's role and presence within the grouping to that of Turkey in North Atlantic Treaty Organization (NATO).

Some observers believe that India was accepted as a full member on Moscow's insistence, to counterbalance China for pushing Pakistan's membership into the organisation. They say that though China agreed to the Russian viewpoint that Moscow, Beijing, and New Delhi must be united in fighting the US-led Western dominance in Asia, or particularly in Central Asia and Eurasia, in reality, Moscow's calculation was to woo India on one hand, so it would keep purchasing Russian weapons, and on the other hand, put pressure on Beijing and keep it sandwiched between Moscow and New Delhi.

WEAKENING AUTONOMY

The Supreme Court's verdict upholding statutory amendments made in 2021 to allow multiple extensions of service to heads of investigative agencies is a setback to the cause of protecting their institutional independence. While the part of the judgment quashing the two one-year extensions given to the Director of Enforcement, S.K. Mishra, may be welcomed, the rest of it is a free pass to the government to undermine the autonomy of these agencies. The Court has asked Mr. Mishra to step down on July 31. In 2021, it had directed the government not to grant any extension to him beyond November that year. It has now ruled that even though Parliament can remove the basis for any judgment through legislation, it cannot nullify a court direction. Mr. Mishra was appointed for a two-year term in 2018, but in 2020, the original appointment was retrospectively amended to make it a three-year tenure. He was given two annual extensions in 2021 and 2022, despite crossing the age of superannuation. The government ignored the Court's earlier observation that such extension should be given to those who have attained superannuation only in "rare and exceptional cases". However, the larger import of the latest judgment is that it endorses the changes enabling annual extensions to the CBI and ED Directors until they complete five years in that office.

The heads of the CBI and ED have an assured term of two years regardless of superannuation, and the introduction of a power to extend it to five years means an officer may get up to three annual extensions. As the petitioners who challenged the extension given to Mr. Mishra, as well as the Court-appointed amicus curiae, argued, piecemeal extensions undermine the independence of the office, and encourage a carrot-and-stick policy to make Directors toe the government's line. The Court has rejected, without much justification, their contention that the 2021 changes to the Central Vigilance Commission Act, the Delhi Special Police Establishment Act and the Fundamental Rules go against the spirit of earlier judgments that mandated fixed tenures to the CBI and ED heads only to insulate them from extraneous pressures. The finding that the amendments do not violate any fundamental rights is quite surprising, as allowing the government to have Directors who can pick and choose what cases to investigate based on political instructions certainly offends the rights of citizens to equal treatment and impartial investigation. At a time when there is a cloud of suspicion over the misuse of government agencies against political opponents, the Court's endorsement of a tenure extension system designed to undermine their independence is not conducive to the rule of law.



DAY-TO-DAY SUPREME COURT HEARINGS FROM AUG 2: THE ISSUES IN CHALLENGE TO CENTRE'S 2019 JAMMU & KASHMIR DECISIONS

The Supreme Court on Tuesday (July 11) said it will begin hearing petitions challenging the changes to Article 370 and downgrading of Jammu & Kashmir state into two Union Territories on August 2, and will then proceed on a day-to-day basis.

Earlier on Monday, the Centre told the SC in its affidavit that they have “brought unprecedented development, progress, security and stability to the region, which was often missing during the old Article 370 regime” and that this is “testament to the fact that Parliamentary wisdom...” was “exercised prudently”. Chief Justice of India DY Chandrachud said that the affidavit on the present status of Jammu and Kashmir would not have any bearing on the constitutional issues raised in the petitions “and shall not be relied upon for that purpose”.

The petitions, involving important legal and constitutional questions, will be taken up by a Bench led by CJI Chandrachud, also comprising Justices Sanjay Kishan Kaul, Sanjiv Khanna, B R Gavai, and Surya Kant.

Road to the changes

Governor's Rule was imposed in J&K on June 19, 2018, after the BJP withdrew support to the coalition government led by Chief Minister Mehbooba Mufti. Under Article 92 of the J&K Constitution, six months of Governor's Rule was mandatory before the state could be put under President's Rule.

The Legislative Assembly was dissolved on November 21 and, on December 12, before the end of six months, President's rule was imposed on J&K. President's Rule was subsequently approved by both Houses of the Parliament.

On June 12, 2019, President's Rule was extended for another six months with effect from July 3 of that year.

Constitutional changes

On August 5, the Centre issued an order amending The Constitution (Application to Jammu and Kashmir) Order, 1954, and superseding it with The Constitution (Application to Jammu and Kashmir) Order, 2019. The new order made “all the provisions of the Constitution” applicable to J&K state. The government also amended Article 367 to add a new Clause (4), making the Constitution of India directly applicable to J&K.

On August 6, the President issued a declaration under Article 370(3) making all its clauses inoperative except the provision that all articles of the Constitution shall apply to J&K.

Change to Article 370

Article 370 provided for application of only Article 1 and Article 370 to Jammu & Kashmir. Other provisions of the Constitution did not automatically extend to J&K, but clause (1)(d) of Article 370 empowered the President of India to extend them through an executive order with the concurrence of the government of J&K.

Clause 3 of Article 370 empowered the President to “declare that this article shall cease to be operative” completely or partially but only if the Constituent Assembly of J&K recommended such



an action. Since the Constituent Assembly of J&K no longer existed, having dispersed in 1957, this power of the President had ceased, unless a new Constituent Assembly came into being.

Article 370 explained that “for the purpose of this article”, the state government meant the Maharaja (later changed to Sadr-e-Riyasat) of J&K, acting on the advice of the council of ministers. But there was no state government either in J&K, so the President had no way to acquire the concurrence of the state government.

This meant there was no constitutional and legal mechanism available for the Centre to abrogate or amend Article 370.

The Centre, however, used the President’s powers under Article 370(1)(d) to amend Article 367, which provides guidelines to interpret the Constitution. A new clause was added to Article 367, replacing “Constituent Assembly of the State” referred to in Article 370(3) by “Legislative Assembly of the State”.

Thus, the presidential order route under Article 370(1)(d) was used to amend Article 370 itself, whereas Article 370 could have been amended only upon the recommendation of the Constituent Assembly under Article 370(3), not through Article 370(1)(d).

Parliament = state govt?

The President, while imposing his direct rule in J&K, had assumed all functions of the J&K government, taken over all the powers of the Governor under both the Indian Constitution and the J&K Constitution, and extended the powers of the state legislature to Parliament.

This meant that the President of India was in effect the J&K state government, and Parliament was in effect the state legislature. The powers of the J&K Constituent Assembly were passed on to the state legislature and, in this scheme of things, when the “state government” gave its concurrence to these monumental changes, it was, in fact, the President giving concurrence to his own decision.

It has been argued that since President’s Rule in a state is in the nature of an interim arrangement until an elected government is put in place, the administration under President’s Rule cannot take decisions that change the very constitutional structure of the state.

J&K Constitution

The move to abolish the J&K Constitution has been challenged because the Legislative Assembly of J&K had no power under the J&K Constitution to recommend any amendment to any provision of the Constitution of India.

Article 147 of the J&K Constitution barred the J&K Legislative Assembly from “seeking to make any change in provisions of the Constitution of India as applicable in relation to the State”. It has been argued that this means even the J&K Legislative Assembly wasn’t legally competent to give consent to the President’s order.

Downgrading to UT

The Jammu and Kashmir (Reorganisation) Act, 2019 bifurcated J&K into two Union Territories — J&K was an UT with a Legislative Assembly; Ladakh was without an Assembly.

There is no other instance in India’s constitutional history of a state being demoted to a UT, even though Parliament can under Article 3 create a new state by carving out territory from any state,



uniting two or more states, or portions of different states. Parliament is also empowered to add area to an existing state, or change the existing boundaries of a state.

The Centre's decision has been challenged on the ground that it violates Article 3. Also, the proviso to this article makes it incumbent on the President to refer any Bill proposing the reorganisation of a state to its legislature if the Bill "affects the area, boundaries or name of any of the states".

It is argued that the view of Parliament on such a Bill cannot replace the view of the state legislature. Under President's Rule, only those powers of a state legislature can be exercised as are essential to run the day-to-day affairs of the state. Parliament cannot provide the view of a particular state legislature which in essence is the opinion of the people of that state.

Colourable legislation

The challenge is also based on the argument that the constitutional changes are "colourable legislation" and thus legally untenable. The doctrine of colourable legislation is the legal principle that says what cannot be done directly cannot be done indirectly.

This doctrine has been reiterated by the Supreme Court, as well as constitutional courts in other countries.

DANGEROUSLY FANCIFUL

The Gujarat High Court order declining to stay the conviction of Congress leader Rahul Gandhi in a defamation case is quite unreasonable and borders on the fanciful. Justice Hemant M. Prachhvak becomes the third judicial authority in Gujarat to rule that Mr. Gandhi, in using the words "Why do all these thieves have Modi as a surname?" in an election campaign speech in 2019, had committed defamation against a large number of people and that it was a "serious offence". The purported seriousness of the offence has been cited to justify the award of a two-year jail term, the maximum punishment for defamation. While the remark is unlikely to have troubled or caused any reputational harm to any reasonable person, the trial magistrate, a civil court hearing an appeal against conviction, and now, the High Court, have unanimously concluded that the offence is grave, amounting to moral turpitude. The High Court has agreed with the first appellate court that Mr. Gandhi does not deserve the benefit of stay of conviction, an order that would help overcome his disqualification from the Lok Sabha. It has enthusiastically endorsed the conclusion that the offence is grave because it was committed by a Member of Parliament and leader of a party that had ruled the country for decades and that it was a speech that contained a false statement made with intent to affect the outcome of an election.

The court has controversially ruled that the statement has defamed a determinable group of people, referring to those with the surname 'Modi'. It has thus rejected the key argument that 13 crore people with the surname could not have been aggrieved by that sentence. How the court concluded that a large number of people were aggrieved is not clear when no one except the complainant has claimed harm to reputation. It is disconcerting that court after court has endorsed a punishment tailored specifically to disqualify a Member of Parliament. The High Court has also ignored the argument that a legislator cannot be pushed out of the House and barred from electoral contest for an offence that was neither serious nor involved moral turpitude. Instead, it has made a fanciful claim that the law's object is to maintain purity in politics and cited the pendency of other cases against Mr. Gandhi to decline to stay the conviction. It has even referred to a complaint by V.D. Savarkar's grandson against Mr. Gandhi, as though a political remark could



add another layer of gravity to the offence. The extent to which a judicial order can go to make a defamation case sound like a horrific crime against society at large is quite astounding.

COMING, WOMEN-ONLY COURTS FOR ALTERNATIVE DISPUTE RESOLUTION

The Union government is set to launch an initiative under which women-only courts will be set up at the village-level as an alternative dispute resolution forum for issues such as domestic violence and property rights, and to counter the patriarchal system.

The scheme will be launched on a pilot basis in 50 villages each in Assam and Jammu and Kashmir in August and extended to the rest of the country over the next six months. Detailed standard operating procedures have been prepared for all the States, which will be released next week.

The Nari Adalat (women's court) of each village will have seven to nine members – half of which would be the elected members of the gram panchayat while the other half will include teachers, doctors and social workers – who would be nominated by the villagers.

“This platform will leverage their potential as advisers and leaders within their communities, functioning as a pressure group,” a senior official in the Ministry of Women and Child Development told The Hindu.

The court will not only address individual cases of women and girls within the local community who require assistance or have grievances, but also raise awareness of government schemes and the legal rights and entitlements of women. The Nari Adalat will, however, not hold any legal status. “The services provided will include alternative dispute resolution and grievance redressal, counselling, evidence-based decision making, pressure group tactics, negotiation, mediation and reconciliation with mutual consent for accessible and affordable justice,” the official said.

Additionally, the platform will engage with citizens, promoting awareness about women's rights, legal opinions, various schemes and collecting public feedback.

Members known as Nyaya Sakhis (legal friends) will be nominated or selected by the gram panchayat, while the head of Nari Adalat called the Mukhya Nyaya Sakhi (chief legal friend) will be chosen among the Nyaya Sakhis. The tenure of the head will be generally six months after which a new one will be selected.

The scheme would be run by the Ministry of Women and Child Development under the Sambal sub-scheme of Mission Shakti, which is dedicated to strengthening women's safety, security and empowerment.

The implementation process will be done in collaboration with the Ministry of Panchayati Raj, the Ministry of Rural Development and Common Service Centres operated by the Ministry of Electronics and Information technology.

EXPRESS VIEW ON BENGAL POLL VIOLENCE: BROKEN BALLOT

At the very core of democracy lies a seemingly simple mechanism: Periodically, voters choose between political actors and parties in a free and fair election, which is followed by a peaceful transition of power. The violence, intimidation and ransacking that have accompanied the panchayat polls in West Bengal last week fly in the face of this basic principle and underline a stark reality: The fairness of the election is under a cloud. At least 13 people — seven from the



Trinamool Congress (TMC), two each from the CPM and BJP and one unaffiliated person — have been killed.

There are reports from several districts of booth capturing, damaged ballot boxes and attacks on presiding officers. This violence is not an aberration: It is entrenched in the state's political culture, with parties in government — the TMC now, and the CPM and Congress before it — wielding it to control the street, and thereby, monopolise state power. This newspaper found that, in village after village, the TMC systematically used bombs, barricades and cadres to ensure that opposition candidates and supporters were unable to move about on polling day. Where they have the clout to do so, some opposition parties have acted in a similar manner. As a result of the violence in the run-up to filing nominations last month, the High Court had ordered that central forces be deployed in the state.

But the onus of ensuring a safe election is not on uniformed personnel alone — the political class in the state, especially the ruling party and State Election Commission, bears a lion's share of that responsibility. From the 1960s until the '90s, tactics such as booth capturing and intimidation of voters and polling officials defined electoral politics in many states, including Bihar and Uttar Pradesh. Most of India has rejected that form of politics and moved on. However, West Bengal seems to be frozen in the past, with parties continuing to nurture a political economy of patronage and extortion. The TMC won office promising change. Mamata Banerjee has been chief minister for over a decade now, but she has not used her formidable political capital to effect a clean-up. This politics that empowers party cadres with seeming impunity has corroded the state's institutions.

Sooner than later, it will dent the TMC as well. Getting the state's demographic dividend to extort, flex muscle, run rackets, make bombs, threaten businesses, means keeping them away from a growing economy shaped by technology and knowledge. No wonder many of the young are forced to leave the state as unskilled labour if they don't join the political underbelly.

The July 11 results, irrespective of who the winner is, will carry this taint of fear and intimidation. The violence, mostly affecting the poor and the under-privileged, has undermined the sanctity of the electoral process. It robs the Opposition coalition of any moral high ground it tries to seize on the issue of protecting due democratic process. CM Mamata Banerjee, the TMC and the State Election Commission must do more to ensure that the image of a broken ballot box, an Opposition candidate locked in her house, violence, vandalism and murder do not define politics in West Bengal. That will be a grave disservice to the state's future.

AN UNACCEPTABLE VERDICT IN THE CONSTITUTIONAL SENSE

A judgment by the Allahabad High Court recently, declining the prayer by an inter-faith couple in a live-in relationship for protection from police harassment has caught national attention. The judgment in Kiran Rawat vs State of UP negates the very idea of constitutional morality in personal relations, which the Supreme Court of India has repeatedly affirmed. The High Court in its judgment implied that the live-in relationship is a "social problem".

The case of the petitioners, a Muslim man and a Hindu woman, was short and simple: They are around 30 years of age, living together and their relation is based on mutual love and affection. They alleged that the local police have been torturing them while living in a rented house, and sought protection from police harassment, allegedly done on the basis of a complaint made by a family member.



The judgment by the High Court is unacceptable in the constitutional sense. First, the court is ostensibly carried away by the notions of conventional social morality rather than the constitutional principles on individual autonomy and personal liberty. Second, in the process, the court also discarded several Supreme Court judgments, even after citing them, by giving untenable reasons. Third, the High Court travelled much beyond the brief and relied on personal laws on marriage which were irrelevant.

The Allahabad judgment said that Supreme Court verdicts on live-in relationships such as D. Velusamy (2010), Indra Sarma (2013) and Dhanu Lal (2015) were not intended “to promote such relationships” and that the law traditionally has been “biased in favour of marriage”. Thereby, the High Court essentially rejected the precedential value of the top court verdicts. The High Court also made an unnecessary reference to Section 125 of the Criminal Procedure Code (Cr.PC) which talks about maintenance to wives (and not “other women”). The High Court also said that extramarital and premarital sex are not recognised under the Muslim law. Even the “sexual, lustful, affectionate acts such as kissing, touching, staring etc.” prior to the marriage, are ‘Haram’ in Islam, says the judgment.

An inclination towards orthodoxy

Though there were many deficits in the petition, the High Court could not have assumed that marriage is a condition precedent for constitutional protection and the exercise of fundamental rights. In effect, it acted as a theological court, as if the very idea of individual liberty and autonomy are alien to the writ jurisdiction. The verdict shows a clear inclination towards social orthodoxy and religious revivalism. In the guise of constitutional adjudication, the court only tried to reiterate the traditional beliefs on marriage and morals.

The Supreme Court verdicts on fundamental rights are not mere adjudication of the inter-party disputes, as fallaciously conceived by the High Court. The law laid down by the Supreme Court is binding on all the courts in the country, as in Article 141 of the Constitution. In the process of constitutional adjudication, the top court is not ‘encouraging’ or discouraging any social practice or human conduct.

For example, in Joseph Shine vs Union of India (2018), the Court decriminalised adultery as defined under Section 497 of the Indian Penal Code (IPC). This was done since the state’s police power cannot be used for punishing individual moral aberrations. In the words of Deborah L. Rhode, “Fidelity is a value, but not one that the state should police” (Adultery: Infidelity and the Law, Harvard University Press). In Navtej Singh Johar (2018), while substantially striking down Section 377 of the IPC dealing with same sex relations, the Supreme Court made a constitutional adjudication rather than mere moral judgment. The libertarian value of these judgments lies in their capacity in limiting the state’s power in the realm of personal choices.

Upholding personal liberty

The Supreme Court judgments, cited in the Allahabad verdict, also upheld personal liberty and laid down the law in that regard. In Lata Singh (2006), the Court directed police authorities throughout the country to see to it that any adult undergoing inter caste or inter religious marriage is not harassed by anyone. In S. Khushboo vs Kanniammal & Anr. (2010), the Supreme Court held: “While it is true that the mainstream view in our society is that sexual contact should take place only between marital partners, there is no statutory offence that takes place when adults willingly engage in sexual relations outside the marital setting”. It was only a restatement of law.



But the Allahabad High Court said that the observations of the Supreme Court in these judgments were made in the context of the facts of the respective cases. Facts of every case will vary from one another and there cannot be precedents on facts. But that does not mean that the High Court can disregard the proposition of law laid down by the Supreme Court on questions of fundamental rights.

The petitioners in the Allahabad case only asserted their right not to be tortured by the police and did not pray for a moral evaluation of their decision to live together. They relied on the law laid down by the top court. The High Court ought to have sought further particulars if required and endorsed the couple's fundamental right, without conducting an unwanted and irrelevant survey of the personal laws on marriage. The judgment is a classic case of judicial indiscipline which the Supreme Court will, hopefully, set right as early as possible. To imply that the moral lessons of personal laws will supersede the constitutional tenets is a serious adjudicatory mishap.

GREEN WASHING

The Forest (Conservation) Amendment Bill, 2023, that is being deliberated upon by a Joint Committee of Parliament, is a contentious piece of legislation that signals the complex challenges involved in balancing industrial development and the conservation of forests. While industrialisation inevitably means usurping greater tracts of forest land and ecosystems, the Forest (Conservation) Act, 1980 has been the mantelpiece legislation that has empowered the state to regulate this and impose costs on such industrial exploitation. Originally meant for notified forests, a landmark Supreme Court judgment, in the T.N. Godavarman Thirumalpad case (1996), among other things, broadened the scope of such protection to even those not officially classified so. India's forest cover has seen only marginal increases, as biennial reports of the Forest Survey of India illustrate. Growth in forest cover inside officially recorded forests is stagnant, or at best incremental. It is tree cover in orchards, plantations and village homesteads that has been on the rise and supplementing India's claim that 24% of its area is under forest and tree cover. India has committed to increasing this number to 33% and adding a carbon sink of 2.5 billion to 3 billion tons of CO₂ this way, by 2030, as part of its international climate commitments.

The existing Forest (Conservation) Act, 1980 — in the Environment Ministry's reckoning — was insufficient for these ends, as it did not incentivise private agro-forestry and tree plantation activities. From 2019 to 2021, India added 1,540 square kilometres of forest cover of which 1,509 sq. km was outside recorded forest area. The new amendments to the Forest Act gave such incentives by clearly defining the limits of the 1996 judgment. Only land recorded as 'forest' in any government record on or after 1980 would invoke provisions of the Act. Forest land authorised by States for non-forestry uses between 1980-1996 would not invoke provisions of the Act. The amendments effectively mean States can no longer classify unclassified forest land, or patches of trees with forest-like characteristics as 'forest land'. The amendments also allow forest land, up to 100 km near India's borders, to be appropriated, without central approval, for "strategic and security" purposes. The primary criticism is that these amendments do not really contribute to regenerating natural forest, but rather incentivise afforestation for commercial ends. What is worrying is that the parliamentary committee, despite its statutory privileges, has not expressed any opinion or suggestion on the way forward. Grooming private forests might look good in theory but expecting them to be a permanent carbon stock is wishful thinking given that strong market incentives exist to use them as 'carbon credits'. While new climate realities might necessitate changes to the way conservation laws are interpreted, these must be backed by rigorous scientific evidence.



PROBLEMATIC

In an interconnected world, a government that seeks greater economic integration and promotes itself as the representative of a nation committed to democratic, liberal and plural values and the rule of law, cannot dismiss scrutiny by like-minded nations with which beneficial ties are sought. India's dismissal of the EU Parliament's resolution on the violence in Manipur as reflecting a colonial mindset and tantamount to interference in internal affairs, was therefore predictably petulant and in line with similar reactions to scrutiny by lawmakers in the United States, for instance. Just as Indian politicians have the right to express their concerns with issues such as attacks on Hindu temples in Australia or racial prejudice in the U.S. or anti-immigrant violence and government response in Europe, their counterparts in the EU Parliament are well within the realms of propriety in questioning actions in Manipur. That the embers of the violence there that peaked in early May resulting in 142 deaths and thousands being displaced, have not been extinguished and distrust and hostility between the Meitei and the Kuki-Zo communities persist, have allowed for this international scrutiny.

Yet, the EU Parliament resolution and the legislators' framing of the problem in Manipur include an erroneous understanding of the conflict having a religious basis and a pitting of Hindus versus Christians. Churches and temples having been vandalised in the conflagration between the Hindu-majority Meitei community and the Christian denominated Kuki-Zo community has given way to this understanding. But this ignores the fact that the spark for the spike in violence was an erroneous order — which was called out as being so by the Chief Justice of India — passed by a single judge Bench in the Manipur High Court to include Meiteis in the list of Scheduled Tribes in the State. The Naga community, also predominantly Christian by denomination, and its representatives were also aggrieved by the decision but the ethnic violence has been limited to actions by militants belonging to the Kuki-Zo and the Meitei communities and exacerbated by an ethnic polarisation that reconciliatory efforts by civil society have still to undo. Festering distrust due to socio-economic variances in the "hill" and "valley" areas, and the inability of the BJP government led by Chief Minister N. Biren Singh to be seen as being above the ethnic fray have been responsible for this crisis. The EU resolution misconstrues this situation as being driven by religious discord. Such a wrong diagnosis would lead to the creation of new fissures at a time when reconciliation and accountability are required to break the stasis that has persisted in the last two months.

WHAT IS THE NATIONAL RESEARCH FOUNDATION?

The story so far:

The Union Cabinet has approved the introduction of the National Research Foundation (NRF) Bill in Parliament, placing once again the debate on science and technology funding in the spotlight.

What is the NRF?

Setting up the NRF was one of the key recommendations of the National Education Policy 2020.

The NRF intends to act as a coordinating agency between researchers, various government bodies and industry, thus bringing industry into the mainstream of research.

In addition to providing research grants to individuals, the NRF plans to seed, grow and facilitate research in India's universities, especially State universities, by funding research infrastructure and researchers.



How will it be funded?

The NRF will operate with a budget of ₹50,000 crore for five years, of which 28% (₹14,000 crore) will be the government's share, and the remaining 72% (₹36,000 crore) will come from the private sector. The NRF draft proposes the government's share to increase eventually to ₹20,000 crore per year. Out of the government's share, ₹4,000 crore will be used from the existing Science and Engineering Research Board's budget, which will be subsumed under the NRF. Therefore, the government has earmarked an additional 10,000 crore over the next five years for the NRF.

However, this increase in the nation's gross domestic expenditure on research and development (GERD) seems too meagre, (less than 2% of GERD) especially if one compares the GDP and the comparative spending in other big economies, such as the U.S. and China. As per the last available statistics (2017-18), India's GERD was ₹1,13,825 crore. While India's GDP was 7.6 and 5.1 times smaller than that of the U.S and China respectively, India's GERD was nearly 24 times less than both these countries during the same period. And in the last five years, that gap has further widened.

How can the NRF facilitate the "ease of doing science"?

First, the time between applying for a research grant and receiving the money must be minimal, preferably within six months. Although the NRF draft mentions that the peer-review process will be completed within six months, releasing funds may take time, pending financial clearance. Second, all the paperwork must be digitally processed without sending stacks of papers in hard copies to the NRF. Third, all finance-related queries, paperwork, approval, and acceptance need to be between the NRF and the finance department of the university/research institution keeping the scientist free to focus on research. Fourth, the NRF needs explicit spending guidelines away from the General Financial Rules (GFR) and the government's e-Marketplace (GeM) usage. Scientific research needs independent guidelines for spending money, which provides flexibility while making scientists accountable. Finally, the release of money needs to be timely. Although the NRF draft mentions timely disbursement of funds, a mechanism needs to be in place to facilitate and implement this.

While the participation of the private industry in the NRF is an important and welcome step, it is unclear how the government will raise ₹36,000 crore from the industry. Although the NRF describes a legislative route to facilitate this, a more detailed plan and establishing mechanisms akin to escrow accounts will reassure the scientific community.

What next?

The proposed NRF is largely modelled after the National Science Foundation of the U.S. It borrows some of the best practices from the German, U.K., Swiss, Norwegian, South Korean, and Singapore science agencies. Even if the NRF draft discusses critical thinking, creativity, and bringing innovation to the forefront, it is unclear how the NRF will transparently seed, fund and coordinate research across institutions. The success of NRF will lie in how the government sets rules and implements the same, different from what already exists.



LVM-3: THE OTHER ISRO ROCKET

WHAT IS IT?

The Indian Space Research Organisation (ISRO) has three classes of launch vehicles: the Polar Satellite Launch Vehicle (PSLV), the Geosynchronous Satellite Launch Vehicle (GSLV), and the new Small Satellite Launch Vehicle (SSLV). Of these, ISRO has launched the PSLV the most. It has a famous reputation as a “workhorse”, with a very low failure rate. The PSLV can lift up to 3.8 tonnes to low-earth orbit.

ISRO developed and uses the GSLV to launch heavier payloads, and if required into higher orbits. Like the PSLV, the GSLV also has multiple configurations. The most powerful configuration is LVM-3, short for ‘Launch Vehicle Mark 3’; it can lift up to 10 tonnes to low-earth orbit.

The LVM-3 has three stages. The first (or bottom-most) stage is in the form of two S200 boosters strapped to the sides of the rocket body. They combust a solid fuel called hydroxyl-terminated polybutadiene. The second stage is powered by two Vikas engines, which combust a liquid fuel – either nitrogen tetroxide or unsymmetrical dimethylhydrazine.

The uppermost final stage is powered by a cryogenic engine. It combusts liquefied hydrogen with liquefied oxygen.

Hydrogen has a very high specific impulse as rocket fuels go, but using it in an engine requires it to be liquefied first, which in turn means it must be stored at very low temperature, and with special pumping and transport systems.

ISRO will launch its Chandrayaan 3 mission on July 14 onboard an LVM-3.

CHANDRAYAAN-3 WILL AIM FOR THE MOON BUT LOOK BEYOND TO THE FUTURE

Who doesn’t enjoy the sight of the Moon? Whether its phase is gibbous, crescent, or complete, the Moon mesmerises children, poets, and anyone who identifies with nature for its serene beauty, its sense of calm, and the sensations it kindles.

Scientists are interested in the moon to understand its origin and characteristics, and, if possible, to explore the possibility of inhabiting it – and these studies require going to the Moon. Not many countries have undertaken such studies, but India is well-positioned with its industrial and technological support base and trained human resources to venture into studying the moon at close quarters. This feat is yet another feather in the cap of the Indian Space Research Organisation (ISRO). No wonder it attracts talented youth from the best institutions in the country.

Chandrayaan-1

ISRO’s first attempt was the Chandrayaan 1 (“Lunar Vehicle 1”) mission, which began in October 2008 with a launch of the very successful Polar Satellite Launch Vehicle (PSLV). The rocket carried a lunar orbiter meant to go around the moon, like a satellite and an impact probe. The orbiter relieved the impact probe to hit the surface of the south polar region of the moon, to generate data relevant to designing a lunar rover that would be a part of the payload in a subsequent mission.

While descending to the moon, the impactor probe collected information on the chemical composition of the lunar atmosphere. Notably, this mission established the availability of water



molecules on the moon, a discovery that may be crucial for future crewed missions. The probe also carved the national flag of India on the Moon, announcing the country's arrival.

The mission did not last two years as planned, possibly due to overheating issues in the orbiter, but it achieved most of its scientific objectives. In a testament to its success, it received many accolades from the international community.

Chandrayaan 2

The next such mission was Chandrayaan 2 in July 2019, which was launched by a Geosynchronous Satellite Launch Vehicle (GSLV). Its payload included a moon lander that carried a rover to release on the moon. The lander, unfortunately, crashed on the lunar surface due to a software glitch, and the rover did not detach from the lander, so further studies of the moon's surface were impossible.

A Chennai-based amateur space enthusiast named Shanmuga Subramanian, skilled in image analysis, identified the location of the lander's debris, and NASA later confirmed it. Participation by citizens in big science projects is a welcome trend and researchers should strive to create such opportunities.

Currently, ISRO is planning Chandrayaan-3 to demonstrate end-to-end capability for safe landing and roving on the lunar surface. The launch is scheduled for July 14 at 2.35 pm. The mission will be launched on board the Launch Vehicle Mark III (LVM 3, a.k.a. GSLV Mk III). The vehicle will carry a lander attached to a propulsion module. The latter will carry the former to a circular orbit around the moon, after which the lander will descend to the surface. The lander module will carry a rover that it will deploy on the moon, and a few other pieces of scientific equipment. The lander and the rover are expected to be operational for about two weeks.

As in previous missions, the scientific mission will study the chemical composition of the lunar surface, local seismic activity, and plasma concentration, among other features. The propulsion module will have a payload called 'Spectro-polarimetry of Habitable Planet Earth' (SHAPE), which will track radiation from the earth to help identify the signatures of life, which future missions can use in turn to look for signs of life on habitable exoplanets. So Chandrayaan-3 is also to look beyond the Moon.

Lessons learned from Chandrayaan-2 will help avoid design deficiencies that are likely to contribute to failures. Some such 'upgrades' already include strengthened legs on the lander and software updated to include failure scenarios.

Importance of the missions

Missions like Chandrayaan are important because many countries participate in them. These missions are collaborative global efforts that strengthen scientific exchange and camaraderie between countries.

There is scope for international collaboration in future missions to explore the south-polar region of the Moon. The craters here have locations that don't receive sunlight. These shadowed sites are cold and hold hydrogen, water, and ice. They could also host primordial material that could help us understand the origins of the Solar System. The biggest lunar crater is also in the south polar region. The origin of this crater, which formed about 4 billion years ago, is still unclear. So understanding our cosmic neighbour will go a long way towards gaining insights about the cosmos.



Why should India spend on these high-tech areas instead of investing in available technologies that can be used more readily for the public good? It is because they can be used for the public good, too. Developing countries need knowledge of such concepts to improve their citizens' quality of life. Space technologies have also become essential for weather prediction, assessment of marine resources, estimation of forest cover, communication, defence – to just name a few. Every country needs technologies of both futuristic and immediately relevant varieties, together with a well-thought-out apportionment of resources between these two areas.

Indeed, R. Chidambaram, a former Principal Scientific Advisor to the Government of India, once remarked that participating in an emerging technology makes a nation a leader in that field, giving it bargaining power when dealing with other countries. This in turn will enable a country to enhance its science and technology base to improve its citizens' and its prestige.

PAU DEVELOPS NEW WHEAT VARIETY TO KEEP OBESITY, DIABETES IN CHECK

From “quantity” to “quality” and from “food security” to “nutritional security” — this seems to be the new research focus of the Punjab Agricultural University (PAU).

The Ludhiana-based institution, which played a pivotal role during the Green Revolution to make India surplus in foodgrains by developing high-yielding strains, has bred a new wheat variety with high amylose starch content, known to reduce risks of type-2 diabetes and cardiovascular diseases.

PAU develops new wheat variety to keep blood sugar, obesity in check

Eating chapatis made from this wheat — called PBW RS1, with RS being short for resistant starch — won't cause an immediate and rapid rise in glucose levels. The high amylose and resistant starch, instead, ensure that glucose is released more slowly into the bloodstream. Being slower to digest also increases a feeling of satiety; a person consuming 4 chapatis from normal wheat would now feel full after having just two.

It has total starch content, almost the same as the 66-70 per cent in other wheat varieties. But it has 30.3 per cent resistant starch content as against only 7.5-10 per cent for other varieties including PBW 550, PBW 725, HD 3086 and PBW 766, show trials conducted by PAU over four years. The other varieties have 56-62 per cent non-resistant starch content which is nearly half (37.1 per cent) in PWB RS1. Similarly, PBW RS1 has 56.63 per cent amylose compared to only 21-22 per cent in other varieties.

“Chapatis and biscuits made from its whole grain flour also have lower glycemic index (a value used to measure how specific foods increase blood sugar levels), which is linked to the decreased digestibility of the starch. So, it can help bring down the prevalence of diet-related diseases, including obesity and diabetes (especially type 2),” said Achla Sharma, principal wheat breeder at PAU, which was rated the country's top state agricultural university in 2023 as per the National Institute Ranking Framework.

The variety has been developed over a period of 10 years by a team of wheat breeders led by Dr V S Sohu, head, department of plant breeding and genetics. PAU is the first to combine five novel alleles (genes) affecting resistant starch levels for developing this variety.



Earlier, PAU had released two varieties – PBW Zn1 with high zinc content, and PBW1 Chapati whose flour had premium chapati quality that remained fresh for long – on nutritional lines but none had features as PBW RS1.

Sharma noted that millets are considered healthy because they don't lead to a spike in blood sugar levels. Dieticians even recommend that diabetic and obese persons give up wheat altogether. "But the fact is that both production and consumption of wheat are much higher and not everyone can have millets on a daily basis. Our idea was, therefore, to breed a wheat variety which feels and tastes like normal wheat, but has higher RS and lower glycemic index," she said.

But PBW RS1 has a significant drawback that might come in the way of its cultivation by farmers. The average grain yield from the variety at PAU's field trials has been recorded at 43.18 quintals per hectare. This is below Punjab's average yield of 48 quintals, which has touched 52 quintals in some years with many farmers harvesting 60 quintals or more.

PAU vice-chancellor Dr Satbir Singh Gosal, however, felt that a beginning towards ushering in nutritional security had to be made. He has urged the Punjab government to promote PBW RS1 flour as a product with "high medicinal and nutritional value". With proper marketing, the wheat could "fetch higher price" from buyers, similar to the premium that millers are paying for basmati paddy over regular parmal varieties.

'Sharma said seeds for the new variety will be made available to farmers in September to enable them sow in the upcoming rabi season. Apart from its nutritional attributes, PBW RS1 is "completely resistant" to yellow rust and "moderately resistant" to brown rust fungal diseases.

"Chapatis and biscuits from its flour taste just like normal wheat. The high amylose/resistant starch content, translating into increased total dietary fibre, would also be advantageous to bakers and food processors. They can produce products without incorporating fibre or additives from other sources to their formulas," she said.

415 MILLION INDIANS CAME OUT OF MULTIDIMENSIONAL POVERTY IN 15 YEARS, SAYS UNDP STUDY

The latest update of the global Multidimensional Poverty Index (MPI) was released by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI) at the University of Oxford. It said that 25 countries, including India, successfully halved their global MPI values within 15 years, showing that rapid progress is attainable. These countries include Cambodia, China, Congo, Honduras, India, Indonesia, Morocco, Serbia and Vietnam.

"The report demonstrates that poverty reduction is achievable. However, the lack of comprehensive data during the period of the COVID-19 pandemic poses challenges in assessing immediate prospects," it added. In 2005-06, about 645 million people were in multidimensional poverty in India, with this number declining to about 370 million in 2015-16 and 230 million in 2019-21.

'Fast progress'

The report noted that deprivation in all indicators declined in India and "the poorest States and groups, including children and people in disadvantaged caste groups, had the fastest absolute progress".



According to the report, people who are multidimensionally poor and deprived under the nutrition indicator in India declined from 44.3% in 2005-06 to 11.8% in 2019-21, and child mortality fell from 4.5% to 1.5%.

“Those who are poor and deprived of cooking fuel fell from 52.9% to 13.9% and those deprived of sanitation fell from 50.4% in 2005/2006 to 11.3% in 2019/2021,” according to the report.

In the drinking water indicator, the percentage of people who are multidimensionally poor and deprived fell from 16.4 to 2.7 during the period, electricity (from 29 to 2.1) and housing from 44.9 to 13.6.

The report said countries with different incidences of poverty also halved their global MPI value.

While 17 countries that did so had an incidence under 25% in the first period, India and Congo had a starting incidence above 50%.

India was among the 19 countries that halved their global MPI value during one period — for India it was 2005-06 to 2015-16.

According to the 2023 release, 1.1 billion out of 6.1 billion people (just more than 18%) live in acute multidimensional poverty across 110 countries.

WELFARE SCHEMES MAY HELP POOR CHILDREN’S BRAINS GROW NORMALLY

The relationship between brain development and low income is relatively well-established, but the role of anti-poverty policies in this relationship is not. A recent study, based on the brain scans of over 10,000 children aged 9-11, located in 17 U.S. states, filled this gap

In 1844, Frederick Engels remarked in a book that the “physical effects of the living conditions of the poor had their effects from early life”. He had seen scrofula (tuberculosis of the neck), rickets, typhus, cholera, and smallpox as representative of the ways in which poverty is embodied in the bodies of the members of the working classes.

In the 1960s, neuroscientists began finding evidence that growing up poor could affect how a young brain develops. Marian Diamond, then a neuroscientist at the University of California, Berkeley, showed that rats that grew up in an “impoverished” environment had “hampered” brain development and learning abilities.

Poverty’s affect on the brain

In 2015, three studies reported that human children and young adults growing up in low-income families had lower cortical volume and did relatively poorly in tests for academic performance. The cortex is the outer layer of the brain.

Together with the cortex, one of the 2015 studies focused on another area: the hippocampus. Kimberley Noble, from Columbia University, and her colleagues found that the volume of this deep-seated convoluted structure, widely regarded by scientists as the “seat for learning and memory”, correlated positively with a family’s socioeconomic status, but not parental income.

Now, a study by researchers from Harvard University and Washington University, published in May 2023 in the journal Nature Communication, has demonstrated that children growing up in low-income families indeed risk a smaller hippocampus. The researchers, led by David Weissman, a postdoctoral fellow at the Stress and Development Lab, showed that generous anti-poverty



policies substantially lower this risk. The finding highlights how state-level public policies can potentially address the correlation between brain development and low income.

The study emphasises “how household finances are connected to brain development in children,” Akash Gautam, a University of Hyderabad neuroscientist who works on hippocampal development, told The Hindu. Children from low-income families might have a smaller hippocampus, which in turn might relate to later “inequities in [their] physical and mental health outcomes.”

Impaired hippocampal development has been associated with higher risk of psychopathologies, such as major depressive disorder and post-traumatic stress disorder. So the researchers also tested the relationship between family income and the incidence of internalising (e.g. depressive disorders, anxiety, etc.) and externalising psychopathologies (e.g. drug abuse, violent behaviour, etc.) in children. They found that family income was “negatively associated” with the incidence of these psychopathologies: higher the family income, lower the incidence of internalising and externalising psychopathologies in the children.

So the study found that poverty could shape biological properties, like brain development, and highlighted the role governments and public policy could have in ameliorating the biological effects of poverty.

Did the study have shortcomings?

Poverty is often a symptom of more systematic discrimination. For example, in 2007-2011, American Indians, Alaska Natives, and African-Americans had the highest poverty rates in the U.S. Similarly, in India, communities listed as Scheduled Tribes (STs), Scheduled Castes (SCs) and Other Backward Classes (OBCs) are significantly poorer than those not listed in these categories, according to a recent study.

So, what if the patterns the study uncovered were not due to poverty but due to racism? In an email to The Hindu, Dr. Weissman agreed to the possibility, adding that they tried to rule out as many alternative explanations as possible, including racial and ethnic makeup of the sample, using supplemental analyses. “The results held consistently across these analyses,” he said, adding that the results may not be directly applicable in India, because the “macroeconomic conditions in India are very different”.

However, Dr. Weissman said that their findings supported something “intuitive” that could be generalisable, “that policies or economic conditions that have a direct influence on a family’s financial resources matter for children’s brain development.”

The study also worked with the ABCD database, which allowed them to sample brain scans only from 17 out of the 50 U.S. states. Rohan Sarkar, a PhD scholar at the Indian Institute of Science Education and Research, Kolkata, said that despite the dataset being broader than in previous studies, the data being limited to 17 states limited the “power of the inference provided”.

How can welfare help?

Mr. Sarkar and Dr. Gautam both said that the relationship between socioeconomic status and hippocampal development might not be “so simple”. According to Dr. Gautam, while hippocampal size is correlated to cognitive development and the incidence of psychopathologies, a smaller hippocampus wouldn’t necessarily indicate that “a child will experience significant impairments in these areas”.



“The brain is a complex and adaptable organ, and compensatory mechanisms can sometimes mitigate these effects,” he added. According to the new paper, more generous anti-poverty policies could “amplify or reduce stressors associated with low income”. That is, having access to more financial resources could “shield families from experiencing some of the chronic stressors associated with low income that can influence hippocampal development”. Finally, ‘generous’ anti-poverty policies don’t just increase family income; they can also allow “families to make decisions that lead to a decrease in wages but that also reduce stress, such as working fewer hours,” per the new paper.

What is the study’s future?

The authors of the current paper worked with data collected in 2017-2018. But according to Dr. Weissman, its youth participants have returned every year, allowing the researchers to study how “policy changes that have occurred since these data were collected ... has influenced the trajectories of the youth’s mental health and brain development”.

The study also illustrated how “investments in social safety net programs” could lower the high cost of “addressing mental health, educational, and economic challenges resulting from socioeconomic disparities in neurodevelopment” tomorrow.

DOWNSIDE OF LIVING IN HIGH-RISE BUILDINGS

Back in those days, we had small houses in villages and knew our neighbours. The ladies would be friendly and the kids would play together. But when we moved to jobs in urban areas, and the population also grew, we lived in apartments, usually no bigger than two-four floors, with bathrooms, halls and kitchens. Yet, we maintained friendly contacts with other residents and their families on most of the floors, and also knew the local vegetable sellers and groceries stores. Alas, with the steep rise in urban population, where many residents live in high-rise apartments, work from home using computers, or go to work, this meeting and companionship has slowly disappeared. We may at best know families on the same floor. And many of us would rather get our daily needs through Apps such as Zomato and Amazon!

More profitable

With the massive growth of IT and drug companies, new high-rise buildings have come up with 45 or 50 floors, not only in cities like Mumbai, Bengaluru, Chennai and Hyderabad, but even in tier-two cities. The residents living in them do not even know neighbours on the same floor. Interpersonal contacts have become far less than in previous times.

An article titled “7 reasons why high-rises kill livability” details the downside of this lifestyle. Let me summarise their messages below. High-rises separate people from the street. Residents there do not know the vegetable and grocery vendors, do not get to see the activities and excitement in the streets, but only learn about these second-hand, through newspapers and media reports. Interpersonal contact, essential for a society, is lost. It is people and societies that make living fun. High-rise residents are in a world of their own, almost like astronauts!

High-rises with 45-60 floors lead to ‘gentrification’ and inequality, while ‘low/mid-rises’ offer resilience and affordability. Dr. S.H.C. Lennard of the “Making cities livable international council” points out that tall buildings offer increased profits for real estate developers, who like to develop taller buildings with luxury floors and apartments.



On the other hand, a smaller four-five floor building is more on the human scale, and is twined to the society and its changing resilience. Mr. Lennard points out that the City of Paris in France, with buildings no more than six floors or 37 meters tall, supports continuous retail along the street, making every neighbourhood walkable.

Higher carbon impact

High-rises also have a much higher carbon impact from greenhouse gases over their life cycles compared to densely populated low-rise neighbourhoods with an equal number of people.

In this connection, the psychologist Dr. D. Cappon had pointed out (Canadian Journal of Public Health, 1971) that high-rise buildings deprive their residents of walking and exercising down the ground, and the children from playing with neighbourhood peers. In effect, high-rise buildings are not good for the health of its people. So, let us not build Empire State Buildings, or Burj Khalifas, but Parisian houses!

EXPRESS VIEW ON EXTREME WEATHER: HEAT IS ON

On three different days last week, global average daily temperatures were in a range they have never been before. Last Monday was the first time the global average daily temperature crossed 17 degree Celsius, making it the hottest day for the planet in recorded history. But that was just the beginning. Tuesday was even hotter, and that record was surpassed on Thursday. Scientists predict that the coming days and weeks would produce more such record-breaking events. This year is widely expected to become one of the hottest ever, if not the hottest.

Climate change is playing out exactly in the manner scientists had said it would. Only a little faster, perhaps. It is not just the heat that is getting increasingly unbearable. Excessive rains, frequent floods and drought, intense forest fires are all happening, sometimes simultaneously, at different places. There is little that governments can immediately do to prevent these. But a lot can be done to minimise their toll on human beings, at least in the case of heat waves.

Experience of the recent past has shown that relatively simple interventions can go a long way in preventing a large number of heat-wave related deaths. However, many state governments and district governments still don't have a heat action plan in place. The fact that some areas of the country are not considered to be heat-wave prone is no reason to relax. If there is one thing certain about extreme climate events, it is their unpredictability — in timing, location and intensity. The 11 heat stroke deaths in Mumbai earlier this year is a grim reminder. So was the heat wave like condition in February this year, officially a winter month in India.

In 2015, only nine states experienced heat wave conditions. By 2020, that number had reached 23. The number of heat wave days during a year has increased from seven in 2015 to 33 in 2020. The trend is only increasing. The events in eastern UP last month, when a large number of people were hospitalised with heat-related diseases — and many died — are the kind of shocks that have the potential to repeat, if local governments are not adequately prepared.

It might seem odd to be talking about heat waves when rains have been lashing many parts of the country. July is officially one of the four months when heat waves are expected. And recent trends make it difficult to rule out heat waves in subsequent months. The current phase is, therefore, a good opportunity for the local governments to strengthen their preparedness to deal with heat emergencies.



ISKCON PUNISHES MONK FOR INAPPROPRIATE REMARKS ABOUT SWAMI VIVEKANANDA, RAMAKRISHNA PARAMHANSA

The International Society for Krishna Consciousness (ISKCON) has punished its monk Amogh Lila Das for “inappropriate and unacceptable” comments on Ramakrishna Paramhansa and Swami Vivekananda by banning him for one month and asking him to withdraw from public life.

The punitive action comes a week after the 43-year-old monk criticised Swami Vivekananda for eating fish, triggering a huge controversy in West Bengal, where fish is an essential part of the diet of the majority population and is even offered to the deities in certain religious traditions.

“Amogh Lila Das’ derogatory remarks towards these esteemed figures aimed primarily at their dietary preferences are not only disrespectful but also showcase the lack of awareness about the diversity of spiritual paths and personal choices. These actions undermine the fundamental principles of mutual respect, religious tolerance and harmony, which are vital for the creation of a peaceful society,” read a press statement by ISCKON dated July 11.

The statement signed by Radharaman Das, vice-president of ISKCON, said the organisation is “pained at the remarks” and added that Ramakrishna Paramhansa and Swami Vivekananda are highly revered figures in Indian history and spirituality.

ISKCON and Ramakrishna Mission are West Bengal-based Hindu religious and spiritual orders with a massive following in the State and across the world.

While ISKCON, founded by Srila Prabhupada in 1966, has its headquarters at Mayapur in West Bengal’s Nadia district, the Ramakrishna Mission, founded by Swami Vivekananda in 1897, is headquartered at Belur in Howrah district.

Teaching questioned

Mr. Amogh, vice-president of the Dwarka chapter of ISKCON, hails from a Punjabi family in Delhi and is quite popular on social media. In the remarks made at Panihati near Kolkata a week ago, which soon went viral, the monk criticised Swami Vivekananda. He also questioned Ramakrishna Paramhansa’s teaching “Joto mot toto poth (As many faiths, so many paths)”.

Dietary preferences are a sensitive issue in the State. Attempts at imposing vegetarianism here have met with resistance in the past as well. Well-known Indologist Nrisinghaprasad Bhaduri said those who make comments on consuming fish are not aware of the scriptures.

“Giving up fish and non-vegetarian food is part of ‘tap (spiritual fortitude)’ on the part of a devotee,” Prof. Bhaduri said. He added that non-vegetarian food items are offered to the deities in the ‘Shakta’ tradition.

IN VARANASI, TURTLES HELP CLEAN THE GANGA

In 2014, the Wildlife Institute of India (WII) and the Ministry of Forest joined hands with the National Mission for Clean Ganga (NMCG), the agency implementing the Namami Gange Programme. Since 2017, they have been running the turtle breeding and rehabilitation centre in Uttar Pradesh’s Varanasi.



About a dozen of the 29 turtle species in India, both herbivorous and carnivorous, help by clearing rotten or half-burnt human bodies as well as flowers dumped into the river here.

“We have released roughly 5,000 turtles since 2017. This year, 1,000 more will be released to strengthen the programme,” said Aashish Panda, a biologist with the WII who works at the turtle rehabilitation centre.

Set up in the late 1980s under the Ganga Action Plan (GAP), the centre has so far released over 40,000 turtles into the river. In 2014, the centre got renewed attention after the Central government enlisted it in the Namami Gange Programme.

How turtles help

At the centre, roughly a dozen species are nurtured. The Forest and Wildlife Department’s team brings turtle eggs from the coastal areas of the Chambal region. The turtle eggs, which are monitored for 70 days, are kept in a room that is fully adapted for hatching. After filling the ground with water and placing bricks atop, the eggs are buried inside sand in wooden boxes. Only 30 eggs are kept in a box. Hatching is completed at temperatures ranging from 27 to 30 degrees Celsius between June and July, and after which the turtles are monitored in an artificial pond for two years before they are released in the river.

“The quality of water in Ganga has improved and the turtles have a role as they feed on meat and waste products thrown in the river. Improvements in biochemical oxygen demand (BOD), fecal coliform (FC) and dissolved oxygen (DO) levels were seen during river water quality checks,” said Rajesh Shukla, convener of the Namami Gange Programme in Varanasi.

During the assessment of the river’s pH levels (i.e. acidic nature) at various locations, officials found that the water quality was suitable for bathing. In 20 locations, they found improved levels of DO, BOD and FC at 16, 14 and 18 locations, respectively.

“It is a long-term biological process and it will take time to know whether these species are playing a major role or not, after 10-15 years. We can check through microbial analysis and we are in the process [of doing so],” Mr. Panda added.

BRITISH LAWMAKERS RALLY FOR THE CAUSE OF ELEPHANTS IN INDIA

Stung by the high number of elephant deaths in India, 85 eminent persons from the U.K. have written a letter to Prime Minister Narendra Modi imploring urgent steps to check the rising instances of human-elephant conflict in India and prevent the extinction of the gravely endangered Asian elephants.

The 85 distinguished persons include members of the House of Lords and House of Commons and celebrated actors.

The letter signed by British lawmakers along with celebrities including William Shatner, a Hollywood legend and the celebrated Captain Kirk of the Star Trek series, and Rula Lenska and Peter Egan, pointed out that in the past 10 years, almost 1,200 elephants have been killed across India. In the past three years, 245 elephants have been killed in Odisha alone, where mining is rampant.

The British lawmakers rallied for the cause of elephants in India after Canada-based biologist and conservationist Sangita Iyer, along with Conservative MP Henry Smith, recently addressed the U.K.

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



Parliament, following the alarming rise in elephant deaths in India caused by electrocution, poaching and habitat loss.

According to the International Union for Conservation of Nature, there are only 40,000 Asian elephants on the planet and India is home to around 27,000 of them. The surging infrastructure development in the country, meant to support its burgeoning population, is squeezing out the gentle beasts from their natural habitations in search of food and water, intensifying the human-elephant conflict, the letter said.

Stressing the need to protect the endangered herbivores that are vital for the global ecosystem, the signatories requested the Union government to do everything possible to protect the animals, and impose stringent penalties that would deter their senseless killings.

Along with Mr. Modi, the letter was also addressed to Union Environment Minister Bhupender Yadav.

AT G20 MEET, A GUINNESS EFFORT TO SHINE LIGHT ON KARNATAKA'S LAMBANI CRAFT

As part of the third G20 culture working group (CWG) meeting in Hampi, a Guinness world record was created on Monday evening for the 'largest display of Lambani items'.

Over 450 women artisans and cultural practitioners from Lambani — a nomadic community inhabiting Karnataka — came together to create embroidered patches with GI-tagged Sandur Lambani embroidery, creating 1,755 patchwork pieces.

The display titled 'Threads of Unity' celebrates the aesthetic expressions and design vocabulary of Lambani embroidery, said officials from the Ministry of Culture. Union Minister for Parliamentary Affairs, Coal and Mines Pralhad Joshi, who inaugurated the exhibition, said the Lambani patchwork embroidery exemplifies many traditional sustainable practices of India.

The Lambani embroidery is an intricate form of textile embellishment characterised by colourful threads, mirror-work and stitch patterns practised in several villages of Karnataka such as Sandur, Keri Tanda, Mariyammanahalli, Kadirampur, Sitaram Tanda, Bijapur and Kamalapur.

The promotion of this craft will not only preserve a living heritage practice of India but will also support the economic independence of women, officials said, adding that the initiative is congruent with the third priority of the CWG, 'Promotion of Cultural and Creative Industries and Creative Economy'.

It spotlights the rich, artistic tradition of Lambani embroidery, thereby promoting the creative economy of Karnataka and of India, they said.

The Lambani craft tradition involves stitching together small pieces of discarded fabric to create a beautiful fabric. The sustainable practice of patch-work is seen in many textile traditions of India and around the world. The embroidery traditions of the Lambanis are shared in terms of technique and aesthetics with textile traditions across Eastern Europe, West, and Central Asia.

After the first two meetings of the CWG in Khajuraho and Bhubaneswar, the third meeting is being held at Hampi from July 9 to 12. The G20 CWG is also espousing 'Culture for LiFE', an initiative for an environment-conscious lifestyle and a concerted action towards sustainability. As many as 50 delegates are attending the third CWG meeting, including those from member countries, guest nations and multilateral organisations.



Progress has been made towards bridging opinions during deliberations and arriving at a

The delegates are being taken on an excursion to heritage sites such as the Vijaya Vittala Temple, the Royal Enclosure and the Yeduru Basavanna complex of the Hampi group of monuments, a UNESCO world heritage site.

ARCHAEOLOGISTS COME UP WITH RARE FINDINGS IN TAMIL NADU

A gold stud, a bone point and a carnelian bead have been unearthed by archaeologists at Porpanaikottai in Pudukottai district of Tamil Nadu, where the State Archaeology Department has taken up excavation this year.

A Sangam-age fort is believed to have existed at the site.

Porpanaikottai, situated about 6.5 km to the east of Pudukottai town, is one of the new sites where the department had taken up excavation this year.

Studies carried out at the site using Light Detection and Ranging (LIDAR), a remote sensing method, had indicated that a fort had existed at Porpanaikottai.

A habitation mound spread over 1.26 hectares is believed to have existed within the fort. The excavation is currently focussed on this area.

Eight trenches, six of them in the properties owned by three persons, are being dug currently. The excavation is being carried out by 35 workers under the supervision of Mr. Thangadurai and research scholars, A. Sudhakar, S. Munusamy and S. Bharath.

SIRI FORT: HOW A KHILJI-ERA BASTION AGAINST MONGOL INVADERS BECAME SYNONYMOUS WITH 1982 ASIAN GAMES

Dotted by historical ruins, nothing about Siri Fort now betrays that it was once a bastion of the Delhi Sultanate to defend the city from the onslaught of the Mongols.

Located in the heart of the capital, Siri is the second among the seven cities of Delhi and the first to be built by a Muslim ruler — Alauddin Khilji.

“Siri Fort stands among the numerous monuments and palaces which Ala-ud-din had constructed. Built in 1311 AD, the fort served as a seat of Ala-ud-din’s administration. Among a host of administrative buildings and palaces, the construction, which deserves most credit was the Hazar Sutun, a magnificent palace comprising one thousand pillars. Housed within Siri, was Hauz-e-Alai, a marvellous reservoir...” writes Rajiv Tiwari in his book Delhi: A Travel Guide.

According to the book, when Khilji ascended the throne in 1296 AD, he found his empire the target of foreign attacks and thus, Siri was constructed with the motive to fortify his kingdom. Tiwari further writes: “The fort was indeed a solid, stable construction which succeeded in guarding its royal residents from any external disturbance. Although the Fort stands in ruins today, one can decipher from the relics how strong and well equipped it had been in the past.”

According to a legend, the place acquired the name as the heads (sirr in Hindustani) of hundreds of Mongol soldiers were buried here. Author Rana Safvi, however, debunks the belief. Speaking to The Indian Express, she says: “According to Sir Syed Ahmad Khan’s Asar-us-Sanadid, the name Siri is after the village (in the area).”



Sir Gordon Risley writes in his book *The Seven Cities of Delhi*: “Inside this city there was a Palace of a Thousand Pillars, but this also has gone, and the only monument connected with the city which now exists is the Hauz Khas of Ala-ud-din, seldom visited, and worthy of no special mention.”

The glory of Siri at its prime has also been acknowledged by Timurlane — the Mongol ruler who invaded Delhi in the 14th century. He writes in his memoirs: “Siri is around the city. Its buildings are lofty. They are surrounded by fortifications built of stone and brick, and they are very strong — from the fort of Siri to that of Old Delhi, which is a considerable distance — there runs a strong wall built of stone and cement... The fortifications of the three cities (old Delhi, Siri and Tughlakabad) have thirty gates. Jahanpanah has thirteen gates, Siri has seven gates.”

Strong as they may have been, the ramparts of the fort failed to guard it against multiple attacks by the Mongols.

Writes A L Srivastava in the *The Sultanate of Delhi*: “The fourth important Mongol invasion occurred at a time when the Sultan was occupied in the siege of Chittor...Ala-ud-din was obliged to take shelter in the fortress of Siri where he (was) besieged for two months. The Mongols plundered the surrounding country and carried their raids even into the streets of Delhi.”

According to Anurit Verma’s book *Forts of India*, Siri had practically lost all its glory until the Asian Games gave it a new lease of life in 1982. “The residential quarters built for foreign participants in the Asian Games at Siri have familiarised them with the name of Siri; and to those interested in history with its glorious past,” Verma writes in his book.

EXPRESS VIEW ON ARIJIT SINGH: SINGER NUMBER 3

Last week, Indian playback singer Arijit Singh became the third most followed artiste on Spotify with 82.8 million followers, surpassing, in the process, the likes of Taylor Swift and Billie Eilish. Ed Sheeran tops the list followed by Ariana Grande whose music has, of late, acquired distinct political overtones.

Singh’s position in the global list seems to showcase the influence of Indian music, globally. The Hindi film song has travelled a long way, alluring many along the course. A few decades ago, playback singers were superstars of the Indian music industry. Songs were made especially for them. You were either a Rafi fan or a Kishore Kumar devotee or heard Lata Mangeshkar with a sense of reverence. In recent times, technology and the changed idioms of filmmaking have placed new demands before the Indian playback singer — the ability to produce hits seems to matter more than the auteur’s suitability for the song. Singh has numbers to his credit. But he also boasts of talent and versatility and a voice rooted in Hindustani classical music — a combination that enables him to strike a chord with a range of listeners.

A country with a large internet-enabled population — and diaspora — is today increasingly tuning in to simplistic compositions that nurture no pretension of becoming great pieces of music. Singh’s singing prowess may be top-notch, but unlike the other artists on the list, he does not write his own music — composers and lyricists do that for him. And, the compositions he has been singing, of late, are becoming monotonous. One hopes that this numbers game — and the pride associated with it — does not become the main reason for creating music, at the cost of the art itself. Singh has the audience’s ears today. Let’s see if he can use that to make his art significant too.



BUSINESS & ECONOMICS

INDIA WEIGHS BETTER MARKET ACCESS TO JOIN IPEF TRADE PILLAR

India is learnt to have asked for better market access in order to be a part of the trade pillar of the Indo-Pacific Economic Framework for Prosperity (IPEF), a 14-nation trade bloc, officials said. Renewed deliberations within the Union Commerce Ministry are learnt to be centred on whether New Delhi should first take a commitment on joining even if there is lack of clarity about specific gains or join now instead as 13 countries are already negotiating the nitty gritty and if India were to accede later, it could be at a disadvantage at having missed out on the negotiations.

As of now, market access has not been agreed upon for India, which is being seen as a crucial factor to join the trade pillar (Pillar-I), the official said. India has an observer status on the trade pillar negotiations.

The developments come after text-based negotiations under the supply chain pillar (Pillar-II) were substantially concluded in the second ministerial meeting in May in the US. "India is there in other three pillars under the IPEF. Second pillar of supply chains is very important, which we have finalised. For trade pillar, we are asking for better market access. We are also seeing how better we can negotiate it," the senior government official told The Indian Express.

Launched in May last year at Tokyo, the IPEF has 14 partner countries including Australia, Brunei, Fiji, India, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, Vietnam and the US with an aim to strengthen economic engagement among the member countries to advance growth, peace and prosperity in the region.

The IPEF framework is structured around four pillars relating to Trade (Pillar I); Supply Chains (Pillar II); Clean Economy (Pillar III); and Fair Economy (Pillar IV). India has joined Pillars II to IV of IPEF while it had opted out from Pillar-I in September last year and now has an observer status in Pillar-I.

"Under the IPEF trade pillar, they have not given market access yet. They are asking India to sign the trade pillar, but it is still not fully clear about what all we will get if we sign it. Earlier also India felt that we are not getting much out of it and environmental and labour laws conditions have been stringent. Some of the other countries are also finding these conditions as stringent and they are also negotiating it," the official said.

The 14-nation IPEF bloc is seen as crucial as it accounts for about 40 per cent of the world's GDP and 28 per cent of the world's trade in goods and services and is seen as an economic and trade strategy backed by the US to counter China's economic influence in the region. India had been reluctant earlier to join Pillar-I in view of concerns to protect its domestic agricultural, labour and digital sectors without being completely sure about the impact of joining the IPEF.

The fourth negotiating round of IPEF for all pillars is currently underway from July 9-15 hosted by Korea in Busan. The first negotiating round was held in Australia in December 2022, followed by a special negotiating round on Pillars II-IV in India in February 2023. The second negotiating round was held in Indonesia in March 2023, followed by the third negotiating round in Singapore in May 2023. On May 27, the IPEF partners met in Detroit, Michigan for a ministerial meeting.



HOW RUSSIA HAS BECOME WORLD'S TOP WHEAT EXPORTER AT UKRAINE'S EXPENSE

Russia is consolidating its position as the world's top wheat exporter, even as Ukraine's shipments are projected to more than halve from their peak and production plunge to a 11-year-low.

The US Department of Agriculture (USDA) has estimated Russia's wheat exports at a record 45.5 million tonnes (mt) in 2022-23 (July-June), up from 33 mt, 39.1 mt and 34.5 mt in the preceding three marketing years. In the process, it has left behind the European Union, which had exported 39.8 mt in 2019-20, before slipping to 29.7 mt, 32 mt and 34 mt in the following three years.

Moreover, Russia's wheat exports are expected to touch a new high of 47.5 mt in 2023-24, way ahead of the EU (38.5 mt), Canada (26.5 mt), Australia (25 mt) and Argentina (11 mt). Russia has gained largely at the expense of Ukraine. The war-torn nation's exports fell from 21 mt in 2019-20 to 16.8 mt in 2022-23 and are forecast to further decline to 10.5 mt in the new marketing year. USDA has projected the country's production, too, to dip to 17.5 mt, the lowest since 2012-13.

The primary destinations for Russian wheat are the Middle East, North Africa and Central Asia, led by Egypt, Iran and Algeria. While the Black Sea Grain Initiative helped Ukraine export 16.8 mt in 2022-23, about 39% of its wheat actually moved via the land route to Eastern Europe, instead of the specially-created corridors for shipping from the three designated ports of Odesa, Chornomorsk and Yuzhny. Ukraine's markets have shifted dramatically from Asia and North Africa before the war to mainly Europe, mostly due to ease of shipment, according to the USDA.

Ample supplies from Russia have helped soften global wheat prices. Russian wheat is now being exported at around \$235 per tonne, as against \$275 three months ago, \$310 six months ago and \$375 a year ago. The relatively low international prices of wheat can be a comfort factor for countries like India; it might have to consider the option of wheat imports if the kharif rice crop does not turn out too good due to poor monsoon rain in major paddy-growing states.

WHY ARE INDIA-RUSSIA TRADE PAYMENTS IN CRISIS?

The story so far:

As India continues to import oil from Russia, it is getting tougher for the country to pay for it. On the one hand, it faces repercussions of breaching the oil price cap of \$60 a barrel put in place by the U.S. and European nations as Russia offers lower discounts on its crude. On the other hand, using currencies like the Chinese yuan for payments, which India has already started doing, has its own geopolitical ramifications amid strained ties with Beijing.

Where do oil imports from Russia stand?

Until a year ago, most of India's oil imports came from West Asia, the U.S., and West Africa but today, a bulk of crude unloading at India's ports is likely to be coming from Russia.

In February 2023, Russia surpassed Saudi Arabia to become the second biggest exporter of crude oil to India in FY23. Since the start of Russian President Vladimir Putin's "special military operation" in Ukraine on February 24, 2022, Moscow has been hit by Western banking and economic sanctions. Against this backdrop, it found a ready market for its goods, especially crude oil, in India and offered steep discounts. India, meanwhile, unlike the West, chose to not join the list of countries formally imposing sanctions on Moscow.



As a result, India's imports of crude oil from Russia increased nearly 13 times in 2022-23 to over \$31 billion from less than \$2.5 billion in 2021-22. Russia is now the largest supplier of oil to India, displacing traditional players such as Iraq, Saudi Arabia, and UAE. In the four-month period between November 2022 and February 2023, Russia took over the top spot from Iraq. An analysis by Reuters showed how India accounted for more than 70% of the seaborne supplies of Russian-grade oil under \$60 dollars a barrel in May.

Which currency is being used for payments?

For starters, as part of war-induced sanctions on Moscow, the U.S., the EU, and the U.K. have blocked multiple Russian banks from accessing the Society for Worldwide Interbank Financial Telecommunication (SWIFT), a global secure interbank system. An estimated \$500 million is pending for goods already shipped by Indian exporters to Russia and it is now not possible to get the payments through the SWIFT channel.

Thus, in an effort to economically strain Russia, the West targeted one of its biggest traded goods — energy — for which transactions have traditionally been dollar-dependent. Besides an oil ban jointly agreed between multiple countries last year, it was also decided to cap the price to a maximum of \$60 per barrel of Russian oil transported through waterways. While India is not a formal signatory, it has tacitly agreed to maintain the price cap as much as possible. Besides, banks and traders may not want to get involved in transactions that breach the oil cap over fears of repercussions for their funds. Until recently, the blends of oil India was importing from Russia were largely below the price cap fixed by G-7 countries and India was able to pay for the oil using dollars. However, Russia has lowered its discounts due to high demand from China and lower grade oil is now in short supply.

What about the rupee-rouble mechanism?

Notably, India was in negotiations with Russia to reactivate the rupee-rouble trade arrangement, which is an alternative payment mechanism to settle dues in rupees instead of dollars or euros.

However, media reports showed in May that the rupee-rouble payment mechanism could not take off. There are a couple of reasons for this — analysts point out there is scepticism on the rupee-rouble convertibility as the rouble's value is kept up by capital controls and not determined by the market, as in the case of reserved currencies. On the flip side, Russia has also pointed out that it finds the rupee to be "volatile".

Lastly, and more significantly, the unforeseen surge in oil trade between India and Russia in one year alone has led to a massively ballooning trade deficit. India's trade deficit with Russia touched \$43 billion in 2022-23 as it imported goods worth \$49.35 billion while its exports were at \$3.14 billion. This has led to staggering amounts of Indian rupees in Russian banks that cannot be used by Russia in its war efforts.

Is de-dollarisation being attempted?

Since the dollar is largely considered the global reserve currency, many countries have seen the U.S. sanctions as a way for America to weaponise the dollar. This has given rise to countries looking at de-dollarisation, which means the replacement of the U.S. dollar with other currencies as the global reserve currency.

India too, has recently released a roadmap for the internationalisation of the Indian rupee to create broader acceptance. It is important to note, however, that the value and the acceptability



of any currency depend mainly on its purchasing power, that is, the number of goods and services that can be bought using it and right now, the daily average share for the rupee in the global foreign exchange market is ~1.6%, while India's share of global goods trade is ~2%.

Meanwhile, Indian refiners have also settled some non-dollar payments for Russian oil in the Chinese yuan and the UAE dirham.

What next?

Experts have pointed out that while India could use the yuan for payments, there are concerns about how that would appear geopolitically as it continues to have strained ties with Beijing since the border standoff. Besides, another solution could be to counter the deficit with Russia by getting it to make investments in energy projects in India or to invest in government bonds.

WORK IN PROGRESS

Meeting after nearly five months, the Goods and Services Tax (GST) Council on Tuesday unravelled some knotty issues that were hanging fire for a long time, such as the constitution of Appellate Tribunals and the tax treatment for the booming online gaming industry. With the appointment norms for tribunal members cleared, the Centre has given an assurance that the first set of tribunals should become operational in four to six months. While States have proposed 50 tribunal benches, these will come up in a phased manner, beginning with State capitals and cities with High Court benches. Industry may hope for quicker redress of mounting GST litigations clogging up courts. On the other hand, businesses have reacted with much consternation to the Council's decision to finalise a 28% GST levy on the face value of all bets placed in online games, casinos or horse-racing, with many e-gaming players terming it a death knell for the growing industry and its thousands of jobs. This was not a hasty decision, having been considered by a ministerial group of the Council not once, but twice since its formation in late 2020. Finance Minister Nirmala Sitharaman said the Council acknowledged that Goa and Sikkim rely heavily on casino-driven tourism revenues, but also examined the moral question of whether this can be equated to the more compassionate tax treatment warranted for essential goods and services. With the Electronics and IT Ministry also formulating a policy for online gaming, this decision, requiring an amendment to the GST law, may yet need some review and fine tuning.

The Council also granted tax exemptions, reduced or clarified some rates and regularised past incongruencies in tax payments on some items owing to confusion about their classification. So, food and beverages in cinema halls will now attract a lower 5% GST, as would unfried, uncooked snack pellets, fish soluble paste and imitation zari yarn. It is not clear why the Council took six years after the GST regime's launch to tweak these rates. Exempting drugs imported for cancer and some rare diseases, for instance, could have been envisaged earlier as well, just as the intended higher tax levy on sport utility vehicles could have been. Dissuading the use of larger personal vehicles is an obvious necessity for a country where traffic congestion is intense and widespread. The impact of some decisions on individual sectors will depend on the fine print, but the Council, which may meet less frequently in the upcoming poll season, has taken its eye off the promised overhaul of GST rates. No successor was named to steer the ministerial group on rate restructuring, previously helmed by erstwhile Karnataka Chief Minister, B.S. Bommai.



EXPRESS VIEW ON GST ON ONLINE GAMING: THE BETS ARE OFF

In its 50th meeting held Tuesday, the GST Council decided to levy a 28 per cent tax on the full face value of the bets involving online gaming, horse-racing and casinos. This is a crushing blow to the gaming industry that is growing rapidly, riding the twin waves of technology and entertainment. Unfortunately, rather than being driven by economics, moral considerations seem to have influenced the Council's decision. Indeed, the Union finance minister said as much underlining that the council's deliberations factored in the "moral question" of whether these activities should be taxed at the same rate as essential items. No distinction has also been made between "games of skill" and "games of chance". Shares of Delta Corp, the casino operator which also has online operations, crashed 23 per cent, while Nazara Technologies, a digital gaming and sports firm, also tanked, recovering thereafter. This is certainly not what the emerging, fast-growing sector was hoping for.

The issue of taxation in this area has been contentious with strong differences of opinions existing within the Council. Earlier, a Group of Ministers (GOM) had suggested a levy of 28 per cent on these activities for the full value of the consideration paid, and had recommended that no distinction be made between games of skill or chance. However, with some reservations being expressed, the Council decided to review the report. Some states were in favour of taxing all three activities on the full face value, while others advocated the levy of tax only on platform fees and on gross gaming revenue for casinos. With the Council now deciding to go this particular way, the nascent industry faces a blow it will find hard to recover from.

This despite the fact that the online gaming market in India has seen a dramatic expansion over the past few years. As per an EY-FICCI report, revenues of the online gaming segment in the country rose from Rs 79 billion in 2020 to Rs 119 billion in 2022, and are expected to touch Rs 153 billion by 2024. The country has also seen a sharp rise in new users, with the report pegging the number of paying gamers at 95 million in 2021. While there is immense opportunity for the sector to grow, the GST decision can disrupt the entire segment, dissuading both investors and users. It is unfortunate that six years after the shift to the GST regime, rather than focusing on reducing the number of tax slabs, providing stability and predictability to the tax system, the GST Council has chosen to go in the opposite direction. In a draft paper, the Niti Aayog had sought a "light touch regulatory framework" for the online fantasy sports industry and differentiated fantasy sports from betting and gambling. That's why the GST's hard sledgehammer needs to be cushioned, the damage it will wreak isn't worth it.

ROILING RESURGENCE

The latest Consumer Price Index data showing a resurgence in retail inflation proves exactly why the RBI's monetary authorities have reiterated the need to keep the policy approach firmly tilted towards ensuring price stability. With food prices becoming unmoored and spiralling up, June's CPI-based provisional inflation reading accelerated by half a percentage point to a three-month high of 4.81%. Inflation in the food and beverages group, the single-largest constituent of the CPI that contributes almost 46% of its weight, led the resurgence, quickening by 128 basis points from May's level to 4.63%. The food price inflation was broad-based with 10 of the 12 sub-groups witnessing year-on-year increases: cereals registered 12.7% price gains, eggs logged 7%, dairy experienced 8.56% inflation, pulses posted 10.5% and spices saw gains exceed 19%. Vegetables, with a 6% weight in the CPI and the third-largest of the food basket's dozen items, though still in the disinflation zone at minus 0.93%, saw prices harden so drastically in June that the disinflation



narrowed by more than 700 basis points. Month-on-month, vegetable price inflation soared to 12.7%, the highest sequential rate of price gains in the essential food group since October 2021. Tomatoes were the main culprit with prices skyrocketing by 64% from May's levels. With the exception of three vegetables, including lady's finger and lemon, in the 19-member basket, all the others including the most widely used potatoes and onions registered sharp sequential inflation.

That the year-on-year quickening in price gains happened notwithstanding a high base — June 2022 saw inflation at 7.01% — is also a clear sign that price pressures are regaining a disconcerting momentum. Core inflation, which excludes the food and fuel and light groups, still remained stuck at 5.16%, barely moving from May's 5.17% pace. Of the non-food items, clothing and footwear, as well as health and personal care saw price gains that exceeded 6% in June. Education prices too continued to keep rising steadily. In the backdrop of monsoon rains showing an erratic trend, the outlook for the kharif crop output will depend heavily on sowing shortfalls being bridged in the rest of July. As on July 7, while overall kharif sowing was 8.7% lower than a year earlier, the essential staples of rice and pulses showed 24% and 26% shortfalls, respectively. And with oilseeds too reflecting a 14% deficiency compared with 2022 levels, there is a real risk that all the recent hard-won gains in anchoring inflation expectations may start to unravel in the coming months. Policymakers must tighten their grip over prices to prevent the broader economic recovery from floundering.

IIP RISES 5.2%, LED BY INFRASTRUCTURE

Industrial output expanded at the fastest pace in three months in May buoyed by infrastructure to grow by 5.2%, compared with April's 4.46%. Electricity generation snapped a two-month contraction to rise 0.9%.

Mining and manufacturing as a whole edged up at a swifter rate of 6.4% and 5.7%, respectively, data from the National Statistical Office (NSO) show. Production of consumer durables rebounded to growth for the first time in six months, expanding 1.1% compared with a 2.5% contraction in April.

Infrastructure and construction goods' output continued to drive up the Index of Industrial Production (IIP), rising 14% after an almost 13% rise in April. Capital goods' production growth also accelerated to 8.2%, from April's 6.2%.

Of the 23 manufacturing sectors tracked by the NSO, 12 sectors recorded a contraction in output in May, with apparel makers (-21%) and furniture producers (-20.5%) reporting the sharpest declines, followed by wood products (-12.7%), paper products (-8.6%) and computers and electronics (-5.7%).

This was counter-weighted by a sharp 20.9% uptick in pharma output and a 13.4% surge in motor vehicles' production. Other transport equipment grew 10.9%, while non-metallic mineral products and machinery and equipment makers also upped output by more than 10%.

"It is a mixed bag, with infra-oriented sectors doing better, but we still need to see consumer spending increasing," remarked Bank of Baroda chief economist Madan Sabnavis. While the auto sector had done well thanks to post-harvest demand from rural India and the marriage season, Mr. Sabnavis said it needed to be seen if this was sustained.

ICRA chief economist Aditi Nayar said June IIP growth may have slowed to about 3%-4% as per high-frequency indicators.



FINMIN ASKED TO CONSIDER IMPOSING CUSTOMS DUTY ON CHINESE STAINLESS STEEL

The Ministry of Steel has written to the Finance Ministry asking it to look at the possibility of levying customs duty on Chinese stainless steel shipments coming into India.

Such a duty will benefit the domestic stainless steel industry which has been badly hit by such imports and is “facing low capacity utilisation”.

The import of stainless steel from China increased from about 20% to about 60% of overall imports into the country.

In a letter to the Revenue Secretary written last month, a copy of which is with businessline, a Steel Ministry official wrote, “This Ministry is of the view that imposition of CD (customs duty) on imports from China will be beneficial and will support the domestic stainless steel industry which is facing the problem of low capacity utilisation due to the surge in the imports. In view of the above, it is requested that the recommendations of the DGTR may be examined for suitable action.”

The Directorate General of Trade Remedies (DGTR) had, in the sunset clause review, recommended the continuation of customs duty on stainless steel imports from China in April.

Industry hit

In Budget 2022-23, countervailing duties on imports of certain hot-rolled and cold-rolled stainless steel flat products originating from China were revoked.

The Steel Ministry in its office memorandum acknowledged the representation from various trade bodies and noted that a surge was observed in the import of stainless steel flat products from China.

A year before the customs duty on stainless steel imports from China was revoked, that is in 2020-21, stainless steel imports from China were 1,57,000 tonnes, which increased by more than 300% to 6,32,000 tonnes in 2022-23.

“This has adversely impacted the domestic stainless steel industry,” it said.

As per findings of an investigation carried out by DGTR, Chinese imports into India shot up 44% (on an annualised basis) after suspension of CVD since February 2021. It stood at 49% (on an annualised basis) for a 9- month period in 2022.

PSU BANKS WARY AFTER SBI'S DISMAL AT-1 BOND ISSUE

The underwhelming subscription to State Bank of India's additional tier-1 (AT-1) bond issue on Thursday has dampened market sentiment and is expected to make fundraising harder for other PSU banks, possibly even leading to delays in certain cases.

On Thursday, SBI raised ₹3,101 crore against an issue size of ₹10,000 crore. The bonds had a base issue of ₹3,000 crore and drew bids worth ₹5,920 crore.

“This has definitely dampened investor sentiment,” said Venkatakrisnan Srinivasan, founder of Rockfort Fincap. “Investors are feeling they have not got the real value or coupon for the AT-1 bonds,” he added.



SBI raised the funds at 8.1%, 91 basis points higher than the yield on the 10-year benchmark G-sec, and against bids received in the range of 7.90-8.42%.

“AT-1 instruments are loss-absorbing, so it is possible investors expect a higher return against that risk,” said Saswata Guha, Senior Director-Financial Institutions, Fitch Ratings India. “The probability of losses being imposed on state banks’ AT-1 is low, but it is still a risk nonetheless, should such a situation arise.”

Other PSU banks such as Punjab National Bank, Canara Bank, and Bank of Baroda might now “wait and watch” to assess if the market will pick up, look to offer higher rates, or delay fund raising by a few weeks or months.

Market participants opine that at least a 15-20 bps premium over the current rates would help AT-1 bonds be appropriately priced to tap market appetite in the current market environment, which is already seeing some overcrowding in the long-tenure space, leading to a pricing mismatch.

IRDAI RETAINS MANDATORY CESSION OF BUSINESS IN FAVOUR OF GIC RE AT 4% FOR FY24

The Insurance Regulatory and Development Authority (IRDAI) has maintained the status quo on obligatory cession of business for the financial year 2023-24 at 4 per cent in favour of General Insurance Corporation of India (GIC Re), disappointing the private sector general insurers and foreign reinsurers with operations in India.

The government had notified the move recently saying that the entire Obligatory Cession is to be placed with GIC Re only. Obligatory cession refers to the part of the business that general insurance companies have to mandatorily cede to the national reinsurer GIC Re.

Understandably, private general insurers are against any obligatory cession to GIC Re as it doesn't give them any freedom to place the reinsurance business the way they like and with the reinsurers they like. The general insurers earn substantial commission out of any reinsurance business they place with the reinsurers apart from the risk cover.

The IRDAI had constituted a panel under Bhargava Dasgupta, MD of ICICI Lombard General Insurance, to suggest measures to phase out obligatory cession and the panel had suggested phase-out the obligatory business along with the right to first refusal by the GIC Re.

Under the right to first refusal, GIC Re has the first right to choose the reinsurance business from the general insurers and then it can be placed with other reinsurers. The obligatory cession was reduced from 5 per cent to 4 per cent in FY23 and the IRDAI, in line with demands of general insurers, had indicated that it will be further be reduced and can even be made zero. “Maybe the government thinks removal of obligatory cession will impact the performance of GIC Re,” said an insurance official.

The IRDAI, after consultation with the Advisory Committee, and with the previous approval of the central government has taken the decision that the percentage cession of the sum insured on each general insurance policy to be reinsured with the Indian re-insurer (GIC Re), will be four percent during the financial year, except the terrorism premium and premium ceded to nuclear pool wherein it would be made ‘NIL’, said the notification.



The approximate size of the Indian reinsurance market is around Rs 70,000 crore in FY2022-23. There are now over 10 foreign reinsurers who are operating in India. However, there are over 200 cross border reinsurers who provide cover offshore and much cheaper premium. The size of the Indian general insurance market is over Rs 2.20 trillion in 2022-23.

It has been growing at over 15 per cent in recent years except for the last two years when it has faced many challenges due to COVID-19 Pandemic and has grown within 10 per cent single digit.

In fact, obligatory cession was 10 per cent which was reduced to five per cent afterwards and the foreign reinsurers which are having branches in India are demanding the total removal of the obligatory cession for GIC Re to create a level playing field in the Indian reinsurance market.

GIC Re reported a net profit of Rs 3,417 crore for the March quarter, an increase of 90 per cent over Rs 1,794 crore reported in the same period of last year. The rise was despite underwriting profits shrinking 61 per cent to Rs 889 crore from Rs 2,313 crore a year ago.

IRDAI had named LIC, GIC Re and New India Assurance as domestic systematically important insurers — which are considered as “too big or too important to fail”

NO TAKERS IN FCI RICE E-AUCTION, CENTRE HINTS AT TWEAKING POLICY

The Centre’s intention behind allowing the sale of wheat and rice through e-auctions under the Open Market Sale Scheme-Domestic (OMSS-D) was to give a signal to the market that the foodgrains stock is available with the government and it will be used to bring down prices, Union Food Secretary Sanjeev Chopra said on Monday.

Addressing the media, Chopra hinted at a possible change in the existing OMSS policy, under which the government has announced to sell 4 lakh metric tonnes (MT) of wheat and 5 lakh MT rice from the Central pool in open market.

In the e-auction conducted on July 5, the Food Corporation of India (FCI) received bids for only 170 MT rice against a quantity of 3.86 lakh MT on offer.

Asked if the government will tweak the OMSS policy in view of tepid response to FCI’s offer to sell rice, Chopra said, “As CMD [of FCI] has mentioned, 100 MT is what we are allowing at present, and this tweaking of policy is a dynamic continuous process. As and when we find there is some requirement, we will tweak the policy to ensure the policy meets the objective.”

WHAT IS THE LEGAL ROW BETWEEN FARMERS AND PEPSICO?

The story so far:

On July 5, the Delhi High Court held that there was “no merit” in the appeal filed by PepsiCo over the patent rights for its ‘unique potato’ variety. The appeal was against an order passed by the Protection of Plant Varieties and Farmers Rights’ Authority (PPVFRA), revoking PepsiCo’s registration vis-a-vis the unique potato variety developed by it.

What was the case about?

The PPVFRA revoked PepsiCo’s registration with respect to its potato plant variety, ‘FL 2027’ (used in Lay’s chips), on the grounds provided under Section 34 (grounds for revocation of registration) of the Protection of Plant Varieties and Farmers Rights Act, 2001 (PPV&FR). FL 2027



is a 'chipping potato' variety with low external defects, high dry matter/high solids content and stable sugars, all of which make it highly suitable for the manufacture of chips.

According to the appellant, it was developed in the U.S. by Robert W. Hoopes, a plant breeder and a former employee of Frito-Lay Agricultural Research, a division of PepsiCo Inc. A certificate of registration for FL 2027 was granted to PepsiCo India on February 1, 2016, conferring it an exclusionary right to market, sell, import, export or distribute FL 2027 for a period of six years. However, in an application filed by Kavitha Kurungati, a farmers' rights activist, the PPVFRA revoked the company's registered potato variety on December 3, 2021.

What is the PPV&FR Act?

The Act provides an effective framework to conserve and encourage the development of various plant varieties. It established an effective system to safeguard and recognise the rights of breeders, researchers and farmers to promote agricultural development in the country.

Additionally, it also facilitates the mushrooming of the Indian seed industry to ensure the availability of high-quality seeds and planting materials to farmers.

What are grounds for revocation?

According to Section 34 of the PPV&FR Act, the protection granted to a breeder may be revoked by the authority on the following grounds — that the grant of a registration certificate is based on incorrect information furnished by the applicant; that the registration certificate was granted to an ineligible person; when the breeder does not provide the registrar with the required documents; a failure to provide an alternative denomination for variety registration in case the earlier variety provided is not permissible for registration; a failure of the breeder to provide the required seeds for compulsory licence; failure to comply with the acts, rules, regulations and directions issued by the Authority; and if the grant of the registration certificate is against public interest.

Why did the court reject the appeal?

In relation to Section 34(a) (incorrect information furnished), it was discovered that PepsiCo had sought the registration of FL 2027 variety as a "new variant" instead of an "extant variant" in its application dated February 16, 2012, despite furnishing the date of its commercialisation in India to be December 17, 2009. However, to be registered as a "new variant" an additional requirement of 'novelty' in addition to 'distinctiveness', 'uniformity' and 'stability' must be satisfied one year before the date of filing of the application for registration. The court held that FL 2027 could not fulfil the criteria of novelty and was only eligible for registration under "extant variety".

What next?

India is an agri-based economy with the agriculture sector having the highest workforce, nearly 152 million as of FY2021 as per Statista. Multinational food processing companies and investors must prioritise the well-being of farmers and their rights by developing a comprehensive understanding of India's local laws, particularly the PPV&FR Act 2001, and recognise the safeguards and protections it provides to farmers.



THE PROBLEM WITH BATTERY ELECTRIC VEHICLES

Battery electric vehicles are at the heart of the government's push for net zero. However, what has worked for Norway and China may not be as successful in India's peculiar conditions. While there is little debate that electrification is the future, the roadmap remains unclear.

Currently, the Centre offers clear tax incentives for primarily one category of cars, with practically all other vehicular technological platforms clubbed together towards the upper end of the tax bracket. India's electric mobility plan is largely focussed on battery electric vehicles (BEVs) replacing internal combustion engine (ICE) vehicles, with Li-ion seen as the most viable battery option for now. The EVs that qualify for a clear upfront tax incentive are the ones referred to as BEVs — the category of cars that Atkinson primarily targets.

Issues in Battery Electric Vehicles push

UPFRONT SUBSIDY: The BEV experience across markets from Norway to the US and China shows the electric push works only if it is backed by state subsidies. An elaborate system of incentives is central to Norway's EV policy, which has fostered the world's most advanced EV market. The government waives the high taxes it imposes on sales of non-electrics, it lets electric cars run in bus lanes, toll roads are free for them, and parking lots offer a free charge.

The problem with this overt subsidisation of EVs, especially in the context of developing nations like India, is that much of the subsidy, especially the one offered as tax breaks for cars, ends up in the hands of the middle or upper middle classes, who are typically the buyers of battery electric four-wheelers.

CHARGING NETWORK: A World Bank analysis found that investing in charging infrastructure is 4-7 times more effective in EV adoption than providing upfront purchase subsidies. Norway and China have seen faster EV adoption through sustained efforts at expanding the public charging infrastructure, while also offering purchase subsidies. China, the leader in the number of publicly available chargers, accounts for 85% of global fast chargers and 55% slow chargers.

In India, the number of EVs had crossed 1 million by mid-2022, and will likely grow to 45-50 million by 2030. But only about 2,000 public charging stations are currently operational across the country.

Also, India's charging infrastructure demands, according to KPMG's 'Electric vehicle charging — the next big opportunity' report, are unique, because the vehicle mix is dominated by two- and three-wheelers. The charging network strategy has to be tweaked, given that the power requirement varies — 2Ws and 3Ws have small, low voltage batteries for which normal AC power charging is adequate, while 4Ws have varied battery sizes and use different charging standards.

Single-phase AC chargers are suitable for cars with single-phase onboard chargers, while three-phase AC chargers are required for cars with larger onboard chargers. Buses, on the other hand, have large batteries and high power requirements, which makes DC fast charging the most suitable.

Most e-2W and 3W models in India are suited to slow charging, and battery-swapping is emerging as an alternative for cases where fast charging is required.



ELECTRICITY SOURCE: In several countries that have pushed EVs, much of the electricity is generated from renewables — Norway has 99% hydroelectric power. In India, the grid is still fed largely by coal-fired thermal plants.

Unless the generation mix changes significantly, India would be using fossil fuel generation to power EVs. Theoretically at least, this would mean reduced tailpipe emissions in the cities, but continuing pollution from the running of the thermal plant. There is the advantage of substitution of oil imports, though.

VALUE CHAIN: As India struggles to make inroads into the global lithium value chain, there is discussion on the need to diversify the country's dependency on Li-ion batteries in the EV mix. The demand for Li-ion batteries from India is projected to grow at a CAGR of more than 30% by volume up to 2030, which translates to more than 50,000 tonnes of lithium requirement for the country to manufacture EV batteries alone.

But more than 90% of the global Li production is concentrated in Chile, Argentina, and Bolivia alongside Australia and China, and other key inputs such as cobalt and nickel are mined in the Congo and Indonesia — India would, therefore, be almost entirely dependent on imports from a small pool of countries to cater to its demand. While other options to Li-ion are being explored, viability remains a key factor.

China is miles ahead of the rest of the world, with a strong base in the entire sourcing chain, and with industry leaders such as battery makers CATL and BYD, and carmakers such as Nio, Li Auto, and XPENG Motors.

Picking winners

There is a larger argument against the government picking winners based on a preferred technology. There is no denying that Li-ion has been a runaway success at the lower end of India's EV segments, with 2Ws and 3Ws seeing a sharp surge. But the same cannot be said of the four-wheeler segment, although there is promise. What needs to be noted is that globally, the EV definition covers, besides BEVs, Hybrid Electric Vehicles, Plug-in Hybrid Electric Vehicles, and Fuel Cell Vehicles.

While there is little debate that electrification is the future, the roadmap remains unclear. Many countries have pushed e-mobility through stringent regulations and lucrative tax incentives; however, monetary incentives alone cannot drive EV penetration, according to McKinsey & Co data. For example, the US state of West Virginia offers the most monetary incentives for EVs but has seen low adoption, while California offers fewer monetary incentives but has the highest penetration, thanks to the government's investment in robust EV infrastructure, parking benefits, and workplace charging facilities.

In India, the two major objectives seem to be to cut emissions and reduce costly fuel imports. Government officials argue that while upfront tax incentives may be limited to BEVs, technologies such as hybrids get incentives under the flagship FAME subsidy scheme. But vehicle manufacturers maintain that a technology-agnostic approach that spells out the emissions objectives that they have to meet, irrespective of technology, might be beneficial.

New technologies

Indeed, there are a lot of technologies to choose from.



HYBRIDS: The hybrid technology is seen as a good intermediate step towards achieving the all-electric goal. Hybrids typically have improved fuel efficiency through electrification of the powertrain, but do not require the charging infrastructure base that is an essential for BEVs. Additionally, manufacturers claim that a hybrid vehicle base also spawns the manufacture of the battery ecosystem, which can then be leveraged for a BEV push.

However, hybrids too have the issue of Li-ion batteries being the main source, even though the self-charging mode obviates the need for charging points. There are also questions about hybrids achieving their famed fuel efficiency claims when the air conditioner is active for most of the drive, as is typically the case in many parts of India for much of the year.

ETHANOL & FLEX FUEL: A flex fuel, or flexible fuel, vehicle has an internal combustion engine, but unlike a regular petrol or diesel vehicle, it can run on more than one type of fuel, or even a mixture of fuels such as petrol and ethanol. A nationwide pilot that is currently underway aims to replicate the commercial deployment of this technology in other markets such as Brazil, Canada, and the US.

FCEVs & HYDROGEN ICE: Hydrogen fuel cell electric vehicles (FCEVs) are practically zero emission, but a major hurdle to their adoption has been the lack of fuelling station infrastructure — even though fuel cell cars refuel in a way that is similar to conventional cars, they cannot use the same station. Safety is also a concern. Hydrogen is pressurised and stored in a cryogenic tank, from there it is fed to a lower-pressure cell and put through an electro-chemical reaction to generate electricity.

Hydrogen ICE vehicles are similar to conventional internal combustion engine vehicles, with a few tweaks to prep them to run on hydrogen. Certain components of the engine like the fuel delivery system and spark plugs are modified or changed to enable compatibility with hydrogen, instead of petrol or diesel. However, these vehicles are not zero-emission, like the FCEVs.

SYNTHETIC FUELS: German manufacturer Porsche is developing a synthetic fuel that it says can make an internal combustion engine as clean as an EV. Porsche's eFuels are made from carbon dioxide and hydrogen, and are produced using renewable energy. The fuel production is being tested in Chile.

The idea is to make this usable in all petrol-engine cars, rendering their use virtually CO₂-neutral, and thereby give ICE cars a fresh lease of life. Incidentally, Formula One will use synthetic fuel from 2026.

THE UNMAKING OF VEDANTA-FOXCONN'S CHIP DREAM: WHAT WENT WRONG?

In September 2022, the Centre hailed Vedanta and Foxconn's semiconductor manufacturing plant in Gujarat as a landmark. Chief Minister Bhupendra Patel and IT Minister Ashwini Vaishnav attended the signing of an MoU with the state government in Gandhinagar.

Less than a year later, the partnership between the two companies to set up the \$19.5 billion plant has come to an abrupt halt. Foxconn announced on Monday that it was pulling out of the joint venture with Vedanta.

Foxconn has given no reason, but it is understood that the ability of Vedanta, which is reeling under a heavy debt load, to pay for acquiring the necessary technology for chipmaking played a key role.



Why is chipmaking crucial for India?

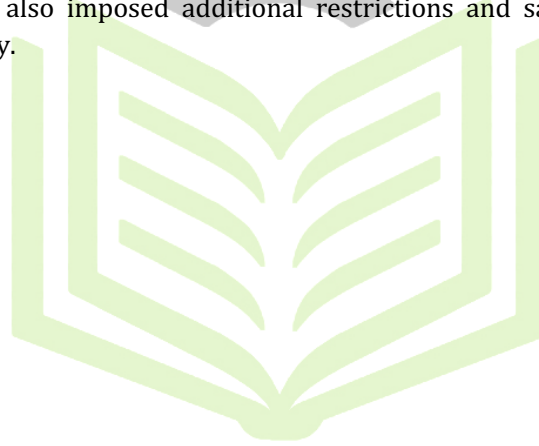
India has identified electronics manufacturing as a key sector in the coming years — both to produce goods for the domestic market, and for export. While some manufacturing schemes, for smartphones for example, have taken off (with Apple in the lead) the process is largely centred around assembling various components imported from elsewhere.

Prime Minister Narendra Modi has made chip manufacturing a top priority for India's economic strategy. He wants to “usher in a new era in electronics manufacturing” by getting global companies to come to India.

Building semiconductors in India is crucial for the government's vision to develop a domestic electronics supply chain and eventually reduce imports — especially from China which, despite some challenges, remains the number one destination for such manufacturing.

All electronics items have semiconductor chips in them — and as more companies try to diversify their bases from China, India has an opportunity to emerge as a reliable destination.

The US passed the CHIPS Act last August, providing a \$280 billion subsidy for manufacturing chips in the country. It has also imposed additional restrictions and sanctions that impact China's semiconductor industry.



DreamIAS



LIFE & SCIENCE

THE STRANGE PARTICLE THAT HOLDS THE KEY TO 'QUANTUM SUPERCOMPUTERS'

Majorana zero modes can be used to realise a powerful form of computing called topological quantum-computing. They can work as qubits and won't easily lose the information vested with them. Such a computer could also take advantage of peculiar mathematical rules called non-Abelian statistics

In a paper published on June 21, researchers at Microsoft announced that they had figured out a way to create a strange kind of particle that could potentially revolutionise quantum computing.

These particles are called Majorana zero modes, whose unique properties could help build quantum computers that are less fragile, and more computationally robust, than they are today.

What does 'Majorana' mean?

All subatomic particles that make up matter are called fermions.

In 1928, the British physicist Paul Dirac wanted to understand how quantum mechanics would change if it accommodated the special theory of relativity as well. The result was the Dirac equation, which described the behaviour of subatomic particles that moved at near the speed of light.

Dirac noticed that the equation predicted the existence of an antiparticle for each particle, such that if the two meet, they annihilate each other. Based on his prediction, scientists found the first antiparticle, the positron (the anti-electron), in 1932. In 1937, the Italian physicist Ettore Majorana found that the Dirac equation also allowed particles that satisfied certain conditions to be their own antiparticles. In his honour, fermions that are their own antiparticles are called Majorana fermions.

IS IT POSSIBLE TO HAVE PARTIAL APP BANS?

The story so far:

Last week, the Telecom Regulatory Authority of India (TRAI) sought inputs on whether it would be possible to have "selective" app bans instead of internet shutdowns, in order to reduce the impact that a wholesale communications lockdown can entail.

Does India have a history of Internet shutdowns?

Internet shutdowns are imposed in States and districts across India from time to time in order to prevent the rapid spread of provocative content during communally charged periods. The Indian government considers Internet shutdowns a legitimate tool of maintaining law and order.

Shutdowns can be prolonged, with access to education, work, banking, and information strained. As such, the government has sought to stay the course on imposing restrictions but not at the scale of a shutdown. In Jammu and Kashmir as well as in Manipur, authorities and courts have gradually loosened long-term restrictions by allowing wired internet connections and limited wireless internet access.



How would the TRAI move work?

The approach suggested by TRAI would require telecom operators and messaging app firms like WhatsApp to cooperate with each other and stop access to services during a shutdown. The telecom regulator has sought inputs on licensing messaging apps in India, which may require firms to be subjected to surveillance and blocking requirements.

Has the TRAI considered app regulation before?

In 2015 and 2018, the TRAI had held consultations on regulating messaging apps, a process that led to wide-ranging protections for net neutrality — the concept that all internet traffic should be treated equally. Telecom operators had then called for regulation because they argued that messaging apps provide the same service without going through the stringent security and surveillance regulations that telecom operators go through. Telcos were also wary of their revenues being undercut by online calls and messages, which were cheaper than calling and SMS rates then. However, from 2016 onwards, the Department of Telecommunication (DoT) and the TRAI have rejected this argument, holding that telcos cannot discriminate between categories of data used by consumers.

Since then, regulating messaging apps has become more a matter of security and policing. Seeking a deterrent against communal misinformation and provocative content spreading online, the Ministry of Electronics and Information Technology added a requirement of 'traceability' to the IT Rules, 2021, wherein one can find the original sender of a forwarded message. However, civil society groups and tech firms said that such requirements were impossible without breaking end-to-end encryption.

What about VPNs?

It is possible to block websites and certain apps by ordering telecom operators to do so. However, Virtual Private Networks (VPNs) make these blocks trivial to bypass. VPNs tunnel a user's internet traffic through another server. While these tools are mostly used for completely innocuous purposes, the government has been showing a growing distrust of VPNs. This is because VPNs are often encrypted, leaving the government with little visibility into what goes on in users' connections.

VPN firms usually route data through servers located in another country, and frequently cycle the IP addresses these servers use to evade detection and blocking. Some VPN firms promise that they do not maintain logs of their customers' usage. Since the government has not publicly stated what procedural safeguards it exercises when intercepting web traffic of users, these services are used by both privacy-conscious users and, the government argues, terrorists and cybercriminals. When the Indian Computer Emergency Response Team (CERT-in) published directions in 2022 requiring VPN firms to retain records of users from India, most large VPN providers stopped offering servers physically located in India. However, these firms continued serving users in India, allowing people to connect to foreign servers through an encrypted connection and access blocked sites.

Can VPNs be blocked?

Blocking VPNs is not straightforward, as companies operating them tend to frequently change the IP addresses associated with their servers. While VPN services' websites may be blocked, the



installation files can be found elsewhere online. The Manipur High Court was informed as much by telecom operators, who said that blocking VPNs was technically unfeasible.

However, Internet rights activists say that blocking VPNs would be a damaging move for online privacy. “VPNs ... help secure digital rights under the Constitution of India specially for journalists, whistle-blowers and activists,” the Internet Freedom Foundation wrote in 2021. “The encrypted nature of information transfer over VPNs allows them to not only secure confidential information but also to safeguard their own identity, thus protecting them from surveillance and censorship.

UNTANGLING THREADS

The story so far:

The past two weeks sorely tested the patience of Twitter users. Multiple outages plagued the platform while billionaire owner Elon Musk cited data scraping by other organisations as his reason for limiting the number of tweets both paying and non-paying accounts could view every day. In response to complaints, Mr. Musk posted memes and made fun of Twitter users.

What is Threads?

Launched by Facebook, Instagram, and WhatsApp-parent Meta on July 5, Threads is a text-based public conversation app that was built by the team behind the photo-sharing app Instagram. Both iOS and Android users in over 100 countries could access the app this week. Attracting around 70 million sign-ups in just two days, the response reportedly stunned even Meta CEO Mark Zuckerberg, reported Bloomberg.

While Twitter had around 368 million monthly active users worldwide in December 2022, according to Statista, Instagram has over two billion monthly active users.

How does Threads work?

Threads is part of a user’s Instagram account. Threads users will need to sign up through Instagram, and can cross over with their original username and the accounts they were following on Instagram. A number of settings such as blocking, restricting users, and hiding words are synced between the two platforms. However, if a user decides they don’t like Threads, they can only deactivate the account. Deleting Threads would mean deleting their Instagram account as well. Users are shown content from the accounts they follow on both Instagram and Threads, as well as recommended content.

There are also plans to let users choose to see only the accounts they follow. There is also no way to privately message others on Threads yet.

According to Google’s Play Store, Threads can collect data such as a user’s location, their personal information, financial information, health and fitness, messages, photos and videos, files and documents, calendar events, and more. Some of the personal information that Threads can collect includes the user’s address, phone number, political or religious beliefs, and/or sexual orientation.

Though Threads is still in its early days, Meta plans to make it compatible with the open social networking protocol ActivityPub, so that Threads could one day work with platforms such as the decentralised social media site Mastodon and the content management system and website-builder WordPress.



How similar is Threads to Twitter?

Threads is similar to Twitter in terms of its user interface and basic features. Threads users can make posts and comment in response. They can also heart posts, repost and quote them, or share posts on Instagram, Twitter, and other platforms. Threads posts can go up to 500 characters and include media such as links, pictures, and videos which are up to five minutes long.

News organisations and other professionals often rely on Twitter for instant updates and official statements or comments. However, Threads does not yet support the keyword searches which are necessary for these users. Threads also does not display trends in the way Twitter does.

For the moment, Meta's new app feels like a familiar mix of both Instagram and Twitter's most recognisable features. Threads does not have advertisements yet. It remains to be seen how the platform will evolve in response to user and advertiser demands.

What was Elon Musk's reaction to Threads?

While Mr. Musk initially responded to news reports about Threads with jokes and light-hearted comments, Twitter lawyer Alex Spiro sent a letter to Mr. Zuckerberg, threatening a lawsuit, reported Semafor. In his letter dated July 5, Mr. Spiro claimed that Meta had hired "dozens of former Twitter employees" and used these employees along with the Twitter trade secrets they knew to build Meta's "copycat" Threads app. Meta spokesperson Andy Stone stressed that no one on the Threads engineering team was a former Twitter employee.

For some time before the launch of Threads, Mr. Musk and Mr. Zuckerberg publicly challenged one another to a physical fight.

Why is Threads facing issues in the EU?

Users in the European Union were not able to download Threads on July 5, as Meta delayed releasing the app in these countries due to challenges with regulatory compliance in the region. Instagram CEO Adam Mosseri told tech outlet The Verge that while Meta planned to bring Threads to the EU, the timeline would be longer to ensure compliance with laws coming into effect in 2024.

While Mr. Mosseri did not mention any law by name, The EU's Digital Markets Act (DMA), which began to apply in May, plans to categorise large online platforms as "gatekeepers" and put in place rules to ensure they handle data fairly, do not put rivals at a disadvantage, and gain consent to track users outside the "core platform service" for targeted advertising.

Separately, the European Court of Justice in July took the side of Germany's anti-cartel watchdog which wanted to stop Meta's practice of mixing data collected across Facebook, Instagram, and WhatsApp.

What are some other Twitter rivals?

When Twitter was taken over by Mr. Musk in late October 2022, rival social media sites saw an uptick in user sign-ups as many linked Mr. Musk's leadership with a rise in bigotry and misinformation on Twitter. Mastodon, for instance, scooped up around one million new users, reported The Guardian. However, growth was not consistent and Mastodon was criticised for its confusing structure of multiple servers that users can access.



Bluesky is another contender. Twitter's co-founder and former CEO Jack Dorsey is on the board of Bluesky, which is building a public conversation protocol so that users can move between platforms instead of being walled in. Bluesky's beta version requires an invite but the platform recorded 50,000 users in April and over 58,000 sign-ups in early July, reported CNBC. Bluesky uses the invite codes to deter spammers and bad actors, so its growth as a Twitter rival is naturally restricted.

How are Bluesky and Mastodon different from Twitter and Threads?

Bluesky and Mastodon both aim to be decentralised platforms. Bluesky is based on the AT Protocol and its founders intend for creators to build their own applications on the protocol so that users can move between social media platforms without losing their data. Mastodon, meanwhile, offers providers called servers which users must join to connect with others. These servers can be region-specific or based on topics such as Technology, Gaming, LGBTQ+, Music, and more. Mastodon servers have their own entry requirements and policies. Users can move between servers or host their own.

Meta's Threads plans to use the ActivityPub protocol which Mastodon uses in the future so that the platforms can work together.

In contrast, Twitter is a centralised social media platform which has more direct control over user actions and content moderation. If Twitter users want to shift their accounts to another platform, they have to start again with zero followers and posts.

With a userbase in the billions, Meta is perhaps the best rival to take on an increasingly erratic Twitter. Yet Threads brings experimental features, dark patterns, and algorithmic feeds during a time when more internet users want usability, transparency, and accountability from their social media companies.

CAN A THUMBS-UP EMOJI SIGNAL AGREEMENT TO A LEGAL CONTRACT? HERE'S WHAT A CANADIAN COURT RULED

A Canadian court has recently ruled that a thumbs-up emoji (👍) sent as a text message can be interpreted as consent to a contract – in what is being seen as an unusual case, with courts deciding on the meaning of emojis that are now liberally used in daily online conversations.

The case here involved people from two companies, South West Terminal Ltd. (SWT) and Achter Land & Cattle Ltd., who had done business with each other in the past. SWT sued Achter, a farming company, for a breach of contract and an alleged failure on their part to deliver 87 tonnes of flax, a variety of seeds.

However, Achter claimed that they never agreed to the contract in the first place. The court ruled in SWT's favour, asking Achter to pay \$61,442.

What was the case about?

The buyer from SWT, Kent Mikleborough, spoke with farmer Chris Achter on the phone and texted a picture of a contract to deliver the flax later, asking the farmer to "please confirm flax contract" in the message, The Guardian reported. Achter replied to this photo with a thumbs-up emoji. When it came time for the goods' delivery, they never reached SWT.



According to court documents, Achter said, “I confirm that the thumbs-up emoji simply confirmed that I received the Flax contract. It was not a confirmation that I agreed with the terms of the Flax Contract. The full terms and conditions of the Flax Contract were not sent to me, and I understood that the complete contract would follow by fax or email for me to review and sign. Mr. Mikleborough [sic] regularly texted me, and many of the messages were informal.”

A lawyer, who cross-questioned Achter, asked if he had ever googled the meaning of the thumbs-up emoji, prompting Achter’s lawyer to object and say “My client is not an expert in emojis.” The first lawyer then continued to explain that thumbs-up is generally interpreted as a version “I approve” and therefore, its meaning was clear.

What did the court rule?

Ultimately, the court ruled in favour of Kent, reasoning that there was enough from SWT’s side to indicate that an answer to a contract was being demanded from Chris. The court said:

“Chris responded to the offer to contract – Kent called him because through Bob Achter (Chris’s father) Chris had expressed interest in a flax contract. There would be no other purpose for Kent’s telephone call on March 26, 2021 to Chris. During that call Kent and Chris talked about the flax contract and just like in previous occasions... a deal appears to have been at least verbally struck. This was followed up by Kent sending a screenshot of the clearly titled Deferred Delivery Production contract... just as they had done on numerous occasions before without any issues. Kent added ‘Please confirm flax contract’ – just as he had done in the past... Chris responded from his cell phone with a 👍 emoji.”

Further, it noted that in the past, when Kent added to the offered contract, Chris did so by messaging similarly short responses: “looks good”, “ok” or “yup”. “The parties clearly understood these curt words were meant to be confirmation of the contract and not a mere acknowledgement of the receipt of the contract by Chris. There can be no other logical or creditable explanation because the proof is in the pudding,” the court said.

What precedent might this set for the future?

However, the court added that going beyond this case, one involving the interpretation of a simple 👍 emoji to signify assent and acceptance, the exercise would “open up the flood gates to allow all sorts of cases coming forward asking for interpretations as to what various different emojis mean.”

“This Court cannot (nor should it) attempt to stem the tide of technology and common usage – this appears to be the new reality in Canadian society and courts will have to be ready to meet the new challenges that may arise from the use of emojis and the like,” the court said.

Such cases aren’t exactly unheard of, but still novel. According to the technology news website The Verge, in a similar case of consent to contract, in 2017, a couple in Israel was charged thousands of dollars in fees after a court ruled that their use of emoji to a landlord signalled an intent to rent his apartment. They had sent the landlord a text with emojis of a champagne bottle, a squirrel, and a comet, but later stopped responding to the landlord’s texts. The emojis used here attested to their confirmation, the court ruled.

Emojis were created by Japanese artist Shigetaka Kurita in 1999 and then hailed as a “new-era hieroglyphic language”, wrote Chinese researchers Jiamin Pei and Le Cheng in a Nature article in 2022. The word emoji is made up of two Japanese words e (“picture”) and moji (“character”). They



cited a recent survey that said court cases relating to emojis in the United States have been growing exponentially, particularly in sexual predation, employment discrimination and murder cases.

In their review of emoji-related cases across the US, China, Israel and a few other countries, it was found that the sender's and recipient's various perceptions of what an emoji means could be a result of different platforms (the apps or websites used as each one has a variation on their emojis), including devices, operating systems and software programs. For instance, an emoji that resembles a toy squirt gun in a message sent on one platform may appear as a revolver on a recipient's device.

Also, while older respondents are considered more likely to interpret an emoji literally, younger respondents can use them more liberally, even sarcastically. In another case in China, a person sent a WeChat message to someone else about the exact amount of money that they owed him, who then responded with the okay (👌) emoji. At trial, it was then claimed that this emoji did not signal a recognition of the message's contents. "The court finally decided that this emoji could not be perceived as a manifestation of Yan's explicit approval," the researchers wrote.

Given the range of emojis now available to users, and their variations across platforms, the change in their perception across cultures, age groups and contexts, disputes are likely to keep arising over time.

EXPRESS VIEW ON HOLLYWOOD STRIKE: UNION V AI

For the first time since 1960 — and only the second time ever — Hollywood is on strike. The Screen Actors Guild has joined the Writers Guild to demand better pay, working conditions and, perhaps most significantly, protections and security against the rising threat of artificial intelligence in an era of content-hungry streaming platforms. While it is easy to think of writers and actors in sunny LA and imposing New York as the rich trying to get richer, there is more to films — and those who make them.

Simply put, the rise of streaming giants has led to a reduction in the amount of work as well as residuals (royalties) for creative workers. Long before "gig economy" became part of the jargon of policy documents, actors, writers, assistants, et al, moved from job to job, with long periods of uncertainty in between. It was through collective bargaining that the talent that makes tinsel town run got some security. The first strike in the 1960s, and then the writers' strike in the 2000s, led to even better contracts for those who tell the Tom Cruises and Brad Pitts what to say.

Since the launch of ChatGPT last year, the fear of white collar workers becoming redundant — from writers and editors to photographers, coders and data crunchers — has gone from the realm of speculative fiction to economic planning. Yet, historically, regulation has lagged woefully behind technology, especially in the internet age. Sometimes, collective bargaining can lead to a compromise, a sustainable path forward that protects those who make the product as well as those who profit from it. But another facet stands out for India, as it watches Hollywood's biggest and richest halt ongoing and future projects in solidarity with their colleagues who have far less influence. Star power, it is clear, can be used for more than selling soap, cold drinks and propaganda.



DESPITE CONSERVATIVE BACKLASH, EU PARLIAMENT BACKS BIODIVERSITY BILL

The text endorsing the Nature Restoration Law passed with 336 votes in favour, 300 against and 13 abstentions, setting the scene for the EU Parliament to negotiate a final law on the issue with member state governments.

Opposition's reasons

The EU Parliament's biggest political grouping, the conservative European People's Party (EPP), had sought to shoot down the text, arguing that it would reduce EU food security and limit the possibilities to build wind and hydroelectric energy facilities.

But it was outnumbered by other lawmakers who feared defeat of the text would send a signal that Europe was backing away from its green goals.

The conservative opposition to it, supported by extreme-right lawmakers, meant parts of the text were amended in ways that leftwing lawmakers said watered it down.

Much of the political fight around the text stemmed from electoral manoeuvres as parties positioned themselves ahead of EU elections to take place in June 2024.

The Nature Restoration Act, initiated by the European Commission, aims to resuscitate degraded ecosystems by boosting forested areas, marine habitats and increasing connectivity between rivers.

It notably seeks to grow populations of bees, birds and butterflies — especially on farmland, which would also be encouraged to bring back marsh — and peatlands previously drained.

The EPP, which woos Europe's farmers as a key constituency, had called the bill a "bad proposal" and that farmers' concerns deserved to be listened to.

The EPP chief in the parliament, Manfred Weber, said in the lead-up to Wednesday's vote that "our approach is bridge-building" and that was why it wanted the current proposal to be scrapped and another drawn up.

GLOBAL TROPICAL PRIMARY FOREST COVER CONTINUED TO DECLINE UNABATED IN 2022

Tropical areas lost 4.1 million hectares of forest cover – equivalent to losing an area of 11 football fields per minute – in 2022, new research quoted by the World Resources Institute's (WRI) Global Forest Watch has said. This forest loss produced 2.7 billion tonnes of carbon dioxide emissions, which is around the same as India's annual emissions due to the combustion of fossil fuels.

According to the University of Maryland, primary forest cover loss in tropical areas in 2022 was 10% more than in 2021.

Primary forests are mature, natural forests that have remained undisturbed in recent history. They often store more carbon than other forests and are rich sources of biodiversity. Primary forest loss is almost irreversible in nature: even if the green cover regrows, a secondary forest is unlikely to match the extent of biodiversity and carbon sequestering capabilities of a primary forest.

Global Forest Watch findings

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



The world is not on track to meet most of its forest-related commitments. WRI measures progress on two goals – ending deforestation by 2030, and restoring 350 million hectares (mha) of lost and degraded forests by 2030 – that represent multiple global forest pledges.

We need to reduce global deforestation by at least 10% every year to meet the 2030 target. In 2022, although the global deforestation rate was 3.1% lower than the baseline from 2018-2020, it was still over one million hectares above the level needed. This puts the world off track to meet the 2030 goal.

To meet the target of restoring 350 mha of forests globally by 2030, the world needs to increase tree cover by 22 mha per year, between 2021 and 2030.

Despite registering some gains, the overall change in tree cover in the past 20 years was a net loss of 100 mha. This means that we are still losing forests and not restoring them at the required rate.

Brazil and the Democratic Republic of Congo are the two countries with the most tropical forest cover, and both registered losses of this resource in 2022. Ghana and Bolivia also rapidly lost their primary forest cover.

On the other hand, Indonesia and Malaysia managed to keep their primary forest cover loss to record-low levels in 2022.

Brazil's high rate of primary forest cover loss occurred in the last year of Jair Bolsonaro's presidency, WRI noted. In his term, Bolsonaro faced international criticism for presiding over a surge of destruction in the world's biggest rainforest, along the Amazon river.

The rate of primary forest cover loss in the country increased by 15% from 2021 to 2022. Non-fire-related losses in 2022 also reached the highest rate since 2005.

Forest loss in the Amazon basin not only affects carbon but also regional rainfall. If deforestation continues at the current rate, it may eventually lead to a tipping point that, if crossed, could convert most of the ecosystem into a savanna.

The Democratic Republic of Congo lost more than half a million hectares of primary forest cover in 2022.

This rate of loss has continued to increase in recent years. As the population of the country grows, there is more demand for food, which in turn is leading to an expansion of area under agriculture and encroachment of land hosting primary forests.

Primary forests are burned for short-term cultivation and then left fallow for regeneration of soil nutrients. However, increased demand for food has shortened the fallow periods, destroying more forests.

A \$500 million agreement was signed at the United Nations Climate Change Conference in 2021, in Glasgow, to protect the Democratic Republic of Congo's forests, but it is yet to have an impact on the deforestation rate in the country.

Indonesia, on the other hand, reduced its primary forest loss rate more than any other country has in recent years. Malaysia also managed to keep its primary forest loss level low in 2022, alongside Costa Rica, China, Cote d'Ivoire, Vietnam, Gabon, Madagascar, Nicaragua, and Equatorial Guinea.



According to Global Forest Watch, India lost 43.9 thousand hectares of humid primary forest between 2021 and 2022, which accounts for 17% of the country's total tree cover loss in the period. The total tree cover loss in India between 2021 and 2022 was 255, 000 hectares.

The total global tree cover loss in 2022 declined by 10%. This includes primary, secondary, and planted forests.

This decrease, according to Global Forest Watch, is a direct result of a decrease in fire-related forest losses which decreased 28% from 2021. Non-fire losses in 2022 increased by slightly less than 1%.

CRYING BLOCKS THE NOSE

When a person cries, the tear fluid is secreted by the lacrimal gland, which can be seen bulging the conjunctiva (the mucous membrane covering the white of the eye and lining the eyelids).

The tears pass through numerous ducts in the conjunctival sac, aided by the contraction of ocular muscles. From there, they reach the lacrimal sac and, through the lacrimal duct, they are drained into the nasal cavity.

The lacrimal duct is an anatomical drainage canal that connects the corner of the eye to the lower surface of the nasal cavity. When there is a sudden discharge of tears, as is the case when crying, the fluid is pooled, resulting in a congestion.

Another interesting fact is that nature has provided a flap valve at the terminal part of the canal to prevent the tear fluid from being pushed back by air, such as when one sneezes or blows their nose.

THE NEED FOR STRENGTHENING PALLIATIVE CARE IN THE FACE OF NON-COMMUNICABLE DISEASES

India is home to nearly 20% of the world's population, two-thirds of which reside in rural areas. Apart from a rising population, India has experienced a steep rise in the burden of lifestyle-related non-communicable diseases. Nearly 1.4 million people are diagnosed with cancer in India every year while diabetes, hypertension, and respiratory diseases are also on the rise. All these diseases need palliative care sooner or later in the disease trajectory.

What is palliative care?

Palliative care is the branch of medicine focusing on improving the quality of life and preventing suffering among those with life-limiting illnesses. It aims to identify patients at risk of over-medicalisation at the expense of quality of life and financial burden on the family. It is often misinterpreted as end-of-life care. However, palliative care aims to improve the quality of life by addressing the physical, psychological, spiritual, and social domains of the health of people suffering from life-limiting diseases like heart failure, kidney failure, certain neurological diseases, cancer, etc.

According to Vandana Mahajan, a palliative care counsellor in Delhi, a palliative care team supports the affected families in a way that focuses on the person as a whole, not just the disease. "Palliative care also includes bereavement support for the caregivers in case of the death of the patient," she said.



How many need palliative care?

Palliative care in India has largely been available at tertiary healthcare facilities in urban areas. Due to skewed availability of services, it is accessible to only 1-2% of the estimated 7-10 million people who require it in the country. According to Aju Mathew, a medical oncologist from Kerala, as many as 7 out of the 10 patients he sees daily need palliative care.

Post-independence India has made considerable efforts to improve the health of its people. A three-tier health system, multiple national health programmes and schemes, and the Ayushman Bharat Health Insurance Scheme are all positive steps taken towards universal health coverage.

However, despite these efforts, 55 million people in India are pushed below the poverty line every year due to health-related expenditures. Over-medicalisation plays a significant role in this financial burden.

Is there a palliative care programme?

The National Programme for Prevention & Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS), now the National Programme for Prevention & Control of Non-Communicable Diseases (NP-NCD), includes chronic diseases whose treatment contributes the most to health-related expenses. These diseases progress to a stage where, in an ideal scenario, palliative care should take over curative care. Launched in 2010 to counter the rising burden of non-communicable diseases in the country, the programme envisaged the provision of promotive, preventive, and curative care from primary to tertiary institutes, thus providing health services delivery across the continuum of care. The revised operational guidelines of NP-NCD were expected to strengthen the programme. However, it has not succeeded in addressing certain gaps in palliative care in India.

What are the gaps in the guidelines?

As per the Global Atlas of Palliative Care, in 2020, the need for palliative care was higher for non-cancer illnesses. However, the revised NP-NCD operational guidelines, released in May 2023, mention palliative care in synonymy with just cancer. To quote, "Palliative care is provided for relief rather than to cure the symptoms and suffering caused by cancer and to improve the quality of life of patients." This is a step back from the previous operational guideline, in which chronic and debilitating conditions also fell under the ambit of palliative care.

Since most patients who need palliative care are suffering from debilitating diseases, home-based care forms the ideal mode of healthcare delivery. Previously, the programme guidelines mentioned support being provided to facilitate home-based palliative care services. However, palliative care service delivery starts only from the district hospital in the revised guidelines, with no mention of home-based care. "Palliative care must be delivered at least at the health and wellness centre and sub-center level. If people have to come to the district hospital for palliative care, it is a failure of the health system," Ravi Kannan, Padma Shri recipient and director of the Cachar Cancer Hospital and Research Centre, Assam, said.

INDIA'S DIABETES EPIDEMIC IS MAKING ITS WIDESPREAD TB PROBLEM WORSE

Diabetes mellitus is a major risk factor that increases the incidence and severity of tuberculosis. Also tuberculosis co-infections adversely affect tuberculosis treatment outcomes in a patient.



Among people with TB, the prevalence of DM was found to be 25.3% while 24.5% were pre-diabetic

Long before COVID-19 devastated us, India has been experiencing the double burden of two debilitating and severe epidemics – type 2 diabetes (a.k.a. diabetes mellitus, DM) and tuberculosis (TB). The figures for both are staggering. Currently, India has around 74.2 million people living with diabetes while TB affects 2.6 million Indians every year. Yet few know how deeply these diseases are interlinked.

The evidence is clear: DM increases the risk of developing respiratory infections. We also know DM is a major risk factor that increases the incidence and severity of TB. Also, DM and TB co-infections adversely affect TB treatment outcomes in a patient. The worry is that among people with TB, the prevalence of DM was found to be 25.3% while 24.5% were pre-diabetic, in a 2012 study in tuberculosis units in Chennai.

DM increases risk of TB

It's important to understand how these diseases work together. DM not only increases the risk of TB, it also delays the sputum smear and culture conversion of an individual affected by both diseases. In other words, reducing the number of TB bacteria to below the threshold required to claim they have 'healed' will take longer than usual.

DM impairs cell-mediated immunity; uncontrolled DM affects the cytokine response and alters the defences in the alveolar macrophages. The altered functions of small blood vessels in the lung (due to hyperglycaemia) along with poor nutritional status may facilitate the invasion and establishment of TB. As people with diabetes have already compromised immune function, the risk of TB infection is high. They will also have a higher bacterial load.

The coexistence of TB and DM in patients may also modify TB symptoms, radiological findings, treatment, final outcomes, and prognosis. Individuals with TB and DM are more likely to have cavitory lesions in lower lung fields. Our 2016 study revealed that the TB-DM group showed reduced lung functioning after TB treatment completion compared with the TB non-DM group. There was a greater improvement in radiographic scores among people with TB non-DM compared to DM

Our older study, from 2012, showed that the average number of days taken for smear conversion (from 'positive' to 'negative') for people with TB and DM (64.5 days) was higher than that for people with TB only (61.5 days).

DM also increases the likelihood of unfavourable TB treatment outcomes, such as treatment failure, relapse/reinfection, and even death. So people with DM and TB suffer more severely and must fight harder to survive – illustrating the greater impact of the twin burden of DM and TB not just on patients but also on the healthcare system, their families, and their communities.

INDO-JAPANESE RESEARCHERS DEVELOP TREATMENT FOR DUCHENNE'S MUSCULAR DYSTROPHY

A team of doctors from Tamil Nadu along with scientists from Japan have developed a disease modifying treatment for Duchenne Muscular Dystrophy (DMD), a rare genetic disease, using a food additive - a beta-glucan produced by N-163 strain of a yeast *Aureobasidium pullulans*.

“Muscles need lubricant. Dystrophin, an enzyme secreted in the muscles, helps in wear and tear and regeneration of muscles. Because of the genetic disorder, muscles cannot produce dystrophin.”

This damages and weakens the muscles, and patients become wheelchair-bound in their early teens and die prematurely.

“Boys born before 1970 had a median lifespan of around 18 years. After anti-inflammatory medications and steroids, the longevity increased. Disease modifying treatments have prolonged the lifespan but despite that, patients die when they are aged 28 to 30 years,” he said.

Currently available treatments were gene therapy, Exon-skipping and disease modifying agents (anti-inflammatory medicines such as steroids), he said.



DreamIAS