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## INTERNATIONAL

### FBI RAID ON DONALD TRUMP MAR-A-LAGO HOME: THE LAW, THE ACTION, THE POLITICS

Former United States President Donald Trump said on Monday that FBI agents had raided his Mar-a-Lago home in Palm Beach, Florida, and had even broke into his personal safe. American media reported the search was part of an investigation into the potential mishandling of presidential documents that Trump had brought to his residence after leaving office in January 2021.

The unprecedented FBI search of a former President's residence comes at a time when the US Department of Justice is putting the heat on Trump in a separate investigation into his alleged attempts to overturn the result of the 2020 presidential election, and his role in the subsequent January 6 attack by his supporters on the US Capitol.

The New York Times reported that the focus of the search seemed to be on material that Trump had brought to Mar-a-Lago after leaving office. CNN said the agents were seeking to examine the boxes of documents that had been taken from the White House, and to determine where they were kept. CNN quoted the former President's son Eric Trump as telling Fox News that the "the purpose of the raid...(was to) corroborate whether or not Donald Trump had any documents in his possession."

The FBI's investigation might reveal a violation of the Presidential Records Act, which requires all official presidential documents to be preserved.

#### **What is the Presidential Records Act?**

In 1978, the US Congress passed the law that made the President's documents that were previously considered to be the office-holder's property, into the property of the US government. According to a Congressional Research Service report cited by The New York Times, the law was introduced after it emerged that President Richard Nixon had attempted to destroy White House recordings that documented his response to the Watergate scandal.

The Presidential Records Act requires that all official documents of the President, apart from personal documents like diaries and journals, be given to the US National Archives at the end of the presidential term. The National Archives has the authority to select which documents need to be preserved, made public, or redacted, The Washington Post reported. Those that are considered suitable are made available to the public 12 years after the President leaves office.

#### **Has Donald Trump violated the law?**

The House Oversight Committee, the chief investigative committee of the lower house of Congress, had earlier said that Trump's handling of documents seemed to constitute a "serious violation" of the law, The NYT had reported in February.

Other than taking classified documents owned by the US government, Trump has also been accused of destroying documents and using his personal cell phone, instead of the White House switchboard, to allegedly conceal his role in the January 6 riot.

Many Republican Party leaders condemned the FBI action as politically motivated, and suggested that they could retaliate against Democrats and enforcement agencies if they came to control



Congress after November's midterm elections. Republican House Minority Leader Kevin McCarthy vowed to "conduct immediate oversight" of the Justice Department and an investigation against Attorney General Merrick Garland if the party gained control of the House.

## THE NEW U.S. BILL ON CLIMATE ACTION

The story so far: On August 7, the U.S. Senate approved a Bill titled the Inflation Reduction Act (IRA) 2022, with a simple majority of 51 to 50. Vice President Kamala Harris cast her tie-breaking vote to aid the approval after the Senate was evenly divided. Even though all Republicans opposed the bill, the Democrats pushed through after a long debate taking advantage of the budget reconciliation process. The bill is a scaled-down version of President Biden's Build Back Better Act (BBBA), which failed to get approval from the Senate. The IRA has a special focus on climate, healthcare, and tax provisions to address inflation.

### **What are the climate change provisions?**

The Bill marks the largest American investment aimed toward making the U.S. a leader in clean energy. It includes packages worth \$369 billion for the clean energy transition.

It provides a tax deduction to low and middle-income households to go electric and seeks to lower the energy bills of American households. It also aims to bolster the domestic production of heat pumps and critical minerals. For disadvantaged low-income communities and tribal communities, the Bill provides funding to benefit from zero-emission technologies which reduce greenhouse gas emissions, enhance climate resilience, and mitigate risks from extreme heat.

The Bill provides significant investment in renewable energy through heavy tax credits for wind and solar energy projects and electric vehicles. Additionally, the Bill imposes a tax on the largest and most profitable companies in order that they pay their fair share, without levying any taxes on households with income less than \$40,000 per annum.

It also imposes a fee on methane leaks from oil and gas drilling.

At the same time, the Bill also aims at more investments in fossil fuels.

It seeks to expand oil and gas drilling, with the federal government offering land for onshore and offshore drilling as a prerequisite for developing renewable energy. Thus, it handcuffs the expansion of oil and gas with renewable energy development.

### **Why does the U.S. want to invest in addressing climate change?**

The U.S is currently facing extreme climate threats. This includes heatwaves, wildfires, cyclones, floods, and hurricanes that have become frequent and intense in the past few years. The ongoing floods in Kentucky triggered by heavy rainfall and the wildfires in California induced by dry lightning have become a major concern for the country. There is a link between extreme weather events and climate change.

Additionally, President Joe Biden has also undertaken certain climate commitments. Climate action has been a priority since he came into office. In 2021, he committed to the new ambitious target of cutting emissions by 50-52% below 2005 levels by 2030 and signed a new methane deal to curb methane emissions from the oil and gas industry. He introduced the Build Back Better plan which was a multi-trillion deal with key provisions for climate change.



In May 2022, the Biden administration revoked the Alaska oil and gas drilling lease sales in the backdrop of soaring fuel prices, a move that is consistent with its climate commitment.

The Bill can help the U.S. compete with China in terms of renewable production as China is a leading producer of solar energy. It can also facilitate the creation of domestic jobs.

Thus, the Bill can prove to be a turning point for global climate action as the U.S. is one of the largest emitters of greenhouse gases globally. However, it does not address any issues of global climate finance which is a major impediment to global climate action. It is a mere step toward achieving the climate target agreed upon in the Paris Agreement, where Article 2 states global temperature should be limited below 2°C.

Even though the Bill is not enough to address the climate crisis, such historic initiatives by global leaders in greenhouse gas emissions can be a benchmark for other large emitters to push their climate action programmes.

#### **Have similar climate packages been announced by other countries?**

In May 2022, Japan announced its 'Invest in Kisida' plan which aims for a \$1.1 trillion investment to bolster the Japanese economy. As part of the plan, the country aims to transition to clean energy and achieve 46% reduction in greenhouse gas emissions by 2030. In June 2021, the European Union (EU) proposed a similar 'Fit for 55' plan to reduce emissions by 55% by 2030. The plan is expected to become law soon. Being the largest emitters, both the U.S. and the EU can play a significant role in taking responsibility for historical emissions.

### **WHAT IS AGM-88 HARM, THE NEW ANTI-RADAR MISSILE SUPPLIED TO UKRAINE BY THE US?**

United States Under Secretary of Defence for Policy Colin Kahl confirmed on Monday (August 8) that Washington has supplied some "anti-radiation missiles" to Ukraine, which could be fired from some Ukrainian Air Force aircraft. The statement has put meat on Russian allegations that an American anti-radar missile, AGM-88 HARM, which is part of NATO's inventory, has been used in the theatre of conflict. What kind of missile is this and what impact can it have in the ongoing war in Ukraine?

#### **What is the AGM-88 HARM missile?**

The acronym 'HARM' in the AGM-88 HARM air-to-surface missile stands for High-Speed Anti-Radiation Missile. It is a tactical weapon fired from fighter aircraft, and has the capability to detect and home into radiation emitted by hostile radar stations that have surface-to-air detection capabilities.

The missile was originally developed by the Dallas-headquartered Texas Instruments, but is now produced by the major American defence contractor Raytheon Corporation. An advanced version of the weapon is manufactured by Dulles, Virginia-based Northrop Grumman.

The AGM-88 HARM is 14 metres in length, but only 10 inches in diameter. It weighs around 360 kg and carries a fragmentation type warhead that is optimised for radar targets. It also has an anti-radar homing seeker broadband RF antenna and receiver, and a solid state digital processor. The missile has a range of more than 100 km.



### **How do we know that it was being used against Russia?**

For the past several days, Russian social media users have been sharing open-source information on Telegram to the effect that remnants of the AGM-88 HARM have been found near a Russian surface-to-air missile site. The pictures of the seeming remnants of the missile appeared to show genuine serial numbers, which were traced to AGM-88 HARM by open source intelligence analysts. The statement by the US has now confirmed these deductions.

### **Do the Ukrainians have a platform to use these missiles?**

This is a question that military analysts have pondered over. It would appear that only Western military groups have the required fighter aircraft to use these missiles, and that the AGM-88 HARM cannot be fitted and used on the Russian-origin aircraft that Ukraine has in its fleet. Several NATO aircraft in Europe — including the Tornado ECR, F-16CM Block 50, and F/A-18-EA-18G — can fire the AGM-88 HARM missiles.

A CNN report noted that the Russia-Ukraine war is the first in which the weapon has been confirmed to have been used by a military other than the US. However, its usefulness, considering the limited number of aircraft in the Ukrainian Air Force, remains in question. The same CNN report also said given that Ukraine does not have aircraft known to be compatible with the missile, there is speculation that the missiles may have been fired by NATO aircraft secretly supporting the Ukraine military in combat roles.

### **Is there no way the missile can be used by Ukraine's Russian-origin aircraft?**

Theoretically, it is possible to use the AGM-88 HARM in a limited mode in a Russian-origin aircraft. However, this would have required a lot of fast-moving research and development which may not have been possible in Ukraine itself due to the extended conflict. Northrop Grumman had tested a land-based version of the missile, but it did not achieve the required parameters.

## **WHAT IS THE CONTROVERSIAL 'BUTTERFLY MINE' RUSSIA HAS ALLEGEDLY USED IN UKRAINE?**

The UK Ministry of Defence, in its intelligence assessment of the ongoing war in Ukraine, has sounded an alarm on the possible use of PFM-1 series 'Butterfly Mines' by the Russian military in Donetsk and Kramatorsk. What are these mines and what kind of damage can they afflict?

### **What is the intelligence assessment put out by UK ?**

As per an intelligence bulletin put out by UK Ministry of Defence a few days back on the security situation in Ukraine, Russia is likely to have deployed anti-personnel mines to deter freedom of movement along its defensive lines in the Donbas.

As per the bulletin, these mines have the potential to inflict widespread casualties amongst both the military and the local civilian population.

PFM-1s were used to devastating effect in the Soviet-Afghan War where they allegedly maimed high numbers of children who "mistook them for toys," the bulletin said.

It added that it is highly likely that the Soviet-era stock being used by Russia will have degraded over time and is now unreliable and unpredictable. This poses a threat to both the local population and humanitarian mine clearance operations, the bulletin says.





### **What is the 'Butterfly Mine' and why is it called so?**

The PFM-1 and PFM-1S are two kinds of anti-personnel landmines that are commonly referred to as 'Butterfly mines' or 'Green Parrots'. These names are derived from the shape and colour of the mines. The main difference between the PFM-1 and PFM-1S mine is that the latter comes with a self-destruction mechanism which gets activated within one to 40 hours.

The 'Butterfly mine' has earned a reputation for being particularly attractive to children because it looks like a coloured toy. It is very sensitive to touch and just the act of picking it up can set it off. Because of the relatively lesser explosive packed in this small mine, it often injures and maims the handler rather than killing them. These mines are also difficult to detect because they are made of plastic and can evade metal detectors.

These mines can be deployed in the field of action through several means, which include being dropped from helicopters or through ballistic dispersion using artillery and mortar shells. These mines glide to the ground without exploding and later explode on coming in contact. Since these mines were green in colour when they were first put to use they also earned the name 'Green Parrots'.

The rapid means of deployment of the mine and the fact that it can be indiscriminately scattered to impede the advance of an enemy makes it an attractive option for a field commander, regardless of the danger that these can pose for non-combatants living in the area.

### **Are these kind of mines allowed by international law?**

The anti personal mines are banned by international convention on land mines but Russia and Ukraine are not signatories to it. However, there is a 1996 Amended Protocol II to the Convention on Certain Conventional Weapons-the Landmines Protocol to which Russia and Ukraine are signatories.

In the ongoing conflict, both countries have accused each other of having used these mines, since both possess them in sufficient numbers. Allegations and counter-allegations of the use of these mines have been made in Mariupol, Kharkiv and now Donetsk.

## **WHY IS TAIWAN CAUGHT BETWEEN U.S. AND CHINA?**

The story so far: On August 3, United States House Speaker and senior Democratic Party politician Nancy Pelosi visited Taiwan. In Taipei, Ms. Pelosi held talks with President Tsai Ing-wen, addressed the legislature, and received a civilian honour. The trip was the highest-level visit from the U.S. to Taiwan in 25 years. China, which had publicly warned the U.S. against going ahead with it, saying it would violate commitments under the 'One China Policy', has since responded with diplomatic, military and economic measures.

### **Why did the U.S. House Speaker visit Taiwan?**

Speaking in Taipei, Ms. Pelosi said her visit was focussed on three issues: human rights, trade and security. Ms. Pelosi also wanted to send a message of solidarity with Taiwan. She said the world "faces a choice between democracy and autocracy" and the visit was aimed at expressing that "America's determination to preserve democracy in Taiwan and in the world remains iron-clad". Ms. Pelosi has previously spoken out about human rights issues involving China in Tibet, Xinjiang and Hong Kong, and the visit, by most accounts, has been driven by the House Speaker rather than



by the administration. Taiwan has welcomed this rare high-level visit as a boost to its global standing, although the White House and U.S. military were far from enthusiastic about the visit, expecting repercussions on relations with China. U.S. President Joe Biden said last month the visit was “not a good idea”, but added that the decision to visit was entirely Ms. Pelosi’s. However, as she was a representative of a different branch of government (the legislature), the White House (representing the executive) could not intervene.

### **Why did China oppose the visit?**

Members of the U.S. Congress — Ms. Pelosi is currently Speaker of the House of Representatives — have previously visited Taiwan, although Ms. Pelosi is the first Speaker, and thus highest-level visitor, since 1997. While U.S. Secretary of State Antony Blinken argued that this suggested there was “precedent” for the visit, China has seen it as an attempt by the U.S. to change the status quo as far as its ‘One China Policy’ is concerned. In Beijing’s view, Ms. Pelosi’s visit is the latest of a number of moves, going back to the previous Trump administration, aimed at “hollowing out” and redefining the ‘One China Policy’. Hence, the robust response from China.

### **Does the visit violate the ‘One China Policy’?**

The answer depends on how the ‘One China Policy’ is interpreted, and both sides have clearly done so differently. The joint communique that established diplomatic relations between the U.S. and China in 1979 declared that “the United States of America recognises the Government of the People’s Republic of China as the sole legal Government of China”. Since the establishment of relations with China, the U.S. no longer has formal diplomatic relations with Taiwan under the ‘One China Policy’. Within this context, the very first paragraph of the communique adds, “the people of the United States will maintain cultural, commercial, and other unofficial relations with the people of Taiwan.”

China has seen Ms. Pelosi’s visit as a political one and thus as a violation of this communique, which it has described as the very foundations of the relationship. Beijing has pointed to her status as House Speaker and second in line to the presidency after the Vice President. The U.S. argument is that Ms. Pelosi does not represent the executive branch — the White House, Cabinet and federal agencies — that has continued to abide by the policy and eschewed high-level political engagement with Taiwan. Beijing, however, has rejected that argument, pointing out that the U.S. cannot have multiple foreign policies. It also rejected the “precedent” argument saying that past visits were also violations.

### **How has China responded?**

The most significant response so far has been the holding of unprecedented live-firing military drills in six regions surrounding Taiwan. The four-day exercises, which began a day after Ms. Pelosi’s visit on August 4, have essentially blockaded Taiwan’s waters and airspace, and marked a number of firsts, such as the crossing of the median line of the Taiwan Strait by a large number of warships and aircraft, and the firing of conventional missiles over the island of Taiwan into waters to the east. Chinese analysts have said the drills were aimed at signalling a new normal in China’s military activities around Taiwan, as well as simulating a future blockade and thus sending a message both to Taiwan and the U.S. Ships and flights were barred from entering the zones.

The broader messaging is to the domestic audience in China, some of whom last week raised questions of the government on social media asking why its public warnings had failed to deter Ms. Pelosi from going ahead with the visit.



In addition to the military measures, China has so far put in place modest economic curbs such as barring more than 100 Taiwanese exporters, and a suspension of fish, fruit and sand imports, which account for a small portion of two-way trade.

Measures have not, so far, targeted the main drivers of bilateral trade, including semiconductors, for which Chinese companies are dependent on Taiwan, while for Taiwan, China is by far the biggest export market, accounting for 42% of its total exports last year.

#### **What will be the visit's impact on China-U.S. relations?**

On August 5, China announced it will cancel or suspend eight key dialogue mechanisms with the U.S. With the cancellation of three key bilateral military dialogue mechanisms — a Theatre Commanders meet, Defence Policy Coordination Talks, and talks under the Military Maritime Consultative Agreement (MMCA) — observers fear growing military tensions, particularly with China's new exercises taking place closer to Taiwan. Beijing has also suspended bilateral talks on climate change, repatriation of illegal immigrants, legal assistance in criminal matters, transnational crimes, and counter-narcotics. An extended period of tense relations is in store both between China and the U.S. and across the Taiwan Strait.

#### **GUILLERMO RIOS IS NEW LEADER OF UNMOGIP**

United Nations (UN) Secretary-General Antonio Guterres has appointed Rear Admiral Guillermo Pablo Rios of Argentina as the Head of Mission and Chief Military Observer for the United Nations Military Observer Group in India and Pakistan (UNMOGIP), the office of the UN Secretary-General has announced.

Rear Admiral Rios will follow Major General Jose Eladin Alcain of Uruguay who has nearly completed his tenure. UNMOGIP emerged from UN Security Council Resolution 39 of January 1948 that set up the UN Commission for India and Pakistan (UNCIP).

The Karachi Agreement of July 1949 firmed up the role of UN-level military observers and permitted supervision of the Ceasefire Line established in Jammu and Kashmir.

India officially maintains that the UNMOGIP's role was "overtaken" by the Simla Agreement of 1972 that established the Line of Control or the LoC which with "minor deviations" followed the earlier Ceasefire Line. Pakistan, however, did not accept the Indian argument and continued to seek cooperation from the UNMOGIP. As a result of this divergent policies, Pakistan continues to lodge complaints with the UNMOGIP against alleged Indian ceasefire violations whereas India has not officially gone to the UNMOGIP since 1972 with complaints against Pakistan.

In view of the difference of opinion between India and Pakistan, the UN has maintained that the UNMOGIP could be dissolved only with a decision from the UN Security Council. Despite the respective official positions, the military observers have at times hit the headlines. In the summer of 2017, Pakistan alleged that Indian side had fired upon vehicles carrying UNMOGIP officials who were travelling in the Pakistani territory.

The then MEA Spokesperson Gopal Baglay categorically denied that charge and the UN Secretary-General's office had observed that there was no evidence that could prove Pakistan's allegation. Earlier, India had asked UNMOGIP to vacate the residential property that it occupied.





The Ministry of External Affairs, however, explained that decision as part of “rationalizing the presence of UNMOGIP”. The latest announcement regarding appointment of the Argentine naval figure to head the UNMOGIP however has come at a time when India and Argentina are warming up official-level dialogue. Argentina which fought the war over the Falklands with the United Kingdom in 1982 has urged the international community to bring the U.K. to the negotiating table so that it could regain control over the Falklands. India hosted the Argentine Foreign Minister Santiago Cafiero in April. Argentina’s embassy here reopened its military wing in 2021 indicating at warming up of defence ties between India and Argentina.

Mr. Rios has been part of Argentine Navy since 1988 and has served in two peacekeeping operations — the United Nations Peacekeeping Force in Cyprus (UNFICYP) in 1993 and 1994 and the United Nations Truce Supervision Organization (UNTSO) in 2007.

He has also served as a Humanitarian Demining Supervisor with the United Nations Development Programme (UNDP) in Angola (1997-1998). He speaks English, Portuguese and Russian.

#### EXPLAINED: FATWA, DEATH THREATS, EXILE — HOW THE SATANIC VERSES CHANGED SALMAN RUSHDIE’S LIFE

On Friday, as he waited to deliver a lecture at the Chautauqua Institution in western New York, on the importance of the US offering asylum for artistes in exile, author Salman Rushdie, 75, was attacked by a man who stabbed him onstage. Even as Rushdie fell to the floor, his assailant was taken into custody.

#### **Fatwa and death threats**

Since the publication of *The Satanic Verses* in September 1988, the British-Indian writer who won the Booker Prize for his *Midnight’s Children* (1981) has faced innumerable threats to his life. On February 14, 1989, Iran’s religious leader Ayatollah Khomeini pronounced a fatwa on Rushdie for “insulting Islam” with his novel. The repercussions of this would continue to be felt for decades to come. Even as Rushdie went into hiding following the fatwa, book bans, book burnings, firebombings and death threats continued unabated for years to come, raising important questions about freedom of expression in the arts around the world.

#### **The controversy around *The Satanic Verses***

In an interview to Channel 4 in 1989, soon after the publication of *The Satanic Verses*, Rushdie had responded to the rising criticism of the book by making a case for freedom of expression. “If you don’t want to read a book, you don’t have to read it. It’s very hard to be offended by *The Satanic Verses* — it requires a long period of intense reading. It’s a quarter of a million words.”

But the author had not bargained for the backlash his novel would bring. Told through a framework of magic realism, *The Satanic Verses* tells the story of Gibreel Farishta and Saladin Chamcha, actors of Indian Muslim origin, whose miraculous escape from, and transformation after, a plane crash forms the basis of the satire. On its release, the book received favourable reviews in the West, winning the 1988 Whitbread Award for novel of the year and becoming a 1988 Booker Prize finalist.

In India, however, nine days after its publication, the book was banned by the Rajiv Gandhi government for hurting religious sentiments. In the UK, too, protests took shape. By the end of the



year, the book was banned in a number of countries, including Bangladesh, South Africa, Sudan, Kenya. Other countries would soon follow.

Iran, though, initially, was not among the countries protesting the book. But as the clamour against the book – and Rushdie – grew, a group of clerics read out sections of the book to Khomeini, including a portion featuring an imam in exile that was suspiciously like a caricature of him. The rest, as it goes, was history.

#### **Life in hiding**

Even as a bounty of more than \$3 million was offered for the assassination of the writer, for the next nine years, Rushdie would remain in hiding, moving from place to place, guarded heavily by bodyguards and security services. In his poignant 2012 memoir *Joseph Anton*, Rushdie wrote about adopting the pseudonym (taken from Joseph Conrad and Anton Chekhov's first names) to avoid scrutiny and turning into "an invisible man in a whiteface mask". He would issue clarifications explaining his position, even as the novel, a bestseller in some countries such as the US, would have to be withdrawn from shops around the world because of vandalism.

The Iranian government would eventually distance itself from the fatwa in 1998.

#### **Re-emergence in public life**

It was only after 1998 that Rushdie re-emerged in public life, becoming an advocate of free speech and artistic freedom, while continuing to write bestselling novels. He returned to India in 2000 for the first time since the fatwa with his son Zafar for the announcement of the Commonwealth Writers' Prize for Best Book.

In an interview to *The Indian Express* last year, the writer, who is working on his first play based on *Helen of Troy*, said, "My creative relationship with India remains just about my strongest motivating force. Thanks to the pandemic, my personal relationship is in abeyance. I truly hope India comes through the nightmare as soon as possible. After that, I hope I'll be back."

Rushdie, a former president of PEN America, has also been serialising his new novella, *The Seventh Wave*, on Substack.

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## NATION

### EXPLAINED: THE SIGNIFICANCE OF INDIA'S TALKS WITH NATO, AND NEXT STEPS

New Delhi held its first political dialogue with the North Atlantic Treaty Organisation (NATO) in Brussels on December 12, 2019, The Indian Express has learnt. Attended by senior officials, including from the Ministry of External Affairs and the Ministry of Defence, the idea was to ensure the dialogue was primarily political in character, and to avoid making any commitment on military or other bilateral cooperation.

Accordingly, the Indian delegation attempted to assess cooperation on regional and global issues of mutual interest.

#### **What is NATO?**

The North Atlantic Treaty Organisation, or NATO, is a political and military alliance of 28 European countries and two countries in North America (United States and Canada).

It was set up in 1949 by the US, Canada, and several western European nations to ensure their collective security against the Soviet Union. It was the US's first peacetime military alliance outside the western hemisphere.

Thirty countries are currently members of NATO, which is headquartered in Brussels, Belgium. The headquarters of the Allied Command Operations is near Mons, also in Belgium.

#### **What is important about NATO's collective defence?**

Members of NATO are committed to mutual defence in response to an attack by any external party. Collective defence lies at the very heart of NATO, "a unique and enduring principle that binds its members together, committing them to protect each other and setting a spirit of solidarity within the Alliance".

This is laid out in Article 5 of the North Atlantic Treaty, the founding treaty of NATO.

#### **What are the origins of NATO?**

At the end of WWII, as battered European nations started to rebuild their economies, the US, which believed that an economically strong, re-armed, and integrated Europe was critical to prevent the westward expansion of communist USSR, embarked on a programme to supply economic aid to the continent on a massive scale.

The European Recovery Programme, known as the Marshall Plan after President Harry S Truman's Secretary of State George C Marshall, promoted the idea of shared interests and cooperation between the US and Europe. The USSR declined to participate in the Marshall Plan, and discouraged eastern European states in its sphere of influence from receiving American economic assistance.

In the 1946-49 Greek Civil War, the US and UK worked to thwart the Soviet-backed communist takeover of Greece. The western nations threw their weight behind Turkey as it stood up to Soviet pressure over control of the Bosphorus and Dardanelles Strait (which connect the Black Sea and Sea of Marmara, and the Sea of Marmara and Aegean Sea, respectively) — and in 1947-48, the US committed itself to containing the communist uprisings in Turkey and Greece.



In 1948, Stalin's government sponsored a coup in (erstwhile) Czechoslovakia, which led to the installation of a communist regime in a country sharing borders with both Soviet-controlled East Germany and the pro-West West Germany. In 1948-49, the Soviets blockaded West Berlin to force the US, UK, and France to give up their post-war jurisdictions in the country, leading to a major crisis and an 11-month airlift of supplies by Western countries to keep their part of the city going.

All these events led the US to conclude that an American-European alliance against the USSR was necessary. The Europeans too were convinced of the need for a collective security solution, and in March 1948, the UK, France, Belgium, Netherlands and Luxembourg signed the Brussels Treaty of collective defence, which meant that if any of the signatories faced an attack, they would be defended by all the others.

A few months later, the US Congress passed the Vandenberg Resolution, a landmark action "advising the President to seek US and free world security through support of mutual defence arrangements that operated within the UN Charter but outside the Security Council, where the Soviet veto would thwart collective defence arrangements".

The Vandenberg Resolution was the stepping stone to NATO. The US believed the treaty would be more effective if it included, apart from the signatories of the Brussels Treaty, countries of the North Atlantic — Canada, Iceland, Denmark, Norway, Ireland, and Portugal. From the American perspective, these countries were the links between the two shores of the Atlantic Ocean, and could help facilitate military action if it was needed.

The treaty was signed in Washington DC on April 4, 1949. It had 12 signatories initially: the US, UK, Canada, France, Denmark, Belgium, Norway, Portugal, the Netherlands, Italy, Iceland, and Luxembourg.

#### **What is the significance of India's talks with NATO?**

India's talks with NATO hold significance given that the North Atlantic alliance has been engaging both China and Pakistan in bilateral dialogue. There was a view here that given the role of Beijing and Islamabad in New Delhi's strategic imperatives, reaching out to NATO would add a key dimension to India's growing engagement with US and Europe.

Until December 2019, NATO had held nine rounds of talks with Beijing, and the Chinese Ambassador in Brussels and NATO's Deputy Secretary General engaged with each other every quarter. NATO had also been in political dialogue and military cooperation with Pakistan; it opened selective training for Pakistani officers and its military delegation visited Pakistan in November 2019 for military staff talks.

The first round of dialogue was finalised for December 12, 2019 by the Indian mission in Brussels after it received a draft agenda for the meeting from NATO.

The government, sources said, was of the view that engaging NATO in a political dialogue would provide New Delhi an opportunity to bring about a balance in NATO's perceptions about the situation in regions and issues of concerns to India.

#### **India-NATO talks: Is there a common ground on China?**

In its first round of talks with NATO, New Delhi realised it did not share a common ground with the grouping on Russia and the Taliban. With NATO's views on China also mixed, given the divergent views of its members, India's Quad membership is aimed at countering Beijing.



In NATO's view, India, given its geo-strategic position and unique perspectives on various issues, was relevant to international security and could be an important partner in informing the alliance about India's own region and beyond, sources said.

It is learnt the two sides also discussed a possible second round in New Delhi in 2020, which was delayed due to the Covid-19 pandemic.

As far as India is concerned, it was felt New Delhi may consider proposals emanating from NATO, if any, on bilateral cooperation in areas of interest to India, based on the progress achieved in the initial rounds. While many say it is logical to follow up and formalise the talks, some caution because of sensitivities attached to the perception of NATO — seen by some as expansionist in nature.

### SRI LANKANS' JOB HUNT IN WEST ASIA HURTS PROSPECTS OF NRIS

The desperate migration of Sri Lankan youth to West Asian cities in search of jobs has created flutters in the overseas job market as it may affect the employment prospects of Indians, especially Keralites, who account for a major share of Indians who work in Gulf Cooperation Council (GCC) countries.

The Non-Resident Indians (NRIs) in GCC countries said the distressed migration from Sri Lanka had the potential to replace a section of the workforce from other countries, including from India, in the Gulf if the current trend continued. Compared to Indians, Sri Lankans were cheap alternatives for companies here as they could employ two or three Sri Lankans in place of an Indian, said Ibrahim Kaleel, State secretary, Kerala Muslim Cultural Centre (KMCC), Dubai, the NRI outfit of the Indian Union Muslim League (IUML).

Among the countries which received the Sri Lankans, Kuwait accounts for the highest number of 39,216 people, followed by Qatar (36,229), Saudi Arabia (26,098), South Korea (3,219) and Japan (2,576). Obviously, the Sri Lankan migration to GCC countries would have a ripple on the job markets in West Asia as large-scale migration would often redefine the existing markets. And the chances were high if it was a distressed migration, said Rejimon Kuttappan, a migration expert.

Earlier, female housemaids from Sri Lanka had mainly migrated to West Asian cities even as the educated people from that country were looking for commonwealth countries such as Australia or the U.K. for migration.

But the current spectrum of civil war coupled with political and economic uncertainty seemed to have driven the present distressed migration, said Muraleedharan Nair, former Indian diplomat in China.

In the past, women housemaids accounted for 80% of their migration to West Asia, which even created a lot of social issues in the island nation. But now, male constituted major share of their migration.

Though it would create some ripple effect in the job market in the initial days, it would not have a lasting effect as they did not have a legacy like Indians in GCC countries, said Mr. Pramod Kumar.

The Sri Lanka Bureau of Foreign Employment Promotion (SLBFEP) figures also revealed that among the 1.56-lakh people who went abroad for jobs, 38,871 were for domestic jobs and the rest were for professional and other jobs.





## CHINESE MILITARY VESSEL AT HAMBANTOTA IS A SPECTRE THAT THREATENS THE NEW EQUILIBRIUM IN INDIA-SRI LANKA RELATIONS

If Sri Lanka did not know or understand this sufficiently before, hopefully it does by now — Delhi has a really serious problem with Colombo's do-we-care attitude to its security concerns. Since it came to light that a Chinese military vessel, the Yuan Wang 5, was to call at Hambantota Port on August 11 and stay over for a week, India had been pressing its grave concern over this to Colombo. After a tense week of negotiations between the two South Asian neighbours, Sri Lanka has told the Chinese that the visit of the ship "be deferred until further consultations are made on this matter". The Sri Lankan note verbale appears to convey that the matter is still open for negotiation, but it would be unfortunate if Colombo believes it can invite the ship back at a later date. China's Yuan Wang vessels are strategic platforms, and they form part of the People's Liberation Army support force. A vessel of its surveillance reach has never before sailed in the waters that Yuan Wang wishes to access. The Sri Lankan attempt to pass it off as a "research vessel" on an innocuous refuelling stop was either naive or disingenuous, but in either case, self-defeating.

China vs India on its soil is hardly a sporting fixture that Sri Lanka can watch from the ringside without getting hurt itself. This is the second time in 19 months that Colombo has tried to make light of India's security concerns on account of the Chinese presence in Sri Lanka. Last January, the Sri Lankan government awarded a renewable energy project on three islands close to the Tamil Nadu coastline, to a Chinese firm. It took much diplomatic energy on India's part, and a commitment to develop the same project through a grant, to have that decision reversed. India's massive assistance to Sri Lanka since January was certainly not tagged with the note that Colombo should stop being friends with Beijing. But a cavalier attitude to India's real security concerns is a sure way to lose Delhi's goodwill at a time that Sri Lanka needs it most.

The timing of the Foreign Ministry's clearance to the ship reinforces a worry that is true for India's entire neighbourhood. Instability in any country in the region, whether that is Sri Lanka, Maldives, Nepal, Pakistan or Afghanistan, tends to impact India adversely and in unexpected ways. The Chinese ship apparently got its clearance from the Foreign Ministry on July 12. This was three days after President Gotabaya Rajapaksa had to flee in a navy boat as a sea of people stormed his official home. Clearly, there were some who believed that the political vacuum in Sri Lanka was ripe for exploitation. Who exactly gave that clearance should be a matter of interest in Colombo, as that person was not just acting on behalf of interests inimical to India, but against the interests of Sri Lanka as well, by trying to sabotage the new equilibrium in the relationship.

### DON'T DISTURB NORMAL AFFAIRS WITH SRI LANKA: CHINA TO INDIA

Reacting strongly to Sri Lanka's request to delay the visit of a tracking vessel that was due to arrive on August 11 and had aroused India's concerns, China on Monday described India's opposition to the visit as "senseless" and "urged" New Delhi to "not disturb normal exchanges" between the two countries.

Without referring directly to India, Mr. Wang said China "urges relevant parties to see China's scientific exploration in a reasonable and sensible way and stop disturbing normal exchanges between China and Sri Lanka".

The ship's visit is another example of Indian and Chinese interests rubbing up against each other in Sri Lanka. Last year, a Chinese firm similarly hit out at what it called "interference" by a "third

**3<sup>RD</sup> FLOOR AND 4<sup>TH</sup> FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR**



party” after India raised concerns about the awarding of a renewable energy project to a company from China, for installing energy systems in three islands off Jaffna. Amid the latest dispute over the visit of the ship, China and Sri Lanka have been continuing long negotiations on possible financial assistance.

## NO HOLDS BARRED

By choosing to place a “technical hold” on the joint India-U.S. proposal to designate Jaish-e-Mohammad deputy chief Rauf Asghar a global terrorist on the United Nations Security Council 1267 Committee listing, China has swung another blow to its ties with India, which are already at a fragile point. Despite 16 rounds of military commander talks at the Line of Actual Control, India and China have failed to resolve the standoff that began with the PLA amassing troops, and transgressions along the LAC in April 2020. The two sides sparred in the maritime sphere this week, after India made its concerns over the proposed docking of a Chinese satellite tracking ship at Sri Lanka’s Hambantota port clear to the Sri Lankan government. And while bilateral trade has recovered from the COVID-19 downturn, Chinese technology majors in India are being raided by the Enforcement Directorate and Income Tax authorities under suspicion of a range of financial crimes. At a time when bilateral trust is already in such deficit comes China’s decision to stop an important terror listing, just two months after Beijing similarly stopped the designation of Lashkar-e-Taiba deputy chief Abdul Rahman Makki. To take such measures on an issue that it knows India has always been extremely serious about, given the number of major attacks perpetrated on Indians by the LeT and JeM, right from the 1990s, is insensitive at the least, but part of an unfortunate pattern by China, which has held up several such listings in the past. Asghar is wanted for his role in freeing his brother Masood Azhar in the most dastardly way, by organising the hijack of Indian Airlines flight IC-814, and holding nearly 200 civilians hostage on the Kandahar tarmac, and other attacks. He is now reportedly in Pakistani prison, convicted on terror-related charges, and is on both the U.S.’s and India’s domestic ‘most wanted terrorist’ lists.

It is important, however, for India to persevere with attempts to designate both Makki and Asghar, as well as other terrorists responsible for attacks on Indians, without losing faith in the process. One option is to keep the international pressure up, and garner more co-sponsors for the listing, which was reportedly approved by 14 of 15 UNSC members. Another would be to work on changing 1267 Committee procedures, so that they don’t allow one country to hold back such important terror listings without due cause. A third may even be to open dialogues with both China and Pakistan bilaterally on the issue, leveraging Pakistan’s need to be removed from the FATF grey list later this year as well as China’s interest in Pakistan’s economic recovery, to ensure the listings are accomplished. Eventually, if the goal behind the UNSC listings is to ensure that perpetrators of terrorist acts are held accountable, the emphasis must be on working through all avenues.

## THE WORKINGS OF THE SUPREME COURT COLLEGIUM

The story so far: The Chief Justice of India (CJI) N.V. Ramana’s tenure is drawing to an end in a few days. The Ramana Collegium has been particularly successful. Meeting frequently and working quickly, they took the perennial problem of judicial vacancies by its horns and turned it around. The collegium, as a united front, was able to recommend numerous judicial appointments and scripted history by getting nine Supreme Court judges appointed in one go. Of the nine, Justice B.V. Nagarathna, is in line to be the first woman CJI in 2027.



### **What exactly is the collegium system?**

The collegium system was born out of years of friction between the judiciary and the executive. The hostility was further accentuated by instances of court-packing (the practice of changing the composition of judges in a court), mass transfer of high court judges and two supersessions to the office of the CJI in the 1970s.

The Three Judges cases saw the evolution of the collegium system. In the First Judges case, the court held that the consultation with the CJI should be “full and effective”. The Second Judges case introduced the collegium system in 1993. It ruled that the CJI would have to consult a collegium of his two senior-most judges in the apex court on judicial appointments. The court held that such a “collective opinion” of the collegium would have primacy over the government. It was the Third Judges case in 1998, which was a Presidential reference, that expanded the judicial collegium to its present composition of the CJI and four of his senior-most judges.

### **How does the collegium system work?**

The collegium of the CJI and four senior-most judges of the Supreme Court make recommendations for appointments to the apex court and High Courts. The collegium can veto the government if the names are sent back by the latter for reconsideration. The basic tenet behind the collegium system is that the judiciary should have primacy over the government in matters of appointments and transfers in order to remain independent. However, over time, the collegium system has attracted criticism, even from within the judicial institution, for its lack of transparency. It has even been accused of nepotism. The government’s efforts to amend the Constitution and bring a National Judicial Appointments Commission was struck down by a Constitution Bench.

### **How are judicial appointments to the Supreme Court made?**

The appointment of the CJI and judges of the apex court is governed by a Memorandum of Procedure. The CJI and the judges of the Supreme Court are appointed by the President under clause (2) of Article 124 of the Constitution. The appointment to the office of the CJI should be of the senior-most judge of the Supreme Court considered fit to hold the office. The Union Law Minister would, at an “appropriate time”, seek the recommendation of the outgoing CJI on his successor. Once the CJI recommends, the Law Minister forwards the communication to the Prime Minister who would advise the President on the appointment.

In the case of an appointment of a Supreme Court judge, when a vacancy is expected to arise in the apex court, the collegium would recommend a candidate to the Union Law Minister. The CJI would also ascertain the views of the senior-most judges in the Supreme Court, who hail from the High Court from where the person recommended comes from. The opinions of each member of the Collegium and other judges consulted should be made in writing and form part of the file on the candidate sent to the government. If the CJI had consulted non-judges, he should make a memorandum containing the substance of consultation, which would also be part of the file. After the receipt of the Collegium recommendation, the Law Minister would forward it to the Prime Minister, who would advise the President in the matter of appointment.

### **Has the increase in judicial appointments lowered pendency in the Supreme Court?**

The increase in the number of judges has not guaranteed lower pendency of cases in the apex court over the years. The number of pending cases has risen to 71,411 as on August 1, 2022 from



a little over 55,000 in 2017. This is despite the fact that the sanctioned judicial strength of the court was increased to 34 judges in August 2019. A steady rise in arrears regardless of the periodic increase in judicial strength has been a constant phenomenon since 1950.

In 1950, the Supreme Court had eight judges and a pendency of 100-plus cases. A decade later, in 1960, the judges' strength in the Supreme Court grew to 14 while pendency rose to 3,247. In 1978, the number of apex court judges was 18 and pendency had crossed the 14,000-mark. In 1986, there were 26 judges in the Supreme Court while pendency increased to 27,881. In 2009, the number of judges in the Supreme Court reached 31 though pendency went beyond 50,000. In 2014, the number of judges remained 31 but pendency had burgeoned to over 64,000. In 2020 and 2021, the pandemic added to the pendency rate in the apex court. The year 2020 ended with a backlog of 64,426 cases and 2021 with 69,855 cases.

The court currently has 31 working judges. Four serving judges, including Chief Justice Ramana, would retire in the next few months. His successor Justice U.U. Lalit, is scheduled to retire in November 8, with hardly a three-month tenure as top judge. Justice D.Y. Chandrachud is in line as per the seniority norm to be the 50th CJI Chief Justice in November. The problems of arrears and vacancies in the apex court may likely fall on his shoulders in a year of churn.

#### JUSTICE LALIT APPOINTED 49TH CJI

Justice Uday Umesh Lalit was appointed the 49th Chief Justice of India (CJI) on Wednesday after President Droupadi Murmu signed his warrant of appointment.

Justice Lalit will assume charge on August 27, a day after Justice N.V. Ramana demits office as the CJI. Justice Lalit will have a brief tenure of less than three months as he will demit office on November 8.

Justice Lalit will be the second CJI who was directly elevated to the top court Bench from the Bar.

Justice S.M. Sikri was the first lawyer to be elevated directly to the top court Bench in March 1964 and went on to become the 13th CJI in January 1971.

Justice Lalit has been part of several landmark judgments, including the one which held the practice of divorce through instant triple talaq among Muslims illegal and unconstitutional. In the triple talaq verdict, while the then CJI J.S. Khehar and Justice S. Abdul Nazeer were in favour of putting on hold the judgment for six months and asking the government to come out with a law to that effect, Justices Kurian Joseph, R.F. Nariman and Lalit held the practice as violative of the Constitution.

Before his elevation as a judge, he was appointed a special public prosecutor for the CBI to conduct trial in the 2G spectrum case.

#### SC TO TAKE UP PLEA TO BAN CONVICTS FROM POLLS FOR LIFE

The Supreme Court on Wednesday said it would consider a plea seeking a lifetime ban on people convicted of offences from contesting elections and becoming MPs and MLAs.

Appearing before a Bench led by Chief Justice of India N.V. Ramana, senior advocate Vikas Singh, appearing for petitioner Ashwini Upadhyay, said "even a constable can lose his job after conviction".





The Centre, in an affidavit filed in 2020, maintained in court that disqualification under the Representation of the People Act of 1951 for the period of prison sentence and six years thereafter was enough for legislators.

On Wednesday, senior advocate Vijay Hansaria, the court's amicus curiae, however, said a convicted MP or MLA could come back after the six-year ban and make laws.

In its affidavit in December 2020, the Ministry had rejected the idea of a lifetime ban on convicted persons contesting elections or forming or becoming an office-bearer of a political party. The Ministry had reasoned that MPs and MLAs were not bound by specific "service conditions". "They are bound by their oath to serve citizens and country... They are bound by propriety, good conscience and interest of the nation," the Ministry had argued.

The Centre had attempted to buttress its case last year by citing a Constitution Bench decision in the Public Interest Foundation case of 2019, which said "though criminalisation of politics is a bitter manifest truth, which is a termite to the citadel of democracy, be that as it may, the court cannot make the law".

But the Centre's stand in 2020 contradicted that of the Election Commission of India. In 2017, the poll body endorsed the call for a life ban in the top court. Such a move would "champion the cause of decriminalisation of politics", it had said.

#### A LAW, WITHOUT A FLAW

The most celebrated kind of court judgments are those that eliminate inherent bias vested in a law or rules framed by the government. The Supreme Court's move last week to set right a rule that was 'manifestly arbitrary and violative of women's right to bodily dignity' fits right into the concept of justice that is free, and without prejudice or favour to any person or group of people. Earlier, the apex court in its wisdom, facilitated the abortion (beyond 20 weeks) of a young unmarried woman whose partner parted ways after realising she was pregnant. Had the Court rested then, it might have meant relief for one woman who had to go all the way to the top court of the land in order to access what seven other categories of women would have been able to do without legal hassles. While the judgment could have been cited in support of other women in a similar situation, the law retained its flaw, and others would still have had to take the long legal route, and wait upon the discretion of individual judges. Utilising the full, expansive reach of its powers, the Supreme Court has decided to correct the anomaly. A Bench comprising Justices D.Y. Chandrachud and J.B. Pardiwala are considering pronouncing a judgment which would make access to medical abortion a level-playing field. The Medical Termination of Pregnancy Act, 1971 and its Rules, 2003, prohibit unmarried women who are between 20 weeks and 24 weeks pregnant to terminate the pregnancy. The Court's argument pierced at the heart of the iniquity in the law: if a married woman had access to abortion facilities during the same period, then why should an unmarried woman be prevented from using these services? Exhorting the Government to have a 'forward-looking interpretation of the law', the Bench pointed out that the rules mentioned 'partner' and not husband.

If the Supreme Court was feted for taking a liberal view of the law, its act of pushing the envelope further to set right existing anomalies in law is to be celebrated in full measure. At a time when the United States' Supreme Court's recent ruling overturning Roe vs Wade has drawn that nation back several decades on the abortion question, India's apex court's move stands out in sharp contrast. It is the surest example of the Court's willingness to be modern and progressive, in order





to remove antediluvian inconsistencies in existing laws. It is also in the full spirit of Article 14 of the Constitution that guarantees to all persons equality before the law and equal protection of laws. The law cannot cherry-pick beneficiaries, and if there is to be any justice at all, the antiquated principles on which old Acts were built, cannot continue to frustrate young women who claim autonomy of their own body.

#### PMLA VERDICT — DUE PROCESS WILL BE BULLDOZED

Outcomes in matters of constitutional law disputes depend on the values that the constitutional court choose to emphasise over those it chooses to discount. The recent decision of the Supreme Court of India in *Vijay Madanlal Choudhary vs Union Of India*, where it found all the provisions of the Prevention of Money Laundering Act, 2002 as amended from time to time (“PMLA”) as constitutional, is a case where the Supreme Court repeatedly relies on the legislative intent behind the PMLA to fight the menace of money laundering to trump all other considerations — in particular due process.

##### **A necessary precondition**

The PMLA is an Act that is meant to deal with prosecution and punishment for the offence of “money laundering”, which an accused commits when he has relation with any process or activity with the “proceeds of crime” and has projected or claimed such proceeds as untainted property. Thus, for the PMLA to come into action, there must have been another crime — independent of the PMLA — from which monies were derived. This other crime, which is a necessary precondition for an offence under the PMLA is described as the predicate offence.

##### **Affecting fair legal process**

The substratum of the challenge before the Court was that when the predicate offences (these can be various offences under regular penal law such as the Indian Penal Code 1860, the Prevention of Corruption Act, etc.) are governed by the regular criminal process, the major deviations from this procedure in the PMLA, which is only a consequential act, are manifestly arbitrary and in any event violative of various fundamental rights, inter alia Articles 14, 20 and 21.

The major deviations in the PMLA scheme, all of which operate to the detriment of the accused that were challenged were: non-supply of the Enforcement Case Information Report (ECIR) to the accused/arrested person; power to make any person (including existing or future accused) state the truth on oath even though it may amount to self-incrimination (Section 50); if the Public Prosecutor opposes bail, then the court can grant anticipatory/regular bail, only if the court has reason to believe that the accused is not guilty (Section 45); once a person is accused of committing the offence of money laundering, the burden of proving that proceeds of the crime are untainted property shall be on the accused (Section 24); blanket common and non-graded punishment for anyone associated with money laundering (Section 4).

It is not too difficult to imagine that these deviations from regular criminal law are capable of great mischief, and strike at the very core of what the Constitution envisages: a fair legal process to determine the criminal culpability of a person. A person under arrest, without knowing what is the primary case against him, being made to give self-incriminating statements under oath and then required to prove his own innocence at trial is hardly a criminal procedure that appears either just or fair. All this, when the Act which brings taint to the money, i.e. the original crime,



continues to be governed by regular criminal law, where none of these draconian provisions applies.

And yet, the Supreme Court in finding these provisions as constitutional has repeatedly relied upon the legislative intent of the PMLA, which it describes as “a special mechanism to deal with the scourge of money laundering recognised the world over and with the need to deal with it sternly.” The Court even compared the intensity of money laundering with terrorism, while disagreeing with its earlier judgment, where the Court had made a distinction between the two.

### **The errors**

This is a fundamental error for multiple reasons. One, legislative intent can be a beginning point of a constitutional analysis, i.e., whether the state has legitimate purpose in making a law. However, faced with a specific fundamental rights challenge to specific provisions of such a law, the use of legislative intent to sanctify the provisions as constitutional means that the Court has also treated legislative intent as the end point of its analysis.

Second, the overemphasis on the seriousness of money laundering is not borne out by the PMLA itself. The maximum punishment under the PMLA is 10 years imprisonment (Section 4). There are so many offences under regular penal law that are punishable with life imprisonment or even death, where none of these draconian provisions applies. Clearly, if in the eyes of the legislature, money laundering was as serious as these offences, the punishment prescribed would have been as severe. The incongruous situation is that a person who is accused of murdering for money, will have his murder trial (where he is punishable with death) with all the constitutional protections available, while in his trial for the money proceeds from the murder (where he can be imprisoned for maximum 10 years), he will be stripped of these constitutional protections.

Third, legislative intent is reflected by Parliament as part of its normal law-making power, whereas constitutional due process is incorporated in the Constitution itself and is meant to define the limits of parliamentary law, irrespective of its intent. The net effect of elevating legislative intent to such a high pedestal that it can bulldoze any constitutional argument/reasoning is that due process has been completely compromised in PMLA cases. The problem of the process being the punishment, which is anyway omnipresent in our criminal justice system, is likely to be aggravated in PMLA cases. The likelihood that many would face long incarceration as PMLA accused, even though eventually found innocent has just increased manifold. One can only hope that sometime in the not distant future the Court corrects the error.

## **FAIR TRIAL GOES BEYOND COURTS, TO THE POLICE AND MEDIA**

Recently, the Chief Justice of India objected to the lack of media accountability in the media's coverage of legal issues. His remarks came less than a month after the Delhi police admitted to informing the media about the outcome of AltNews' co-founder Mohammed Zubair's bail hearing before the judicial order was even pronounced in open court. While the matter of how this information was known to the police remains an open issue, it is problematic that a considerable portion of its news coverage depicted the remarks of the police officer as fact without waiting for the judicial order.

### **The police as source**

In criminal cases that attract the most sensationalist media coverage, media attention is often drawn toward investigation and early trial stages, with a notable disconnect from eventual



outcomes of trial that follow several months or even years after an arrest. This makes the police a crucial source for the media and communication between the two institutions is often a starting point of the troubles of media trials. Unregulated divulgence of case details by an eager police force and disproportionate reliance on this information by the media (to the detriment of the judiciary and other sources), results in a public stripping of the rights that typically accompany a fair trial.

Reportage of this nature violates the presumption of innocence and the right to dignity and the privacy of suspects, the accused, victims, witnesses and persons closely related to them. They often face social ostracisation and difficulties in retaining employment, making them vulnerable to crime and exploitation.

### **Ineffectual media policies**

Though the police are meant to be an independent agency, tasked with truth-seeking (ostensibly an objective shared with the news media), this is not always the case. Police narratives are sometimes designed to achieve political goals, and the media's ready acceptance of these narratives does little to prevent their insidious effects. Given the media's ability to shape political opinion, law enforcement agencies are sometimes under pressure to selectively reveal certain facets of the investigation or to mischaracterise incidents as communal or systemic. Just a few years ago, the investigation of the Bhima Koregaon violence (2018) was marked by a slew of motivated arrests of popular dissenters critical of the Government. While the investigation was underway, the police exposed letters purportedly written by these activists that were still undergoing forensic analysis. While these letters received extensive news coverage, none of them was presented as evidence in court.

The police, when independent from political and corporate influence, are more concerned with demonstrating dynamism and efficiency, rather than the protection of civil liberties. Courts have repeatedly directed law enforcement authorities not to reveal details of their investigations, especially the personal details of the accused, before trial is complete (notably, the Supreme Court in *Romila Thapar vs Union of India*, (2018) 10 SCC 753). Despite this, statutory restrictions on the police to maintain confidentiality are rare, with Kerala being one of the few States to have disallowed photographs and parades of persons in custody within its Police Act. Most other States have issued disparate media policy guidelines with weak enforcement mechanisms through administrative circulars whose contents remain unknown to the public. The Ministry of Home Affairs issued a sparse office memorandum outlining a media policy over a decade ago, but this is of limited value given that 'Police' is an entry in the State List and thus falls primarily within the jurisdiction of State governments. In any event, the slew of media reports on arrests, complete with residential and age details of suspects and their photographs, is a strong indication that these internal orders, where they exist, are ignored.

### **Regulating briefings**

Most police departments do not have dedicated media cells, making officials of all levels authoritative sources of information and blurring the boundaries between an official and informal police account of events. As a result, the evidence-based narrative of criminal cases presented by the police to a court varies significantly from the account provided to the news media, much to the detriment of the persons involved in the case, and the justice system as a whole. A range of stakeholders now demand stronger regulation of communication channels between law enforcement and the media. In an ongoing case, the Peoples' Union for Civil Liberties asked the



Supreme Court to issue guidelines to regulate media briefings by the police to ensure fair trial. This has left the judiciary with no choice but to deliberate on binding directives to the police.

### **Indifference of the media**

Problematic news coverage of criminal cases arises when reporters absolve themselves of any duty to contextualise information revealed by the police. Media ethics extend beyond verification of facts. Apart from making sure that police narratives are accurate before making them public, reporters bear the burden of translating the significance of police versions in a criminal trial. For example, many reports mention “arrest” without any information about whether such arrests are conducted in the course of investigation or after filing of a charge sheet — an important indicator of the degree of certainty with which the police can assert the claim that they are indeed criminals.

Ignorance of these nuances of the justice system has significant implications for citizens whom it is meant to protect, and contributes considerably to the public apprehension and mistrust in the system. Some of this negligence can be attributed to the changing nature of the newsroom responding to deadlines externally set by competing social media accounts that now qualify as news. With the growing financial pressures on media organisations, beat reporters specialising in crime and legal reporting are becoming rare.

Current media regulation is limited, and rightly so. Government regulation is not uniform for print and television media and enforcement of these regulations, where it occurs, is slow. In any event, Government regulation of the media is problematic and likely to increase politicisation of the press. Self-regulation set-ups such as the National Broadcasting Standards Authority and Indian Broadcasting Foundation are membership-based and easily avoided by simply withdrawing from the group. This weak regulatory environment effectively leaves reporting norms to the conscience of reporters and their editors.

### **Look inwards**

Unfortunately, given the narrow goals of both institutions, it serves neither the interest of the police nor the media to deliberate how information should be disseminated while protecting the persons involved in the case. However, with an increasing call for media regulation, it is now in the immediate interest of the media and the general interest of free press, that media institutions look inward to find an answer to what is essentially an ethical crisis. The media’s immense power to shape narratives regarding public conceptions of justice makes it a close associate of the justice system, bringing with it a responsibility to uphold the basic principles of our justice system. The media should feel subject to the obligation to do its part in aiding mechanisms that aim to preserve these principles. On the other hand, a structured and well-designed media policy with training and enforcement mechanisms is the need of the hour for the police.

## **ON GUARDIANSHIP AND ADOPTION OF MINORS**

The story so far: A Parliamentary panel has recommended conferring equal rights on mothers as guardians under the Hindu Minority and Guardianship Act (HMGA), 1956 instead of treating them as subordinates to their husband, and has called for joint custody of children during marital disputes. It has also proposed allowing the LGBTQI community to adopt children.





### **What are the recommendations of the Parliamentary panel on guardianship and child custody?**

The department-related Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice tabled its report on August 8, 2022, in both Houses of Parliament on the 'Review of Guardianship and Adoption Laws'. In its report the committee has said that there is an "urgent need to amend the HMGA (Hindu Minority and Guardianship Act, 1956) and accord equal treatment to both mother and father as natural guardians as the law violated the right to equality and right against discrimination envisaged under Articles 14 and 15 of the Constitution."

In cases of marital dispute, the panel says there is a need to relook at child custody which is typically restricted to just one parent where mothers tend to get preference. It says courts should be empowered to grant joint custody to both parents when such a decision is conducive for the welfare of the child, or award sole custody to one parent with visitation rights to the other.

On adoption, the Committee has said that there is a need for a new legislation that harmonises the Juvenile Justice (Care and Protection of Children) Act, 2015 and the Hindu Adoptions and Maintenance Act (HAMA), 1956 and that such a law should cover the LGBTQI community as well.

### **What does the law say on guardianship? How do courts grant child custody?**

Indian laws accord superiority to the father in case of guardianship of a minor. Under the religious law of Hindus, or the Hindu Minority and Guardianship Act, (HMGA) 1956, the natural guardian of a Hindu minor in respect of the minor's person or property "is the father, and after him, the mother: provided the custody of a minor who has not completed the age of five years shall ordinarily be with the mother."

The Muslim Personal Law (Shariat) Application Act, 1937 says that the Shariat or the religious law will apply in case of guardianship according to which the father is the natural guardian, but custody vests with the mother until the son reaches the age of seven and the daughter reaches puberty though the father's right to general supervision and control exists. The concept of Hizanat in Muslim law states that the welfare of the child is above all else. This is the reason why Muslim law gives preference to the mother over the father in matters of custody of children in their tender years.

The Supreme Court's landmark judgment in Githa Hariharan vs Reserve Bank of India in 1999 challenged the HMGA for violating the guarantee of equality of sexes under Article 14 of the Constitution of India and the court held that the term "after" should not be taken to mean "after the lifetime of the father", but rather "in the absence of the father". But the judgment failed to recognise both parents as equal guardians, subordinating a mother's role to that of the father. Though the judgment sets a precedent for courts, it has not led to an amendment to the HMGA.

The panel's proposals on guardianship have been made by the Law Commission of India in its 257th report on "Reforms in Guardianship and Custody Laws in India" in May 2015 as well as its 133rd report in August, 1989 on "Removal of discrimination against women in matters relating to guardianship and custody of minor children and elaboration of the welfare principle"

### **What about cases of marital disputes?**

In cases of marital disputes, some courts such as the Punjab and Haryana High Court and Bombay High Court have framed rules to grant joint custody or shared parenting. But senior lawyer Anil Malhotra says instead of this "patchwork" there is a need to amend the law, including the Guardians and Wards Act, 1890 to introduce concepts such as joint custody.





### Can queer and transgender people adopt children in India?

The Adoption Regulations, 2017 is silent on adoption by LGBTQI people and neither bans nor allows them to adopt a child. Its eligibility criteria for prospective adoptive parents says that they should be physically, mentally and emotionally stable, financially capable and should not have any life-threatening medical condition. Single men can only adopt a boy while a woman can adopt a child of any gender. A child can be given for adoption to a couple only if they have been in a marital relationship for at least two years. The HAMA which applies to Hindus, Sikhs, Jains and Buddhists allows men and women to adopt if they are of sound mind and are not minors. Activists say LGBTQI people who seek adoption face institutional discrimination because of stigma. Therefore, the law should be amended to include them as eligible candidates including when they apply as non-single parents such as when they are in civil unions or married for which there is no legal recognition in the country as yet even though the Supreme Court legalised gay sex in 2018.

### NEVER-ENDING FIGHT

In quashing a criminal case against actor Suriya and director T.J. Gnanavel, the Madras High Court has spared them the ordeal of facing vexatious proceedings for allegedly insulting a section of society in the acclaimed film *Jai Bhim*. The FIR cited Section 295A of the IPC, a provision that makes it a crime to commit “deliberate and malicious acts intended to outrage religious feelings” on the basis of a complaint that the film insulted the Vanniyar community. A magistrate had forwarded the complaint to the police for the registration of a first information report by concluding that it disclosed a “cognisable offence”. The High Court has rightly concluded that the magistrate had acted mechanically as the order did not even mention what offence was made out in the complaint. In this case, it is quite strange that a perceived insult to a caste was seen as outraging “religious” feelings. It indicates the perfunctory manner in which caste and religion can be conflated with one another by those claiming to be hurt or insulted by others. The court has noted that except for a contention that the film was made in a manner that is likely to incite violence and hostility towards a particular community, there was no specific instance stated in the FIR.

The casual resort to criminal prosecution for perceived insults to religion or any other social segment has become an unfortunate feature of contemporary life. Some years ago, the Supreme Court had to intervene to quash a criminal complaint against cricket star Mahendra Singh Dhoni for being featured in the likeness of a deity on the cover of a magazine. Section 295A has been interpreted by a Constitution Bench in 1957 to the effect that it only “punishes the aggravated form of insult to religion” when something is done with a deliberate and malicious intention to outrage the religious feelings of a class. However, in practice, groups and individuals use some imagined slight to themselves as a pretext to infringe the right to freedom of speech and expression by objecting to films, plays and public performances. In many cases, the police tend to give greater credence to such complaints than they deserve and cite the possibility of a disruption of law and order to clamp down on the screening or performance rather than protect free speech. Constitutional courts do intervene time and again to protect freedom of expression, but often such relief comes after a delay. Books have been pulped and performances and lectures have been cancelled based on threats and complaints more often than needed. These developments can only mean that the fight for free speech has to be fought anew from time to time.



## HC JUDGE'S REMARK ON MANUSMRITI DRAWS WOMEN GROUPS' IRE

Women's rights groups and activists on Thursday strongly condemned the remarks of Delhi High Court's judge Pratiba M. Singh, who a day ago had said that Indian women were "blessed" because scriptures like Manusmriti give a "very respectable position" to them.

The judge was speaking at an event organised by the Federation of Indian Chambers of Commerce and Industry's (FICCI) WISE Council (Women in Science and Entrepreneurship) on the topic — 'Facing the unseen barriers: Addressing challenges faced by Women in Science, Technology, Entrepreneurship and Mathematics (STEM)'.

During the address, Justice Singh, citing examples of Indian scriptures, said: "In fact, the Asian countries do much better in respecting women, in households and in general. That's because of the cultural and religious background that we have. The women and equally men play a very important role in our lives to be where we are and to achieve what we want." She went on to say that even the Manusmriti says that prayers are useless unless women are respected and honoured.

These remarks drew a sharp reaction from women's rights groups and activists, with the National Federation of Indian Women issuing a statement through its general secretary Annie Raja, placing on record its "strong disagreement" with the position taken by Justice Singh.

Ms. Raja said, "Justice Singh's reading of the Manusmriti wilfully chooses to ignore the institutionalised prescriptions of the absolute disciplining and punishing of women bodies and ideas. This is in addition to the despicable ascriptive norms of caste that is encoded in the said text."

Activist Kavita Krishnan, who is also associated with the All India Progressive Women's Association, quoted certain parts of the Manusmriti and said, "What the Manusmriti calls 'reverence' or 'worship' of women is actually control of women — all to maintain caste apartheid... For a judge to call all this 'respect' is worse than absurd."

## WHAT IS THE CRIMINAL PROCEDURE (IDENTIFICATION) ACT, 2022?

In India, the Identification of Prisoners Act, 1920 (the "1920 Act") permitted the collection of fingerprints, footprint impressions, and photographs of, among others,

- i) persons convicted of a crime for which the punishment is one year of rigorous imprisonment; and
- ii) persons arrested in connection with such a crime. Considering that prisoner identification is now done in many more ways than those provided in the 1920 Act, the Criminal Procedure (Identification) Act, 2022 (the "2022 Act") has been passed by both houses of parliament and has received the President's assent. The 2022 Act will widen the type of identifiable information that can be collected from convicts or arrested persons for criminal investigations.

However, the 2022 Act has been challenged by lawyer, Harshit Goel, in the Delhi High Court because it allows the police to "forcibly take measurements" of convicts and accused persons.

This critique identifies the important changes and key issues in the 2022 Act



### Important changes

- The 2022 Act will permit the collection of biological samples, “behavioural attributes”, and reports of any physical examinations of the accused conducted under sections 53 and 53A of Criminal Procedure Code (“CrPC”) dealing, among others, with rape cases.
- Unlike the 1920 Act, the 2022 Act aims to authorize the collection of data from convicts, persons arrested for offences punishable under any law, or those detained under preventive detention laws. The 2022 Act limits the forced collection of biological samples to offences committed against a woman or a child or for any offence punishable with imprisonment for a period not less than seven years.
- Under the 1920 Act, the power to make rules relating to criminal investigations had been entrusted with the state governments; however, the 2022 Act seeks to vest the rule making power in the central government and the state government.
- To aid in an investigation or proceeding under the CrPC, the 2022 Act seeks to empower a magistrate to direct any person to give his/her measurements and data as prescribed.

Delhi HC seeks Centre's stand on challenge to Criminal Procedure (Identification) Act, available at (last visited April 26, 2022).

- The 2022 Act increases the number of persons who are eligible or authorized to collect data and provides discretion to prison officers, the police, and the magistrate's officers, in this regard.
- The National Crime Records Bureau (“NCRB”), which is a central government authority, is entrusted with the task of maintaining the electronic records of measurements and other data, including the collection, storage, preservation, sharing, dissemination, destruction, and disposal of such records.
- The 2022 Act also proposes retaining such records of measurements for a period of seventy-five years.

### Key issues

Arrested persons who have committed offences against women or children or for offences punishable with imprisonment for seven years or more, will be legally required to give their biological samples. Moreover, “measurements” and personal data other than biological samples can be demanded from all arrested persons. Eventually, if they are exonerated, such persons will still find their data in the NCRB, which may include iris and retina scans, biological samples, etc.

The definition of “measurements” specifies behavioural attributes that include signatures, handwriting or any other examination referred to in sections 53 or 53A of the CrPC; however, the scope of the term “behavioural attributes” has not been explained anywhere in the 2022 Act. In the absence of a properly crafted explanation, the result may be that such “measurements” may create evidence against the accused which can lead to self-incrimination in violation of Article 20(3) of the Constitution.

Extending the power to legislate and/or make rules under the 2022 Act to the central government may give rise to conflicts with state authorities who are also so empowered.



More importantly, the 2022 Act fails to make provisions for an appeal to a higher authority against any arbitrary exercise of power by an authorised entity to collect an individual's personal data. Therefore, by default, any remedy for abuse of power will fall into the lap of the High Courts of states or the Supreme Court.

The 2022 Act does not mandate the NCRB to provide for the safekeeping of records of “measurements” against security threats like data breaches and cyber incidents. In addition, the 2022 Act does not restrict or provide for data sharing, which can pose a serious risk to the privacy of an accused who is acquitted or even in other instances.

### Conclusion

While the 2022 Act will bring in modern prisoner identification techniques, there are a few disadvantages, namely, possibility of abuse of power by the authorities, chances of self-incrimination by the accused, data privacy, overlapping or conflicting legislation between states and the central government, etc. In addition, some provisions of the 2022 Act need to be clarified, and in the absence thereof, there is a threat to law abiding citizens and their fundamental rights. Moreover, the government has been deliberating and scrutinizing Indian data protection and privacy laws to develop a robust data protection framework. Once established, the collection and retention of “measurements” under the 2022 Act will have to be done in accordance with established data protection laws.

### EC HAS A POINT

Debate over the rampant culture of freebies in India is gaining traction. The Prime Minister kickstarted it, calling for an end to free “revdi(s)”, the Opposition parties objected to the manner in which the conversation is being framed, the RBI underlined the risk that power subsidies pose to state finances, and the Supreme Court has sought suggestions on the composition of a committee that can look into the issue. Various actors in India’s political and institutional landscape have begun to wade into a conversation that is critical, though not entirely new. It is especially warranted in this moment considering the acute fiscal stress at both the central and state levels. However, as matters of economic policy lie in the domain of the government, whose contours are shaped by the political representatives, legitimate questions are being raised over the judiciary’s intervention.

In this context, it is welcome and apt that the Election Commission has stated in its supplementary affidavit filed in the Supreme Court that it “may not be appropriate for the Commission, being the Constitutional Authority, to be part of the proposed committee.” The EC has done well to voice its reservations. As a neutral arbiter of elections, it will not be proper for it to wade into a contentious issue which pits the ruling dispensation at the Centre against the Opposition parties that govern states. There is also the equally controversial process of defining what constitutes “irrational freebies”, and what doesn’t. As the EC notes, “both ‘freebie’ and ‘irrational’ are subjective and open to interpretation.”

It is true that political parties, driven by short-term electoral calculations, often resort to fiscally profligate promises. It is also true that the fiscal risks at the state level are growing. But the allocation of public money is, at its core, a political decision. Suggestions proffered by experts can and should be taken on board. But the provision of free or highly subsidised goods and services in an attempt to either sway the electorate or to compensate for the lack of employment/income opportunities in a system that offers scarce safety nets for the vulnerable, is a decision to be taken,





and questioned, in the political domain, by political representatives. Ultimately, the voters need to judge the economic and fiscal implications of such policies. While a wider conversation on this issue is needed, it needs to be located firmly in the political process.

## ACRIMONY OVER APPOINTMENTS

The relationship between Kerala Governor Arif Mohammad Khan and the State government has entered yet another thorny phase over differences in opinion on the bounds of the Chancellor's role in the functioning of universities. The tussle has been in the making for nearly a year after the Governor confronted the government over the University of Kerala's refusal to confer honorary doctorate on former President Ram Nath Kovind. The reappointment of the Vice Chancellor of Kannur University had also annoyed him. These instances prompted him to declare his unwillingness to continue as Chancellor of universities.

Chief Minister Pinarayi Vijayan had led the government's rapprochement efforts earlier after the Governor reportedly withheld his assent to the policy address on the eve of the Budget Session of the Legislative Assembly. Nevertheless, the government has quietly endorsed the growing clamour of some States, including Maharashtra, Tamil Nadu, West Bengal and Odisha, to work towards trimming the powers of the Chancellor over universities in order for the government to gain greater control.

Within a few months, a government-constituted commission that was mandated with overhauling university laws advocated stripping the Chancellor off his discretionary powers. It instead recommended that a University Tribunal be formed to decide on legal matters. It also called for reducing the Governor's authority in the selection of Vice Chancellors. Another Commission tasked with suggesting reforms for the higher education sector has mooted separate Chancellors for each university.

While the government prepared to bring out an Ordinance to implement such reforms in the University of Kerala prior to the selection of the next Vice Chancellor, the Governor made a pre-emptive move by initiating the process on his own without consulting the State government.

Mr. Khan also refused to re-promulgate 11 key Ordinances that have now lapsed. While claiming to have been provided little time to "apply his mind" in examining the Ordinance, he took a swipe at the State government by averring that "ruling through Ordinances is not desirable in a democracy". His comments emboldened the Opposition to accuse the ruling dispensation of adopting an 'Ordinance Raj' to bypass the legislature in implementing contentious laws. The lapsed Ordinances included the contentious Kerala Lok Ayukta (Amendment) Ordinance that amended Section 14 of the Kerala Lok Ayukta Act, 1999 which empowered the ombudsman to remove a corrupt public official from office and prevent the person from holding office again. The Ordinance enabled the Governor, the Chief Minister or the State government to "either accept or reject the declaration".

Mr. Khan also sought an explanation from Kannur University on the politically sensitive appointment of the wife of the Chief Minister's private secretary as an associate professor based on a complaint that UGC rules were flouted to ensure she was appointed.

In a single stroke, Mr. Khan has negated the advantage the government enjoyed in the process of selecting the Vice Chancellor. While a nominee each has been chosen by the Governor and the UGC, the State government can effectively rely only on the nominee sent by the university Senate to



further its interests. Governors have conventionally entrusted the governments to choose nominees on their behalf. The onus is now on the government to either accustom itself to the 'new' template in the appointment of Vice Chancellors or to adopt drastic steps as those recommended by its Commissions.

## UNCLE VOLTE-FACE

Nitish Kumar has done it again — a volte-face. Rashtriya Janata Dal (RJD) leader and now the Deputy Chief Minister of Bihar, Tejashwi Yadav, used to call the Janata Dal (U) chief, paltu chacha — 'uncle turnaround'. In his latest U-turn, Mr. Kumar has joined hands with Mr. Yadav, five years after they parted ways, and turned the tables on the Bharatiya Janata Party (BJP) in the process. According to the JD(U), the BJP was scheming to split it and sabotage Mr. Kumar's government from the inside. The BJP has dismissed this allegation, pointing out that it could not have formed a government even if the JD(U) were to split. Mr. Kumar has won this round in the game of smoke and mirrors that he has had with the BJP, and earned himself a pat on the back from the anti-BJP camp. But his cleverness and manoeuvring skills may not be lauded by the people of Bihar whose sights might be more fixated on his political trapeze act — after being with the BJP for long, he fought the 2015 Assembly elections with the RJD, and split with it in 2017 to return to the BJP's embrace. Politics makes for strange bedfellows, but Mr. Kumar has stretched the limits of ideological infidelity. He had accused the RJD of corruption in defence of his split with it in 2017. His explanation for walking out of the alliance with the BJP that won the election in 2020 is unlikely to convince people.

Twice in five years, Mr. Kumar changed partners, both the times trampling over the mandate entrusted to him by the people of Bihar. Those in the Opposition camp who see this blatant opportunism as hope of an anti-BJP politics ahead of 2024 are clutching at straws. At the moment, all that the new alliance of JD(U) and RJD along with the Congress and the Left parties achieves is their survival in the immediate term. The road to 2024 and beyond is a long one from here, and there is little that is predictable about Mr. Kumar en route. A lot will depend on how supporters of the individual partners of the alliance respond to this abrupt realignment, and how the JD(U) and the RJD respond to the signals from below. Though the BJP has suffered a setback, a new window has opened for it in Bihar, as the sole claimant of all anti-incumbency votes. Central investigative agencies could get active against key figures in the new ruling coalition, but a more reasonable thing for the BJP to do is to be more respectful of its partners and opponents. As the Shiv Sena and the JD(U) will affirm, the BJP as a friend is more dangerous than the BJP as an enemy. The BJP seems intent on expanding its base at the expense of friends and foes alike. While this is good as a long-term strategy, it runs the risk of undermining established power equations and coalition governments in the near term. And in politics, as in other aspects of life, there is no long-term future if one is unable to survive in the short term.

## NEW HOPES

Jagdeep Dhankhar will take oath as the 14th Vice-President of the country on Thursday, a day after the term of the incumbent Vice-President, M. Venkaiah Naidu, ends. As the candidate of the National Democratic Alliance (NDA), he secured 528 votes of the 710 valid votes in the election held on Saturday. The Opposition candidate and Congress leader, Margaret Alva, got 182 votes, with the Trinamool Congress abstaining. Mr. Dhankhar's election was a foregone conclusion, as the NDA had a clear majority in the electoral college, which was further reinforced by the support of the Biju Janata Dal and the YSR Congress Party (YSRCP). Mr. Dhankhar, a Jat leader from



Rajasthan, has had stints in Delhi and the State, in the Janata Dal and the Congress, before he shifted to the Bharatiya Janata Party (BJP) in 2003. His appointment as the Governor of West Bengal catapulted him into the national limelight even as the BJP fought a pitched battle against the Trinamool Congress (TMC) to take over the reins of the State. A lawyer by training, he never pulled his punches, and combined political rhetoric and legal reasoning in frequent run-ins with the West Bengal Chief Minister and TMC. He faced charges of partisanship, but it all ended with the TMC mending fences with him ahead of his election as Vice-President; it obliquely supported him by abstaining from the polls. The TMC accused the Congress of not consulting it on Ms. Alva's nomination but that claim is unconvincing, and the entire episode has exposed the chinks in the Opposition armour. The help that he got from the TMC added a slice of intrigue to what was otherwise a predictable victory.

The Vice-President is also the chairman of the Rajya Sabha, a critical role anytime, and more so in the present situation of extreme hostility between the Government and the Opposition. Parliamentary proceedings have been continuously stalled, Members of Parliament have been suspended and there has been a complete breakdown of communication between the ruling BJP and the Opposition parties. The Government has repeatedly bypassed the Rajya Sabha in the making of critical laws by arbitrarily classifying pieces of legislation as money Bills. The question is now before the Supreme Court. As Vice-President, Mr. Dhankhar will be expected to facilitate better relations between the ruling party and the Opposition parties and uphold the majesty and the constitutional role of the House. It is not an easy task in the current scenario, but his initial moves will be eagerly awaited by everyone invested in parliamentary democracy. Mr. Dhankhar's elevation as Vice-President will certainly help the BJP politically. His role as Chairman should be more to protect the Opposition's space, debates and ensure accountability of the executive. The inauguration of the new Vice-President should renew hopes for parliamentary democracy.

#### THE PESA ACT, AND THE REASON BEHIND PARTIES TRYING TO WOO TRIBALS IN GUJARAT

Aam Aadmi Party (AAP) leader Arvind Kejriwal Sunday (August 7) declared a six-point "guarantee" for tribals in Gujarat's Chhota Udepur district, including the "strict implementation" of the Panchayats (Extension to the Scheduled Areas) Act.

The PESA Act was enacted in 1996 "to provide for the extension of the provisions of Part IX of the Constitution relating to the Panchayats to the Scheduled Areas". Other than Panchayats, Part IX, comprising Articles 243-243ZT of the Constitution, contains provisions relating to municipalities and cooperative societies.

Under the Act, Scheduled Areas are those referred to in Article 244(1), which says that the provisions of the Fifth Schedule shall apply to the Scheduled Areas and Scheduled Tribes in states other than Assam, Meghalaya, Tripura, and Mizoram. The Fifth Schedule provides for a range of special provisions for these areas.

#### What is the PESA Act?

The PESA Act was enacted to ensure self-governance through Gram Sabhas (village assemblies) for people living in the Scheduled Areas. It recognises the right of tribal communities, who are residents of the Scheduled Areas, to govern themselves through their own systems of self-government.



The Act empowers Gram Sabhas to play a key role in approving development plans and controlling all social sectors. This includes the processes and personnel who implement policies, exercising control over minor (non-timber) forest resources, minor water bodies and minor minerals, among other things.

Ten states — Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, and Telangana — have notified Fifth Schedule areas that cover (partially or fully) several districts in each of these states.

After the PESA Act was enacted, the Union government circulated model PESA Rules. So far, six states have notified these Rules.

### **PESA in Gujarat**

Gujarat notified the State PESA Rules in January 2017, and made them applicable in 4,503 gram sabhas under 2,584 village panchayats in 53 tribal talukas in 14 districts.

This was announced in Chhota Udepur by then CM Vijay Rupani ahead of the last Assembly polls.

Five years later, current CM, Bhupendra Patel, Tuesday told a rally in Dahod that all tribals had been covered under the Act and empowered under its provisions.

Legal experts, however, say the Act has not been enforced in letter and spirit.

Gujarat is among the 10 states that have Schedule Areas, and accounts of 8.1% of the ST population. The tribals are concentrated in the eastern districts, along the Rajasthan, Madhya Pradesh and Maharashtra borders. There are 11 major tribes in Gujarat, the largest being Bhil which is nearly 48% of the state's total tribal population.

The tribals have been a loyal voters of the Congress. In 2017, of the 27 reserved ST seats, the BJP won eight, Congress got 16, and its alliance partner, the Bharatiya Tribal Party (BTP) bagged two. One Congress rebel won as an Independent. Since then, Congress's three tribal MLAs have joined the BJP. The Independent MLA was disqualified, and BJP won the bypolls in 2021. This time AAP is also targeting this constituency and has allied with the BTP. However, the BJP does not see the implementation of the Act as an election challenge as several Congress states are yet to implement it.

### **DATA LAW DELAY**

The story so far: On Wednesday, August 3, the government withdrew the Personal Data Protection Bill that it had tabled in the Lok Sabha on December 11, 2019. The Bill, which had undergone intense scrutiny by a Joint Parliamentary Committee (JPC), would now be replaced by "a new bill that fits into the comprehensive legal framework," as per the government's statement on the withdrawal. IT Minister Ashwini Vaishnaw has said that the new Bill is in advanced stages of preparation and may be tabled in the Budget session next year.

### **What are the origins of the Bill?**

In the seminal Justice K.S. Puttaswamy (Retd) vs Union of India case, the Supreme Court of India ordered in 2017 that the right to privacy is an intrinsic part of the right to life and personal freedom guaranteed by the Indian constitution. In the light of this judgment, and the concerns around how large tech platforms were handling the personal data of its Indian users, the Centre





in 2017 set up an expert committee chaired by retired Supreme Court Justice B.N. Srikrishna to formulate a regulatory framework for data protection. The Srikrishna Committee submitted its report and a draft for the Data Protection Bill to the Ministry of Electronics and Information Technology on July 27, 2018.

The Bill that was tabled by the Ministry in Parliament over a year later was, however, criticised by Justice Srikrishna for giving much more control to the Central government over the data than envisaged in the committee's draft.

The JPC that then deliberated on the Bill submitted its report in November, 2021, clearing clause 35, the provision that enables government agencies to circumvent provisions of the law citing "public order", "sovereignty", "friendly relations with foreign states" and "security of the state". The opposition members of the JPC had submitted strong dissent notes along with the report.

#### **Why has the Bill been withdrawn now?**

Despite the government retaining its access to data, it has withdrawn the Bill now citing the significant number of amendments, recommendations, and corrections suggested by the JPC. The JPC's 542-page report has 93 recommendations, 81 amendments and members have suggested 97 corrections and improvements to the Bill. One of the key recommendations is widening the ambit of the Bill to cover all data instead of just personal data — thus moving it considerably away from its Puttaswamy origins. The stated view of the government is that in the face of such a radical overhaul, it is better to bring in a new Bill.

Alongside this, the government has also said that it received several concerns from the tech industry — specifically from Indian start-ups — regarding the stipulations on data localisation in the Bill.

#### **What does the Bill say on data localisation?**

Personal data was defined in the Bill as "any characteristic, trait, attribute or any other feature information" that can be used to identify a person. The Bill also identified a sub-category of Sensitive Personal Data, such as details on a person's finance, health, sexual orientation and practices, caste, political and religious beliefs, and biometric and genetic data. It also created a Critical Personal Data category, which was "personal data as may be notified by the Central government" in the future.

The Bill stated that while Sensitive Personal Data can be transferred abroad for processing, a copy of it must be kept in India. Critical Personal Data can be stored and processed only in India. It also stipulates the conditions under which sensitive data can be sent abroad, such as government authorised contracts.

Several countries have such localisation provisions, considering the strategic and commercial implications of data, the "new oil". However, businesses both big and small, international, and domestic, have issues with such localisation.

#### **What were the concerns of the tech industry?**

Indian start-ups have raised the issue that the infrastructure needed to comply with the localisation stipulations will be a huge drain on their resources. Start-ups also often depend on international companies for services such as customer management, analytics and marketing, which will require them to send data on their customers abroad. Data localisation requirements



would not only reduce their choices on such services but also burden them with compliance processes.

The compliance requirements have implications for the larger U.S.-based tech companies as well, with reports indicating that umbrella organisations of U.S. businesses were lobbying against the Bill.

One of the JPC recommendations would also have been of particular concern for social media companies as it sought to move them from the category of online intermediaries to content publishers, thus making them responsible for the posts they host.

## GOVERNMENT DOES WELL TO DO AWAY WITH PRICE RESTRICTIONS IN THE AVIATION SECTOR

In the early days of the pandemic, the Union government had imposed capacity and price restrictions on domestic airlines. While restrictions on capacity were put in place to contain the spread of Covid, from the government's point of view, the rationale to impose both price floors and ceilings was two-fold. One, to prevent a price war among the airlines so as to protect the financially weaker airlines during an economically turbulent period. And two, to prevent consumers from price gouging as airlines sought to recoup their losses during a period of demand and supply mismatches.

Over time, the government did do away with the restrictions imposed on capacity — in October last year it allowed for 100 per cent capacity utilisation — but the restrictions on pricing were kept in place. On Wednesday, the civil aviation ministry announced that the last remaining restrictions on pricing will be removed with effect from the end of this month. This is a long overdue corrective.

The price restrictions, imposed in May 2020, when the airlines had resumed their operations after the two-month lock-down, were based on the duration of flights. The seven price bands ranged from Rs 2,600 for flights under 40 minutes to Rs 8,700 for flights over three hours. Last year, these prices were adjusted upwards, though marginally.

Considering the then economic environment, and the considerable uncertainty that the pandemic had injected in the aviation sector, some airlines did in fact support the imposition of these pricing restrictions. But by intervening in the functioning of the market, by making commercial decisions which should be the prerogative of airlines, these price caps ended up distorting the market, having unintended consequences on both demand and supply. While various justifications have been marshalled in favour of the imposition of this policy during the pandemic, the reality is that price restrictions by the government are the norm, not the exception. Across a range of sectors, ranging from urea to medical devices, price restrictions are prevalent, despite their well-known economic consequences.

The easing of the last of the Covid-era restrictions comes at a time of fresh developments in the airline sector. Air India has been recently sold off to the Tatas. A new airline, Akasa Air, has been launched. And Jet Airways is reported to have secured the permits to restart operations. At this juncture, the government must desist from playing an interventionist role, it must limit itself to facilitating the growth of the sector. During such a time, airlines say they like to attract passengers with lower fares, but they were constrained by the airfare restrictions. "This move will rationalise demand and supply," said Bharatt Malik of Yatra.com.



## NEW PRIVACY FEATURES ON WHATSAPP

WhatsApp on Tuesday announced new privacy features, following which users of the instant messaging service will now be able to leave groups silently as well as choose who can see when they are online. WhatsApp will also block taking screenshots for 'view once' messages.

With the 'Leave Groups Silently' features, WhatsApp users will be able to exit a group privately without having to notify everyone. Now, instead of notifying the full group when leaving, only the admins of the group will be notified. This feature will be rolled out to all users this month.

"Seeing when friends or family are online helps users feel connected to one another, but everyone has had times when they wanted to check their WhatsApp privately. For the times you want to keep your online presence private, WhatsApp is introducing the ability to select who can and can't see when you're online," the company said in a statement, adding that this feature will start rolling out to all users this month.

### Block screenshots

Additionally, the application will now block taking screenshots for 'View Once Messages'. It noted that 'View Once' is already an incredibly popular way to share photos or media that don't need to have a permanent digital record. "Now WhatsApp is enabling screenshot blocking for View Once messages for an added layer of protection. This feature is being tested and will be rolled out to users soon," the company said.

The messaging service added that the introduction of these new features are backed by a new WhatsApp privacy study which found that 72% of people value being able to speak in an honest, unfiltered way, but more than 47% are only comfortable doing this in a safe, private space.

To spread awareness about the new features, WhatsApp will also kick off a new campaign to educate people, starting with the UK and India.

## MOVING POLICY AWAY FROM POPULATION CONTROL

The United Nations' World Population Prospects (WPP), 2022, forecasts India becoming the most populous country by 2023, surpassing China, with a 140 crore population. This is four times the population India had at the time of Independence in 1947 (34 crore). Now, at the third stage of the demographic transition, and experiencing a slowing growth rate due to constant low mortality and rapidly declining fertility, India has 17.5% of the world's population. As per the latest WPP, India will reach 150 crore by 2030 and 166 crore by 2050.

### A sea change

In its 75-year journey since Independence, the country has seen a sea change in its demographic structure. In the 1960s, India had a population growth rate of over 2%. At the current rate of growth, this is expected to fall to 1% by 2025. However, there is a long way to go for the country to achieve stability in population. This is expected to be achieved no later than 2064 and is projected to be at 170 crore (as mentioned in WPP 2022).

Last year, India reached a significant demographic milestone as, for the first time, its total fertility rate (TFR) slipped to two, below the replacement level fertility (2.1 children per woman), as per the National Family Health Survey. However, even after reaching the replacement level of fertility,



the population will continue to grow for three to four decades owing to the population momentum (large cohorts of women in their reproductive age groups). Post-Independence, in the 1950s, India had a TFR of six. Several States have reached a TFR of two except for Bihar, Uttar Pradesh, Jharkhand, Manipur and Meghalaya. All these States face bottlenecks in achieving a low TFR. These include high illiteracy levels, rampant child marriage, high levels of under-five mortality rates, a low workforce participation of women, and low contraceptive usage compared to other States. A majority of women in these States do not have much of an economic or decisive say in their lives. Without ameliorating the status of women in society (quality of life), only lopsided development is achievable.

### **Demographic dividend**

A larger population is perceived to mean greater human capital, higher economic growth and improved standards of living. In the last seven decades, the share of the working age population has grown from 50% to 65%, resulting in a remarkable decline in the dependency ratio (number of children and elderly persons per working age population). As in the WPP 2022, India will have one of the largest workforces globally, i.e., in the next 25 years, one in five working-age group persons will be living in India. This working-age bulge will keep growing till the mid-2050s, and India must make use of it. However, there are several obstacles to harnessing this demographic dividend. India's labour force is constrained by the absence of women from the workforce; only a fourth of women are employed. The quality of educational attainments is not up to the mark, and the country's workforce badly lacks the basic skills required for the modernised job market. Having the largest population with one of the world's lowest employment rates is another enormous hurdle in reaping the 'demographic dividend'.

Another demographic concern of independent India is the male-dominant sex ratio. In 1951, the country had a sex ratio of 946 females per 1,000 males. After aggressively withstanding the hurdles that stopped the betterment of sex ratios such as a preference for sons and sex-selective abortions, the nation, for the first time, began witnessing a slightly improving sex ratio from 1981. In 2011, the sex ratio was 943 females per 1,000 males; by 2022, it is expected to be approximately 950 females per 1,000 males. It is a shame that one in three girls missing globally due to sex selection (both pre-and post-natal), is from India — 46 million of the total 142 million missing girls. Improvement in sex ratio should be a priority as some communities face severe challenges from a marriage squeeze (an imbalance between the number of men and women available to marry in a specific society) and eventual bride purchase.

Life expectancy at birth, a summary indicator of overall public health achievements, saw a remarkable recovery graph from 32 years in 1947 to 70 years in 2019. It is welcome to see how several mortality indicators have improved in the last seven decades. The infant mortality rate declined from 133 in 1951 (for the big States) to 27 in 2020. The under-five mortality rate fell from 250 to 41, and the maternal mortality ratio dropped from 2,000 in the 1940s to 103 in 2019. Every other woman in the reproductive age group in India is anaemic, and every third child below five is stunted. India stands 101 out of 116 nations in the Global Hunger Index; this is pretty daunting for a country which has one of the most extensive welfare programmes for food security through the Public Distribution System and the Midday Meals Scheme.

### **Serious health risks**

The disease pattern in the country has also seen a tremendous shift in these 75 years: while India was fighting communicable diseases post-Independence, there has been a transition towards non-





communicable diseases (NCDs), the cause of more than 62% of total deaths. India is a global disease burden leader as the share of NCDs has almost doubled since the 1990s, which is the primary reason for worry. India is home to over eight crore people with diabetes. Further, more than a quarter of global deaths due to air pollution occur in India alone. With an increasingly ageing population in the grip of rising NCDs, India faces a serious health risk in the decades ahead. In contrast, India's health-care infrastructure is highly inadequate and inefficient. Additionally, India's public health financing is low, varying between 1% and 1.5% of GDP, which is among the lowest percentages in the world.

India is called a young nation, with 50% of its population below 25 years of age. But the share of India's elderly population is now increasing and is expected to be 12% by 2050. After 2050, the elderly population will increase sharply. So, advance investments in the development of a robust social, financial and healthcare support system for old people is the need of the hour. The focus of action should be on extensive investment in human capital, on older adults living with dignity, and on healthy population ageing. We should be prepared with suitable infrastructure, conducive social welfare schemes and massive investment in quality education and health. The focus should not be on population control; we do not have such a severe problem now. Instead, an augmentation of the quality of life should be the priority.

#### INDIAN VIRTUAL HERBARIUM, BIGGEST DATABASE OF COUNTRY'S FLORA, IS A GLOBAL HIT

With details of about one lakh plant specimens, the Indian Virtual Herbarium, the biggest virtual database of flora in the country, is generating a lot of interest and turning out to be an eye-catching endeavour. While herbarium specimens are considered important tools for plant taxonomy, conservation, habitat loss and even climate change, Prime Minister Narendra Modi has recently described the Indian Virtual Herbarium as an example of how digital tools can help us connect to our roots.

Developed by scientists of the Botanical Survey of India (BSI), the herbarium was inaugurated by Union Minister of Environment Forest and Climate Change Bhupendra Yadav in Kolkata on July 1. Since then, the portal [ivh.bsi.gov.in](http://ivh.bsi.gov.in) has had nearly two lakh hits from 55 countries.

Each record in the digital herbarium includes an image of the preserved plant specimen, scientific name, collection locality, and collection date, collector name, and barcode number. The digital herbarium includes features to extract the data State-wise, and users can search plants of their own States, which will help them identify regional plants and in building regional checklists.

The portal includes about one lakh images of herbarium specimens. BSI Director A.A. Mao said that by 2022-end, the number of digitised species will increase to two lakh.

"By 2024, we plan to provide a platform to all the herbaria in the country so that they can display their herbarium collection on the platform," Dr. Mao said.

Scientists say that there are approximately three million plant specimens in the country which are with different herbaria located at zonal centres of the BSI and at the Central National Herbarium at Acharya Jagadish Chandra Bose Indian Botanic Garden at Howrah in West Bengal.

"Work on the digitisation of the specimens started in 2019, and most of the digitisation has been done by the BSI. About 52% of our type specimens are from foreign nations and collected from 82 countries of the world during the British-era," Kumar Avinash Bharati, scientist, BSI said.



The Indian Virtual Herbarium is also deeply linked with the botanical history of the country. The portal provides most valuable historical collections of botanists like William Roxburgh, Nathaniel Wallich and Joseph Dalton Hooker, considered the founding fathers of botany in India.

The digital herbarium has some of the oldest botanical specimens dating as early as 1696. *Cyperus procerus* was collected between June 15 and 20, 1696, near Chennai. The oldest type specimen *Lepidagathis scariosa* was collected in 1817 by Robert Wight. Type specimens are those collections that help in new discoveries and are considered of great significance by botanists and taxonomists. Researchers need to examine the types of the names in order to confirm their identities. As a priority, the Indian Virtual Herbarium has digitised information with images of 29,615 type specimens on its platform.

## WHAT IS LUMPY SKIN DISEASE, THE VIRAL INFECTION KILLING CATTLE IN GUJARAT, RAJASTHAN

Over the last few weeks, nearly 3,000 cattle have died in Rajasthan and Gujarat due to a viral infection called the Lumpy Skin Disease (LSD) that has spread across the states. Gujarat Chief Minister Bhupendra Patel visited the affected areas in Kutch to review the situation on Tuesday (August 3).

At the same time, Bhavya Verma, District Development Officer of Kutch, told The Indian Express that the rate of daily infections has started stabilising of late, and the region was “past the peak of the surge of LSD”.

On July 27, the Gujarat government banned the transport of livestock out of 14 affected districts. Around 11 lakh cattle have been vaccinated against the disease, and the National Dairy Development Board has supplied 28 lakh doses of goat pox vaccine to Gujarat, Rajasthan and Punjab, bought from a private entity called Hester Biosciences. A toll-free helpline – 1962 – has also been activated to guide cattle-herders and dairy farmers to tackle the disease.

### What is the Lumpy Skin Disease?

According to a report by GAVI, the Global Alliance for Vaccines and Immunisation, the Lumpy Skin Disease (LSD) disease is caused by a virus called the Capripoxvirus and is “an emerging threat to livestock worldwide”. It is genetically related to the goatpox and sheeppox virus family.

LSD infects cattle and water buffalo mainly through vectors such as blood-feeding insects. Signs of infection include the appearance of circular, firm nodes on the animal’s hide or skin that look similar to lumps.

Infected animals immediately start losing weight and may have fever and lesions in the mouth, along with a reduced milk yield. Other symptoms include excessive nasal and salivary secretion. Pregnant cows and buffaloes often suffer miscarriage and in some cases, diseased animals can die due to it as well.

### Have such outbreaks occurred earlier; and are humans at risk?

This is not the first time LSD has been detected in India. The disease has been endemic in most African countries, and since 2012 it has spread rapidly through the Middle East, Southeast Europe and West and Central Asia. Since 2019, several outbreaks of LSD have been reported in Asia. In May this year, Pakistan’s Punjab also reported the deaths of over 300 cows due to LSD.



In September 2020, a strain of the virus was discovered in Maharashtra. Gujarat too has reported cases over the last few years sporadically, but currently, the point of concern is the number of deaths being reported, and whether vaccination catches up to the rate at which the disease is spreading. According to the World Organisation for Animal Health (WOAH), of which India is a member, mortality rates of 1 to 5 per cent are considered usual. The disease is not zoonotic, meaning it does not spread from animals to humans, and humans cannot get infected with it.

While the virus does not spread to humans, “milk produced by an infected animal will be fit for human consumption after boiling or pasteurisation as these processes will kill the viruses, if any, in the milk”, said Prof J B Kathiriya, Assistant Professor with the department of veterinary public health and epidemiology of Kamdhenu University’s College of Veterinary Science and Animal Husbandry in Junagadh.

#### **How can the spread of the disease be prevented?**

Successful control and eradication of LSD relies on “early detection...followed by a rapid and widespread vaccination campaign”, as per the WOAH. Once an animal has recovered, it is well protected and cannot be the source of infection for other animals.

In his interview with The Indian Express, Prof J B Kathiriya, also spoke about the measures to protest against the viral infection. He said: “The first thing is, they should sanitise cattle-sheds by eliminating vectors through application of insecticides and spraying disinfectant chemicals. They should isolate the infected cattle immediately from the healthy stock and contact the nearest veterinarian for treatment of the infected animal. This is necessary as otherwise the virus may prove fatal.”

“Secondly, they should report the outbreak to the state government so that the rest of the healthy herd can be vaccinated using goat pox vaccine,” said Prof Kathiriya. He added that cattle with healthy immune systems will recover from the disease in some days.

Another challenge is the disposal of the dead animals as improper handling of the carcasses can cause health and sanitation issues. Proper disposal of the carcasses can include incineration or burning of the bodies at high temperatures, along with disinfection of premises, as per the WOAH.

#### **HOW THE MAIDEN FLIGHT OF ISRO’S SSLV WENT AWRY**

The story so far: On August 7, ISRO got ready for the first developmental flight of the SSLV-D1/EOS-2 mission. The launch took place from the Satish Dhawan Space Centre at Sriharikota. The Small Satellite Launch Vehicle (SSLV) D1/EOS-2 mission, was carrying two satellites — the Earth Observation Satellite-2 (EOS-2) which weighed about 135 kg and AzadiSAT which weighed about eight kg. The mission aimed to place the EOS-2 in a circular low-Earth orbit at a height of about 350 km above the Equator and inclined at an angle of 37 degrees. The initial part of the story was successful with the launch vehicle operating smoothly. However, the mission failed to place the satellites in their required orbits, and the satellites, as they were already detached from the launch vehicle, were lost.

#### **What was the purpose of the SSLV-D1/EOS-2 mission?**

The purpose of this mission was to place the two satellites in circular low-Earth orbits at a height of about 350 km above the Equator. The larger one, the EOS-2 which was designed and developed by ISRO, offered advanced optical remote sensing operations. It would have operated in the



infrared region and could have served many purposes, from imaging for climate studies to simply keeping an eye on Earth.

AzadiSAT, on the other hand, was a collective of 75 tiny payloads weighing around 50 grams each, which were integrated by students. It carried tiny experiments which would have measured the ionising radiation in its orbit and also a transponder which worked in the ham radio frequency to enable amateur operators to access it.

#### **Which part of the mission succeeded and where did it fail?**

The SSLV was composed of three stages powered by solid fuels and these three performed their function as planned. However, when it came to the stage when the satellites had to be set in orbit, there was a glitch which resulted in the satellites being lost forever. With a degree of openness that is unprecedented in ISRO, it was announced that there was a malfunctioning of a sensor which resulted in placing the satellites in an elliptical orbit, rather than a circular orbit. The ellipse or oval shape of the elliptical orbit is elongated in one direction and compressed in another (the so-called major and minor axes, which are like two radii of the ellipse). The shortest height above the Earth of this oval orbit was only about 76 km.

#### **Why were the satellites lost?**

If the closest distance to the Earth is only 76 km, as it happened this time, there is an atmospheric drag experienced by the object at that height. Thereafter, unless adequate thrust is applied to overcome the drag, it will lose height and fall towards the Earth because of gravity and may eventually burn up due to friction.

#### **What went wrong with the launch?**

Today rocket technology has progressed to such a stage that even if the course of the rocket is altering from its planned course, there will be sensors that feed back this information to a system. This will immediately trigger a course correction which will restore the trajectory of the rocket. There are many sensors as well as a built-in redundancy. That is, even if one or two sensors fail, there will be others that take over and effect the course correction. In the present case, the announcement was that “failure of a logic to identify a sensor failure and go for a salvage action caused the deviation.” This could possibly imply that either redundancy was not built in, which is highly unlikely, or perhaps that it was built in but did not kick off due to a technical glitch.

#### **Why do we need to develop an SSLV when we have successfully used PSLV and GSLV?**

The PSLV (Polar Satellite Launch Vehicle) and GSLV (Geosynchronous Satellite Launch Vehicle) are quite powerful and can carry huge loads. To place an Earth Orbiting Satellite in a low Earth orbit, one does not need such power horses. The SSLV can easily carry small-to-medium loads from 10 kg to 500 kg. It is less expensive. The three stages being powered by solid fuel is another advantage. Solid fuel is easier to handle, whereas handling the liquid propellants used in the PSLV and GSLV is more complex.

#### **What is the difference between circular and elliptical orbits?**

Mostly objects such as satellites and spacecrafts are put in elliptical orbits only temporarily. They are then either pushed up to circular orbits at a greater height or the acceleration is increased until the trajectory changes from an ellipse to a hyperbola and the spacecraft escapes the gravity





of the Earth in order to move further into space — for example, to the Moon or Mars or further away.

Satellites that orbit the Earth are mostly placed in circular orbits. One reason is that if the satellite is used for imaging the Earth, it is easier if it has a fixed distance from the Earth. If the distance keeps changing as in an elliptical orbit, keeping the cameras focussed can become complicated.

## INDIA BEGINS COOPERATION WITH COMBINED MARITIME FORCES

Last month, India formally commenced cooperation with the Bahrain-based multilateral partnership, Combined Maritime Forces (CMF). However, the modalities of the exact nature of cooperation are being worked out, according to official sources.

At the India-U.S. 2+2 in April, India had announced that it would join the CMF as an Associate Partner, which Defence Minister Rajnath Singh had then said would strengthen cooperation in regional security in the western Indian Ocean.

Joining the CMF is the latest in a series of multilateral engagements by the Indian Navy as part of India's widening military diplomacy. The Indian Navy has a Liaison Officer posted at the U.S. Central Command (CENTCOM) in Bahrain who will also function as the point person for cooperation with the CMF, officials stated.

The Combined Maritime Forces is a multinational naval partnership to promote security, stability and prosperity across approximately 3.2 million square miles of international waters, which encompass some of the world's most important shipping lanes.

### **34 members grouping**

The 34-nation grouping is commanded by a U.S. Navy Vice Admiral, who also serves as Commander U.S. Naval Forces CENTCOM and U.S. Fifth Fleet. All three commands are co-located at U.S. Naval Support Activity Bahrain.

In the immediate neighbourhood, Pakistan is a full member of Combined Maritime Forces. It comprises three task forces: CTF 150 (maritime security and counter-terrorism), CTF 151 (counter piracy) and CTF 152 (Arabian Gulf security and cooperation).

As per CMF's website, it is a flexible organisation and members are not bound by either a political or military mandate. "Contributions can vary from the provision of a liaison officer at CMF HQ in Bahrain to the supply of warships or support vessels in task forces, and maritime reconnaissance aircraft based on land," it stated. We can also call on warships not explicitly assigned to CMF to give associated support, which is assistance they can offer if they have the time and capacity to do so whilst undertaking national tasking, the description on the website stated.

Under this framework, India has in the past cooperated with CMF on various occasions. For instance, the Combined Maritime Forces's CTF 151 has coordinated with Indian and Chinese warships deployed on anti-piracy duties to patrol the Maritime Security Transit Corridor.



## FAIR AND SQUARE

The 44th edition of the Chess Olympiad, which concluded at the historical town of Mamallapuram near Chennai on Tuesday, will be talked about for a long time, for all the right reasons. It was originally slated to be held in Russia in 2020, but the coronavirus pandemic forced a postponement. Then, Russia's invasion of Ukraine prompted the world chess governing body, FIDE, to look for a new venue for what is the game's most prestigious and largest team event. Chennai was chosen as the host in March but the visitors to the Olympiad — there were thousands of them every day — would have been surprised to learn that the event, featuring more than 1,700 participants from 186 countries, was being staged at such a short notice.

## SHARED HISTORY

The Commonwealth Games (CWG), alluding to a happily ever-after between England and its former colonies, may have its legacy issues. And in terms of the competitive yardstick, with the obvious absence of the United States of America, Russia and China, the CWG is considered a notch below the Olympics and the Asian Games. Yet, the CWG has a certain value in being a multi-nation quadrennial event that pits a disparate group of countries split by continents and fused by a shared past linked to the British Empire. It offers athletes one more shot at glory besides inspiring their fans to pursue sport with added vigour. In the latest edition that concluded at Birmingham on Monday, India with a medal haul of 61, inclusive of 22 golds, was placed fourth while Australia, host England and Canada led the charts. With shooting excluded from the CWG, India lost out on an additional yield.



# DreamIAS



## BUSINESS & ECONOMICS

### THE UPROAR OVER THE ELECTRICITY (AMENDMENT) BILL, 2022

The story so far: Ignoring the objections of the Opposition, the Samyukt Kisan Morcha (SKM) and the trade unions, the Union Power Ministry introduced the Electricity (Amendment) Bill, 2022 in Lok Sabha on August 8. Union Power Minister R.K. Singh said at the stage of introduction that the Bill could be moved to the Energy Standing Committee of Parliament for broader consultations. "My simple submission is that this entire matter will be discussed in the Standing Committee and the Standing Committee has representatives from all the parties," Mr. Singh said. The Opposition questioned the introduction of the Bill. They alleged that the Centre is breaching the promise given to SKM that the Bill will not be brought to Parliament. The Opposition MPs said the Bill is not just anti-farmer, but also anti-Constitutional and against the interest of States. The basis of their argument was that the Bill may lead to ending subsidies for farmers and poor consumers.

#### What is the history of the Bill?

The Electricity Bill was brought for the first time and passed in Parliament in 2003, when A. B. Vajpayee was the Prime Minister. The intention was to consolidate the laws relating to generation, transmission, distribution, trading and use of electricity. The Act also offered to protect the interest of consumers and supply of electricity to all areas, rationalisation of electricity tariff, transparent policies regarding subsidies etc. The Act resulted in privatisation of distributing companies. It was amended in 2007 by the UPA Government, apparently under pressure from the Left parties. The provisions for "cross subsidy" — ensuring subsidy to poor households was added to the Bill in 2007. There were attempts to amend the Bill further in 2014, 2017, 2018, 2020 and 2021. While the 2014 Bill was cleared by the Standing Committee on Energy, it could not be passed in the House as the Centre wanted to revise it. None of the other draft Bills came to Parliament as the Centre was not satisfied with the primary response it received after consultations with stakeholders. All of those Bills remained in their draft form.

#### Why is there opposition to the Bill?

The opposition to the Bill is primarily from farmers' groups as they fear that the Bill will lead to stopping subsidies and that power distribution will thereafter be under the control of private companies. The workers in the power sector also oppose the Bill citing that privatisation of distribution companies and generating units will result in job losses. When the Central trade unions started a campaign against the Act, the SKM pledged support. The Opposition parties questioned the Bill on federalist principles. RSP MP N. K. Premachandran said in the House that power or electricity is a subject which comes under the Concurrent List of the Constitution, and that the Centre should have consulted the States before bringing the Bill. Congress MP Manish Tewari said the Bill paves way for privatisation of profits and the nationalisation of losses. DMK's T.R. Baalu asked what will happen to poor farmers who are getting subsidised power in States like Tamil Nadu.

#### What are the main amendments to the Act?

Compared to the drafts of 2020 and 2021, the Electricity Act (Amendment) Bill of 2022 has a number of changes. The main change among them could be the proposal for the Centre's intervention in the area of power distribution, a domain under the State governments. Such provisions can be seen in clauses 5, 11, 12, 13, 15 and 23 of the Bill. Clause 5 amends Section 14



of the parent Act that deals with the criteria for electricity distributors. The amendment empowers the Central Government to prescribe the criteria.

Another clause that causes worry for those who oppose the Bill is Clause 11, which seeks to amend section 42 of the principal Act to facilitate operation of multiple distribution licensees in the same area and to avoid parallel network and optimise usage of the distribution network. Trinamool Congress MP Saugata Roy said such a provision will create a situation similar to the telecom sector where monopoly companies will destroy the public sector and smaller networks.

Similarly, Clause 13 seeks to amend section 60 of the principal Act to enable management of power purchase and cross subsidy in case of multiple distribution licensees in the same area of supply. It says in case of issuance of licence to more than one distribution licensee in an area of supply, the State Government shall set up a cross subsidy balancing fund which shall be managed by a government company.

#### **What lies ahead?**

The trade unions in the power sector held a one-day strike against the Bill. They are also discussing the possibilities for an indefinite strike. The SKM is also stepping up its agitations. The Energy Standing Committee will soon start its deliberations on the Bill. The panel is currently headed by senior JD(U) MP Rajiv Ranjan Singh Alias Lalan Singh. JD(U) called off its alliance with the BJP on Tuesday. Though the BJP can claim a majority in the committee, the chairman's stand will be important when Bills like this are taken up for discussion.

### STATES HOLDING UP RESULTS OF ECONOMIC CENSUS: CENTRE

The Centre has blamed the States for a prolonged delay in releasing the findings of the Seventh Economic Census, a critical compendium of formal and informal non-farm enterprises operating across the country, in a submission to the Parliament's Standing Committee on Finance.

The committee, chaired by BJP MP Jayant Sinha, has rapped the Ministry of Statistics and Programme Implementation for the second time in five months over 'a growing delay' in releasing the findings of Economic Census (EC), carried out between 2019 and 2021, rendering some of the data 'outdated'.

Responding to a recommendation made by the committee in March to 'release the EC without any further delay lest the data becomes infructuous', the Ministry has attributed its inaction to the lack of requisite nods from States and Union Territories (UTs) for the provisional results.

Conducted every five years, the EC, which also captures the employment creation by each firm, their ownership pattern and sources of finance at a granular level, was last carried out in 2013-14.

#### **Concerted efforts**

Field work for the Seventh EC, which had deployed IT-enabled tools for the first time to facilitate real-time data analytics, had begun in July 2019.

The availability of digitised data, as opposed to paper-based canvassing in earlier ECs, was expected to lead to quick finalisation and dissemination of results.





“The approval of provisional results of 7th EC at State level is the mandate of State Level Coordination Committee constituted under the chairpersonship of the Chief Secretary of State/UTs,” the Ministry informed the committee as per its report tabled last week.

While the Ministry said it was making ‘concerted efforts’ to coordinate with State governments to convene these meetings early and pave the way for the results to be released, it concluded by stating: “However, approvals of the States/UTs are not forthcoming.”

The parliamentary panel has responded sternly to what it termed a ‘routine reply’ and hauled up the Statistics Ministry for having ‘now sought to shift the onus on the States and UTs’ for holding up the provisional results of the census.

“The Ministry has to squarely assume responsibility in this regard, as it is being conducted by them as a central sector scheme. It is high time that the Ministry should expedite the process of enumeration and produce reliable data publicly,” the panel commented.

The latest EC is expected to capture the changes in India’s economic landscape since the implementation of policy shifts such as demonetisation, the Goods and Services Tax and paring of corporate taxes.

## THE FIGHT FOR FISCAL AUTONOMY

In a recent debate between Union Finance Minister Nirmala Sitharaman and Opposition MPs on price rise, Ms. Sitharaman said the States should do more, ignoring the fact that the reduced fiscal autonomy of the States gives them little leeway to do much. Similarly, the increasing reliance of the Union government on indirect taxes such as the GST has directly contributed to price rise and inequality. But despite reduced fiscal autonomy, States such as Tamil Nadu and Kerala have contained price rise and inflation through targeted interventions.

### Growing inequality

Adam Smith had argued that taxation per se is not bad, but should follow the principles of fairness. Fairness, in taxation, should be compatible with taxpayers’ conditions, including their ability to pay in line with their personal and family needs. However, the Union government’s increasing dependence on indirect taxes has removed any ‘fairness’ in taxation. The share of indirect taxes of the gross tax revenue in FY2019 increased by up to 50% compared to 43% in FY2011. Compare this with the OECD countries, where indirect taxes on average do not contribute to more than 33% of their tax revenue. Indirect taxes are regressive because they tax both the rich and the poor equally.

The poor get taxed a higher proportion of their income compared to the rich. For example, Indians on average spend 22% of their income on fuel, the highest in the world. Also, Union tax on diesel has increased by 800% since 2014, which, after recent reductions, stands at 300%. While indirect taxes have increased, direct taxes such as corporate tax have been reduced from 35% to 22%, leading to a loss of about ₹2 lakh crore to the exchequer. This over-reliance on indirect taxes not only hinders growth by thwarting demand, but can also lead to high inflation and high inequality, which again inhibit growth.

The reason for high inflation in India lies in the extremely high CPI index for food (over 15% in the recent past). Instead of making efforts to lower food prices, the Union government, via GST, increased taxation on basic food items such as rice and milk.



It is not a mere coincidence that India's increasing reliance on indirect taxes has coincided with rising inequality and lower growth. Over recent years, wealth has remained concentrated in the top echelons of society. According to the World Inequality Report 2022 report, the top 1% of India's richest held 22% of the total national income as of 2021 and the top 10% owned 57% of the income. The report also showed that India is one of the most unequal countries in the world. Furthermore, the World Poverty Clock identifies India as home to the second highest number of extremely poor people.

Inflation, and predominantly rural inflation, has touched double digits in some States. Inflation is based on weighted average of components such as transport and food, which are given a weightage ranging from 6% to 10% basis points.

But States require fiscal autonomy to implement these programmes. The share of cesses and surcharges in the gross tax revenue of the Union government has nearly doubled between 2011-12 and 2020-21. Such continuous erosion of fiscal autonomy does not bode well for India's federal structure and will only thwart the growth of developed States. The Union government should urgently initiate a course correction on its taxation policy and fiscal autonomy.

#### TO BOOST SPENDING, CENTRE RELEASES ₹1.16 LAKH CR. TO STATES

The Centre on Wednesday released over ₹1.16 lakh crore to the States, equivalent to two monthly instalments of tax devolution, to help front-load State governments' capital spending abilities in this financial year.

Coming soon after the expiry of the assured Goods and Services Tax (GST) compensation to States from this July, economists expect the move to give the States twice the monthly share of net proceeds of Union taxes and duties for August to bolster their cash flows and nudge them into planning and executing capital expenditure (capex) outlays.

The development assumes significance as some Chief Ministers raised concerns about their dwindling resources and sought more funds from the Centre through extension of the GST compensation period and a higher share in the divisible pool of taxes, at NITI Aayog's Governing Council meeting chaired by Prime Minister Narendra Modi on August 7.

As against a "normal monthly devolution" of ₹58,332.86 crore, the Finance Ministry said ₹1,16,665.75 crore had been released "in line with the commitment of the Government of India to strengthen the hands of States to accelerate their capital and developmental expenditure".

In 2021-22, a large part of the upside in tax devolution was paid out to States in the fourth quarter of the year, which ended up reducing State government borrowings for that period but did not translate to higher spending.

Rating agency ICRA anticipates the Central tax devolution to be "as large as" ₹9.3 lakh crore this year, compared to the ₹8.2 lakh crore estimated in the Budget, on the back of higher non-excise tax revenues. It estimated that a total of ₹3.18 lakh crore has been devolved to States in the first five months of this year, about 39% of Budget estimates.

On May 31, the Centre released GST compensation dues of about ₹87,000 crore to the States for April and May, even though GST compensation cess accruals at the time were just ₹25,000 crore.

The Finance Ministry had said that this was also aimed at assisting the States in managing their resources and ensuring that their programmes, especially the expenditure on capital, is carried out successfully during the financial year.

The States are now owed ₹35,266 crore on account of GST compensation for June 2022, the last month for which the States were promised assured revenues as part of the compact to transition to the GST regime in 2017.

The Finance Ministry has said those dues will be paid from collections of the GST compensation cess, whose levy has been extended till March 31, 2026.



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## WHAT RBI'S SURVEYS TELL ABOUT INDIA'S ECONOMY

As far as the Indian economy is concerned, there were two big news developments last week.

First, the government released India's trade data for July. Second, the RBI unveiled its latest monetary policy review as well as seven surveys that help it ascertain how the economy is doing.

### Trade Deficit

The trade data details what goods (only goods, and not services) India imported and exported in July. It presents this in value terms (in Indian rupees or US dollars).

Many of you might recall how towards the end of March this year the government had celebrated India's exports breaching the \$400 billion mark — a record — in the 2021-22 financial year. The government had asserted that this jump in exports was a result of "a detailed strategy", which targeted specific countries for specific exports and made the necessary "course correction."

ExplainSpeaking dealt with this topic and explained what the \$400 billion exports record hid.

In short, ExplainSpeaking had alerted that "between the pincer effect of lower (global) growth and higher inflation (which reduces people's purchasing power), the global demand for Indian goods is most likely to suffer in the coming year."

Here's what has happened in the four months since then. Barring April, in each of the last three months — May, June and July — India's trade deficit (that is, the excess of imports over exports) hit an all-time high in each passing month

The trade deficit has risen so sharply that just in the first four months of the current financial year, it is already equal to the full-year trade deficit of 2020-21 and more than half of the trade deficit in 2021-22

Many analysts now expect India's Current Account Deficit (CAD) to balloon from 1.2% of GDP in 2021-22 to around 4% (of the GDP) in 2022-23. This spike in the trade deficit has been one of the key reasons why the rupee has lost value against the US dollar

### RBI Monetary Policy Review

Since mid-May, when the Monetary Policy Committee (MPC) was forced to hike interest rates in an off-cycle meeting, the RBI has reprioritised its focus from boosting growth to containing inflation. Following in the same path, RBI raised the repo rate — the interest rate at which it lends money to the banking system — by 50 basis points (bps). Since May, repo rates have gone up by 140 bps (or 1.4 percentage points).

However, given the fact that RBI expects inflation to be 6.7% for the current financial year (April 2022 to March 2023), most analysts expect another 50 bps hike in the repo rate later in the year. At 5.4%, already the repo rate is at the pre-pandemic level. Another 50 basis points would take it close to 6%.

Since this is the base rate, expect borrowing rates of all kinds to go up by the same degree or more. Consumers will have to shell out more as EMIs for their home and car loans. Producers will have to pay more to borrow money for new investments. Understandably, these moves by the RBI will create a drag on India's economic recovery.





But this is the most curious bit in the RBI policy. RBI still expects India to grow at 7.2% in the current year. But this is the same GDP estimate that it had in April. At that time, RBI's inflation estimate for the current year was 4.5%. Now, it expects inflation to be 6.7%. Moreover, since April, repo rates have gone up by 140 bps, with another 50 to 60 bps in the offing.

The question is: How can the estimate for GDP growth rate not change when RBI's policy actions to bring down inflation will impede overall economic activity?

As such, don't be surprised if RBI revises downward the GDP growth rate projection in the coming months as the financial year winds down.

### **RBI's Surveys**

Speaking about the state of the Indian economy, the RBI also released the results of seven surveys that it conducts. Each of these surveys throws light on some aspect or the other of the Indian economy.

Here's a summary of what they are and what they found.

#### **1. Consumer Confidence Survey (CCS)**

The CCS asks people across 19 cities about their current perceptions (vis-à-vis a year ago) and one-year ahead expectations on the general economic situation, employment scenario, overall price situation and own income and spending. The latest round of the survey was conducted from July 07 to July 14, 2022, covering 6,083 responses. Based on the responses, the RBI comes up with two indices: the Current Situation Index (CSI) and the Future Expectations Index (FEI).

To read either index it is important to first understand that the value of 100 is the neutral level. An index below the 100 mark implies people are pessimistic and a value higher than 100 conveys optimism.

As the CCS chart shows, the CSI (red dotted line) has been recovering since falling to a historic low in July last year. However, despite the improvement, the CSI stays firmly in the negative territory — suggesting consumer confidence is still considerably adrift from the neutral territory.

The FEI is in the positive territory but even now it stays below the pre-pandemic levels.

#### **2. Inflation Expectations Survey (IES)**

This is another key survey for the RBI. It tracks people's expectations of inflation. The biggest worry during phases of rapid inflation is that if inflation is not controlled soon, it can lead to people getting into the habit of expecting high inflation; that, in turn, alters people's economic behaviour. Often central bank heads can be found saying they want to prevent people's inflation expectations from becoming "unanchored".

This survey provides an answer to whether that is happening in India or not.

As the IES charts show, households' inflation perception for the current period has moderated by 80 bps to 9.3 per cent in the latest survey round. "Their three months and one-year ahead median inflation expectations also declined by 50 bps and 60 bps, respectively, from the May 2022 round of the survey," finds the RBI.



### 3. OBICUS Survey

OBICUS stands for “Order Books, Inventories and Capacity Utilisation Survey”. This survey covered 765 manufacturing companies in an attempt to provide a snapshot of demand conditions in India’s manufacturing sector from January to March 2022.

The key variable here is Capacity Utilisation (CU) — shown in the blue line in the OBICUS chart. A low level of CU implies that manufacturing firms can meet the existing demand without needing to boost production. That, in turn, has negative implications for job creation and the chances for private sector investments in the economy.

Here again, the news is heartening. The CU is well above the pre-pandemic level — suggesting India’s aggregate demand is recovering steadily.

### 4. Industrial Outlook Survey (IOS)

Just like the CCS tries to suss out consumer confidence, this survey tries to track the sentiments of the businessmen and businesswomen. “The survey encapsulates qualitative assessment of the business climate by Indian manufacturing companies for Q1:2022-23 (April, May and June) and their expectations for Q2:2022-23 (July, August and September),” according to the RBI.

As the IOS chart shows, businesses were optimistic (above the 100 level) in Q1, although not as much as they were in the recent past. But, they do expect things to improve as the months roll by. This tallies with the steadily improving capacity utilisation from the OBICUS.

### 5. Services and Infrastructure Outlook Survey (SIOS)

Again, much like the CCS and IOS above, this survey does a qualitative assessment of how Indian companies in the services and infrastructure sectors view the current situation and the future prospects. This round of SIOS surveyed 758 companies on their assessment for Q1:2022-23 and expectations for Q2:2022-23. The questions were on parameters relating to demand conditions, price situations and other business conditions. As the SIOS charts 1 and 2 show, the companies in the services space are far more optimistic than the companies in the infrastructure sector.

But the important thing is that the net responses — that is, the difference between the percentage of respondents reporting optimism and those reporting pessimism — is positive for both sectors.

### 6. Bank Lending Survey (BLS)

This survey captures the mood — qualitative assessment and expectations — of major scheduled commercial banks (SCBs) on credit parameters (viz., loan demand and terms & conditions of loans) for major economic sectors.

The BLS found that the bankers’ assessment of loan demand in Q1: 2022-23 remained positive for all major sectors though the sentiments were somewhat toned down from the level reported in the previous quarter. Sentiments on overall loan demand in the second, third and fourth quarters also remained upbeat (see BLS chart).

### 7. Survey of Professional Forecasters (SPF)

Lastly, there is a survey of 42 professional forecasters (outside the RBI) on key macroeconomic indicators such as GDP growth rate and inflation rate in the current year and the next financial year.



India's real GDP is expected to grow by 7.1 per cent in 2022-23 — projections revised down by 10 basis points from the last survey round— and it is expected to grow by 6.3 per cent in 2023-24.

As shown in the SPF chart, it is noteworthy that while the highest probability is that GDP growth will range between 7%-7.4%, the second most probable outcome is that the growth rate will decelerate to 6.5%-6.9% range.

#### INFLATION TRIGGERED BY SUCCESSIVE SUPPLY-SIDE SHOCKS WITHIN LAST TWO YEARS OR SO IS DECLINING

Global food prices fell 8.6 per cent in July over the previous month. This was the steepest monthly decline for the UN Food and Agriculture Organisation's (FAO) benchmark price index since October 2008. What it hopefully suggests is an end to "peak inflation" triggered by successive supply-side shocks within the last two years or less. These include extreme weather events, Covid-19, war and export controls. The pandemic is no longer coming in the way of the movement of people and cargo. Most countries — notably Indonesia, the world's biggest palm oil supplier — have lifted or relaxed curbs on farm produce shipments. India has, wisely, not banned exports of cotton or rice, after doing so in wheat and sugar (by imposing a quantitative cap that has now been raised). As for war, the good news is the resumption of grain exports from Ukraine's Black Sea ports and Russia agreeing not to target ships in transit.

That leaves the fourth factor — climate shocks. They are here to stay. Take India, which last year registered five consecutive excess rainfall months from September to January. These not only resulted in inundation of the kharif crops at the time of their harvesting, but also impacted yields of the rabi mustard in flowering/pod development stage during January. Worse followed when temperatures suddenly spiked from mid-March, singeing the standing wheat and causing premature grain ripening. Things look better this time, at least so far. Monsoon rainfall was deficient in much of the country during June, but has recovered to notch up a cumulative surplus of 7.7 per cent as of August 10. Overall, kharif sowing has been satisfactory. More area under soyabean and cotton, plus the rains, should translate into improved feed and fodder availability for livestock and poultry. Acreage shortfalls in rice and pulses can be covered by surplus carryover stocks (especially of the former) and imports (for the latter). Also, rice is grown both during kharif and rabi, and in a wider geography than wheat.

On the whole, today's situation is far less grim than in March, after Russia's invasion of Ukraine and when the FAO's food price index hit an all-time high. Back home, if the monsoon delivers reasonably, as it has, in the remaining part of this month and the next, the benefits would flow to the ensuing rabi crop as well. The RBI will, then, have no reason really to further hike interest rates. Given that food items have a 45.86 per cent weight in the consumer price index, relief on this front is practically half the battle won.

#### WITH RBI MOVING TO RISING RATE CYCLE, BANKS HIKE RLLR

Several banks have raised their repo rate-linked lending rates (RLLR) after the Reserve Bank of India (RBI) on Friday increased the repo rate by 50 basis points (bps) to 5.40 per cent.

Public sector lenders including Bank of Baroda (BoB), Punjab National Bank (PNB), Union Bank of India, as well as private sector ICICI Bank on Saturday raised their RLLRs.



RLLR is linked to or is based on the repo rate and is revised every time the RBI changes policy rates. With the RBI moving into a rising rate cycle, banks too have started raising their lending rates, both externally benchmarked and marginal cost of funds-based (MCLR). Since April, the RBI has increased the repo rate by 140 bps in three tranches.

As the transmission of monetary policy takes place more effectively under the EBLR regime, banks are opting to switch to the system. As per RBI data, the share of loans under the EBLR-based system, for all banks, has increased to 39.2 per cent in December 2021 from 28.6 per cent in March.

The immediate increase in RLLR or EBLR by banks and a comparatively delayed increase in deposit rates augurs well for their margins. In addition to the RLLR, banks are also increasing their MCLR. ICICI Bank, PNB, Yes Bank and Bank of India also raised their MCLR by 10-15 bps before the RBI policy decision.

While banks revise RLLR whenever there is a change in repo rate, MCLR is revised by lenders every month. Other lenders like Housing Development Finance Corporation (HDFC) and LIC Housing Finance have also increased their retail prime lending rate (RPLR) on home loans.

#### SELF-REGULATION: DIVIDE AMONG BIG TECH FIRMS ON WAY FORWARD

There is a growing divide among internet companies on setting up a self-regulatory body — to address complaints by social media users — as an alternative to the Centre’s Grievance Appellate Committee (GAC).

Snap and Google oppose an industry proposal to create such a body. They have flagged concerns over the potential inability to legally challenge any final content moderation decisions of a self-governing body, in addition to the difference in the moderation policies of different platforms, many executives aware of these discussions told The Indian Express. Facebook and Twitter, however, are learnt to be in support of the body’s creation.

Social media companies, along with industry body Internet and Mobile Association of India (IAMAI), are currently chalking up the contours of a self-regulatory mechanism in response to the Ministry of Electronics and IT’s (MeitY’s) proposal to set up “government-appointed committees” to address complaints raised by users about social media companies’ content-moderation decisions.

In proposed amendments to the Information Technology Rules, MeitY has suggested setting up Grievance Appellate Committees (GACs), even though the Ministry said it is open to a self-regulatory body of social media companies to handle such issues.

In June, during a public consultation with stakeholders, Minister of State for Electronics and IT Rajeev Chandrashekar had said that the government will go ahead with the proposed appellate committees.

He had added that if the industry were to come up with a self-regulatory mechanism that worked for the government, the Ministry would “move to that.” During a closed-door meeting, Google is learnt to have expressed reservations about the current structure of the self-regulatory body which, in a draft policy, said that decisions passed by the body will be binding in nature. This is where the company’s concern stems from.





“Orders passed by the GAC can be challenged in court, whereas the scope for challenging a ‘binding’ order passed by a self-regulatory body is much lower,” a source said.

Another argument is that while having senior executives of all social media companies in the self-regulatory body could make it easy to reach a consensus, disagreements are also likely. “Different companies have their respective content moderation guidelines. What is acceptable for a certain firm may not be OK for the other because their community guidelines are different. So the real challenge for any self-regulatory body is to reach a consensus on content moderation decisions for all platforms,” an executive said.

In a statement, a Google spokesperson said: “We had a preliminary meeting and are engaging in active discussions with the industry as well as the Government. We are exploring all options and look forward to working with stakeholders to find the best possible solution.” Facebook declined to comment. Queries sent to Twitter, Snap and IAMAI remained unanswered.

An absence of consensus among social media companies could jeopardise its bargaining power with the government to allow a self-regulatory body instead of its proposed GACs. Industry bodies like the US-India Business Council and the Asia Internet Coalition which count major American tech firms as members, have opposed the formation of these government-appointed committees, questioning their effect on independence.

The IAMAI currently runs two self-regulatory bodies – the Digital Publisher Content Grievances Council (DPCGC) for online content streaming companies, and a body for edtech companies called India Edtech Consortium (IEC). Another self-regulatory body that was set up under the aegis of IAMAI, the Blockchain and Crypto Assets Council (BACC), which represented firms like CoinSwitch Kuber, WazirX, and CoinDCX, was dissolved last month due to regulatory uncertainty surrounding cryptocurrencies.

Senior government officials said that MeitY is expected to go ahead with the GACs in the final version of the IT Rules amendments as it is of the view that a self-regulatory body may not be inclusive of all companies and could end up “prioritising” a handful of the bigger social media firms like Facebook, Twitter and Google.

## GOVT'S OPEN NETWORK FOR DIGITAL COMMERCE, AND WHAT MICROSOFT JOINING IT MEANS

US firm Microsoft has become the first big tech company to join the Open Network for Digital Commerce (ONDC), a government-backed project which is aimed at enabling small merchants and mom-and-pop stores in parts of the country to access processes and technologies that are typically deployed by large e-commerce platforms such as Amazon and Flipkart.

The software giant intends to introduce social e-commerce — group buying experience — in the Indian market, which would include a shopping app for Indian consumers along with their social circle, harnessing the ONDC network to discover the best pricing among retailers and sellers.

### First, what is Open Network for Digital Commerce (ONDC)?

It is an initiative aimed at promoting open networks for all aspects of exchange of goods and services over digital or electronic networks. ONDC is to be based on open-sourced methodology, using open specifications and open network protocols independent of any specific platform. It is



being developed as a counter to the current duopoly in the Indian e-commerce market which is largely dictated by Amazon and Walmart-owned Flipkart.

In May this year, the Department for Promotion of Industry and Internal Trade (DPIIT) went live with a test run of ONDC in cities like Delhi-NCR, Bengaluru, Coimbatore, Bhopal, and Shillong where it plans to onboard 150 sellers.

#### **What does Microsoft joining ONDC mean, and who else is on board?**

Microsoft getting on board the the ONDC wagon means the project gets its first international marquee name ahead of its Bengaluru launch.

A number of participants are currently live on the ONDC network, offering a number of services in the e-commerce supply chain such as buying, selling and offering logistics services. Among those that are live are Paytm, which has joined the platform as a buyer, and Reliance-backed Dunzo, which is offering logistics services for hyperlocal deliveries.

Companies like Kotak, PhonePe, Zoho and Snapdeal are in the “advanced stage of development”, according to the ONDC website.

Axis Bank, HDFC Bank and Airtel have already initiated integration with the network.

According to some media reports, e-commerce giants Flipkart and Amazon are also considering joining the network.

#### **How does ONDC work?**

The ONDC platform lies in the middle of the interfaces hosting the buyers and the sellers. So far, the buyer side interface is being hosted by Paytm, whereas the seller side interface is being hosted by other players like GoFrugal, etc.

When a buyer searches for an item on the Paytm app, from where ONDC has gone live, the app will connect to the ONDC platform, which will connect it to seller side interfaces that will list all the companies from where you can buy the particular item.

On ONDC, there will be several other backend partners such as logistics service providers, enterprise resource planners, e-commerce store hosting service providers, etc.

#### **What are the challenges ONDC aims to address?**

An ONDC strategy paper published earlier this year has flagged the rising dominance of global players in India’s e-commerce ecosystem, pointing out that the large quantum of investment required to build competitors to the integrated solutions offered by the big players has become an entry barrier for digital marketplaces.

It also flagged the inability of marketplace sellers to move out of the platform ecosystem, given that the value created by these small players is stored with the larger platforms. With this in mind, ONDC aims to transform the marketplace ecosystem from an operator-driven platform-centric model to a facilitator-driven interoperable decentralised network.



### What does it mean for online buyers?

ONDC is being seen as the UPI-moment for the e-commerce market, and its whole claimed value proposition lies as “democratising” digital commerce, taking it away from the clutches of a handful of deep-pocketed companies, as is the case currently – a number of sellers can offer their goods and services on the network which could be accessed from different platforms, with the delivery and payments infrastructure being handled by different companies.

In theory, ONDC may enable more sellers to be digitally visible, which means that for online buyers, it could present increased options at a number of different price points.

One of the biggest criticisms of e-commerce giants globally has been that they have amassed critical data about users’ buying patterns, which gives them an idea about what products are in demand at any given point in time. There have been accusations made against companies like Amazon, in India and elsewhere, that it uses this data to launch similar products through an entity that it indirectly controls, usually at a price point regular sellers cannot match.

## HOW WILL THE 5G AUCTION IMPACT THE SECTOR?

The story so far: The auction of telecom spectrum, including bands for offering fifth generation (5G) technology services, concluded on Monday drawing record bids exceeding ₹1.50 lakh crore. Telecom Minister Ashwini Vaishnaw said 71% of the 72,098 MHz of spectrum on offer was sold. Reliance Jio emerged as the top bidder, staking claim for a period of 20 years to 24,740 MHz of spectrum. Bharti Airtel stood second with 19,867.8 MHz worth spectrum and Vodafone-Idea third with 6,228.4 MHz worth spectrum. The mop-up from the bids with respect to 5G airwaves was almost double in comparison to that of 4G last year. According to the telecom Minister, “Spectrum purchased is good enough to cover all circles in the country. [In the] coming two-three years, we will have good 5G coverage.” As per the Ministry, the roll-out of 5G services is likely to start by September/October.

### What did telecom service providers shop for?

Spectrum in three bands, namely, low (constituting of 600, 700, 800, 900, 1800, 2,100 and 2,500 MHz bands), mid (3,300 MHz) and high (26 GHz — 1 GHz equals 1000 Mhz) frequency bands were put up for auction.

Low-band spectrum is popular for providing wider coverage, however, the speed and latency might just be an incremental upgrade over 4G. Speed is subject to the proximity to the source. On the other hand, the high band spectrum can provide speeds of up to two Gbps but is unable to travel longer distances, at times, less than a mile. Additionally, signals from the low-band spectrum can travel through windows and walls which is not the case with the high-band.

The mid-band spectrum falls somewhere between the two. It can carry sizeable data over longer distances and maintain increased speeds.

The mid and the high-band garnered maximum attention at the auction with 76% and 72% of the available spectrum respectively sold. Bharti Airtel and Reliance Jio combined, staked claim to 87% of the total purchased spectrum in these two bands, strengthening their operational capability in the 5G market.



While making bids for spectrum, telcos take note of their existing financial position and priorities. Thus, not all spectrum on offer is acquired. For example, the 700 Mhz spectrum went unsold in 2016 and 2021. This time, Jio emerged as the sole entity to spend ₹39,270 crore on the 'premium band' known to improve indoor and rural coverage as well as possessing the ability to penetrate through walls and properties more effectively. Operators did not opt for this band previously because of their financial positions and high prices, focussing instead on alternate strategies. Thus, reflecting its financial health, Vodafone-Idea spent slightly above a quarter of the combined average spend of their compatriots. It also focussed on the mid and high-band spectrum.

The latest entrant to the sector, Adani Data Networks, paid ₹212 crore to acquire 400 MHz in the high band. The company had earlier made it clear that it was "not to be in the consumer mobility space." Instead, it would provide private network solutions with enhanced cyber security in its airport, ports and logistics, power generations, transmission, distribution and various manufacturing operations.

The 600 Mhz category did not find any takers, which as per the Ministry, was because the device ecosystem for the band was not yet developed for mobile telephony. However, the band may become important in a few years, it stated.

#### **What will it be used for?**

"While the 3,300 MHz band will be crucial for 5G technology deployment going forward, the appetite for the 1,800 MHz band stems from the rising mobile broadband usage and thus the need for improving network capacity." ICRA's Vice President and sector head Ankit Jain told The Hindu. He added that the amount of spectrum put to auction was optimal as witnessed by the fact that apart from one circle in the 1,800 MHz band, spectrum was sold at the reserve price only. The high reserve prices caused some disquiet in the industry when the auction was cleared.

The fact that a significant share of the bids was at the reserve prices indicates the sense of competitiveness in the industry.

#### **What is the post-auction outlook for the industry?**

Telecommunications in India is a price-sensitive and competitive market. The sector is capital-intensive, and has to consistently invest in upgrading technologies and improving services. A tariff war initiated by the entry of new players in the previous decade, resulted in severe financial distress for companies. Therefore, the investment made towards 5G could potentially further stress the sector's debt position.

Manish Gupta, senior director at CRISIL Ratings, contended that with the latest spectrum purchase, the debt could rise to about ₹6.1 lakh crore. He said that the adoption of 5G services would hinge directly on the premium levied from 4G services. So, despite the two rounds of major tariff increases in December 2019 and November 2021, there could be another increase in rates (for 4G services) in the current fiscal. The ability of the sector to meet its financial obligations ought to improve in the next fiscal once the complete benefits of expected tariff increases and the 5G launch are realised.

#### **What upgrades are necessary for 5G implementation?**

The mass roll-out of 5G is likely to take some time. Mr. Gupta said the mass roll-out may happen only next fiscal as telcos need to first upgrade fiberisation. "The telcos are also required to launch





commercial services in at least one city of each circle by the end of the first year of acquiring the licence, as per roll-out obligations,” he observed.

#### **What about the debt situation?**

Notwithstanding the debt levels, ICRA pointed to the fact that the cash flow being generated from business was improving. The latest spectrum auction too would improve the sector’s operational viability by lowering the repayment burden. For the first time ever, there was no mandatory requirement to make any upfront payment. The payment for the spectrum could be made in 20 equal annual instalments in advance at the beginning of each year. This could potentially lower the operating costs for telcos, in turn, providing an opportunity to spur their respective ARPU (average revenue per user). “Thus, while the debt metrics for the industry might look stretched, the improving cash-flow position with improvement in ARPU levels translates into a ‘stable’ outlook for the industry,” Mr. Jain said.

5G, however, may not mean much for rural India, according to Mr. Jain, as operators would only opt for areas where they can generate adequate returns.

### **COMMON CHARGER FOR ALL DEVICES: WHAT GOVT WANTS, WHAT IT MEANS FOR INDUSTRY**

A common charger for your iPhone, your Android tablet and your Windows 11 laptop? That’s not quite possible yet, but this is what the future could look like. The Union Ministry of Consumer Affairs has written to industry and other concerned stakeholders, inviting them to brainstorm a plan for having one cable for charging all your devices.

#### **What is the reason behind the ministry’s push?**

The ministry’s move comes in the backdrop of the concept of LiFE — Lifestyle for the Environment — announced by the Prime Minister at the UN Climate Change Conference (CoP 26) held in Glasgow in November last year. Besides, the Union Cabinet has also approved India’s updated Nationally Determined Contribution (NDC). According to the NDC, India has committed to reducing the emission intensity of the GDP by 45% by 2030. In view of the country’s commitment to fight climate change, the ministry has taken a step in the direction to reduce electronic waste.

#### **What does the letter say?**

It has been observed that due to the incompatibility of charging ports between old and new devices, consumers are forced to buy a separate charger and cable every time they purchase a new gadget. Not only do consumers face inconvenience, this also adds to avoidable e-consumption, the letter says. Based on this rationale, the government wants to brainstorm the possibility of ending the redundancy of having multiple chargers in every household. The meeting will be held on August 17. The ministry has invited representatives of industry bodies and other stakeholders.

#### **Which players would be impacted if there is a rule for common chargers?**

If there was a directive for a common charger for all phones, laptops, earbuds, etc., as is being considered, then Apple would be the biggest player impacted, especially in the phones segment. The reason: Apple’s iPhone is still using the Lightning port for charging, and this requires a different cable compared to most other Android phones in the market. If you have an iPhone and a MacBook Air M1, you require two separate chargers. But if you have a new iPad and MacBook, you can



charge them both from the same Type-C cable. Also while Apple has reintroduced its famed MagSafe charging on the new M2-powered MacBooks, it has continued support for Type-C charging. So regular Type-C charging can be used to keep these going as well.

Apple's Lightning port is in stark contrast to devices from players like Samsung, Xiaomi, Oppo, Vivo, and Realme — the top five brands in the Indian smartphone market. All five have switched to phones with Type-C charging ports. Now, while the charging speeds supported on each device might be different, given that most have a Type-C port at the bottom, the chargers can be used interchangeably. In fact, brands such as Samsung have removed chargers and cables from their devices entirely in the name of environmental sustainability. The assumption is that people have older Type-C chargers lying around at home which can be used for the newer phones as well. While there are some older budget phones in the market with the micro-USB cable such as the basic Redmi or Realme series, these are mostly priced under Rs 10,000. The segment above Rs 10,000 has largely adopted the Type-C cable.

Some of Amazon's older Kindle ebooks such as those in the 10th gen — still being sold — also come with the older micro-USB charging ports. Still, the newer Kindle Paperwhite Signature has switched to the Type-C USB. Even in the truly wireless stereo (TWS) and Bluetooth headphone segment, most brands are offering Type-C charging. This holds true even for the most affordable budget segment earbuds in the market.

The directive could extend to laptops as well. Many laptops come with their own custom charging ports and cables as well. But brands like Asus, Lenovo, HP and Dell have also adopted Type-C charging and many of the Type-C ports on these devices can be used to charge the laptop as well. While custom port chargers in some laptops will ensure faster charging, a regular Type-C cable will also get the job done.

#### **Have other countries tried to pass similar laws or rules around chargers?**

This idea of 'one charger for all devices' is not new. It was also proposed by the European Union in June. The rationale again revolved around the problem of e-waste and that users have to buy multiple chargers. According to reports, the new requirements will only apply after the law is passed — and it is expected to take place this year. The EU plans to give a grace period of 24 months, once the law is passed, to phone manufacturers. This is supposed to give them enough time to make the switch. In the case of laptops, manufacturers will be given 40 months to adapt their devices to the new standards.

#### **Will the iPhone now come with Type-C USB charging?**

Apple switching the port on the iPhone is not entirely unexpected. It happened back in 2015 when Apple introduced the Lightning port. Also, with the iPad and MacBook already supporting Type-C charging, it might make for a better ecosystem fit for all key products to have a common port.

There have been talks about Apple making the switch to Type-C ports for the iPhones for a while now. It is not expected to take place this year, but if these rules are passed, Apple might well have to make the switch in 2023.



## LIFE & SCIENCE

### NEW RESEARCH: GIANT METEORITE IMPACTS CREATED CONTINENTS

A new Curtin University study has found the most robust evidence yet showing that Earth's continents were formed by giant meteorite impacts. The paper, 'Giant impacts and the origin and evolution of continents', was published in Nature on August 10.

Dr Tim Johnson from Curtin's School of Earth and Planetary Sciences, who is one of the study's authors, said: "By examining tiny crystals of the mineral zircon in rocks from the Pilbara Craton in Western Australia, which represents Earth's best-preserved remnant of ancient crust, we found evidence of these giant meteorite impacts."

These impacts were prevalent during the first billion years or so of the planet's history.

"Studying the composition of oxygen isotopes in these zircon crystals revealed a 'top-down' process starting with the melting of rocks near the surface and progressing deeper, consistent with the geological effect of giant meteorite impacts. Our research provides the first solid evidence that the processes that ultimately formed the continents began with giant meteorite impacts," Dr Johnson added.

He said that understanding the formation and ongoing evolution of the Earth's continents was crucial given that these landmasses host the majority of Earth's biomass, all humans and nearly all of the planet's important mineral deposits.

While the hypothesis has been there for decades, so far there was no solid evidence to back it.

The researchers now plan to test the findings from Western Australia on other ancient rocks and see if the model is more widely applicable.

### THE GREAT BARRIER REEF'S RECOVERY AND VULNERABILITY TO CLIMATE THREATS

The story so far: The highest levels of coral cover, within the past 36 years, has been recorded in the northern and central parts of Australia's Great Barrier Reef (GBR), according to the annual long-term monitoring report by the Australian Institute of Marine Science (AIMS). The researchers behind the report have warned, however, that this could be quickly reversed owing to rising global temperatures. This came after the reef experienced a mass coral bleaching event in March this year.

#### What are coral reefs?

Corals are marine invertebrates or animals which do not possess a spine. They are the largest living structures on the planet. Each coral is called a polyp and thousands of such polyps live together to form a colony, which grow when polyps multiply to make copies of themselves.

Corals are of two types — hard corals and soft corals. Hard corals extract calcium carbonate from seawater to build hard, white coral exoskeletons. Hard corals are in a way the engineers of reef ecosystems and measuring the extent of hard coral is a widely-accepted metric for measuring the condition of coral reefs. Soft corals attach themselves to such skeletons and older skeletons built by their ancestors. Soft corals also add their own skeletons to the hard structure over the years. These growing multiplying structures gradually form coral reefs.



Australia's Great Barrier Reef is the world's largest reef system stretching across 2,300 km and having nearly 3,000 individual reefs. It hosts 400 different types of coral, gives shelter to 1,500 species of fish and 4,000 types of mollusc. Coral reefs support over 25% of marine biodiversity even as they take up only 1% of the seafloor. The marine life supported by reefs further fuels global fishing industries. Besides, coral reef systems generate \$2.7 trillion in annual economic value through goods and service trade and tourism. In Australia, the Barrier Reef, in pre-COVID times, generated \$4.6 billion annually through tourism and employed over 60,000 people including divers and guides.

#### **What does the new report say?**

The annual long-term monitoring by AIMS began 36 years ago, and reefs are surveyed through in-water and aerial techniques. The current report surveyed 87 reefs in the GBR between August 2021 and May 2022. The report states that reef systems are resilient and capable of recovering after disturbances such as accumulated heat stress, cyclones, predatory attacks and so on, provided the frequency of such disturbances is low.

The new survey shows record levels of region-wide coral cover in the northern and central GBR since the first ever AIMS survey was done. Coral cover is measured by determining the increase in the cover of hard corals. The hard coral cover in northern GBR had reached 36% while that in the central region had reached 33%. Meanwhile, coral cover levels declined in the southern region from 38% in 2021 to 34% in 2022.

The record levels of recovery, the report showed, were fuelled largely by increases in the fast-growing *Acropora* corals, which are a dominant type in the GBR. Incidentally, these fast growing corals are also the most susceptible to environmental pressures such as rising temperatures, cyclones, pollution, crown-of-thorn starfish (COTs) attacks which prey on hard corals and so on. Also, behind the recent recovery in parts of the reef, are the low levels of acute stressors in the past 12 months — no tropical cyclones, lesser heat stress in 2020 and 2022 as opposed to 2016 and 2017, and a decrease in COTs outbreaks.

#### **Does this mean the reef is out of the woods?**

Besides predatory attacks and tropical cyclones, scientists say that the biggest threat to the health of the reef is climate change-induced heat stress, resulting in coral bleaching.

Corals share a symbiotic relationship with single-celled algae called zooxanthellae. The algae prepares food for corals through photosynthesis and also gives them their vibrant colouration. When exposed to conditions like heat stress, pollution, or high levels of ocean acidity, the zooxanthellae start producing reactive oxygen species not beneficial to the corals. So, the corals kick out the colour-giving algae from their polyps, exposing their pale white exoskeleton and leading to coral starvation as corals cannot produce their own food. Bleached corals can survive depending on the levels of bleaching and the recovery of sea temperatures to normal levels. Severe bleaching and prolonged stress in the external environment can lead to coral death.

Over the last couple of decades, climate change-induced rise in temperature has made seas warmer than usual. Under all positive outlooks and projections in terms of cutting greenhouse gases, sea temperatures are predicted to increase by 1.5°C to 2°C by the time the century nears its end. According to the UN assessment in 2021, the world is going to experience heating at 1.5°C in the next decade, the temperature at which bleaching becomes more frequent and recovery less impactful.





The concern is that in the past decade, mass bleaching events have become more closely spaced in time. The first mass bleaching event occurred in 1998 when the El Niño weather pattern caused sea surfaces to heat, causing 8% of the world's coral to die. The second event took place in 2002. But the longest and most damaging bleaching event took place from 2014 to 2017. Mass bleaching then occurred again in 2020, followed by earlier this year. According to the Australian government's scientists, 91% of the reefs it had surveyed in March were affected by bleaching.

Notably, half of the total reefs were surveyed before the peak of this year's mass coral bleaching event in the GBR. Since surveys to determine the effects of bleaching need to occur during or after the summer heatwave, the authors of the report say that the full impact of this year's mass bleaching would only be known in next year's report. The aerial surveys by AIMS included 47 reefs and coral bleaching was recorded on 45 of these reefs. While the levels were not high enough to cause coral death it did leave sub-lethal effects such as reduced growth and reproduction.

The AIMS report says that the prognosis for the future disturbance suggests an increase in marine heatwaves that will last longer and the ongoing risk of COTs outbreaks and cyclones. "Therefore, while the observed recovery offers good news for the overall state of the GBR, there is an increasing concern for its ability to maintain this state," the report says.

#### SATELLITE IMAGERY SHOWS ANTARCTIC ICE SHELF CRUMBLING FASTER THAN THOUGHT

Antarctica's coastal glaciers are shedding icebergs more rapidly than nature can replenish the crumbling ice, doubling previous estimates of losses from the world's largest ice sheet over the past 25 years, a satellite analysis showed on Wednesday.

The first-of-its-kind study, led by researchers at NASA's Jet Propulsion Laboratory (JPL) near Los Angeles and published in the journal Nature, raises new concern about how fast climate change is weakening Antarctica's floating ice shelves and accelerating the rise of global sea levels.

The study's key finding was that the net loss of Antarctic ice from coastal glacier chunks "calving" off into the ocean is nearly as great as the net amount of ice that scientists already knew was being lost due to thinning caused by the melting of ice shelves from below by warming seas.

Taken together, thinning and calving have reduced the mass of Antarctica's ice shelves by 12 trillion tons since 1997, double the previous estimate, the analysis concluded.

The net loss of the continent's ice sheet from calving alone in the past quarter-century spans nearly 37,000 sq km (14,300 sq miles), an area almost the size of Switzerland, according to JPL scientist Chad Greene, the study's lead author.

"Antarctica is crumbling at its edges," Greene said in a NASA announcement of the findings. "And when ice shelves dwindle and weaken, the continent's massive glaciers tend to speed up and increase the rate of global sea level rise."

The consequences could be enormous. Antarctica holds 88% of the sea level potential of all the world's ice, he said.

Ice shelves, permanent floating sheets of frozen freshwater attached to land, take thousands of years to form and act like buttresses holding back glaciers that would otherwise easily slide off into the ocean, causing seas to rise.



When ice shelves are stable, the long-term natural cycle of calving and re-growth keeps their size fairly constant.

In recent decades, though, warming oceans have weakened the shelves from underneath, a phenomenon previously documented by satellite altimeters measuring the changing height of the ice and showing losses averaging 149 million tons a year from 2002 to 2020, according to NASA.

### **Imagery from space**

For their analysis, Greene's team synthesized satellite imagery from visible, thermal-infrared and radar wavelengths to chart glacial flow and calving since 1997 more accurately than ever over 30,000 miles (50,000 km) of Antarctic coastline.

The losses measured from calving outpaced natural ice shelf replenishment so greatly that researchers found it unlikely Antarctica can return to pre-2000 glacier levels by the end of this century.

The accelerated glacial calving, like ice thinning, was most pronounced in West Antarctica, an area hit harder by warming ocean currents. But even in East Antarctica, a region whose ice shelves were long considered less vulnerable, "we're seeing more losses than gains," Greene said.

One East Antarctic calving event that took the world by surprise was the collapse and disintegration of the massive Conger-Glenzer ice shelf in March, possibly a sign of greater weakening to come, Greene said.

Eric Wolff, a Royal Society research professor at the University of Cambridge, pointed to the study's analysis of how the East Antarctic ice sheet behaved during warm periods of the past and models for what may happen in the future.

"The good news is that if we keep to the 2 degrees of global warming that the Paris agreement promises, the sea level rise due to the East Antarctic ice sheet should be modest," Wolff wrote in a commentary on the JPL study.

Failure to curb greenhouse gas emissions, however, would risk contributing "many meters of sea level rise over the next few centuries," he said.

## **JUDGING THE FUDGING OF DATA**

An editorial in Nature Genetics in January, 'A very Mendelian year', reminded us of the 200th birth anniversary of Gregor Mendel, the 'father of modern genetics', on July 20, 2022. The legacy of Mendel is intriguing. Mendel performed controlled crossing experiments on around 29,000 plants with the garden pea between 1856 and 1863. He registered many observable characteristics, such as the shape and colour of the seeds, the colour of the flower, and formulated two principles of heredity. His seminal paper, 'Experiments on Plant Hybridization', was published in the Proceedings of the Brunn Society for Natural Science in 1866. He, however, gained posthumous recognition when, in 1900, the British biologist William Bateson unearthed Mendel's paper.

### **The issue of falsification**

Importantly, in 1936, eminent British statistician and geneticist, Sir Ronald Fisher, published a paper titled 'Has Mendel's Work Been Rediscovered?' By reconstructing Mendel's experiments, Fisher found the ratio of dominant to recessive phenotypes to be implausibly close to the expected



ratio of 3:1. He claimed that Mendel's data agree better with his theory than expected under natural fluctuations. "The data of most, if not all, of the experiments have been falsified so as to agree closely with Mendel's expectations," he concluded. Fisher's criticism drew wide attention beginning in 1964, about the time of the centenary of Mendel's paper. Numerous articles have been published on the Mendel-Fisher controversy subsequently. The 2008 book, *Ending the Mendel-Fisher Controversy*, by Allan Franklin and others recognised that "the issue of the 'too good to be true' aspect of Mendel's data found by Fisher still stands." Fisher, of course, attributed the falsification to an unknown assistant of Mendel. Modern researchers also tend to give the benefit of the doubt to Mendel.

In fact, the 1982 book, *Betrayers of the Truth: Fraud and Deceit in the Halls of Science*, by William Broad and Nicholas Wade is a compendium of case histories of malpractice in scientific research. While data fudging in the scientific and social arena is understandably more likely in today's data-driven and data-obsessed world, data and the resulting conclusions, in many cases, lose their credibility. Data is expanding; so is fudged data.

In a paper published in 2016 in the journal *Statistical Journal of the IAOS*, two researchers illustrated that about one in five surveys may contain fraudulent data. They presented a statistical test for detecting fabricated data in survey answers and applied it to more than 1,000 public data sets from international surveys to get this worrying picture.

Also, Benford's law says that in many real-life numerical data sets, the proportion of times of different leading digits is fixed. A data set not conforming to Benford's law is an indicator that something is wrong. The U.S. Internal Revenue Service uses it to sniff out tax cheats, or at least to narrow the field to better channel resources.

Judging the fudging is not easy though. The available technologies for identifying data fudging are still inadequate to address all possible situations. Several procedures for testing the randomness of data exist. But they may only shed doubts over the data, at best. It's difficult to conclude fudging in most cases. Data may, of course, be non-random due to extreme inclusion criteria or inadequate data cleaning. And remember that a real data set is just a single 'simulation by nature', and it can take any pattern, whatever small likelihood that might have.

Still, an efficient statistical expert will be able to identify the inconsistencies within the data as nature induces some kind of inbuilt randomness that fabricated data would miss. However, if raw data is not reported and only some brief summary results are given, it's very difficult to identify data fudging. Still, if the same data is used to calculate different types of summary measures and some of the measures are fudged, quite often it's possible to find inconsistencies. There is nothing called 'perfect fudging of data'.

Back to the Mendel-Fisher controversy. In her 1984 review of the book *Betrayers of the Truth*, Patricia Woolf noted that Ptolemy, Hipparchus, Galileo, Newton, Bernoulli, Dalton, Darwin, and Mendel are all alleged to have violated standards of good research practice. "[T]here is scant acknowledgement that scientific standards have changed over the two-thousand-year period from 200 B.C. to the present," Woolf wrote. The importance of the natural fluctuation of data was possibly not so clear during Mendel's era as it is today, for example. Thus, it's possibly unfair to put these stalwarts under a scanner built by present-day ethical standards.

Judging the fudging is a continual process, empowered with new technologies, scientific interpretations, and ethical standards. The future generations would keep judging you even if your conclusion is perfect.



## SPIDERS DREAM LIKE HUMANS WHEN THEY SNOOZE

Scientists have found evidence to suggest that spiders might be more like humans than previously imagined. While they snooze, they might not just be resting, but perhaps even dreaming.

Daniela C. Rößler, a behavioural ecologist from the University of Konstanz in Germany, along with her colleagues recorded baby jumping spiders (*Evarcha arcuata*) with infrared cameras overnight, and found that they exhibited characteristics that were similar to human sleep cycles, such as leg curling, twitching and eye movement.

This could suggest that jumping spiders experience an “REM sleep-like state” that humans and other vertebrates undergo, the researchers claimed in their study published in the journal, *Proceedings of the National Academy of Sciences of the United States of America (PNAS)* on August 8.

REM or Rapid Eye Movement sleep is characterized by shifting of eyes and increased brain activity. The body’s muscles begin to paralyze, suppressing most body movements but allowing for slight fluttering of limbs. This is the phase in which most people dream, and is considered to play an integral role in learning and memory retention.

The most noticeable sign of REM sleep is the movement of the eyes, but it is difficult for researchers to determine how widespread it is amongst the animal kingdom, as insects and most terrestrial arthropods lack movable eyes. While the eight eyes of jumping spiders are fixed to their heads, they have long tubes that allow their retinas to move around at the back of their principal eyes. Baby spiders also temporarily lack pigment in their exoskeletons, which allows scientists to peer inside and observe the retinal tubes.

Scientists have hypothesized that the eye movements which occur during REM sleep are reflective of visual dream sequences.

## WHY DIABETICS NEED PROTEIN IN THEIR DIET

Do proteins have a role in diets for diabetes? Expectedly, when we talk about diabetes and meal planning, we mostly focus on carbohydrates (carbs). Diabetes is also called sugar in common parlance. The connection between sugar and diabetes is strong and embedded in our minds. Not just people with diabetes, every health conscious person talks about reducing carbs in the diet. In all this craziness, we often miss the importance of proteins.

There are three “macro” nutrients in our diet — carbohydrate, protein and fats. Proteins are the building blocks of our body and are vital for growth, muscle and bone development. They are also important constituents of hormones and many enzymes at the cellular level and are important to build immunity. About half of the proteins in our body are in our muscles. Proteins are also broken down by the body into glucose and used for energy, a process known as gluconeogenesis.

India is a carb-loving country. In general, our protein intakes are sub-optimal. According to The Indian Council of Medical Research (ICMR), the daily recommended intake of protein for an adult is 0.8 to 1 gm per kg body weight. This means, for a 70 kg average Indian, about 56-70 gm protein should be consumed daily. Most Indians are way below this figure, often not even reaching 50 gm a day. This has an impact on our muscle mass. Studies have shown that Indians at all ages have low muscle mass (“sarcopenia”) as compared to populations with better protein intakes.





There are several prevalent myths around protein consumption like ‘patients with diabetes should not consume much protein’, ‘protein-rich diets may harm your kidney’, ‘protein is difficult to digest’, ‘leads to weight gain’ and is ‘only for body builders’. Some of these myths come from the Western world where protein intakes are much higher than Indians. Excess protein intake can be a concern in some of these countries, whereas for Indians, it’s a struggle to meet normal protein requirements.

#### **How does protein intake impact diabetes?**

1. When you eat carbohydrates in combination with protein (or fat), it can take longer for your body to convert the carbs into glucose, leading to lower post-meal blood sugar levels in patients with Type 2 diabetes.
2. Although 1 gm of protein provides four calories, the same as carbs, it reduces the calorie intake by providing satiety, which also helps in blood sugar control.
3. A low protein diet leads to muscle loss which increases the risk of falls and fractures in elderly diabetics. Such individuals could in any case be more prone to a fall because of nerve, muscle and eye involvement due to long-standing diabetes.
4. Low muscle mass is a contributor to insulin resistance. So, it’s not just adipose tissue but a lack of muscle mass that also contributes to insulin resistance and its long list of consequences.
5. Recent data suggests that low muscle mass — and low protein intakes by inference — promote the development of fatty liver disease, which can lead to liver cirrhosis and even cancer.

#### **How should we be addressing the protein issue if we have diabetes?**

We should aim at getting 15-20 per cent of our calories through proteins on a daily basis, and ensuring a bare minimum of 0.8 gm/kg body weight protein. This should ideally be greater than 1 gm/kg for people with diabetes, unless they have kidney involvement. Even for those with kidney complications, an intake of 0.8 gm- 1 gm/kg is recommended!

Our requirement also depends on our exercise level, so a higher intake 1-1.5 g/kg is recommended for some. Athletes often have to consume much higher amounts.

Try to get protein in every meal for maximum benefit. Having one high protein meal with other meals being devoid of proteins is not the best health management method.

All proteins are not the same. Their quality also matters. Animal source proteins are generally superior to plant proteins, although there is a lot of attempt to enhance the latter in recent times. Amino acids are the units that make up protein. Some of these cannot be made in the human body and are required to be taken through the diet. These are called essential amino acids.

The best sources of proteins are dairy products like milk, curd, paneer as well as eggs, meat, fish and poultry because they have all the essential amino acids.

Vegetable sources of proteins include lentils, beans, and nuts. Soya bean is an exceptional source. If you are vegetarian, consume dairy and dals. If you like the taste, add soya bean. If you are vegan, please have a nutritionist calculate your protein intake and ensure you don’t fall short! A combination of cereals, millets and pulses provides most of the amino acids, which complement each other to provide better quality proteins.



A variety of proteins always helps. One good principle is that every time you have a meal, search for the protein in the plate. Make sure there is protein in every major meal that you consume.

## EXPLAINED: WHAT IS CHRONIC FATIGUE SYNDROME?

A woman from Bengaluru has filed a petition in the Delhi High Court to stop her Noida-based friend, who has been suffering from Chronic Fatigue Syndrome since 2014, from travelling to Europe to undergo a physician-assisted euthanasia.

The petition stated that his condition has deteriorated over the past eight years, making him “completely bed-bound and just able to walk a few steps inside home”.

### What is Chronic Fatigue Syndrome?

Also known as myalgic encephalomyelitis (ME/CFS), Chronic Fatigue Syndrome, is a serious and debilitating disease that affects the nervous system, the immune system and the body's production of energy, according to the US Centres for Disease Control and Prevention (CDC).

Experts have suggested that the term can trivialize the severity of the illness. In a 2015 report, the US Institute of Medicine proposed the term systemic exertion intolerance disease (SEID).

Its causes are still unknown. However, the potential triggers would include viral or bacterial infection, hormonal imbalances and genetic predispositions. There is no specific test for the disease, and doctors have to rely on medical examinations, blood and urine tests.

ME/CFS can affect anyone, from children to adults of all ages. According to the CDC, it's more common in women and people between 40 and 60 years old.

### What are the symptoms of Chronic Fatigue Syndrome?

The biggest telltale symptom is a significantly lowered ability to do activities that were performed before the illness. This is accompanied by at least 6 months (or longer) of debilitating fatigue that is more severe than everyday feelings of tiredness. This fatigue is not relieved by sleep or rest and exercising usually makes the symptoms worse, according to the UK's National Health Services (NHS).

Other symptoms include trouble sleeping, difficulty in thinking, memory retention and concentration, dizziness/lightheadedness, headaches, muscle pain, joint ache, flu-like symptoms, tender lymph nodes and digestive issues.

According to the New York state health department, the most recognizable symptom is post-exertional malaise (PEM). Patients often describe it as a “crash” in physical/mental energy following even minor activities like grocery shopping or brushing teeth.

### Treatment for Chronic Fatigue Syndrome

As of yet, there is no specific cure or approved treatment. Instead, doctors recommend ways to deal with the symptoms of the disease.

To manage PEM, patients are recommended ‘pacing,’ in which patients learn to balance rest and activity to prevent crashes caused by exertion.



The CDC earlier recommended cognitive behaviour therapy (CBT) and graded exercise therapy (GET), which uses physical activity as a treatment for ME/CFS. After concerns over their effectiveness and possibility of harm, the CDC stopped recommending these treatments, according to the New York state health department.

## WHY STRENGTHENING GENOMIC SURVEILLANCE IS AN IMPERATIVE

Ever since it was first reported in humans in 1970, monkeypox virus infections have been largely restricted to countries in Central and Eastern Africa until recently. Early in 2022, multiple cases were identified in Spain and several cases were reported from countries where the disease is not endemic, including regions in Europe and North America, and in patients with no history of travel to endemic regions.

Following a rapid rise in cases, the World Health Organization (WHO) on July 23, 2022 declared the 2022 monkeypox outbreak as a Public Health Emergency of International Concern (PHEIC). As of early August 2022, over 25,000 cases of monkeypox have been reported from 83 countries, 76 of which have never historically reported monkeypox.

### Genome sequences

The accelerated use of genomics as a tool to understand outbreaks in the last half decade has left an indelible mark during the ongoing COVID-19 pandemic and has seen a wider deployment of sequencing infrastructure across the world. Genomic surveillance of pathogens could provide unique insights to understand the outbreak better, track the spread of pathogens and provide immense opportunities for public health decision-making as well as for epidemiology.

Researchers from across the world have made available over 650 complete genome sequences of monkeypox isolates to date in public domain databases including GISAID and GenBank. This includes over 600 genomes which were sequenced this year alone from over 35 countries, including genomes of two isolates from India, collected from Kerala.

### Accelerated evolution

The monkeypox virus has a DNA genome of around 2,00,000 base pairs, roughly six times larger than that of SARS-CoV-2. Like other viruses, the monkeypox virus evolves by the accumulation of genetic errors, or mutations, in its genome when it replicates inside a host. Information about mutations occurring in different genome sequences of the monkeypox virus across different regions can, thus, provide essential insights into how the virus is evolving, its genetic diversity and other factors that may be relevant to the development of diagnostic tools.

Being a DNA virus, the monkeypox virus like other poxviruses was believed to have a small rate of accumulating genetic changes compared to viruses with an RNA genome like SARS-CoV-2, which have a much larger rate of mutations. For poxviruses, this rate is estimated to be as low as a couple of genetic changes every year. A recent study, however, revealed that the observed rate of genetic changes in the virus was higher than expected — average of around 50 genetic changes. The higher-than-expected rate of evolution coupled with the rapid rise in monkeypox cases across the world could potentially be due to highly parallel evolution in a large number of individuals simultaneously, as the present outbreak came out of a superspreader event.



### **APOBEC3 protein**

The study also suggests that several mutations that have been identified in the new sequences of the monkeypox virus may have emerged due to interaction between the virus genome and an important family of proteins coded by the human genome known as the Apolipoprotein B Editing Complex (or APOBEC3). These proteins offer protection against certain viral infections by editing the genome sequence of the virus while it replicates in the cell.

Some researchers, therefore, suggest that many of the genetic mutations in the monkeypox genomes from the current outbreak are relics of the effect of APOBEC3 and may not provide a significant evolutionary advantage to the virus.

Monkeypox virus can infect a range of hosts, including non-human primates and rodents which could act as a natural reservoir. Infections in the reservoir could also enable continued transmission and accumulation of mutations before spilling over to cause human infections. Other studies have also suggested a continued evolution of the virus, including deletions involving genes as seen in a few genomes from the present outbreak, which could suggest newer ways in which the virus continues to evolve with sustained human-to-human transmission.

### **Monkeypox lineages**

Clusters of genomes having common and shared mutations and a common origin are referred to as a lineage or clade. In the early 2000s, two different clades of monkeypox virus were defined in Africa where several cases of the disease have been seen — the Central African (Congo Basin) clade and the West African clade, of which the Congo Basin clade has been shown to be more transmissible and cause more severe disease.

Since naming viral lineages using the country or geography of origin could be discriminatory and possibly not in the right spirit, a new system of naming monkeypox lineages has been proposed by researchers recently. Under the new proposed system, the Congo Basin clade is denoted as clade 1, while the West African clade is divided into clade 2 and clade 3. This new system will also describe sub-lineages of the virus, with the original parent lineage being denoted as lineage 'A', and its descendants as 'A.1', 'A.1.1', 'A.2', and 'B.1'. Lineage B.1 denoted the current 2022 outbreak of monkeypox virus infections which is a descendant of the A.1.1 lineage.

### **2022 outbreak insights**

With several genome sequences of the monkeypox virus available in public databases, it is possible today to understand the prevalence of different lineages of the virus across different regions. Over 95% of the recently deposited genome sequences of the virus belong to the B.1 lineage of monkeypox virus and this lineage is epidemiologically linked to the superspreader events in Europe that formed the basis for the current outbreak of monkeypox.

While a majority of the genomes deposited could be linked to the 2022 outbreak of monkeypox, sequences deposited recently in 2022 from the U.S., Thailand and India suggest that there is a second distinct lineage of the monkeypox virus that is currently in active circulation in 2022. These genomes are classified as the A.2 lineage of the monkeypox virus and currently encompass six genome sequences, including two that were collected from Kerala. The earliest genome belonging to this lineage was collected from Texas in 2021 while the two sequences from Kerala collected in 2022 cluster closely with a genome collected from Florida in the same year.





The characterisation of this distinct lineage amid the 2022 outbreak of monkeypox suggests that a previously undetected and cryptic transmission of the virus has been occurring in multiple countries, since at least around 2021, and was probably uncovered due to increasing awareness about the disease and the availability of diagnostic tools.

Genomic surveillance of pathogens provides interesting insights by following a molecular approach for contact tracing and understanding the transmission of the virus across the world. As cases of monkeypox continue to rise, it is therefore important to strengthen the genomic surveillance for the monkeypox virus. Since data from the present outbreak suggest a sustained human-to-human transmission, continuous genomic surveillance is important to understand the evolution and adaptation of the virus, apart from providing useful data to epidemiologists.

With COVID-19 continuing unabated and monkeypox around the corner, the time has never been better, and the need never more acute, to build a sustainable system for genomic surveillance in India.

#### WHAT IS LANGYA, A NEW ZOOTIC VIRUS THAT HAS INFECTED 35 PEOPLE IN CHINA?

Almost three years after the novel coronavirus was detected in China, a new zoonotic virus has been discovered in the country's two eastern provinces with 35 infections identified so far. This new type of Henipavirus is also being called Langya Henipavirus or the LayV.

Henipaviruses are classified as biosafety level 4 (BSL4) pathogens. They can cause severe illness in animals and humans, and as of now there are no licensed drugs or vaccines meant for humans.

#### **What is Langya virus?**

The newly discovered virus is a “phylogenetically distinct Henipavirus”, according to a recent study — A Zoonotic Henipavirus in Febrile Patients in China — published in The New England Journal of Medicine.

The types of Henipaviruses that had been identified prior to this included Hendra, Nipah, Cedar, Mojiang and the Ghanaian bat virus. According to the US CDC, the Cedar virus, Ghanaian bat virus, and Mojiang virus are not known to cause human disease. But Hendra and Nipah infect humans and can cause fatal illness.

Langya, meanwhile, is known to cause fever, with the NEJM study calling for a deeper investigation of associated human illness.

The study adds that Langya's genome organization is “identical to that of other Henipaviruses”, and that it is closely related to the “Mojiang Henipavirus, which was discovered in southern China”.

#### **How was Langya virus discovered?**

Langya was discovered in eastern China during surveillance testing of patients who had fever along with a recent history of animal exposure. It was identified and isolated from the throat swab sample of one of those patients. According to the NEJM study, 35 patients with LayV infection were found in Shandong and Henan provinces, out of which 26 were only infected with this new virus and no other pathogen.



### **What are the symptoms of Langya virus?**

The study looked at the 26 patients with only LayV infection to identify the associated symptoms. While all 26 had fever, 54% reported fatigue, 50% had cough, 38% complained of nausea. Also, 35% of the total 26, complained of headache and vomiting. The study found that 35% had impaired liver function, while 8% had their kidney function impacted. The patients were accompanied by abnormalities of “thrombocytopenia (35%), leukopenia (54%), impaired liver (35%) and kidney (8%) function”, the study noted. Thrombocytopenia is low platelet count, while leukopenia means a fall in the white blood cell count, in turn reducing the body’s disease-fighting capability.

### **Where has Langya virus come from?**

In all likelihood, the new virus has jumped from an animal to humans. The LayV virus RNA has been predominantly found in shrews, which may be its natural hosts. The study zeroed in on shrews after conducting a serosurvey of domestic and wild animals. Among domestic animals, seropositivity was detected in goats and dogs.

### **What about human-to-human transmission?**

There are no clear answers yet. The authors of the study have underlined that the sample size of their investigation is too small to determine human-to-human transmission. However, they point out that among the 35 patients infected by LayV, there was “no close contact or common exposure history”, which suggests that the “infection in the human population may be sporadic”.

The study further noted that contact tracing of 9 patients with 15 close-contact family members revealed no close-contact LayV transmission.

## **COVID-19, ARGUABLY, HAS BECOME ENDEMIC IN INDIA**

The infectious disease ‘outbreaks’ or ‘epidemics’ or ‘pandemics’ share a fate — there is a day when the majority of them run their course and fade away. However, a small proportion (of epidemics or pandemics) transitions to the stage of endemicity, i.e., a level of transmission which is not considered to be a major concern by the public or health authorities. It has been 29 months since COVID-19 was declared a pandemic. However, new COVID-19 cases are still continuing to be reported from different parts of the world, including India, on a regular basis. In fact, the numbers of daily new COVID-19 cases in many countries are more than what had been reported at the peak of the national waves in those countries before the emergence of Omicron as a variant of concern. However, the severity of COVID-19 infections is low and the burden of health services due to intensive care unit and hospital admission even lower. COVID-19 vaccination coverage is increasing and, in many countries, COVID-19 related restrictions have either been removed completely or relaxed to a large extent.

### **Much opinion**

After the third wave in January 2022, India saw the lowest number of daily new COVID-19 cases in March and April this year. However, since then, daily cases have spiked to around 18,000 a day. In fact, in the last two months every rise and fall in daily cases in India revives the discussion on whether COVID-19 continues to remain pandemic or has become endemic. Yet, consensus is missing. Part of the reason is that the discourse is dominated by opinion and there has been



insufficient attention on an objective assessment of what constitutes the endemic stage or endemicity.

An important point to remember is that the terms, outbreaks, epidemics, and pandemics reflect only the geographical spread. Outbreaks are a localised spread while an epidemic is when a disease affects a large geographical area within a country or a few countries. A pandemic is when multiple countries in different regions of the world are affected. The severity of the disease has no or very limited linkage with this classification and a disease could be mild; but if it is widespread, it could be termed a pandemic. COVID-19 began as an outbreak in China, became epidemic afterwards when more countries were affected, and then, finally, was declared a pandemic on March 11, 2020. It was not linked to the severity of disease. Severe Acute Respiratory Syndrome (SARS), in 2002-04, was a very serious disease, with one in 10 people who were affected dying; it was not declared a pandemic because severity does not determine this classification.

#### Here to stay

New diseases usually do not disappear completely. Chikungunya, dengue and many respiratory viruses usually stay within populations once they enter a population. Twenty-nine months into the pandemic, there is consensus that SARS-CoV-2 will stay with humanity for long, possibly for years and even decades. Cases are being reported from all countries and parts of the world and are likely to be reported in the time ahead. In this situation, it is important to ask how diseases transition from epidemic or pandemic to the endemic state.

We usually go back to history to get such answers. However, in the case of the COVID-19 pandemic, historical references are not very useful. The end points of the pandemics prior to the 18th century were determined retrospectively, when it was relatively easy to conclude a defined year. Then, the infections and cases in three major influenza pandemics in the 20th century (1918-20, 1957 and 1967-68) were identified based on symptoms; laboratory testing was not available for the pandemic in 1918-20 and was very limited in subsequent ones. In fact, in the 1918-20 flu pandemic, even the virus was not identified (it was first identified in 1933). If those clinical criteria of yesteryears are applied in ongoing COVID-19 cases which are now either mild and/or asymptomatic (thanks to vaccination and natural infection), one can conclude that the COVID-19 epidemic is over in many countries.

One of the ways to differentiate between 'pandemic' and 'endemic' is the 'socio-economic' impact. Pandemics are not merely health events but also encompass the social and economic implications of infections and diseases. For nearly two years, a large number of SARS-CoV-2 infections were happening in a short period of time — by a novel virus in a population which was completely immunologically naive — illnesses required hospitalisation and health facilities were overwhelmed. The infections, illnesses and hospitalisations understandably resulted in fear, panic and economic and social disruption. The interventions to halt the transmission of SARS-CoV-2, i.e., lockdowns, quarantines, national and international travel bans and school closure were equally unprecedented. There was a loss for many in terms of their sources of income after the ensuing social disruption and economic slowdown. Clearly, the impact was not restricted to those who tested COVID-19 positive; it has affected everyone and every member of society.

The risk of infection and disease under COVID-19, till early 2022, was unknown, and the outcome unpredictable. Two and half years into the pandemic — the risk of getting COVID-19 continues and will always be greater than zero, for long. However, there is better understanding now of who will get severe diseases. The risk of the social and economic impacts due to COVID-19 is minimal



and close to zero. In such a backdrop, it is fair to conclude that while the health challenges of SARS-CoV-2 remain, the socio-economic impact is blunted. It is a good starting point to believe that the COVID-19 pandemic in India has moved to its endemic stage. However, that is not the same as saying that the pandemic is over. In epidemiology and public health, context (local setting, infection rate and vaccine coverage) determines the disease spread. Therefore, in the ongoing COVID-19 pandemic, every country would reach an endemic stage at different points of time. Countries that had higher vaccination coverage and higher natural infection (such as India) are likely to reach this stage early. Countries with low natural infection and vaccination coverage (as in Africa) would reach an endemic stage a little later.

### **A disease perspective**

There is another dimension to the pandemic and endemic debate. Since pandemics have a social impact, the decision on when a country has reached an endemic stage is also determined by societal perspective of 'the acceptable risk'. There are a number of countries across the world where societies have returned to 'normalcy mode' even though the per million daily cases in many settings are higher than cases at the peak of earlier waves. The United States has returned to a 'no mandatory COVID-19 test' for inbound passengers. In Europe, many countries are back to full normalcy.

Here is another example. HIV/AIDS was an epidemic in the mid-1990s. Now, HIV/AIDS cases are reported regularly but it is endemic because all societies/countries have agreed to it being an acceptable risk. Let us examine the data angle as well. In June-July 2022, around 30 deaths are being reported every day on average in people who tested COVID-19 (but did not necessarily die due to COVID-19). These numbers need to be seen in perspective. In India, an estimated 26,000 to 27,000 people die every day due to a variety of reasons which includes even old age. These daily deaths include 120 deaths every day due to pregnancy-related causes; 350 to 600 deaths in road accidents; 1,400 attributed to tuberculosis; around 2,000 deaths in children younger than five years due to different reasons, and 4,000 deaths every day attributed to tobacco and other related causes. Every effort should be made to avoid any death that is preventable. No society should be overly fixated over only one disease or health challenges. Clearly, COVID-19 is one of the many challenges and cannot continue to be the top and the only health priority.

The ongoing COVID-19 pandemic at the global level does not mean every country needs to have similar interventions in its response. India, arguably, has reached a stage where COVID-19 can be considered to be in its endemic stage. It is time to deal with the COVID-19 just like any other health condition and integrate COVID-19 interventions in general health services. It is time people do a self-assessment of their COVID-19 risk and undertake voluntary precautionary measures. COVID-19 vaccination should become part of the routine immunisation programme. There are other health challenges that are waiting to be tackled.