



# CURRENT AFFAIRS for UPSC

22nd to 28th May 2022

DreamIAS



## INTERNATIONAL

### UNDERSTANDING THE NATURE OF U.S.-TAIWAN RELATIONS

The story so far: The President of the United States Joe Biden made a controversial statement on May 23, during a joint news conference with Japanese Prime Minister Fumio Kishida a day before the start of the Quad summit in Japan. He gave an affirmative reply to a question on whether the U.S. will come to the aid of Taiwan militarily in case of an invasion by China. This is the third time that he has made such a statement, raising questions about whether the U.S. is shifting from its long-standing policy of strategic ambiguity over Taiwan to that of strategic clarity.

#### **What is the Taiwan issue?**

Taiwan is an island territory located off the coast of mainland China, across the Taiwan Strait. After their defeat to the communist forces in the Chinese civil war (1945-1949), the ruling Kuomintang (Nationalist) government of China fled to Taiwan. They transplanted the Republic of China (ROC) government in Taiwan, while the Communist Party of China (CPC) established the People's Republic of China (PRC) in the mainland. Since then, the PRC considers the island as a renegade province awaiting reunification by peaceful means, if possible. Meanwhile, the ROC retained its membership at the United Nations and its permanent seat at the UN Security Council (UNSC). The cross-strait relations became strained as a result of the Cold War, with the PRC allying itself with the Soviet Union (USSR) and ROC with the U.S. This resulted in the two Taiwan Strait crises of the 1950s.

However, with the shifting geopolitics of the Cold War, the PRC and the U.S. were forced to come together in the 1970s to counter the growing influence of the USSR. This led to the US-China rapprochement demonstrated by the historic visit of then U.S. President Richard Nixon to PRC in 1972. The same year, the PRC displaced ROC as the official representative of the Chinese nation at the UN. Diplomatic relations with the PRC became possible only if countries abided by its "One China Principle" — recognising PRC and not the ROC as China. Taiwan transitioned from a single party state to a multi-party democracy at the same time that China reformed its economic system under Deng Xiaoping, and by the end of the Cold War they became economically entangled; nevertheless, they continue to compete for international recognition and preparing themselves for the worst possible scenario.

#### **How has the U.S.'s stance on the Taiwan question evolved vis-à-vis China?**

The very foundation of the U.S. rapprochement as well as its recognition of the PRC is a mutual understanding on the Taiwan question. This has been outlined in three documents — the Shanghai Communique (1972), the Normalisation Communique (1979) and the 1982 Communique. According to the 1972 communique, the U.S. agreed to the 'one China principle', with an understanding that it "acknowledges" and "does not challenge" that "all Chinese on either side of the Taiwan Strait maintain that there is but one China and that Taiwan is a part of China."

As per the 1979 communique, the U.S. recognised PRC, but stated that it merely "acknowledges the Chinese position that there is but one China and Taiwan is part of China". It also established unofficial relations with Taiwan through this communique in the name of the people of both the countries. The 1982 communique assuaged Chinese concerns of the possibility for continued arms supply to Taiwan by the U.S. provisioned in the Taiwan Relations Act (TRA) of 1979 which enabled it to resume supply of "defensive" arms. With these foundational arrangements, the U.S. developed



a way to balance the recognition of PRC with the concerns of Taiwan. This delicate balance, however, has increasingly been tested of late.

#### **Why is the issue significant today?**

As Taiwan's democracy flourished, the popular mood drifted towards a new Taiwanese identity and a pro-independence stance on sovereignty. The past decade has seen considerable souring of ties across the Strait, as the Democratic People's Party (DPP) became the most powerful political force in Taiwan, sweeping two consecutive elections in the past decade. The DPP government, led by Tsai Ing Wen has been catering to the pro-independence constituency in Taiwan and seeks to diversify economic relations away from China. This has made China wary of Tsai. China has always seen Taiwan as a territory with high geopolitical significance. This is due to its central location in the First Island Chain between Japan and the South China Sea, which is seen as the first benchmark or barrier for China's power projection. U.S. military outposts are scattered throughout this region, and hence, taking control of Taiwan would mean a significant breakthrough as per China's geostrategic calculus. Moreover, its reunification will formally bury the remaining ghosts of China's "century of humiliation". China under President Xi Jinping seems to have lost its patience and currently sees very slim chances of a peaceful reunification, given the current downturn in cross-Strait relations and the trajectory of the wider geopolitics. This has been demonstrated in the growing frequency of rhetorical spats between Beijing and Taipei, and China's military drills and patrols across the Strait, as well as the record-breaking aerial transgressions by China of Taiwan's Air Defence Identification Zone (ADIZ). Also, this build-up of tensions is happening simultaneously and drawing parallels with the Russo-Ukrainian conflict.

#### **Is U.S. strategy towards Taiwan witnessing a major transformation?**

The U.S.'s strategy towards Taiwan in light of the unresolved nature of the cross-Strait relations has been marked by what has been called "strategic ambiguity", which is quite visible in the TRA.

The TRA had come up in the wake of U.S.'s recognition of the PRC, and the resultant termination of the 1954 U.S.-Taiwan mutual defence treaty. As per the TRA, the U.S. has stated clearly that the establishment of bilateral relations with the PRC rests upon "the expectation that the future of Taiwan will be determined by peaceful means". It also states that it is the policy of the U.S. "to maintain the capacity of the United States to resist any resort to force or other forms of coercion that would jeopardise the security, or the social or economic system, of the people on Taiwan". Hence, there is no clear guarantee here that the U.S. will militarily involve in a situation where China attempts to invade Taiwan, short of supplying "defensive weapons". The U.S. has for long utilised this strategic ambiguity with its own interpretation of the 'one China principle' to maintain its strategic interests in the Western Pacific. It is in this context that Mr. Biden's statements have made controversy. The reason behind why Mr. Biden stated that the U.S. will come to the rescue of Taiwan, as well as the backtracking by the administration later is not clear. It is quite possible that this could have been a "gaffe", as portrayed by some sections of the media. However, this is the third time that Mr. Biden has put forward such a strong, clear viewpoint to the media — the first was in August and the second in October, 2021. This repeated assertive signalling seems to be therefore more than just accidental. Rather, it is speculated that the need to reassure U.S. allies in the Indo-Pacific in lieu of the Quad summit could have played a part in taking a bolder stance by the Biden administration.

It is also possible that the Russo-Ukraine conflict might have created a context where a strong message to the adversary becomes essential, especially considering Beijing's wearing patience



and Taipei's increasingly pro-independence slant. It may have reached the point where strategic ambiguity may be losing its relevance to strategic clarity. However, another plausible interpretation can be that this messaging is aimed by the U.S. for eliciting responses and testing the waters to get a feel of China's game plan for the Indo-Pacific, at a time when a grand distraction is underway at the Eurasian-Atlantic theatre. This may muddle the level of U.S.'s strategic ambiguity further.

## WHY IS TURKEY AGAINST SWEFIN JOINING NATO?

The story so far: With the Russian invasion of Ukraine nearing three months, Sweden and Finland (SweFin), the two Nordic countries that have historically stayed out of military alliances, have formally applied to join the North Atlantic Treaty Organization (NATO). If President Vladimir Putin ordered the Ukraine attack on February 24, apparently to prevent NATO's further expansion into Russia's neighbourhood, he is now facing the prospects of two countries joining the trans-Atlantic military alliance. But their accession into NATO may not be smooth. Turkey, a NATO member since 1952, has said it would oppose the Nordic countries joining the bloc, citing that they harbour "terrorist groups" — a reference to Kurdish insurgent outfits. Put together, these developments — the continuing war in Ukraine, fresh NATO applications, and Turkey's opposition to SweFin's bid — have shaken up Europe's delicate security equilibrium further.

### What explains the long-term neutrality of Sweden and Finland?

The last war Sweden fought was in 1814 — the Swedish Norwegian War. Six years earlier Russia had invaded the Gotland Island in the Baltic Sea. While the Swedes drove the Russians out of the island, the latter took Finland away from Sweden while retreating. After the Swedish-Norwegian war, Sweden has adopted neutrality as the cornerstone of its foreign policy as it suited its interests better in an increasingly hostile neighbourhood. It stayed out of the two World Wars and the Cold War.

Finland's history has been more complicated. Soviet leader Joseph Stalin invaded Finland in 1939, demanding territories in the Karelian Isthmus, the strip of land situated between the Gulf of Finland and Lake Ladoga. Leningrad (now St. Petersburg) sat at the southern end of the Isthmus and Stalin wanted a buffer between Finland and the former Tsarist capital. The Finns resisted valiantly in the initial phase of the war denying an outright victory to the Red Army, but eventually agreed to sign the Moscow Peace Treaty as part of which they had to cede more territories of the Isthmus than what Stalin originally demanded. But a year later, the Finns joined hands with the German Nazis and attacked the Soviet Union.

Peace returned to the long Soviet-Finnish border only after the Nazis were defeated in the Second World War. Having suffered the after-effects of two wars, Finland did not want to get sucked into another great power contest. Like 19th century Sweden, Finland also adopted neutrality as the centrepiece of its foreign policy.

### What triggered SweFin's NATO application?

In short, Mr. Putin's Ukraine war. While the Russians may have their explanations for the war, the invasion saw Russia violating the sovereignty of a weaker power in its neighbourhood. It also raised questions on whether Russia would have started the war had Ukraine been a NATO member.



Unlike Ukraine, Sweden and Finland do not have any border conflict with Russia. But again, Ukraine didn't have any major conflict with Russia until the 2014 regime change in Kyiv. So the Russian attack seemed to have altered the security calculus of SweFin. They moved quickly to apply for NATO membership because they hoped the alliance would act as deterrence against potential future attacks. Sweden and Finland have already developed deep ties with the West. Both are members of the European Union. Their ties with NATO are the closest two non-members could get with the alliance. They hold joint military drills with NATO, share intelligence and have supported NATO's military missions abroad. They did not formally seek membership until now because they did not want to upset the security status quo in Europe. They also feared Russian retaliation. But that status quo has been altered by the Russian invasion. And the possibility of Russian military retaliation is very less now because Russian troops are fighting a seemingly prolonged war in Ukraine.

This opened the door for both SweFin and NATO. And they are ready to embrace each other.

#### **What's Russia's position?**

Since the German reunification in 1990, NATO has seen five rounds of expansions. In 1999, three East European countries — Czech Republic, Hungary and Poland — became NATO members. In 2004, seven more countries — including the three Baltic nations, Estonia, Latvia and Lithuania, all sharing borders with Russia — were taken into the alliance. Russia has consistently opposed the bloc expanding its reach towards its neighbourhood, but was not in a position to do anything about it. In 2008, however, when Georgia and Ukraine, both Russia's neighbours and Black Sea basin countries, were offered membership, Russia responded militarily. Now, with SweFin applying for NATO membership, the bloc is coming further closer to Russia's border. Finland shares an over 1,300-km border with Russia. Sweden's Gotland island in the Baltic Sea is some 200 km away from Russia's Kaliningrad coast. But despite its concerns, Russia would not be able to do much to stop their NATO bids. Mr. Putin has sought to play down the development saying the Nordic countries joining NATO does not pose any immediate threat to his nation, but warned against NATO moving weapons to these countries. While it's not clear what Russia would do in the long term, its immediate response was to cut electricity exports and gas supplies to Finland.

#### **Why is Turkey against SweFin's bids?**

President Recep Tayyip Erdogan has repeatedly said Turkey would oppose SweFin's NATO bid. Within NATO, decisions are taken unanimously, which means every country in the 30-member bloc holds a veto. Turkey says Sweden and Finland have ties with "terrorist" groups — a reference to the Kurdistan Workers Party (PKK) and the People's Protection Units (YPG). The PKK, which seeks greater autonomy for Turkey's Kurdish minority, has waged an armed insurgency since the mid-1980s. The YPG is the armed wing of Syrian Kurdistan which controls parts of the Kurdish region in Syria. Turkey faces serious allegations of human rights violations in the Kurdish region. In recent years, Mr. Erdogan's government has cracked down on Kurdish political groups and leaders, including the left-wing People's Democratic Party (HDP). Selahattin Demirtas, a charismatic Kurdish politician who was a former legislator and presidential election candidate, has been in prison since 2016. Turkey has justified its actions, claiming that the PKK, YPG and their associated political groups are "terrorists".

Turkey says Sweden, and Finland to a certain extent, maintain close ties with Kurdish militias, particularly the YPG. It also alleges that the countries are hosting supporters of the Fethullah Gulen movement, a religious sect led by the U.S.-based Gulen who is accused by Ankara of being



the mastermind behind the failed 2016 coup against Mr. Erdogan. Turkish state TV reported last week that Sweden and Finland refused to extradite 33 people wanted by Ankara. Mr. Erdogan calls Sweden “a nesting ground for terrorist organisations” and has ruled out Turkey backing SweFin’s NATO entry in the future either.

#### What’s next?

When Mr. Erdogan first expressed his opposition, many thought it would be a bargaining tactic. But the repeated comments from the Turkish leadership have raised alarm in NATO capitals. If Turkey walks the talk and blocks the SweFin bid, that would leave the Nordic countries in an awkward spot — they have already given up neutrality, but they won’t be getting NATO’s protection. Even if the application goes through, it would take time for these countries to be formally inducted into the alliance. In the case of NATO’s last expansion, when North Macedonia was admitted into the alliance in March 2020, the process took 20 months. In the case of Montenegro, which became a NATO member in June 2017, the process took 18 months. So the time taken for the process to be completed offers a window to Mr. Putin, whose response would depend on whether his troops could meet their military objectives in Ukraine and whether they could do it fast. There’s a lot of uncertainty. The only thing that’s certain is that more instability is awaiting Europe.

### FALL OF THE LAST HOLDOUT

April 21 was a significant day for the war raging in Ukraine. Although the Russians had captured most of Mariupol by end-March, they were unable to claim victory. The Ukrainians continued to hold on to a major asset that played a key role in Mariupol’s economy: Azovstal Iron and Steel Works.

The sprawling industrial complex, which employed more than 10,000 workers and covered 11 sq. km in the port city’s water front, had seen fierce fighting for weeks. It was with the aim of claiming total control over the city that the Russians had mounted a brutal siege of the steel plant, subjecting it to intense artillery fire, aerial bombardment, and missile strikes.

Ukraine had sent some of its best fighters to defend Mariupol, including the 36th Marine Brigade and the National Guard’s Azov Regiment. More than 2,000 of them had made the Azovstal steel plant their last stand. They used the plant’s vast network of underground tunnels and passages — estimated to be 24 km long — to frequently shift their positions and surprise the Russians. It was in this context that on April 21, in a televised meeting with Defence Minister Sergei Shoigu, President Vladimir Putin announced a change in strategy: Russia will no longer attempt to ‘capture’ the Azovstal steel plant. Instead, Mr. Putin instructed Mr. Shoigu to seal off the industrial complex so that “not even a fly could get through”. The rest of Mariupol was already in their control. So Russia might as well wait it out until the trapped Ukrainians ran out of supplies, and when that happens, they would have no choice but to surrender. The calculation proved to be accurate.

#### Soviet-era structure

The Azovstal steel plant, a Soviet-era structure inaugurated in 1933, has seen military action before — it was captured by the Nazis in 1941 and they left it in ruins when they withdrew in 1943. But it was quickly rebuilt and became one of the largest metallurgical facilities in Europe,



producing 4 million tonnes of crude steel annually. Crucially, like many large factories of the Soviet era, it had well-stocked bunkers that could accommodate 4,000 people.

But this April, as Russia sealed off the complex, those inside began to run out of food, water and medical supplies. Apart from the Ukrainian soldiers, there were also civilians inside. The Russian border is barely 60 km from Mariupol. When Moscow launched its 'special military operation' on February 24, thousands of Mariupol residents — many of them family members of plant workers — fled to the safety of its bunkers. Most of them had assumed that they were going to stay there for a few days. But as the Russian siege went on, the civilians remained trapped.

Diplomatic efforts were made to negotiate their evacuation. After several false starts, all women and children were evacuated by May 8. Ukrainian soldiers and male civilians remained trapped inside, and with supplies running low, they appealed to President Volodymyr Zelensky for help, in vain. Finally, on May 16, the Ukrainian military ordered the commanders in Azovstal "to save the lives of the personnel". Official statements avoided the term 'surrender'. Over the following days, according to the Russian military, a total of 1,730 Ukrainian troops surrendered and were taken to camps in territories controlled by Russia.

Although the military significance of the Russian victory at the Azovstal plant is limited, it does hold great value in ideological and psychological terms. In the preceding weeks, the site had become a symbol of Ukrainian resistance. There were widely circulated reports of Ukrainian soldiers preferring "death by combat" and "fighting to the last man" rather than laying down arms in front of the Russians. In this context, the Ukrainian surrender would be invaluable fodder for Russian propaganda. The Ukrainian military, however, has maintained that its troops at the Azovstal plant had successfully completed their "combat mission", which was to keep a large number of Russian troops bogged down in Mariupol so that they could not be deployed to other, more critical, battle fronts.

While the fate of these Ukrainian soldiers remains uncertain, there is little doubt that Moscow is now closer than ever to achieving its objective of securing a land bridge from Russia to Crimea.

#### WHAT IS RUSSIA'S TERMINATOR TANK SUPPORT SYSTEM, NOW DEPLOYED IN UKRAINE?

Russia, according to Western intelligence inputs, has deployed the Terminator tank support system – the BMPT, also known as the BMPT 'Terminator', and its new version the BMPT-72 – in an area that remains its immediate tactical priority in the Ukraine war. What is this latest addition to the Russian inventory of mechanised battle vehicles and what does its deployment mean in the ongoing conflict?

##### **What is the 'Terminator'?**

The Terminator or the Boyevaya Mashina Podderzhki Tankov (BMPT), is a tank support fighting vehicle developed by Russia.

Western military analysts believe that Russia developed the Terminator after identifying the need to provide dedicated protection to main battle tanks it used during the Afghan and the Chechen wars.

The tank support vehicles are designed to protect the Russian tanks against enemy infantry. They are basically a replacement for mechanised infantry troops in the urban battlefield.



The high-level of attrition suffered by the Russian tanks in the ongoing war in Ukraine due to the use of anti-tank weapons provided by the West appears to have pushed Russian military commanders to induct the Terminator. The move is aimed at providing close protection to the Russian armour from Ukrainian tank-hunting infantry.

#### **Where have the Russians deployed it?**

According to the latest intelligence bulletin released by the British Ministry of Defence on the ongoing conflict in Ukraine, Russia's only operational company of BMP-T Terminator tank support vehicles has likely been deployed to the Severodonetsk axis of the Donbas offensive.

According to the British appreciation of intelligence inputs and several independent sightings of the Terminators, their presence suggests that the Central Grouping of Forces (CGF) is involved in this attack – which is the only Russian army formation fielding this vehicle.

The CGF, as per the British MoD bulletin, previously suffered heavy losses while failing to break through to eastern Kyiv during the first phase of the invasion.

As of now, the Severodonetsk area remains one of Russia's immediate tactical priorities. But with a maximum of ten Terminators deployed, they are unlikely to have a significant impact on the campaign.

#### **What kind of weapons does the Terminator have?**

The list of potent weaponry that Terminator is equipped with includes 4×130 mm Ataka-T GWS launchers, 2×30 mm 2A42 autocannons (850 rounds), 2×30 mm AG-17D or 2x AGS-30 grenade launchers (600 rounds), 1×7.62 mm PKTM machine gun (2,000 rounds).

These weapons are capable of firing in multiple directions in quick succession, thus suppressing firepower to prevent any attempt to take out the tank columns being protected.

The BMPT destroys targets such as infantry personnel carrying anti-tank weapons, as well as lightly and heavily armoured targets, like tanks. The BMPT can be put to alternate uses too and can provide protection to infantry or to convoys.

#### **Where are its other features?**

The BMPT was first brought into public domain during the Russian Arms Expo held at Nizhny Tagil in 2013. Guerrilla warfare tactics used by the Chechen fighters in Grozny during the First Chechen War in 1995 led to the development of this weapon system as many Russian tanks were lost in the urban fighting.

The Terminators, initial version BMP-T and the new version BMPT-72, are based on the chassis of the T-72 tank and are produced by the Russian company Uralvagonzavod.

The Terminator's latest upgrade is equipped with fragmenting ammunition which is essential to target the enemy infantry which lies in wait to destroy the tanks. Information in public domain also reveals that increased gun elevation provides for engaging top floors of buildings in urban environments and also low flying aircraft/drones. The manufacturer claims that a single Terminator can replace two conventional BMPs and an infantry platoon.





## REIMAGINING AUSTRALIA

After nine years in the opposition, the Australian Labor Party, under the leadership of Anthony Albanese, is back in power. When 74.6% votes were counted, it won 75 seats in the 151-member House of Representatives; the conservative Liberal National Coalition secured 57 seats. More than a victory for Labor, which is still one seat short of absolute majority, this election will be remembered for the rout of the conservatives, who had 77 seats in the outgoing Assembly. The polls also saw a sizeable section of the Australian electorate voting for the Greens and independents, who campaigned on the planks of better environmental standards and anti-corruption policies. In an election where inflation and climate policy dominated the agenda, Scott Morrison, the conservative leader, failed to understand the public pulse. Even when the annual inflation number hit 5.1%, a 20-year high, the Morrison government took comfort in the argument that the unemployment rate was low. Mr. Morrison was also criticised for his inaction on climate challenges even after Australia witnessed repeated bushfires. His government's handling of the COVID-19 crisis, with stringent lockdowns, and inaction over allegations of rape and sexual assault within Parliament and even within the Cabinet also triggered widespread public resentment.

Mr. Albanese, on the other side, tapped into this anger by running a carefully crafted campaign. On climate, an issue which 29% of the voters identified as the most important one, Labor made a slew of promises. It vowed to raise the share of renewable energy to 82% of the grid by 2030. Mr. Albanese is planning to reduce emissions by 43% this decade. He has also promised to index the minimum wage to inflation. Another key promise is to call a constitutional vote to set up a representative body to advise Parliament on legislation affecting indigenous peoples. Running a successful electoral campaign is hard, but heading a government that meets the campaign promise is harder. Besides tackling inflation and coming up with an ambitious plan to address the climate challenge, the Prime Minister faces a huge foreign policy challenge too. Mr. Morrison had given up Australia's traditional middle path on China and joined an American-British alliance (AUKUS), specifically targeting Beijing's influence in the Indo-Pacific. Mr. Albanese will have to decide whether he should follow the path laid out by his predecessor and take on the China challenge head on or take Australia back to the old school pragmatism and coexistence. The decisions he makes — domestic and foreign — over three years would reshape Australia's position in the Indo-Pacific region.

## XINJIANG LEAK PUTS UIGHURS IN SPOTLIGHT

A leak of thousands of photos and official documents from China's Xinjiang has shed new light on the methods used to enforce mass internment in the region, researchers said on Tuesday.

The files, obtained by academic Adrian Zenz, were published as UN human rights chief Michelle Bachelet begins a long-awaited and controversial trip to Xinjiang.

Activists say Chinese authorities have detained more than one million Uighurs and other mostly Muslim minorities in a network of detention centres and prisons in the region, which Beijing has defended as training centres.

### Database hacked

But the trove of police photographs and internal documents — sent to Mr. Zenz by an anonymous source who hacked into official databases in Xinjiang — add to evidence that the mass internments



were far from voluntary, with leaked documents showing top leaders in Beijing including President Xi Jinping calling for a forceful crackdown.

The files include a 2017 internal speech by Chen Quanguo, a former Communist Party secretary in Xinjiang, in which he allegedly orders guards to shoot to kill anyone who tries to escape, and calls for officials in the region to “exercise firm control over religious believers”.

A 2018 internal speech by Public Security Minister Zhao Kezhi mentions direct orders from Mr. Xi to increase the capacity of detention facilities.

#### ‘Training schools’

After initially denying their existence, Beijing has claimed the facilities are vocational training schools, attended voluntarily and aimed at stamping out religious extremism.

But the leaked documents give an insight into how leaders saw the minority population as a security threat, with Mr. Zhao warning that more than two million people in southern Xinjiang alone had been “severely influenced by the infiltration of extremist religious thought”.

More than 2,800 police photos of Xinjiang detainees included minors such as 17-year-old Zeytunigul Ablehet, detained for listening to an illegal speech, and 16-year-old Bilal Qasim, apparently sentenced for being related to other detainees.

The details echo a separate police list leaked earlier to AFP which showed the government crackdown snaring hundreds of people at a time from villages, often many from the same household.

“The sort of paranoid threat perception comes out in these files, and the internal justification for why one has to move against an entire population,” said Mr. Zenz in video comments published alongside the leaked files.

Mr. Zenz works for the U.S.-based non-profit organisation, Victims of Communism Memorial Foundation.

Photos appear to show officers restraining hooded and shackled inmates with batons, while other guards wearing camouflage stand by with firearms.

China’s Foreign Ministry dismissed the leaked documents as “cobbled-together material” by “anti-China forces smearing Xinjiang”.

## SECURITY IN FRIENDSHIP

The recent summit meeting of the leaders of the Quadrilateral Security Dialogue, or Quad, could not have come at a more critical juncture in world politics. Between Russia’s invasion of Ukraine that has destabilised accepted norms on respecting territorial sovereignty; its knock-on effects on commodity and input prices, fuelling inflationary pressures and impacting global supply chains; and the lingering effects of the COVID-19 pandemic that spotlighted deficiencies in public health infrastructure, the leaders of India, the United States, Australia and Japan are likely to have had a full and multidimensional policy agenda in Tokyo. For the leaders the obvious, if not always explicitly stated theme linking several global issues is the China factor and the unique strategic challenges that that country poses to the rules-based international order. While U.S. President Joe Biden and Japanese Prime Minister Fumio Kishida were blunt in their condemnation of Russia’s



belligerence, Prime Minister Narendra Modi and newly elected Australian Prime Minister Anthony Albanese avoided any direct reference to Moscow, as indeed did the summit's joint statement. On China, however, the four nations were on the same page, and the Quad joint statement called for continued cooperation towards maintaining a free and open Indo-Pacific; championing adherence to international law as reflected in the UN Convention on the Law of the Sea and in maintaining freedom of navigation and overflight; and meeting challenges to the maritime rules-based order, including in the East and South China Seas.

The Quad leaders affirmed the Dialogue's two core messages. First, they will continue to strongly oppose coercive, provocative, and unilateral actions by Beijing that seek to change the status quo and heighten tensions across the region, including through manoeuvres such as the militarisation of disputed territories, the dangerous use of coast guard vessels and maritime militia, and clandestine attempts to disrupt other nations' offshore resource exploitation activities. To this end, military coordination between the Dialogue members will continue to provide strategic depth to the mission, including notably the annual Malabar exercise. The second message seeks to leverage Dialogue member resources in vaccine delivery, climate action, supply chain resilience, disaster response, cyber security infrastructure, and economic cooperation. Even though Beijing may consider the Quad to be an "Asian NATO", the Dialogue can be about much more than a strategic pushback on China's hegemonic intentions. At a time when the liberal consensus on globalisation has anyway run its course and across the Indo-Pacific, there is, post-pandemic, a strong appetite for deepening regional cooperation for trade and investment. In this context, the Quad is in pole position to shape economic alliances and regional security architecture towards a new world order based on national interest and realpolitik.

## CRISIS AND OPPORTUNITY

The adage 'every crisis contains the seeds of an opportunity' could not have been truer for anyone than for Sri Lanka's Prime Minister Ranil Wickremesinghe. The severe economic crisis, which set off indefinite protests against President Gotabaya Rajapaksa and his brother, (now former) Prime Minister Mahinda Rajapaksa, has pitchforked Mr. Wickremesinghe to an office that he had no chance of occupying until last week. Given the turmoil, Sri Lanka needed a government that would work towards stability and economic recovery. With Mahinda Rajapaksa resigning in the face of determined protests, and the Opposition leader unwilling to work under President Gotabaya, a rare opportunity opened up for Mr. Wickremesinghe. The former premier's political prospects had almost ended with the 2020 parliamentary election, when his United National Party won no seats, and he himself made it as its lone member in Parliament on the principle of representation in proportion to the total votes it had received across the nation. Much of the UNP's support base has also gone with Sajith Premadasa, his erstwhile party colleague, who now runs the main Opposition party, the Samagi Jana Balawegaya (SJB). Mr. Wickremesinghe finds himself in an extraordinary situation, as he is dependent on lawmakers of the Sri Lanka Podujana Peramuna (SLPP), the party of the Rajapaksas that is the target of public anger. The SJB has offered conditional support to measures aimed at economic recovery.

Mr. Wickremesinghe brushed aside a question on whether he had the moral authority to hold his office, contending that his situation was no different from that of Winston Churchill becoming PM with just four members supporting him to stave off a crisis. There are many questions on the political morality of his assuming office; there is some justification for popular resentment against him for easing the pressure on the President to resign. However, the need to have a viable arrangement to tackle the economic crisis is quite urgent. He has spoken about putting together

an international consortium to ensure financial assistance for the shortage-stricken country. His only strength now is the goodwill of the international community, which solidly backed his efforts to bring about peace and development in Sri Lanka in 2001-02, when he negotiated a ceasefire agreement with the LTTE and held direct talks. There is talk of speeding up political reforms, even to the point of abolishing the executive presidency through a fast-tracked constitutional amendment. Yet, such speculation about far-reaching changes does not inspire confidence, as many such opportunities in the past had been squandered. Mr. Wickremesinghe has the additional burden of proving to his detractors that he is working for political stability and economic recovery and not for reviving the political fortunes of the Rajapaksas.



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## NATION

### ON QUAD; ITS ORIGINS, GOALS AND FUTURE PLANS

The story so far: The leaders of four countries — India, the U.S., Australia, and Japan — are meeting for the second in-person summit of the Quadrilateral Security Dialogue or Quad in Tokyo which commenced yesterday on May 24. A lot has changed, since the first in-person meeting of the Quad in September last year.

The ongoing Russia-Ukraine crisis has triggered geopolitical shifts, driven up global inflation, and affected supply chains amid a slew of western sanctions on Moscow. In March this year, Quad leaders discussed the situation in Ukraine in an unscheduled virtual meeting called by U.S. President Joe Biden.

#### **What is the Quad and why was it formed?**

The Quad is an informal multilateral grouping of India, the U.S., Australia, and Japan aimed at cooperation for a free and open Indo-Pacific region. The region, composed of two oceans and spanning multiple continents is a hub of maritime trade and naval establishments. While not stated explicitly by the leaders, a major basis for the grouping is to check China's growing influence in the region.

After the Indian Ocean tsunami in 2004 wreaked havoc in the region now called the Indo-Pacific, India stepped up its rescue efforts not just on its own shores but also provided assistance to its maritime neighbours: Sri Lanka, the Maldives and Indonesia. Soon, the disaster relief effort was joined by three other naval powers — the U.S., Australia and Japan, with then U.S. President George W. Bush announcing that the four countries would set up an international coalition to coordinate the massive effort.

While the charge of the rescue operations was handed over to the United Nations shortly after, it led to the birth of a new framework: the Quadrilateral or Quad. Then Japanese Prime Minister Shinzo Abe, who had been promoting the idea of an “arc of prosperity and freedom” that brought the Quad countries closer together, further developed the concept and discussed it with then Prime Minister Manmohan Singh during a summit in December 2006. The grouping held a meeting in May 2007 but did not release an official statement. The 2007 Indo-U.S. Malabar naval exercises also saw the partial involvement of Japan, Australia and Singapore. The exercises and coordination were seen by China as an attempt to encircle it, which termed the grouping as trying to build “an Asian NATO”.

The Quad lost momentum post the 2007 meeting as the effort “dissipated amidst member leadership transitions, concerns about economic repercussions from China, and attention to other national interests,” according to the U.S. Congressional Research Service.

The grouping was only revived an entire decade later in 2017, at a time when all four countries had revised their assessment of the China challenge; and India had witnessed the Doklam standoff. Leaders of all four countries met in the Philippines for the ‘India-Australia-Japan-U.S.’ dialogue, not referred to as a Quad dialogue to avoid the notion of a “gang-up”. Even at this point, a set of objectives, areas of cooperation, and even the definition of Indo-Pacific were not fixed among Quad members.



It was in March 2021 that Mr. Biden, Mr. Modi, Australia's outgoing Prime Minister Scott Morrison, and then Japanese PM Yoshihide Suga met virtually, for the first time as an official Quad summit, releasing a set of objectives for the grouping in a joint statement called the 'The Spirit of the Quad'.

#### **What were the objectives of the grouping?**

The March 2021 virtual summit gave rise to the main objectives of the Quad, outlined actionable goals, and formed expert working groups in multiple areas.

Coming together to foster a free and open Indo-Pacific formed the bedrock of cooperation. "We recommit to promoting the free, open, rules-based order, rooted in international law and undaunted by coercion, to bolster security and prosperity in the Indo-Pacific and beyond," the joint statement said. Emphasis was laid on "rule of law, territorial integrity, freedom of navigation and overflight, peaceful resolution of disputes, and democratic values" in the region.

The other areas of immediate focus were the pandemic through strengthening equitable vaccine access for the Indo-Pacific, combating climate change, sharing critical technologies, cyber security, supply chain resilience, and infrastructure and connectivity projects.

Quad leaders launched the Quad Vaccine Initiative (QVI) with the aim of manufacturing and distributing at least a billion COVID-19 vaccines for the Asia region by the end of 2022. The plan was to manufacture U.S. developed vaccines in India with financing provided by the U.S. and Japan, and delivery undertaken by Australia and Japan to countries in Southeast Asia. The plan, however, has had trouble taking off for multiple reasons including legal indemnity issues with Indian law, safety concerns around the vaccine facility (of Pharma Biological E in Hyderabad), and lower demand for vaccines in South East Asia. As for emerging technologies, the four countries aimed to work on the development and diversification of 5G telecommunications and the creation of supply chains for critical minerals and technologies for making semiconductors used in smartphones, another area where China is a leader.

Quad nations had also agreed to build joint connectivity projects and transparent infrastructure funding for countries in the region. The emphasis on connectivity saw the Quad challenge China in another sphere: a coordinated effort to provide financing and sustainable alternatives to China's Belt and Road Initiative (BRI), which has led many nations to take loans and accept infrastructure bids from Beijing.

The Quad also created a working group for combating climate change which would oversee efforts to foster green shipping by decarbonising maritime supply chains and promoting the use of clean hydrogen.

#### **What are the future plans of the Quad?**

According to a statement released by the Ministry of External Affairs about the agenda of the May 24 summit, "The Leaders will review the progress of Quad initiatives and Working Groups, identify new areas of cooperation and provide strategic guidance and vision for future collaboration". The Quad summit is expected to discuss the Russian war in Ukraine, and the impact of three months of Western sanctions. Mr. Biden said yesterday that the world was "navigating a dark hour" with Russia's attack on Ukraine, adding that the war made evident the need for decent international order.



(India is the only member of the Quad that has not joined sanctions against Russia, while also ramping up its intake of Russian oil — an estimated 40 million barrels more than it had in all of 2021).

Mr. Biden also unveiled the 'Indo-Pacific Economic Framework' (IPEF) on May 23, which, according to Reuters is a programme to bind countries in the region more closely through common standards in areas including supply-chain resilience, clean energy, infrastructure and digital trade.

Mr. Modi, who attended the launch, signalled India's readiness to join the economic initiative. Indian officials had earlier expressed, however, that India was likely to be cautious about its participation in the Indo-Pacific Economic Framework as it could be seen as a counter to the 15-nation Regional Comprehensive Economic Partnership and the 17-nation Trans-Pacific Partnership that China is a member of. Quad members also launched a maritime monitoring plan to curb illegal fishing in the Indo-Pacific. Several countries have objected to Chinese fishing vessels often violating their exclusive economic zones resulting in economic losses, while also engaging in deep-sea trawling, which causes environmental damage.

#### CAUTION AND CLARITY

In a sudden decision not previously intimated, India became one of a 13-nation economic initiative led by the U.S., on Monday, as President Joseph Biden unveiled plans for an Indo-Pacific Economic Framework for Prosperity (IPEF). The initiative is touted as a substantial step by the U.S. as part of its decade-old "pivot to Asia", and an attempt at putting some "economic heft" into its Indo-Pacific presence that has been on the decline after its decision to quit the Trans Pacific Free Trade Agreement, the CPTPP, in 2017. Officials say the IPEF framework has four "pillars": supply-chain resilience; clean energy, decarbonisation and infrastructure; taxation and anti-corruption; and fair and resilient trade. Mr. Biden's visit to Japan and South Korea, attendance at the Quad summit and helming the IPEF launch is also aimed at reassuring the Eastern hemisphere about the U.S.'s focus. India's joining is an equally strong statement of commitment to Indo-Pacific goals, and to broadening regional economic cooperation, particularly after it walked out of the 15-nation RCEP. It is significant that all IPEF members, other than India and the U.S., are a part of the RCEP free trade agreement, and yet have chosen to be part of the U.S.-led initiative.

Despite the strong signalling from all sides, however, there are many aspects to the IPEF that bear further scrutiny. Monday's launch only signals the willingness of the 13 countries to begin discussions on the contours. Much will depend, as Prime Minister Narendra Modi stressed, on how inclusive the process is. Second, U.S. officials have made it clear that it is not a free trade agreement; nor will it discuss tariff reductions or increasing market access, raising questions about its utility. Shorn of the rhetoric of Indo-Pacific cooperation, there must be more clarity on its framework. The four pillars also lend themselves to some confusion, drawing into question whether there is enough common ground among the 13 countries that are part of very different economic arrangements, as well as outliers (the U.S. and India), to set standards together, or be open to issues that vary for each country. The U.S.'s statement that the IPEF is essentially focused on "American workers" also raises questions on whether increasingly protectionist global trends will chafe. Each of the IPEF countries has considerable trade interests in China, with most having large trade deficits. So, it remains to be seen how much they will be willing to sign on with the IPEF. Already three ASEAN countries, Cambodia, Laos and Myanmar, have decided to stay out of the framework's launch. Above all, given the fact that the U.S.'s previous initiatives (the Blue Dot Network and the Build Back Better Initiative) have made little headway in changing the region's



infrastructural needs, the IPEF faces a credibility challenge. Negotiators will need to move with both caution and clarity before making any big promises on its benefits for the region.

## WHAT CHINA AIMS TO ACHIEVE BY BUILDING A SECOND, BIGGER BRIDGE ON PANGONG TSO

The Ministry of External Affairs has confirmed that China is building a second bridge on the Pangong Tso lake, not far from the site of one of the most intense friction points in the border standoff that began in May 2020.

The second bridge, which is still under construction, is a permanent structure, sources told The Indian Express. A previous bridge, which came up around January, seemed to have been built to facilitate work on the new one. After completion, this second bridge will allow swift movement of armoured vehicles between the north and the south banks of Pangong Tso.

### Where are these bridges located?

After building the first bridge – about 400 metres long and 8 metres wide – on the Pangong Tso close to the friction areas on the north bank of the lake and the Chushul sub-sector on the south bank, China started constructing a broader bridge next to it a few months back

The site of the bridge is around 20 km east of Finger 8 on the lake's north bank – which is where the Line of Actual Control (LAC) passes, according to India. However, the actual distance by road is more than 35 km between the bridge site and Finger 8.

The construction site is just east of an old ruin called Khurnak Fort, where China has major frontier defence bases. China calls it Rutong Country. It has a frontier defence company at the Khurnak Fort, and further east, a water squadron deployed at Banmozhang.

Although it is being built in territory that is under China's control since 1958, the exact point is just west of India's claim line, which means India considers it its own territory. The Ministry of External Affairs last week stated that it considers the area as illegally occupied by China.

Pangong Tso is a 135-km long landlocked lake. India has around 45 km of Pangong Tso under its control, while China has more than two-thirds. The site of the new bridge is near the halfway mark of the boomerang-shaped lake.

### How will these constructions help China?

The main objective of the bridges is faster movement of troops, including mechanised forces, heavy weapons, and military vehicles. The bridges are at one of the narrowest points on the lake, close to the LAC.

The constructions are a direct outcome of the ongoing standoff that began in May 2020, which catalysed the construction of infrastructure by both sides across the entire 3,488-km long LAC.

### Why this location, though?

The location has to do with an operation by the Indian Army in August 2020, which allowed India to gain some leverage in negotiations to resolve the standoff. Indian troops outmanoeuvred the People's Liberation Army to occupy the heights of Kailash Range in the Chushul sub-sector on the south bank of Pangong Tso.





The positions allowed India to dominate the strategically significant Spanggur Gap, which could be used to launch an offensive as China had done in 1962. Also, India got a direct view of China's Molde Garrison. This was a cause of immense concern for the Chinese.

After this operation, the Indian Army also readjusted on the lake's north bank to position themselves above Chinese positions. The north bank was one of the first friction points to have come up in May 2020.

During this jostling, warning shots were fired for the first time by both sides, a first in over four decades. Also at certain areas on the south bank, troops and tanks were positioned just a few hundred metres apart, creating a dangerous eyeball-to-eyeball standoff.

The two sides finally agreed to pull back troops from these areas in February last year after spending a harsh winter on those heights.

China is building these bridges close to the theatre of action. Sources suggest that the new bridge will allow Chinese troops to slash travel time from around 12 hours at the moment to around four hours.

#### **What has been India's response?**

Officially, India has said that the site of the bridge is under illegal occupation of China, and that it is monitoring all Chinese activity closely.

MEA spokesperson Arindam Bagchi said on Friday (May 20), "We have seen reports of a bridge being constructed by China on Pangong Lake alongside its earlier bridge. Both these bridges are in areas that have continued to be under the illegal occupation of China since the 1960s. We have never accepted such illegal occupation of our territory, nor have we accepted the unjustified Chinese claim or such construction activities."

About India upgrading and developing infrastructure along the northern border, former Army Chief General M M Naravane had said in January:

"We are in a much better position where we were a year and half ago," adding that "whatever China is doing, is being equally matched by our side", and that India is in no way "lagging behind as far as infra is concerned".

In 2021, over 100 projects were completed by the Border Roads Organisation (BRO) in the border areas, most of which were close to the China border. India is also improving surveillance along the LAC, apart from building new airstrips and landing areas.

#### **What is the current situation in the standoff?**

While several friction points have been resolved, discussions are on regarding three remaining areas.

India and China pulled thir troops back from Patrolling Point (PP) 14 in Galwan Valley in June 2020, after the fatal clashes.

Then they disengaged from the north and south banks of Pangong Tso in February 2021, and from PP17A near Gogra Post in August. But negotiations have been stuck since then.



The Corps Commanders from both sides have met 15 times since the standoff began, and the last meeting was in March.

The dates for the next round of talks are still awaited.

China has a Platoon-sized strength of PLA troops on the Indian side of the LAC at PP15 in the Hot Springs area. Also, some so-called “Chinese civilians” have pitched tents on the Indian side of the Charding Nalla, which marks the LAC in Demchok.

Further north, closer to the Karakoram Pass, Chinese troops continue to block Indian soldiers in an area called the Bottleneck in Depsang Plain, disallowing them to access India’s traditional patrolling limits at PP10, PP11, PP11a, PP12 and PP13.

Both sides have over 50,000 troops each in the region, in the depth areas, along with additional air defence assets, artillery, tanks and other weapons.

#### SRI LANKA TO SEEK ADDITIONAL \$500 MILLION INDIAN LOAN FOR FUEL

Sri Lanka has decided to seek fresh assistance of \$500 million from India to augment its fuel imports, as the island reels under a crippling economic crisis manifesting in persisting shortages of essentials.

For weeks now, citizens are spending long hours lining up outside fuel stations — at times all day or night — to pump petrol or diesel, currently in short supply, as crisis-hit Sri Lanka runs out of dollars to pay for imports.

Public transport has been stalled due to the unavailability of fuel, businesses have been hit, and schools were forced to remain closed as students are unable to commute. Over the last few days, Sri Lankan social media saw many accounts of families being unable to access emergency medical care due to the lack of fuel. The government has asked “non-essential” staff to work from home, to save on fuel consumption.

“The Cabinet of Ministers granted approval for the proposal submitted by the Minister of Electricity and Energy to obtain a series of short-term loan facilities worth another \$500 million with the assistance of the export–import bank of the Indian government in order to purchase petroleum products required by the country settling the foreign exchange shortage existing at the moment,” the government said in a statement following the Cabinet meeting on Monday.

Fuel prices saw a record hike on Tuesday as diesel, earlier sold for LKR 289 (\$0.80) a litre, now costs LKR 400, reflecting a 38% jump. Petrol prices rose from 338 to 420 Sri Lankan rupees, threatening to further increase costs of all essential commodities whose prices are already skyrocketing.

For several months now, Sri Lanka has been amidst an unprecedented economic downturn, sparking street protests across the country. A group of demonstrators are camping outside the Presidential Secretariat in Colombo for 46 days in a row, demanding that President Gotabaya Rajapaksa, who they hold chiefly responsible, quit office.

Amid a heightening crisis, the government announced last month that it would pre-emptively default on the country’s foreign debt totalling \$51 billion as the “last resort”, and is currently negotiating a package with the International Monetary Fund.



However, Central Bank Governor Nandalal Weerasinghe on Monday noted that it was difficult to give a timeline of Sri Lanka's economic recovery that, he said, was contingent on the success of the measures taken by the government.

Much of Colombo's initiatives so far have been about tapping external help. India has already extended credit lines worth \$700 million for fuel imports — as part of the total \$3.5 billion assistance extended since January — and delivered over 5 lakh tonnes of fuel, including the latest shipment of 40,000 tonnes of petrol that reached Colombo on Monday. Meanwhile, the government is also considering various options to expand Sri Lanka's domestic energy sector, including with foreign investment. Minister of Power and Energy Kanchana Wijesekera on Tuesday announced plans to advertise plots for studies on oil exploration in the Mannar Basin, where Cairn India was earlier involved in exploration.

## THE CASE AGAINST MEHUL CHOKSI

The story so far: Earlier this week, Dominica dropped criminal proceedings against diamantaire Mehul Choksi, who was accused of illegally entering the country in May 2021. Now wanted by the Central Bureau of Investigation (CBI) and the Enforcement Directorate (ED) for his alleged role in the ₹13,578 crore Punjab National Bank (PNB) fraud, he had shifted to Antigua and Barbuda in January 2018, days before the first case against him was registered.

### What happened in Dominica?

On May 23, 2021, Mr. Choksi went missing from Antigua and Barbuda under mysterious circumstances. He later surfaced about 190 km away in Dominica, where he was detained on the charge of illegal entry. On May 27, 2021, the Dominican government confirmed his presence there. His family and lawyers alleged that he was abducted and taken to Dominica in a yacht, and had in that process, suffered injuries as well. In July 2021, a Dominica High Court allowed him to travel back to Antigua and Barbuda on bail for medical treatment. The Dominican government has now decided to drop all charges against him.

### What are the charges against Mr. Choksi in India?

On the PNB's complaint, the CBI registered the first case against Mr. Choksi, his nephew, Nirav Modi and others on January 31, 2018, alleging that they cheated the bank of over ₹280 crore in conspiracy with some officials. The alleged role of three companies, Diamonds R US, Solar Exports and Stellar Diamonds, was detected after they approached the bank's corporate branch in Mumbai for buyer's credit to make payment to the so-called overseas suppliers.

Days later, the agency registered another case against three Gitanjali group companies of Mr. Choksi for causing an alleged ₹4,887 crore loss to the bank. Following investigations, the CBI filed a chargesheet alleging that the amount involved was over ₹7,080 crore.

In an unrelated matter, earlier this month the CBI registered yet another case against Gitanjali Gems Limited, Mr. Choksi and others for allegedly cheating the IFCI Limited of ₹22.06 crore.

The ED has filed chargesheets under the Prevention of Money Laundering Act and attached properties worth hundreds of crores in India and abroad. Proceedings against him have also been initiated under the Fugitive Economic Offenders Act



### **How was the PNB allegedly cheated by Mr. Choksi and his associates?**

The CBI found that Mr. Choksi's companies were fraudulently issued 165 Letters of Undertaking (LoU). The value of 58 Foreign Letters of Credit (FLCs) were also enhanced in 2017 for payment to dummy overseas suppliers. In all, 347 FLCs were issued from 2014-16. The suspect transactions had been initiated in 2011 and they continued till the bank authorities unearthed the "scam". They earlier remained undetected as the respective major entries were not made in the bank's Core Banking Software (CBS).

Initially, the FLCs were opened for small amounts against which entries were recorded in CBS and letters sent to overseas branches through the SWIFT messaging system. As time went by, the value of FLCs was enhanced manifold by making amendments via SWIFT, without making CBS entries. The funds released to "suppliers" were used for clearing previous liabilities and other purposes, as alleged.

### **When did the shift to Antigua and Barbuda happen?**

Mr. Choksi and his relatives flew out of India in the first week of January 2018, days before the bank lodged a complaint with the CBI. The agencies later found that he had applied for Antiguan citizenship in May 2017. His application was approved in November 2017. On January 15, 2018, he took the oath of allegiance to Antigua and since then has been living there. As alleged, Mr. Choksi had visited Hong Kong in December 2017 and told the dummy directors of "supplier" companies to apply for Thailand visa. Therefore, the ED has alleged that he knew beforehand about the impending criminal proceedings.

### **What measures are the Indian agencies taking to bring Mr. Choksi back?**

Based on its findings, the CBI approached Interpol and got a Red Notice issued against Mr. Choksi in December 2018. Through diplomatic channels, the probe agencies have sought the fugitive's custody for his prosecution in India. India does not have an extradition treaty with Antigua and Barbuda. However, according to a Ministry of External Affairs' order dated August 3, 2018, provisions of the Extradition Act, 1962, (other than Chapter III) apply to Antigua and Barbuda with effect from the date of notifying India as a Designated Commonwealth Country under the Extradition Act of Antigua and Barbuda on September 17, 2001. India is currently pursuing its request for Mr. Choksi's extradition in the court there. He is also facing legal proceedings challenging the validity of his Antiguan citizenship.

## **UNDERSTANDING THE PROCESS OF ISSUING LOCS**

The story so far: On April 5, the Punjab and Haryana High Court while quashing a Look Out Circular (LOC) against petitioner Noor Paul passed omnibus instructions to the respondents including the Ministry of Home Affairs (MHA) and the Bureau of Immigration (BOI) to serve a copy of the LOC to the affected person, state the reasons for issuing the LOC "as soon as possible" and provide a "post-decisional opportunity". It asked the MHA to include these directions into the "Official Memorandum" or the guidelines that govern the opening of LOCs. The Government of India moved Supreme Court and the apex court stayed the particular paragraph of the High Court order. The High Court in its judgement has said that the action of the Bank of India to issue an LOC against Ms. Paul who was a guarantor to a loan procured by her father was "arbitrary, illegal and violative of Article 21 of the Constitution." Ms. Paul got to know about the LOC when she was turned away from the Delhi airport on February 22 when she was there to travel to Dubai.



### **What is a look out circular?**

It is a notice to stop any individual wanted by the police, investigating agency or even a bank from leaving or entering the country through designated land, air and sea ports. The immigration is tasked to stop any such individual against whom such a notice exists from leaving or entering the country. There are 86 immigration check posts across the country.

### **Who can issue LOCs?**

A large number of agencies which includes the Central Bureau of Investigation (CBI), Enforcement Directorate, Directorate of Revenue Intelligence (DRI), Income Tax, State police and intelligence agencies are authorised to generate LOCs. The officer should not be below the rank of a district magistrate or superintendent of police or a deputy secretary in the Union Government.

### **What are the details required to generate an LOC and who issues it?**

According to a 2010 official memorandum of the Ministry, details such as First Information Report (FIR) number, court case number are to be mandatorily provided with name, passport number and other details. The BOI under the MHA is only the executing agency. They generate LOCs based on requests by different agencies. Since immigration posts are manned by the BOI officials they are the first responders to execute LOCs by stopping or detaining or informing about an individual to the issuing agency. The LOCs can be modified; deleted or withdrawn only at the request of the originator. Further, the legal liability of the action taken by immigration authorities in pursuance of LOC rests with the originating agency.

### **How are banks authorised?**

After several businessmen including liquor baron Vijay Mallya, businessmen Nirav Modi and Mehul Choksi fled the country after defaulting on loans, the MHA in 2018 brought changes to the 2010 guidelines authorising the chairman, managing director and chief executives of all public sector banks to generate LOCs against persons who could be detrimental to economic interests of the country. Though an LOC generated by the CBI on October 16, 2015 to “detain” Mr. Mallya existed based on the preliminary enquiry in a ₹900 crore loan default case, it was downgraded to “inform only” on November 23, 2015 as there was no FIR yet against him. Mr. Mallya who was a Rajya Sabha member then was a frequent flyer and he fled to the U.K in March 2016. The Ministry recently told the Delhi High Court that banks were authorised to generate LOCs as “in the recent past there have been incidents where the willful defaulters or economic offenders of public financial institutions have left the country after usurping public money or defrauding such public financial institutions.”

### **Is there any other clause under which an individual can be stopped?**

The 2010 Ministry guidelines give sweeping powers to police and intelligence agencies to generate LOCs in “exceptional cases” without keying in complete parameters or case details against “suspects, terrorists, anti-national elements, etc, in larger national interest.” In 2015, Greenpeace activist Priya Pillai was stopped from travelling to London on a request by the Intelligence Bureau (IB) based on the “etc” provision in the 2010 order. The LOC was later quashed by the Delhi High Court. After the special status of J&K under Article 370 of the Constitutions was read down by the Parliament in August 2019, LOCs were opened against several politicians, human rights activists, journalists and social activists to bar them from flying out of



the country. The number of persons and the crime for which they have been placed under the list is unknown.

#### **Are individuals entitled to any remedial measures?**

Many citizens have moved courts to get the LOC quashed. The MHA has asserted that “LOCs cannot be shown to the subject” at the time of detention nor can any prior intimation be provided. The Ministry recently informed the Punjab and Haryana High Court that the LOC guidelines are a secret document and the same cannot be shared with the ‘accused’ or any unauthorised stakeholder; it cannot be provided or shown to the subject at the time of detention by the BOI since it defeats the purpose of LOC and no accused or subject of LOC can be provided any opportunity of hearing before the issuance of the LOC.

On January 12, a Delhi High Court bench led by Justice Rekha Palli had quashed an LOC against a Delhi businessman Vikas Chaudhary generated at the instance of the Income Tax department. The court said “no proceedings under any penal law had been initiated against the petitioner” and the LOC was “wholly unsustainable.” A Delhi court on April 8 while quashing an LOC against Aakar Patel, chair, Amnesty International India said that “there cannot be any unfettered control or restriction on the right to travel” and that it was part of the fundamental rights and asked the Director of the CBI to tender a written apology. As per norms, an LOC will stay valid for a maximum period of 12 months and if there is no fresh request from the agency then it will not be automatically revived.

#### **THE UPROAR OVER A HUG**

It was no surprise when certain sections of society in Tamil Nadu celebrated the news of the Supreme Court ordering the release of A.G. Perarivalan, one of the seven convicts in the assassination of former Prime Minister Rajiv Gandhi. But what has triggered a political controversy is the way Chief Minister M.K. Stalin received Perarivalan on the day of the Supreme Court’s decision. The image of the Chief Minister hugging Perarivalan at the Chennai airport went viral, evoking strong reactions from many, including survivors and other persons affected by the bomb blast in which Rajiv Gandhi was assassinated in May 1991. While the BJP State president, K. Annamalai, was forthright in criticising the Chief Minister for his reaction, the Congress, an ally of the DMK in Tamil Nadu, simply stuck to disagreeing with the Supreme Court’s verdict.

Those directly impacted by the assassination are livid that Mr. Stalin greeted Perarivalan warmly. “What did Perarivalan achieve for the Chief Minister to hug him,” asked Anusuya Daisy Ernest, now a retired police officer and one of the survivors of the blast. As a sub-inspector in May 1991 and posted for the security of Rajiv Gandhi, Ms. Ernest had, seconds before the blast, attempted to stop the assassin Dhanu, “the human bomb”, from approaching Rajiv Gandhi but the former Prime Minister had restrained her. “Why did the Chief Minister not meet us (the affected persons of the blast),” the former police officer asked. In the last 31 years, successive Chief Ministers did not bother to meet the survivors of the blast and the family members of the 15 persons (apart from Rajiv Gandhi) who were killed in it, she added.

However, Mr. Stalin alone did not hail the verdict. A large number of political parties, including the AIADMK, the principal Opposition party, welcomed the development. In fact, the AIADMK claimed credit for the release of Perarivalan, as it was Jayalalithaa who, as Chief Minister, declared on the floor of the Assembly in February 2014 that if the Centre did not take a decision immediately, her government would go ahead with the decision of the State Cabinet to release all



the seven convicts in the case. Perarivalan, along with his mother, Arputham, also met AIADMK coordinator O. Panneerselvam and co-coordinator Edappadi K. Palaniswami. The mother and son went on to meet several other leaders belonging to different parties.

Yet, Mr. Stalin has become the cynosure of public attention. In fact, his consultation with legal experts on the release of the remaining six convicts on the death anniversary of Rajiv Gandhi (May 21) too came in for sharp criticism as the Tamil Maanila Congress (M) leader G.K. Vasan said it was like rubbing salt in the wound.

But the DMK's take on the episode is different. Commenting on Mr. Stalin's reception of Perarivalan, the party spokesperson, A. Saravanan, recalled the submission made by the former probe officer, V. Thiagarajan, in an affidavit filed in the Supreme Court in October 2017, that Perarivalan had "absolutely no idea" about the deadly purpose of the two nine-volt batteries he had bought and handed over to the assassins. Contending that such was the material on which Perarivalan was convicted, the spokesperson also pointed out that the former police officer has not been prosecuted for perjury. Besides, the judicial verdict should be viewed as a victory for the rights of States vis-a-vis the powers of the Centre in the present political context, he added.

Notwithstanding the strong reaction to his action, Mr. Stalin's meeting with Perarivalan will remain a subject of discussion for long.

## SEX AS WORK

A long-standing demand of sex workers that their work be decriminalised has been partially fulfilled with the Supreme Court passing an order on May 19 that adult sex workers are entitled to dignity and equal protection under law. Directing the police to respect the rights of consenting sex workers, the Court observed that "... notwithstanding the profession, every individual ... has a right to a dignified life under Article 21 of the Constitution". It reiterated what the Court had ruled in *Budhadev Karmaskar* (2011), that sex workers are also entitled to a "life of dignity". With the Trafficking of Persons (Prevention, Protection and Rehabilitation) Bill yet to see the light of day, the Court invoked powers under Article 142 to issue guidelines till the legislation is in force. In 2011, it had set up a panel to look at prevention of trafficking; rehabilitation; and conditions conducive for sex workers who wish to continue work. As the Court awaits the Government's response to the panel's recommendations that adult sex workers should not be "arrested or penalised or harassed or victimised," a three-judge Bench led by Justice L. Nageswara Rao did well to direct the police to treat "all sex workers with dignity and should not abuse them, ... verbally and physically, subject them to violence or coerce them into any sexual activity". During the hearings, the Additional Solicitor General Jayant Sud had conveyed to the Court that the Government has "certain reservations" on some of the panel's recommendations.

The Court has asked the Government to respond to the panel's suggestions in six weeks. By holding that basic protection of human decency and dignity extends to sex workers and their children, the Court has struck a blow for the rights of an exploited, vulnerable section. Coming down heavily on the brutal and violent "attitude" of the police toward sex workers, the Court said "it is as if they are a class whose rights are not recognised". It has asked State governments to do a survey of protective homes under the Immoral Traffic (Prevention) Act, the legislation governing sex work in India, to review the cases of "adult women" detained there and process their release in a time-bound manner. The ITP Act penalises acts such as running a brothel, soliciting in a public place, living off the earnings of a sex worker and living with or habitually being in the company of one. The Court's general observations should help sensitise the police,



media and society toward sex workers, who have generally been invisible and voiceless. The ball is in the Government's court to draw up appropriate legislation to free consenting sex workers from stigma, and grant them workers' rights. In that too, the Court suggested the Centre and States involve sex workers or their representatives to reform laws.

#### FRAME POLICIES TO PROTECT LGBTIQ+ WORKERS, SAYS ILO

A document released on Wednesday by the International Labour Organisation (ILO) on "Inclusion of lesbian, gay, bisexual, transgender, intersex and queer (LGBTIQ+) persons in the world of work" recommended member countries, employers' organisations and representatives of workers to launch social protection programmes to remove barriers that LGBTIQ+ persons face in society.

Citing data from various sources, the ILO document said discrimination has an economic cost not just to LGBTIQ+ persons and their families but also to enterprises and national economies. The ILO added that around the world, LGBTIQ+ persons face harassment, violence and discrimination on the basis of sexual orientation, gender identity, gender expression and sex characteristics.

It said a national policy and labour law review will allow governments to assess their country's work policy environment for LGBTIQ+ persons. "This will allow the identification of concrete steps for improving the legal and policy environment, ending discrimination and exclusions, and complying with international instruments," the document said.

The ILO said consultation with LGBTIQ+ communities and social dialogue with employers' and workers' organisations are key. "This will allow the identification of barriers faced by LGBTIQ+ persons when entering the labour market and accessing government schemes, including those on social protection," the document said.

The ILO asked the governments to work with small and medium industry associations, sectoral unions and informal economy workers' associations to monitor discrimination in the informal economy and address stigma and discrimination related to gender and sexual identity.

Encouraging employers' organisations to end sexual discrimination at workplaces, the ILO said it makes business sense to work on LGBTIQ+ inclusion in the workplace.

#### Workplace diversity

"Studies have shown that diversity in the workplace, including LGBTIQ+ persons, is better for business. It signals a creative environment that creates the right conditions for economic growth. Employers' organisations can provide policy guidance to their members, undertake advocacy and raise awareness on including LGBTIQ+ persons in workplaces, promote social dialogue and collective bargaining, and facilitate learning and sharing of good practices among members," the document said.

The ILO asked trade unions to help LGBTIQ+ workers to organise and exercise their right to freedom of association. The ILO said workers' associations can also ensure that issues affecting LGBTIQ+ workers are represented in collective bargaining agreements with employers and in workplace policies and other tools.

"Many LGBTIQ+ workers, particularly those in smaller workplaces, may feel isolated without visible LGBTIQ+ peers or allies," the document said.





## DRIVING THE BALKANISATION OF INDIA

One of the reasons for celebrating the completion of 75 years of India is that it has survived as long. At Independence there had been scepticism whether it would. The chief doubter was Winston Churchill, who claimed that India was no more than a geography, the peoples of which the British had helpfully brought under one umbrella through conquest. But as we celebrate India's journey, it would do to recognise that today forces are at work that weaken its unity. In particular, two projects that appear to have the blessing of the present political dispensation at the Centre have the potential to actually destroy it.

### **The Gyanvapi issue**

First, we watch with shock and awe the developments related to the Gyanvapi mosque in Varanasi. The court has been petitioned to allow Hindus to worship at what has for centuries been a mosque. Impartial observers state that there is incontrovertible evidence that the mosque was once a temple that was demolished at the orders of the Mughal emperor Aurangzeb. Now, we have the Places of Worship Act of 1991 that disallows a change of status of a religious structure. This ought to be sufficient to protect the mosque concerned from the threat of a change in its status as a site of worship for Muslims. But should we see this solely in legal terms? Should, if it comes to that, Indian Muslims of today be asked to vacate a mosque based on an act in the distant past that they are not responsible for? Should India's Hindus not rise to a magnanimity that would reconcile them to the injustice done to their ancestors, heart-rending as it is even to imagine? Not only are they the overwhelming majority of this country now but they also have plenty of places to worship in.

### **From another democracy**

Last year, the United States President, Joe Biden, even if he now enjoys a diminished popularity globally, made an important speech at Tulsa, Oklahoma, U.S., where he had gone to commemorate the 1921 Tulsa Race Massacre. He had said, "We do ourselves no favors by pretending none of this ever happened or it doesn't impact us today, because it still does impact us today. We can't just choose to learn what we want to know, and not what we should know. We should know the good, the bad, everything. That's what great nations do. They come to terms with their dark sides...." Mr. Biden was suggesting that while Americans must remember, they must also move on without hoarding grievances. This message is valid for both the Hindus and the Muslims of India, depending upon the context.

There is something incomplete in the project of singling out Muslim rule in north India for a record of violence in our history. Though it is yet to be established whether the decline of the great Dravidian settlements of northern India was due to Aryan expansion or environmental causes such as drought, we have reason to believe that this expansion was not without violence. After all, verses in the Rig Veda invoke Indra, the pre-eminent Aryan god, as the slayer of the "dasyu", literally "the enslaved" inhabitants of India. All over northern India, there was till quite recently a pride expressed in the subjugation of the local population by the Aryans upon their arrival. But Hindu nationalism sits uncomfortably with such exultation, for it renders the Aryans foreigners in this land, without the legitimacy to define its cultural norms. The pattern of settlement in India whereby the Adivasi have been corralled into inaccessible spaces such as mountains or banished to the extremities of villages suggest that this was the result of a concerted move to exclude them from social life. This could not have been possible without the threat of violence.



### Another project, of language

Speaking of the destruction of religious icons, there is evidence that the Aryans may not have been so ecumenical after all. Archaeologists who participated in the excavation on sites of Harappan civilisation in western India have pointed to the deliberate destruction of remnants of the phallic symbol carved in stone. Admonition of the worship of shishnadeva, literally phallus god, may be found in the sacred literature of Vedic Hinduism. So, the destruction of the religious icons of conquered peoples in India is not confined to Islamic rule in north India. For some Indians, it dates back into our pre-history. This is not to even suggest a moral equivalence, for violence against any defenceless people is cowardly, but it does serve to bring some perspective into the debate about retributive justice related to the injustices of the past. It is the Adivasi amongst us who are least likely to have blood on their hands.

Aligned to the project of isolating the religious minorities of India is Hindu nationalism's second project — that of establishing Hindi as the dominant language in the country. Purely a reflection of the will to dominate, it cannot be rationalised as the pursuit of retributive justice, and, unlike the other project, has unabashed state support. The issue has remained dormant in the country after a very mature settlement of it in the 1960s, whereby it was agreed that English would be used in the communications of the Government of India so long as the southern States want it.

Since 2014, we have seen a renewed thrust being given to Hindi by the Central government. The attempt to impose Hindi on the rest of the country is both insidious and predates the present. But Prime Minister Narendra Modi is being disingenuous when he speaks of the equal importance of all Indian languages while his Home Minister does not miss an opportunity to remind the country of the special status of Hindi. Far too much time and resources of Central government institutions are wasted on promoting Hindi when all its functionaries understand English perfectly well. Nothing but linguistic chauvinism keeps this pursuit alive. Even the so-called socialists of north India are not above it, as revealed by Mulayam Singh, then Chief Minister of Uttar Pradesh, writing in Hindi, in the 1990s, to his counterpart in Kerala, a politician with a far longer tenure in public life. Sadly, the sentiment that Hindi should prevail is quite widespread in India, as seen in the recent comments of Bollywood actors. These purveyors of mostly costume drama may aspire for Hollywood status but do not have the large-heartedness of a Marlon Brando, who championed the rights of native Americans.

The relentless thrust to impose Hindi came close to succeeding in the mid-1960s, but it took arson and self-immolation in Madras State to fend it off. Today, the moment is less propitious for the Hindi chauvinists. The south is far more advanced than the Hindi heartland in terms of both social and economic progress. In fact, it serves as a beacon of hope for north Indian workers in search of a livelihood. Even the ordinary southerner sees Hindi as the language of the most backward part of the country, one where Muslims are bullied, women are subjugated and politicians are treated as minor feudals. So, why would south Indians agree to be ruled in the language of a region they view as unworthy of emulation? It is not even necessary for them to recall that Hindi is the language of the most recent migrant to this ancient land. They simply reject the majoritarian grounds on which it is deemed to be the national language.

### A diverse peoples

Constitutionally, India is a union of States. Its founders crafted an entity that has so far held out under great adversity. But India is also a coalition of peoples that are diverse in terms of their histories and culture. For it to hold together requires leaders with large hearts and not merely big



chests. We see today the ascendancy of a political ideology with little understanding of the idea of India as a coalition of the willing. Incapable of winning hearts and minds, it has spawned a divisive politics which has the potential of wrecking a union put together with great care. Only a determinedly active citizenry can avert this outcome.

#### PFI RALLY IN ALAPPUZHA SENDS OUT DISTURBING SIGNALS OF A POLITICS THAT THREATENS TO DEEPEN FAULTLINES, SHRINK SHARED SPACES

The Kerala police has booked two senior leaders of the Popular Front of India (PFI) after video clips from a rally held on Saturday featured a boy perched on the shoulders of an adult raising highly provocative and polarising slogans. That the hate speech came from a young boy suggests a disturbing level of indoctrination. The PFI had organised the Alappuzha rally ostensibly to protest attacks on constitutional values. The communally-charged slogans, however, gave the lie to its stated intent. The PFI's militancy in the name of protecting minority rights is disquieting and a self-goal: It triggers more fear and distrust, shrinks spaces for conversation and potentially produces political ghettos. The Constitution respects free speech and guarantees the citizens' right to organise, but constitutional politics allows little space for spreading hate.

The PFI, formed in 2007, has a dismal record of fostering polarisation and promoting violence. The outfit first caught national attention in July 2010, when eight of its activists chopped off the hands of a college professor, T J Joseph, for allegedly insulting the Prophet. In 2015, an NIA court convicted 13 PFI activists for this crime. Though the PFI, and its political wing, the SDPI (Social Democratic Party of India) has sought to position itself as an outfit invested in the welfare of Muslims, Dalits and tribals, it has been constantly on the police radar for its communal propaganda. In April this year, a PFI leader was hacked to death outside a mosque in Palakkad, allegedly by RSS-BJP workers, and in retaliation, an RSS worker was killed.

The rise of a brutish force like the PFI threatens to undo the social, political and economic gains made by mainstream Muslim outfits since the formation of Kerala in 1956. Muslims, who constitute over a quarter of the state population, are better-represented in Kerala's legislative assembly and ministries than in other states — currently, 33 of the 140 MLAs are Muslims. Legislators from the Indian Union Muslim League have held important portfolios such as education and industry in various governments. The PFI has sought to diminish these achievements and play a politics of victimhood by framing the Kerala Muslim as an oppressed Other. It has sought to project a militant politics as an alternative to the democratic idiom — the boy rallying marchers with threatening slogans is being painted on social media as a hero. This crude and coarse politics helps neither the Kerala Muslim nor the wider Kerala society.

#### QUTUB MINAR NOT A PLACE OF WORSHIP: ASI

The Qutub Minar complex is not a place of worship and its character cannot be changed now, the Archaeological Survey of India submitted in a Delhi court on Tuesday while opposing a plea challenging the dismissal of a civil suit seeking "restoration" of Hindu and Jain temples on the premises.

The original suit, which claimed that 27 temples were demolished to build the Quwwat-ul-Islam mosque at the Qutub Minar complex, was dismissed last year under the provisions of Places of Worship (Special Provisions) Act, 1991.



### **Court reserves order**

Additional District Judge (ADJ) Nikhil Chopra has reserved the order on the plea for June 9.

Arguing before the ADJ at a Saket court, petitioner Hari Shankar Jain said the dismissal of the original suit based on the 1991 Act was wrong as the Qutub Minar complex comes under the purview of the Ancient Monuments and Archaeological Sites and Remains (AMASR) Act of 1958.

The ASI, however, submitted that the Qutub Minar complex was not a place of worship when it was first notified as a protected monument in 1914.

Advocate S. Gupta, appearing for the ASI, explained that the character of a monument is decided on the date when it comes under protection. Following this, objections from the public are invited for two months. This is how several places where religious practices were being conducted came to be protected under the AMASR Act, the ASI explained, adding that the petitioner cannot at this juncture seek to change the character of the monument.

While hearing the arguments, ADJ Chopra noted that the central question appears to revolve around the character of the monument.

Mr. Jain cited the Ayodhya Ram Janmabhoomi judgment to argue that the character of the area remained that of a temple as the structure was built by allegedly demolishing Hindu and Jain temples.

In its submissions, the ASI said remains of 27 temples were procured for the mosque by spending 2,00,000 Delhiwals (coins) on each. It added that nowhere in the records does it mention that these remains were retrieved by demolishing temples.

The court said that the petitioner is seeking to turn the monument into a place of worship based on a claim that a temple complex existed there 800 years ago. "Deity has survived without worship for 800 years, why not let it survive like that?" the court said on a lighter note.

## **HARMONIUM IN SIKH RELIGIOUS TRADITION, AND WHY AKAL TAKHT WANTS IT REMOVED FROM GOLDEN TEMPLE**

The Akal Takht wants the harmonium removed from the Golden Temple in the next three years. Giani Harpreet Singh, Jathedar of the Akal Takht, recently asked the Shiromani Gurdwara Parbandhak Committee (SGPC) to work towards ensuring that the deadline is met.

On May 21, the Delhi Sikh Gurdwara Management Committee (DSGMC) set its own target to phase out harmoniums as it asked all Sikh Raagis in Delhi to switch to traditional string instruments.

What is behind the push by Sikh bodies to ensure that kirtan, or the singing of Gurbani, is only accompanied by traditional instruments, and why is the harmonium at the receiving end?

### **History of harmonium**

Born in Europe in the 1700s, the harmonium went through many design tweaks to become the instrument that we know today.

The first prototype is believed to have been built by Christian Gottlieb Kratzenstein, a professor of physiology at the University of Copenhagen. Alterations followed, and in 1842, a French



inventor named Alexandre Debain patented his design and called it 'Harmonium'. This was a foot-pumped harmonium. It was brought to India by Western traders or missionaries in the latter part of the 19th century.

According to the website of the Union Ministry of Culture, the Indian hand-pumped harmonium was designed by Dwarkanath Ghose in Kolkata in 1875.

Drone knobs were added to the instrument to produce harmonies in Indian classical music. A scale-changing technique was also added.

By 1915, India had become the leading manufacturer of the harmonium, and the instrument had become an integral part of Indian music. The harmoniums of today can play up to 12 Surs and 22 Shrutis.

However, a section of Indian classical music scholars continued to note that the harmonium is not able to perform all Raagas properly and strike all classical notes with perfection.

#### **At the Golden Temple**

It is unclear when exactly the harmonium entered the Golden Temple. It is believed that it has been there since the beginning of the 20th century.

A painting of a congregation at the Harmandir Sahib by William Carpenter from 1854 shows kirtan being performed with only the string instrument rabab and a tabla-like instrument called jori — there is no harmonium.

However, it is difficult now to picture a Gurmat Sangeet performance without a harmonium.

In fact, out of the 105 Raagi jathas (choir) hired by the SGPC, 100 perform kirtans with harmoniums. Five jathas with knowledge of traditional string instruments or Tanti Saaz were added only in recent years.

"It is said the harmonium was played at Harmandir Sahib for the first time in 1901 or 1902. There are kirtani jathas that use both the harmonium and string instruments, and come up with very good performances," Dr Alankar Singh, a Punjabi University, Patiala, professor who has specialised in Hindustani classical music and Gurmat Sangeet, said.

#### **Opposition by Sikh scholars**

A group of scholars of Gurmat Sangeet, the Sikh tradition that has parallels with Indian classical music, believes that the harmonium was "imposed" by the British.

They believe that the harmonium allows Raagis to hide their shortcomings, while Tanti Saaz require more discipline. These scholars argue that the harmonium allows less talented Gurbani singers to become Raagis at the Harmandir Sahib, which in turn impacts the quality of kirtan.

Over the years, several Sikh Raagis have also faced criticism for trying to introduce an element of entertainment to what Sikh clergy consider a strictly spiritual discipline. The SGPC had even warned Raagis against drifting away from the Raagas mentioned in Guru Granth Sahib while doing Shabad Kirtan. In the Guru Granth Sahib, every Shabad is tied to a Raag.

#### **But it is not easy to replace**



The SGPC will not find it easy to phase out an instrument that has been part of the Gurmat Sangeet ecosystem for over a century. There are many generations of Sikhs who have grown up listening to the harmonium as part of the Gurmat Sangeet. There are Raagis who have trained for years in the discipline. Harmonium and tabla training classes are a norm at most gurdwaras in India and abroad.

Several Sikh scholars opposed to the Akal Takht's call think that it should focus on the revival of string instruments instead of removing the harmonium. The other side, however, argues that it is the dominance of harmonium that marginalised Tanti Saaz in the first place. They also point to how the Namdhari sect shunned the harmonium in the 1970s, and moved completely to the use of string instruments.

## CONVICTION AND REPRESSION

After pleading guilty to all charges related to a terror funding case, including those under the stringent Unlawful Activities (Prevention) Act (UAPA), it was inevitable that separatist leader Yasin Malik, chairman of the Jammu and Kashmir Liberation Front, would be sentenced to life imprisonment as he was by an NIA court. Malik's chequered past includes serious charges of being involved in the killing of Indian Air Force officers in 1990. It is another matter if Malik, who claims to have abjured violence and has been part of several parleys with the Indian government in peace talks since the mid-1990s, was pleading guilty to all charges in order to make a political statement and to inflame passions to get support for the flagging separatist leadership in the Kashmir Valley. Nevertheless, with the Union Government adopting a hard line since 2019 in dealing with the separatist movement, it was a foregone conclusion that the charges against Malik would have been doggedly pursued. Among the separatists, the JKLF remains an outfit committed to the independence of Kashmir, including parts of Pakistan-occupied Kashmir, placing it on a confrontationalist course with the Indian government, notwithstanding Malik's claims of giving up violence as a means. The initial reaction in the Valley to Malik's conviction was an uptick in violence and protests even as security clampdowns were put in place to prevent any further upsurge. Malik's arrest and conviction, the ongoing house arrest of Mirwaiz Umar Farooq and the death of hardliner Syed Ali Shah Geelani suggest that the political face of separatism has been neutralised in the valley.

Yet, this does not mean that the voices of separatism in the Valley have been silenced. Militant incidents with law enforcement, security personnel and even Kashmiri Pandits as targets have continued to rage on, and the absence of the political leadership is expected to give way to more militancy. This is a situation that should not be taken lightly. With the mainstream Kashmir polity also nursing a grievance of alienation over the Indian government's decisions to do away with the special status for Jammu and Kashmir, its bifurcation into two Union Territories and loss of statehood, besides the ham-handed approach to achieve a politically suitable delimitation of electoral constituencies, the situation in the Valley threatens to return to what prevailed during the violent 1990s. It is possible that Yasin Malik's conviction, even if obtained through the judicial process, will be seen in the Valley as an extension of the political repression that has been unleashed since 2019, and militant groups will definitely seek to portray it that way. It is up to the Union Government to resuscitate confidence-building measures in the Union Territory. A return to statehood and a re-activation of the democratic political process is a much-needed imperative.



## PUNJAB CM DOES WELL TO WEED OUT A COLLEAGUE UNDER CLOUD BUT HE NEEDS TO DO MORE SPADEWORK — OFF CAMERA

Newly elected Chief Minister of Punjab Bhagwant Mann has sacked a minister with a high-profile portfolio following allegations of corruption. There is much that is refreshing in this. Corruption is an old scourge of governance which, for the most part, only breeds cynicism and pessimism. In Punjab, however, corruption-as-usual contributed to a groundswell of popular alienation from the political class that helped relative newcomer AAP romp to a sweeping electoral victory. Acting decisively on corruption, or corruption allegations, within its ministry, therefore, helps the new AAP government send out the message of a much-needed break from a congealed past. Given the AAP's own backstory — it emerged from the Anna Hazare-led movement against corruption — it also helps it reaffirm its own positioning in a political field in which it is still trying to achieve a more secure footing. But the sacking of Vijay Singla, minister of Health and Family Welfare and Medical Education and Research, allegedly for demanding a 1 per cent commission for awarding government contracts to private vendors, also raises questions.

Punjab's new chief minister must not merely congratulate himself on taking a bold step against one of his own, he must also ask how someone who is seen as tainted so soon after taking charge was given a crucial portfolio, any portfolio, in the first place. Going forward, if it is not to be seen as selective or merely opportune, Singla's sacking also sets the bar challengingly high for action against corruption by the Mann government. In reality, beyond the spectacular sacking, "zero tolerance on corruption" — that the AAP lays claim to — can only be achieved by examining and reforming the procedures and processes that help the system turn a blind eye to, even give a leg-up to, the corrupt. The question in Punjab, then, is: Can the AAP do the quieter, more patient labour needed for a larger clean-up? Can the Mann government deliver on its promise to weed out corruption in ways that may not have an immediate pay-off, and that require a longer follow-through? An aspect of AAP's politics has been a distinct preference for the performative and the gestural — an overreliance on instant audios, stings, videos, helplines — alongside its more substantive work on the ground on health and education.

It is good for a chief minister to go to the people, to communicate and engage widely on the government's decisions, policies and issues. But Chief Minister Mann must strike a careful balance. A large governance agenda awaits, away from his lit up social media screen, in a state that has vested in his party a very hopeful mandate for change. Sacking a minister under a corruption cloud may play well to the gallery but it also raises the bar for governance that is quiet and effective.

## AN IAS OFFICER GETS ATHLETES OUT OF A STADIUM TO WALK HIS DOG BECAUSE HE CAN. THAT MUST CHANGE

A state-of-the-art stadium serves the needs of athletes. A private airline sets a price for tickets, and customers get what they pay for. These statements are axiomatic. Yet, in the last fortnight, two incidents shine a light on the ossified sense of entitlement of India's upper bureaucracy that gives the lie to them. On the field and in the air, there appears to be an expectation of the bureaucrat's right of way, lit up by the *lal batti's* halo. In a country riddled with inequality, where the VIP enjoys privileges and exemptions, from the toll booth to the airport, the *babu* continues to be out of touch with the temper of the times.

On Thursday, this newspaper reported that the Delhi government-run Thyagraj Stadium has been closing its grounds to athletes at 7 pm, apparently to allow Principal Secretary (Revenue) Sanjeev



Khirwar to walk his dog on the track. While Khirwar has denied that his canine's constitutional disrupted the athletes' routine, the evidence from the ground points the other way. In the aftermath of the report, the Delhi government has ordered that the stadium be kept open till 10 pm and the Centre has asked the LG to take action. Just days earlier, on May 14, another report in this paper detailed how Rajiv Bansal, Secretary, Ministry of Civil Aviation, and his wife received tickets at cheaper than market rates from Air India for a personal trip to the US. In addition, they were upgraded to first class.

The reason these incidents have a wide resonance is that they do not come across as exceptions. Rather, they are part of a pattern, a culture that has come to be associated with the "steel frame". Almost every other aspect of the Indian state has witnessed a churn — democratic impulses have deepened and entire sectors have opened up to questions and challenges. But the bureaucracy often seems to be the wing of government that has most retained its colonial character. Bureaucrats don't stand up to their political masters on matters of principle often enough. At the other end, the officer, ostensibly a public servant, maintains a distance from the people and all too often thinks nothing of what his "perks" cost them. At the stadium, for example, athletes were forced to practice during the day in the middle of a heatwave because the premises were closed early. There is much written and said about how the bureaucracy needs to reform. For a start, every officer needs to know that there is a price to be paid for being an ugly VIP.

## HOUNDING OF ARYAN

The dropping of all charges against Aryan Khan and five others who were arrested by the Narcotics Control Bureau in a raid on the passengers of a cruise ship is well deserved ignominy for the central investigating agency. Ever since the Sushant Singh Rajput suicide case, which saw several central investigation agencies launch parallel investigations on the premise that Mumbai Police had not covered all angles to the case, the NCB had apparently assigned itself the task of dismantling the "Bollywood drug citadel". Red flags should have gone up in Delhi then, and the fact that they didn't may have had more than a little to do with Maharashtra being an Opposition-ruled state, and the imminence of an election in Bihar, Rajput's home state. No attempt was made, therefore, to rein in Sameer Wankhede, then the local head of the NCB, from his celebrity hunt. The October 2021 raid at the Mumbai port jetty from where Khan, son of actor Shah Rukh Khan, was about to board a cruise boat to Goa, appeared prompted by the rush to make a "high value" arrest. At the time, no drugs were found on him, and no test was conducted to ascertain if he or any of the others had used any narcotic substance. The entire case that Khan not only did drugs, but was also a part of a narcotics trafficking ring, rested on WhatsApp chats between him and his friends. Procedural flaws came to light, with serious questions raised on the credibility of at least two of the panch witnesses. The whole episode reeked of a campaign to take Khan down. Clearly, no lessons had been learnt from the stinging rebuke the Bombay High Court had delivered on the case contrived against Rhea Chakraborty, while granting the young actor bail.

It was only after a series of dramatic disclosures about the problems with the Aryan Khan case by NCP politician Nawab Malik that the NCB bosses set up a special investigation team to take over the case. Seven months later, it has admitted that there is no evidence against six persons including Khan. It has chargesheeted 14 others arrested at the time, but has abandoned Wankhede's theory that all 20 were part of an "international conspiracy". The NCB has indicated that Wankhede will be punished. But who will compensate for the time that the six young adults spent in jail while being branded as drug runners, with their parents not being spared either?





The shabby episode does nothing for the reputation of central investigating agencies. It has been apparent for some time that the government is not above wielding these agencies to fix political rivals and others who cross its path. Even without orders from the top, a bullheaded official can feel emboldened enough in the prevailing ecosystem to believe he can get away with acts that might be purely motivated by a personal or political agenda. It should be sobering that Wankhede drew not a little encouragement from cheerleaders in the electronic and social media exulting in the damage that was being done to the reputation of the Khan father and son, just like they did in the defamation of Chakraborty. In a case where so many have lost face, genuine closure will come only by bringing to book Wankhede and all those who misused their power and position to pursue a tawdry witch hunt in this high-profile case.

## GREEN HYDROGEN: FUEL OF THE FUTURE?

The story so far: At the World Economic Forum in Davos, Switzerland, a few days ago, Minister of Petroleum and Natural Gas Hardeep Singh Puri said India will emerge as the leader of green hydrogen by taking advantage of the current energy crisis across the globe. His assertion came almost a month after Oil India Limited (OIL) commissioned India's first 99.99% pure green hydrogen plant in eastern Assam's Jorhat.

### What is green hydrogen?

A colourless, odourless, tasteless, non-toxic and highly combustible gaseous substance, hydrogen is the lightest, simplest and most abundant member of the family of chemical elements in the universe. But a colour — green — prefixed to it makes hydrogen the “fuel of the future”. The ‘green’ depends on how the electricity is generated to obtain the hydrogen, which does not emit greenhouse gas when burned.

Green hydrogen is produced through electrolysis using renewable sources of energy such as solar, wind or hydel power. Hydrogen can be ‘grey’ and ‘blue’ too. Grey hydrogen is generated through fossil fuels such as coal and gas and currently accounts for 95% of the total production in South Asia. Blue hydrogen, too, is produced using electricity generated by burning fossil fuels but with technologies to prevent the carbon released in the process from entering the atmosphere.

### Why is India pursuing green hydrogen?

Under the Paris Agreement (a legally binding international treaty on climate change with the goal of limiting global warming to below 2°C compared to pre-industrial levels) of 2015, India is committed to reducing its greenhouse gas emissions by 33-35% from the 2005 levels. At the 2021 Conference of Parties in Glasgow, India reiterated its commitment to move from a fossil and import-dependent economy to a net-zero economy by 2070. India's average annual energy import bill is more than \$100 billion and the increased consumption of fossil fuel has made the country a high carbon dioxide (CO<sub>2</sub>) emitter, accounting for nearly 7% of the global CO<sub>2</sub> burden. In order to become energy independent by 2047, the government stressed the need to introduce green hydrogen as an alternative fuel that can make India the global hub and a major exporter of hydrogen.

The National Hydrogen Mission was launched on August 15, 2021, with a view to cutting down carbon emissions and increasing the use of renewable sources of energy.



### **How much green hydrogen is India producing?**

India has just begun to generate green hydrogen with the objective of raising non-fossil energy capacity to 500 gigawatts by 2030.

It was on April 20, 2022 that the public sector OIL, which is headquartered in eastern Assam's Duliajan, set up India's first 99.99% pure green hydrogen pilot plant in keeping with the goal of "making the country ready for the pilot-scale production of hydrogen and its use in various applications" while "research and development efforts are ongoing for a reduction in the cost of production, storage and the transportation" of hydrogen.

The plant was set up at the petroleum exploration major's Jorhat pump station, also in eastern Assam.

Powered by a 500 KW solar plant, the green hydrogen unit has an installed capacity to produce 10 kg of hydrogen per day and scale it up to 30 kg per day.

A specialised blender has also been installed for blending green hydrogen produced from the unit with the natural gas supplied by the Assam Gas Corporation Limited and supplying the blended gas to the Jorhat area for domestic and industrial use.

OIL has engaged experts from the Indian Institute of Technology-Guwahati to assess the impact of the blended gas on the existing facility.

### **What are the advantages of hydrogen as a fuel?**

The intermittent nature of renewable energy, especially wind, leads to grid instability. Green hydrogen can be stored for long periods of time. The stored hydrogen can be used to produce electricity using fuel cells. In a fuel cell, a device that converts the energy of a chemical into electricity, hydrogen gas reacts with oxygen to produce electricity and water vapour. Hydrogen, thus, can act as an energy storage device and contribute to grid stability. Experts say the oxygen, produced as a by-product (8 kg of oxygen is produced per 1 kg of hydrogen), can also be monetised by using it for industrial and medical applications or for enriching the environment. The possibilities of hydrogen have made many countries pledge investments with Portugal having unveiled a national hydrogen strategy worth \$7.7 billion in May. Renewable developers see green hydrogen as an emerging market and some have targeted the transport sector, although electric vehicles have begun to catch the imagination of consumers today.

## **78% STUDENTS FOUND REMOTE LEARNING BURDENSOME: SURVEY**

Nearly 80% students found learning at home during the pandemic "burdensome" and felt that they learnt better in school with help from peers, according to the government's survey of more than one lakh schools across the country.

The Ministry of Education on Wednesday released its National Achievement Survey (NAS) 2021 report, which assesses the health of the school education system in the country through a survey of children's learning competencies at Classes 3, 5, 8 and 10.

Nearly 34 lakh students of 1.18 lakh schools in 720 districts from government, government-aided and private-unaided schools participated in the exercise.



The survey recorded perception of sampled students on remote learning during the pandemic and found that 78% students found it burdensome and one that had too many assignments for them. Nearly the same percentage of students (80%) also felt that learning was better in schools because of the help they received from their classmates. As many as 24% students said they had no digital device at home. Though 45% students found the experience “joyful”, 38% also said that they had difficulties in learning.

### Performance in subjects

The report also evaluated competencies of students in subjects such as mathematics, languages, and environmental studies (EVS) for Classes 3 and 5; language, mathematics, science and social science for Class 8; and language, mathematics, science, social science and English for Class 10.

It found that out of a score of 500, students across various classes performed better in languages, but lagged behind in subjects like mathematics and science.

For example, in Class 3, students scored the highest in languages (323), followed by EVS (307) and mathematics (306). In Class 5 too, students were better in languages (309), as compared to mathematics (284) and EVS (283). Class 8 students scored 302 in English, whereas in maths, they scored 255, and science 250.

It also showed that across various subjects and classes, SC, ST and OBC students perform worse than general category students.

## NATIONAL ASSESSMENT SURVEY LAYS OUT POST-COVID CHALLENGES. TEACHER- AND STUDENT-CENTRED APPROACHES ARE NEEDED

With social and economic activity returning to near normal after the pandemic, one of the critical challenges is to extend the post-Covid recovery to the classroom. India witnessed one of the longest school closures in the world. For the better part of the past two years, teachers struggled to cope with the pedagogical challenges posed by the switch to online classes. The country’s digital divide proved to be a hurdle for a large number of underprivileged learners. Field reports by private agencies and state government bodies have indicated that this disruption resulted in an alarming regression in children’s foundational skills — reading, writing, doing simple mathematics. Now a study commissioned by the Centre, the National Assessment Survey (NAS), details the magnitude of this learning crisis across the country. Conducted in November 2021 among students of more than one lakh schools in 720 districts, the NAS shows a sharp dip in the performance of students in almost all subjects during the pandemic years. Worryingly, it reveals that the breakdown affected even states that traditionally do well on educational parameters. The average scores of Delhi’s Class V students in mathematics, for instance, were well below the national average.

The Union education ministry has said that the NAS data “will help states in taking remedial measures, both short-term and long-term”. The first step should be to acknowledge that children are returning to schools with diminished skills as well as recognise that some learners may have experienced more setbacks than their peers. Planners and school administrators should give teachers the freedom to adopt creative approaches that turn classrooms into spaces where students can shed the anxieties of the past two years and regain skills at their own pace. This would require re-imagining pedagogical practices and a shift from syllabus-centred approaches of the past to learner-centric methods. The New Education Policy 2020, announced in the first



year of the pandemic, recognises this imperative. Unfortunately, however, the public health emergency seems to have put on the back-burner the implementation of school education reforms envisaged by the NEP. Funds for training teachers have been slashed by nearly 50 per cent in the current budget and the outlay for the Mid-Day Meal Scheme — whose positive impact on school enrollment, student retention and nutrition of children is well-documented — has come down by almost 10 per cent. Instead, there seems to be an over-reliance on e-learning. But as the NAS shows, these methods cannot be a substitute for the interactions in a classroom.

Several studies, including the annual ASER reports, have underlined that most of the failings of the country's educational system stem from the lack of connect between the lived experiences of most students and what is taught in classrooms. The pandemic-induced crisis — no doubt formidable — is an opportunity to apply correctives. Failure to do so will imperil the academic future of an entire generation.

### 'ALLOW SURROGACY FOR SINGLE MEN, MOTHERS'

Why can't a single man or a married woman beget a child through surrogacy and does such a denial not result in the violation of the right to privacy? These are some of the questions that two petitioners have posed to the Delhi High Court, demanding at the same time that commercial surrogacy be decriminalised.

A Bench headed by Acting Chief Justice Vipin Sanghi and Justice Sachin Datta has issued a notice to the Centre seeking its stand on the matter within the next six weeks. The matter is listed for further hearing on November 29.

The petitioners have challenged their exclusion from availing of surrogacy under the Assisted Reproductive Technology (Regulation) Act, 2021, and Surrogacy (Regulation) Act, 2021.

The two petitioners are a single man and a woman who is also a mother and desires a second child.

Under the Surrogacy (Regulation) Act, 2021, a woman who is a widow or a divorcee between the age of 35 and 45 years or a couple, defined as a legally married woman and man, can avail of surrogacy if they have a medical condition necessitating this option.

It also bans commercial surrogacy, which is punishable with a jail term of 10 years and a fine of up to ₹10 lakh. The law allows only altruistic surrogacy where no money exchanges hands and where a surrogate mother is genetically related to those seeking a child.

The petitioners have stated that commercial surrogacy is the only option available to them but the "ban on it robs them of the option". "The personal decision of a single person about the birth of a baby through surrogacy, i.e., the right of reproductive autonomy is a facet of the right to privacy guaranteed under Article 21 of the Constitution. Thus, the right to privacy of every citizen or person to be free from unwarranted governmental intrusion in matters fundamentally affecting a decision to bear or beget a child through surrogacy cannot be taken away," the petition argues.

It also says that the best eligibility criteria to maximise the chances of finding the best surrogate mother would be any healthy woman above the age of majority and "the needless conditions of being genetically related, of a particular age, married and already having at least one child only constrict the universe of available candidates who may otherwise become healthy surrogate mothers."



## SERVING THOSE WHO SERVE

When WHO Director General Tedros Adhanom Ghebreyesus announced the names of six Global Health Leader awardees at the opening session of the World Health Assembly, over one million ASHAs and eight volunteer polio workers found themselves being counted amidst people leading from the front. The other awardees are Paul Farmer, co-founder of the NGO Partners in Health, Ahmed Hankir, a British-Lebanese psychiatrist, Ludmila Sofia Oliveira Varela, a youth sports advocate, and Yōhei Sasakawa, WHO's Goodwill Ambassador for Leprosy Elimination. Dr. Tedros who picks the awardees himself, said that the award recognises those who have made an outstanding contribution to protecting and promoting health around the world, at a time when the world is facing an unprecedented convergence of inequity, conflict, food insecurity, climate crisis and a pandemic.

The ASHAs were honoured for their “crucial role in linking the community with the health system, to ensure those living in rural poverty can access primary health care services....” These workers, all women, faced harassment and violence for their work during the pandemic, well documented in the media. While the pandemic rewrote the rules, creating danger where mere routine existed, it must be stressed that in general, their job, which takes them into difficult-to-reach places and hostile communities, confers a measure of privations. Even as they contribute to better health outcomes, this workforce continues to protest across the country, for better remuneration, health benefits and permanent posts. The eight volunteer polio workers of Afghanistan (four of them women) were shot and killed by gunmen in Takhar and Kunduz provinces in February 2022. Their work was crucial in a country where wild polio virus type 1 is still circulating, WHO recorded. Clearly, certain kinds of basic public health work are fraught with perils in several continents across the world. It is the duty of the governmental agencies that employ them to ensure their welfare, safety and security. While cheerleading about the award is rightfully reaching a crescendo, what matters is how the Indian government serves its last mile health workers who are its feet on the ground, once the dust raised by their unexpected recognition has settled down.

## ASHA: A SUCCESSFUL PUBLIC HEALTH EXPERIMENT ROOTED IN THE VILLAGE COMMUNITY

The World Health Organisation (WHO) has recognized the contribution of India's 1 million Accredited Social Health Activists (ASHAs) during the Covid-19 pandemic. It is acknowledged that ASHAs facilitate linking households to health facilities, and play pivotal roles in house-to-house surveys, vaccination, public health and Reproductive and Child Health measures.

In many states, ASHAs are involved in national health programmes, and in the response to a range of communicable and non-communicable diseases. They get performance-based payments, not a fixed salary like government servants. There have been agitations demanding employee status for ASHA workers. The idea of performance-based payments was never to pay them a paltry sum — the compensation was expected to be substantial.

### Genesis & evolution

The ASHA programme was based on Chhattisgarh's successful Mitadin programme, in which a Community Worker looks after 50 households. The ASHA was to be a local resident, looking after 200 households. The programme had a very robust thrust on the stage-wise development of capacity in selected areas of public health. Dr T Sundararaman and Dr Rajani Ved among others provided a lot of support to this process. Many states tried to incrementally develop the ASHA



from a Community Worker to a Community Health Worker, and even to an Auxiliary Nurse Midwife (ANM)/ General Nurse and Midwife (GNM), or a Public Health Nurse.

Important public policy and public management lessons emerge out of the successful experiment with Community Workers who were not the last rung of the government system — rather, they were of the community, and were paid for the services they rendered. The idea was to make her a part of the village community rather than a government employee.

Over 98 per cent ASHAs belong to the village where they reside, and know every household. Their selection involved the community and key resource persons. Educational qualification was a consideration. With newly acquired skills in health care and the ability to connect households to health facilities, she was able to secure benefits for households. She was like a demand-side functionary, reaching patients to facilities, providing health services nearer home.

### **Building of a cadre**

It is a programme that has done well across the country. As skill sets improved, recognition and respect for the ASHA went up. In a way, it became a programme that allowed a local woman to develop into a skilled health worker.

The ASHAs faced a range of challenges: Where to stay in a hospital? How to manage mobility? How to tackle safety issues? The solutions were found in a partnership among frontline workers, panchayat functionaries, and community workers. This process, along with the strengthening of the public infrastructure for health with flexible financing and innovations under the Health Mission and Health and Wellness Centres, led to increased footfall in government facilities. Accountability increased; there would be protests if a facility did not extend quality services.

The Community Worker added value to this process. Incentives for institutional deliveries and the setting up of emergency ambulance services like 108, 102, etc. across most states built pressure on public institutions and improved the mobility of ASHAs. Overall, it created a new cadre of incrementally skilled local workers who were paid based on performance. The ASHAs were respected as they brought basic health services to the doorstep of households.

### **Issue of compensation**

There have been challenges with regard to the performance-based compensation. In many states, the payout is low, and often delayed. The original idea was never to deny the ASHA a compensation that could be even better than a salary — it was only to prevent “governmentalisation”, and promote “communitisation” by making her accountable to the people she served.

There were serious debates in the Mission Steering Group, and the late Raghuvansh Prasad Singh made a very passionate plea for a fixed honorarium to ASHAs. Dr Abhay Bang and others wanted the community character to remain, and made an equally strong plea for skill and capacity development of Community Workers. Some states incentivised ASHAs to move up the human resource/ skilling ladder by becoming ANMs/ GNMs and even Staff Nurses after preferential admission to such courses.

The important public policy lessons are the need to incrementally develop a local worker keeping accountability with the community, make performance-based payments, and provide a demand-side push with simultaneous augmentation of services in public systems. The system can sustain and grow only if the compensation is adequate, and the ASHA continues to enjoy the confidence of the community.



### Debate over status

There is a strong argument to grant permanence to some of these positions with a reasonable compensation as sustaining motivation. The incremental development of a local resident woman is an important factor in human resource engagement in community-linked sectors. This should apply to other field functionaries such as ANMs, GNMs, Public Health Nurses as well.

It is equally important to ensure that compensation for performance is timely and adequate. Ideally, an ASHA should be able to make more than the salary of a government employee, with opportunities for moving up the skill ladder in the formal primary health care system as an ANM/ GNM or a Public Health Nurse. Upgrading skill sets and providing easy access to credit and finance will ensure a sustainable opportunity to earn a respectable living while serving the community. Strengthening access to health insurance, credit for consumption and livelihood needs at reasonable rates, and coverage under pro-poor public welfare programmes will contribute to ASHAs emerging as even stronger agents of change.

### NATIONAL FACILITY FOR GENE FUNCTION IN HEALTH & DISEASE: WHAT IT WILL DO, WHAT IT HAS

The National Facility for Gene Function in Health and Disease (NFGFHD) was inaugurated in Pune by Dharmendra Pradhan, Union Minister of Education on Friday.

The NFGFHD has been set up at the Indian Institute of Science Education and Research (IISER), Pune. Built by IISER Pune and supported by the Department of Biotechnology (DBT) at a total cost of about Rs 45 crore, this will be one-of-its-kind large facilities providing timely supply of animal models to researchers studying a range of diseases from cancer to diabetes. Rats, mice and rabbits will be housed here, doing away with the need to import them.

#### Why it is needed

With a growing zoonotic disease burden on human health, there is an increased urgency to perform disease studies based on physiological evidence and methods. Since human trials alone cannot suffice for such studies, the need for having experimental setups using animal models has become imperative. Hence, animal, plant and microorganism-based models are now being significantly deployed to study diseases in a time-bound manner.

“Scientists depend on small animals such as rats, mice and rabbits to study human diseases. When an animal model is used to study diseases, we need to carefully follow the animal’s well-being for long durations. During this time-frame, the animals are prudently observed, bred for further generations. Their behaviours are monitored in responses to stimuli, signs for any phenotypic variations, feeding behaviours and changes in habits if any,” said Prof Anjan Banerjee, Dean, Research and Development at IISER, Pune.

#### Technological facilities

The facility houses molecular biology laboratories and micro-injection setups to generate mouse models, in which scientists will knock out existing genes and replace them with external or artificial genes that are linked to the disease under study. This is done through CRISPR / Cas9 systems.



There are facilities for making embryonic stem cell-based models and traditional transgenic mice models, embryo and sperm cryopreservation, and in-vitro fertilisation.

## INDIA NEEDS TO KEEP AN EYE ON ITS MYOPIA PREVALENCE

Millions of young children are growing up short-sighted every year because of myopia. The World Health Organization (WHO) estimates that there were nearly two billion people with myopia in 2010 — a quarter of the human population. By 2030, they project myopia prevalence to reach 3.3 billion people. While East Asia and the Pacific have been reporting some of the highest numbers for a decade now, current estimates out of India do not yet reflect this trend. It may mean we have time to act and save the sight of our children.

### 'Near-work' is on the rise

Myopia is commonly found in children. As they grow and their bodies change, the length of the eyeball and its power to refract light do not always align, leading to vision that is blurry. A pair of spectacles is enough to correct this mismatch. However, spectacles address the symptom and not the cause (eyeball length), so myopia can progress all through childhood. Progressive myopia, after a point, leads to 'high' myopia, increasing the risk of retinal detachment, glaucoma or macular degeneration that can cause permanent vision loss.

A host of environmental and genetic factors determine the onset of myopia. It is believed that exposure to sunlight and a healthy balance between distance- and near-work can arrest myopia onset and progression. Many children, especially in urban environments, are spending more time indoors and on near-work. Be it at school or at home, the quantum of near-work — looking at books, television, phones or laptops — has increased over the decades. The COVID-19 pandemic has only accelerated this trend by robbing children of outdoor playtime and exposure to sunlight. This big shift to near-work seems to be triggering an increase in myopia prevalence.

### Epidemic or not is the issue

Data from the East Asian countries have been particularly alarming. Even before the novel coronavirus pandemic, 80%-90% of high school children in East and Southeast Asia were presenting with myopia. Nearly 20% of them had high myopia. All these countries are racing to put in place systems to increase sunlight exposure and reduce near-work for children. The World Health Organization is warning of a global myopia epidemic, where millions of our children are at risk of vision impairment. Projections show nearly 50% of the world's population will be myopic by 2050.

India seems to be bucking this trend. Current studies are recording low myopia prevalence among schoolchildren when compared to East Asia. In India, one in 30 to one in five schoolchildren are presenting with myopia. In a large study that surveyed 1.2 million schoolchildren in Telangana and parts of Andhra Pradesh, public health optometrist Winston Prakash and his team found myopia prevalence of a little over 5%. Even including those already with glasses, the prevalence numbers are low. What explains these anti-climactic numbers?

### The urbanisation link

Despite a demographic shift towards cities and towns, nearly 65% of India's population still lives in rural areas. As urbanisation increases, so does the burden of myopia. Myopia can be twice as high among urban children when compared to rural ones. One study found a higher prevalence





among South Asian children in the United Kingdom compared to those living in rural India. So, it is likely that urban schools are harbingers of increasing myopia in children. Small studies are already finding that myopia prevalence in urban Indian schools is relatively higher, at nearly 35%. The spectacle power of urban children with myopia is also increasing year on year. Taking all these factors into account, prediction models are pointing to a myopia prevalence of nearly 50% in India too by 2050 — similar to global projections.

There are many treatment strategies to constrain myopic progression, including pharmaceuticals and specialty spectacles or contact lens. But like all public health issues, prevention strategies that tackle myopia onset and progression are far more inexpensive and cost-effective. We need to encourage parents to take children out to parks and other outdoor spaces regularly. Schools must ensure adequate exposure to sunlight. We need educational methodologies at every school level that balances near-work with distance-work.

#### **Encourage annual screening**

At the same time, we must make it easy to screen and provide spectacles for the many who will need them. Basic, annual screening can be performed by schoolteachers who can then refer myopic children to eye-care professionals. We must also tackle the social stigma around spectacle wear with tact and compassion. It is critical that we step up surveillance for myopia so that we are not caught unawares by a runaway epidemic that will destroy our children's vision.

It is likely that India's myopia prevalence is still low because we are not yet on the 'epidemic' growth curve of East and Southeast Asia. The time to act is now.

### THE CONTROVERSY AROUND THE JAGANNATH TEMPLE HERITAGE CORRIDOR PROJECT

The story so far: The Archaeological Survey of India (ASI) on May 17 said that a sculpture of a lion, which possibly dates back to the Ganga dynasty, was found during excavation for the controversial heritage corridor project around the 12th century Jagannath Temple in Puri, Odisha. This is the third such lion sculpture found during the excavation work. The Odisha government's ambitious temple corridor project in Puri has become a subject of intense political controversy in the State.

#### **What is the controversy?**

The Puri Heritage Corridor Project is a ₹3,200 crore redevelopment project of and around the 800-year-old Jagannath temple in Puri by the Odisha government to create an international heritage site.

Plans for the corridor had been in the making since 2016, with the State Assembly unanimously passing a resolution for the effective implementation of the project in February last year. Soon after, the plan was approved by the Shree Jagannatha Temple Administration (SJTA). The Odisha government has listed three objectives for the revamp of the area around the temple — the security of the temple, the safety of devotees, and the creation of a religious atmosphere for devotees. In all, 22 development projects are planned under the scheme.

In February this year, when the Odisha Bridge and Construction Corporation (OBBC) started excavation work within 75 metres of the Jagannath temple to build public amenities such as toilets and cloakrooms, experts and members of civil society objected to the use of heavy machinery for digging, citing the possibility of an adverse impact on the 12th century temple. Questions started



being raised about whether the construction around the temple had the due permissions and clearances.

The Jagannath temple has been designated a monument of national importance by the ASI and is a centrally protected monument. As per the Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act (AMSAR), construction is prohibited within a 100-metre periphery of a protected area. The area extending to 200 metres around the monument in all directions is called a regulated area. If construction has to be undertaken in the regulated or prohibited area, permission from the National Monuments Authority (NMA) is required. Notably, the term “construction” as defined in the AMSAR Act does not include the construction of public toilets, urinals, and “similar conveniences”. It also does not include works for the supply of water, electricity or “provision of similar facilities for publicity”.

Raising concerns about the structural safety of the temple in the wake of the excavation in the prohibited area of the temple, Dilip Baral, a resident of Puri, filed a plea with the Orissa High Court in March.

BJP MP Aparajita Sarangi also raised the issue in a Parliament session in March. Calling the work around the temple “illegal”, she said: “It is a matter of great concern.... Massive demolition and construction works are taking place within 100 and 200-metre area of the temple. No permission from NMA and ASI has been taken. The work which is a threat to the temple must stop.”

Responding to Ms. Sarangi, BJD MP Pinaki Misra said that no digging was being done. “Only four toilets are being constructed... No additional construction is taking place,” he said.

#### **What has the ASI said?**

After the petition was filed in the High Court, the ASI was directed to conduct a joint inspection of the site along with the State government. In its affidavit submitted to the court in May post the survey, the ASI observed that there was “every possibility that the agency OBCC during the excavation or soil removal might have destroyed the archaeological remains of the heritage site”. It pointed out that the construction work fell partly within both the prohibited and regulated areas of the centrally protected monument.

The ASI had found that the ongoing construction work had “no valid permission or no objection certificate (NOC) issued by the competent authority”.

Moreover, the apex conservation agency said: “It was informed during the discussion that no heritage impact assessment studies have been conducted before commencement of the project. No Ground Penetrating Radar Survey (GPRS) has been conducted to ascertain the archaeological and historical importance lying buried in the subsoil of 75m radius (Construction Zone) of Centrally Protected Monuments.”

#### **What is the stand of the Odisha government?**

The Odisha government refuted the ASI report in court, saying that it had acquired an NOC from the NMA in September 2021. The NOC was granted for constructing a cloakroom, three toilets, an electrical facility, a pavement, and a shelter pavilion in the 75-metre zone as it did not come under “construction” as per the AMSAR Act. The NMA had no objection as long as the work was carried out under ASI supervision. However, the ASI said that no such permission was taken from it.



In a move seen by the opposition as a “cover up”, the government on May 21, started a GPRS to trace any archaeological treasure beneath the soil.

## BOXING DAYS

For a country that sought boxing inspiration from six-time World boxing champion M.C. Mary Kom and Tokyo Olympics bronze medallist Lovlina Borgohain, Nikhat Zareen’s World title in the women’s 52 kg class in Istanbul is a fresh source of optimism. The Nizamabad-born Nikhat’s story of struggle is vastly different from those emerging from Haryana or the North East. The widespread celebration of her success in India should further amplify the spread of boxing within the country. As the fifth World champion Indian woman boxer, who is the only one after Mary to win a gold in the last 16 years, Nikhat has joined an exclusive club of Mary, Sarita Devi, R.L. Jenny and K.C. Lekha. Her gold was the first by an Indian woman after Mary’s sixth World title in 2018. For boxing fans, who were disheartened after India’s below-par showing in the Tokyo Olympics, where Lovlina landed a lone bronze, Nikhat has provided cheer. Nikhat’s journey was packed with challenges and she was determined to break barriers. When, as a teenager, she got to know that girls were not encouraged to take up boxing in her area as the combat sport was considered tailor-made for boys, Nikhat switched from sprinting to boxing to prove a point. Hailing from a Muslim family, she overcame hurdles posed by conservatives in society.

When Nikhat, a 2011 World junior champion, tried to graduate to the elite level, a career-threatening shoulder injury in 2017 stole a year away from her. Two years later, she was embroiled in a controversy, when she got on to the wrong side of her idol Mary in the run-up to the trials for the Olympics qualifier. She lost the trials and it stirred a debate and left a trail of bad blood. But nothing could dent Nikhat’s steely resolve. Her parents remained her pillars of strength through thick and thin. The 25-year-old, who personifies the rise of women’s power in sport, worked hard with different coaches and imbibed the best lessons from them to emerge as a polished boxer. Nikhat’s new status will boost her confidence and make her a force to reckon with in events such as the upcoming Commonwealth Games, the Asian Games and the 2024 Paris Olympics. An ample supply of talented boxers will only benefit the country in its quest for a better performance in Paris. As a World champion, Nikhat could inspire many Indian girls who suppress their desire to take up boxing, wary as they are about an orthodox society. Nikhat’s tale may strike a chord with talented boxers and motivate them to follow in the footsteps of the new poster girl of Indian sport.

## SHREE’S STORY

What could a bird or a butterfly, a road or a passer-by, say about the life of an octogenarian on the cusp of momentous change? Perhaps they could iterate that timeless cliché that every end is a beginning; perhaps, they could speak of the unexpected, often exhilarating insights that come from looking into one’s life from the outside. In *Tomb of Sand* (2021), Daisy Rockwell’s English translation of Geetanjali Shree’s Hindi novel *Ret Samadhi* (2018), which, on Friday, became the first book in any Indian language to win the International Booker Prize, they speak of all these and more. In the polyphony of voices that they present as they follow the journey of its protagonist Maiji, they make a case for diversity, but also for the inherent connections that bind us — a befitting tribute to not just the theme of the novel, but also to the idea of translation.

It is somewhat emblematic that a novel that speaks of the fallacy of boundaries should win an award that honours a work in translation. *Tomb of Sand* is the first novel in an Indian language to



be even longlisted for the International Booker Prize, which annually awards a contemporary writer of any nationality for a work translated into English and published in the United Kingdom or Ireland. Shree and Rockwell's win is essential validation of the vitality of the novel in Indian languages that has, of late, benefited from the ascendancy of translated works in contemporary literary hierarchy. *Tomb of Sand*, for instance, was championed by translator Deborah Smith, who invested the prize money from her International Booker Prize win in 2016, for the English translation of *The Vegetarian* by Han Kang, into setting up Tilted Axis Press to push Asian literature to an international audience.

Often, in terms of Indian literature on a global platform, it is the work of a handful of Indian or diasporic writers writing in English that gets to share the spotlight. Frequently macroscopic, they highlight more often than not the exotica of subcontinental lives. Shree's novel, rooted in the tradition of Hindi writers such as Shrilal Shukla, Krishna Sobti and Vinod Kumar Shukla, and contemporised in Rockwell's robust linguistic retelling, captures the push and pull of the personal and the political in a region forever in churn. At the awards ceremony on Friday morning, Frank Wynne, the Irish translator and chair of the judges, spoke of the binaries that Shree's novel represents, "youth and age, male and female, family and nation" that make it "a kaleidoscopic whole" — "a novel of India".

#### ON RAJA RAM MOHAN ROY'S 250TH BIRTH ANNIVERSARY, REMEMBERING THE LEGACY OF THE FATHER OF MODERN INDIAN RENAISSANCE

One of the most influential social and religious reformers of the 19th century, Ram Mohan Roy, born on May 22, 1772 in what was then Bengal Presidency's Radhanagar in Hooghly district, would have turned 250 years today. As India grapples increasingly with changing social and religious circumstances, Roy's work in the sphere of women's emancipation, modernising education and seeking changes to religious orthodoxy finds new relevance in this time.

In *Makers of Modern India* (Penguin Books, 2010), a book that profiles the "work and words of the men and women who argued the Republic of India into existence", its editor, historian Ramachandra Guha, writes, "Roy was unquestionably the first person on the subcontinent to seriously engage with the challenges posed by modernity to traditional social structures and ways of being. He was also one of the first Indians whose thought and practice were not circumscribed by the constraints of kin, caste and religion."

#### Early Life

Born into a prosperous upper-caste Brahmin family, Roy grew up within the framework of orthodox caste practices of his time: child-marriage, polygamy and dowry were prevalent among the higher castes and he had himself been married more than once in his childhood. The family's affluence had also made the best in education accessible to him.

A polyglot, Roy knew Bengali and Persian, but also Arabic, Sanskrit, and later, English. His exposure to the literature and culture of each of these languages bred in him a scepticism towards religious dogmas and social strictures. In particular, he chafed at practices such as Sati, that compelled widows to be immolated on their husband's funeral pyre. Roy's sister-in-law had been one such victim after his elder brother's death, and it was a wound that stayed with him.

The waning of the Mughals and the ascendancy of the East India Company in Bengal towards the end of the 18th century was also the time when Roy was slowly coming into his own. His education



had whetted his appetite for philosophy and theology, and he spent considerable time studying the Vedas and the Upanishads, but also religious texts of Islam and Christianity. He was particularly intrigued by the Unitarian faction of Christianity and was drawn by the precepts of monotheism that, he believed, lay at the core of all religious texts.

He wrote extensive tracts on various matters of theology, polity and human rights, and translated and made accessible Sanskrit texts into Bengali. "Rammohun did not quite make a distinction between the religious and the secular. He believed religion to be the site of all fundamental changes. What he fought was not religion but what he believed to be its perversion... (Rabindranath) Tagore called him a 'Bharatpathik' by which he meant to say that Rammohun combined in his person the underlying spirit of Indic civilisation, its spirit of pluralism, tolerance and a cosmic respect for all forms of life," says historian Amiya P Sen, Sivadasani Fellow at the Oxford Centre for Hindu Studies, Oxford, UK, whose Rammohun Roy: A Critical Biography (Penguin, Viking, 2012), remains a definitive work on the man who was a key figure in India's journey into modernism.

### **Roy, the first among liberals**

Even though British consolidation of power was still at a nascent stage in India at the time, Roy could sense that change was afoot. Confident about the strength of his heritage and open to imbibing from other cultures what he believed were ameliorative practices, Roy was among India's first liberals. In the introduction to his biography of Roy, Sen writes, "...his mind also reveals a wide range of interests, rarely paralleled in the history of Indian thought. He was simultaneously interested in religion, politics, law and jurisprudence, commerce and agrarian enterprise, Constitutions and civic rights, the unjust treatment of women and the appalling condition of the Indian poor... And he studied matters not in the abstract or in academic solitude but with the practical objective of securing human happiness and freedom. That made him a modern man."

In 1814, he started the Atmiya Sabha (Society of Friends), to nurture philosophical discussions on the idea of monotheism in Vedanta and to campaign against idolatry, casteism, child marriage and other social ills. The Atmiya Sabha would make way for the Brahmo Sabha in 1828, set up with Debendranath Tagore, Rabindranath Tagore's father.

### **Abolition of Sati, educational and religious reforms**

During the course of his time in Kolkata (formerly Calcutta), a period of about 15 years, Roy became a prominent public intellectual. He campaigned for the modernisation of education, in particular the introduction of a Western curriculum, and started several educational institutions in the city.

In 1817, he collaborated with Scottish philanthropist David Hare to set up the Hindu College (now, Presidency University). He followed it up with the Anglo-Hindu School in 1822 and, in 1830, assisted Alexander Duff to set up the General Assembly's Institution, which later became the Scottish Church College.

It was his relentless advocacy alongside contemporaries such as Ishwar Chandra Vidyasagar that finally led to the abolition of Sati under the governor generalship of William Bentinck in 1829. Roy argued for the property rights of women, and petitioned the British for freedom of the press (in 1829 and 1830).



His Brahma Sabha, that later became the Brahma Samaj, evolved as a reaction against the upper-caste stranglehold on social customs and rituals. During the Bengal Renaissance, it ushered in sweeping social changes and birthed the Brahma religion, a reformed spiritual Hinduism that believes in monotheism and the uniformity of all men, irrespective of caste, class or creed.

### Perils of non-conformism

As many modern liberals discover to their peril, non-conformism brings with it its own share of infamy. Roy, who was given the title of Raja by the Mughal emperor Akbar II, was no exception to this. Among the first Indians to gain recognition in the UK and in America for his radical thoughts, in his lifetime, Roy was also often attacked by his own countrymen who felt threatened by his reformist agenda, and by British reformers and functionaries, whose views differed from his.

Would Roy's reformist agenda have met with equal if not more resistance in contemporary India? After all, in 2019, actor Payal Rohatgi had launched an offensive against Roy on Twitter, accusing him of being a British stooge who was used to "defame" Sati. Sen says Roy's legacy has not been celebrated enough for many historic reasons, of which partisan reading by the Hindu right is one, but "His life and message stands vastly apart from the spirit of contemporary Hindutva or exclusionary, political Hinduism."

### Celebrations

Roy's 250th birth anniversary will see year-long celebrations in different parts of the country. In West Bengal, the unveiling of a statue at Raja Rammohun Roy Library Foundation, Salt Lake, by GK Reddy, Minister of Culture; Tourism; and Development of North Eastern Region, will mark the inauguration of the Centre's celebration plans. The West Bengal state government has overseen repairs of Roy's ancestral house in Radhanagar, and is set to confer heritage status to it. The Sadharan Brahma Samaj in Kolkata has organised a three-day inaugural programme from May 22 to May 24 that will see musical tributes and talks by Rajya Sabha MP and retired diplomat Jawhar Sircar; eminent academics and historians such as Suranjan Das, vice-chancellor, Jadavpur University; Rudrangshu Mukherjee, chancellor, Ashoka University; professor Arun Bandyopadhyay of Calcutta University, among others.

A philatelic exhibition on the Bengali Renaissance has been organised by the Rammohun Library and Free Reading Room, set up in 1904. The organisation will also publish a commemorative volume.

## 'HOLES' IN BIODIVERSITY BILL

The story so far: Rajya Sabha MP and senior Congress leader Jairam Ramesh has criticised the provisions of the Biological Diversity (Amendment) Bill, 2021 that is currently being reviewed by a Joint Parliamentary Committee (JPC). The law was introduced in Parliament on December 16 last year by the Union Environment Minister Bhupender Yadav, and was referred to the JPC. Mr. Ramesh is a member of the committee, whose chairperson is BJP MP Sanjay Jaiswal.

### What do the amendments in the Bill deal with?

The Biological Diversity Act, 2002 was framed to give effect to the United Nations Convention on Biological Diversity (CBD), 1992, that strives for sustainable, fair and equitable sharing of benefits arising out of the utilisation of biological resources and associated traditional knowledge. To do this, it formulates a three-tier structure consisting of a National Biodiversity Authority (NBA) at



the national level, State Biodiversity Boards (SBBs) at the State level and Biodiversity Management Committees (BMCs) at local body levels. The primary responsibility of the BMCs is to document local biodiversity and associated knowledge in the form of a People's Biodiversity Register.

The amended Bill was drafted in response to complaints by traditional Indian medicine practitioners, the seed sector, and industry and researchers that the Act imposed a heavy "compliance burden" and made it hard to conduct collaborative research and investments and simplify patent application processes. The text of the Bill also says that it proposes to "widen the scope of levying access and benefit sharing with local communities and for further conservation of biological resources." The Bill seeks to exempt registered AYUSH medical practitioners and people accessing codified traditional knowledge, among others, from giving prior intimation to State biodiversity boards for accessing biological resources for certain purposes. Environmentalist organisations such as Legal Initiative for Forests and Environment (LIFE) have said that the amendments were made to "solely benefit" the AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy) Ministry and would pave the way for "bio piracy." The modifications will exempt AYUSH manufacturing companies from needing approvals from the NBA and thus will go against one of the core provisions of the Act.

#### **What are Mr. Ramesh's objections?**

Mr. Ramesh contended that the Environment Ministry was drawing a distinction between a registered AYUSH practitioner and a company, and exempting the former from the Act. He said this was an "artificial distinction" as nothing prevented a registered AYUSH practitioner from having informal links with a company structure. These paved the way for potential "abuse of the law," he said in a letter to Mr. Jaiswal and other committee members. Multiple provisions of the Bill, he said, were aimed at diluting the authority of the National Biodiversity Authority (NBA), especially the clause appointing 16 ex-officio officers of the Centre. The provision of requiring companies to seek the approval of the NBA only at the time of commercialisation, and not when applying for a patent, was of concern. The Bill also decriminalised violations, such as bio-piracy and made them civil offences, and this defeated the Act's "deterrent powers," he said.

#### **Are there other shortcomings in the Bill?**

An analysis by the Centre for Science and Environment (CSE) and the Down To Earth magazine on how the Biodiversity Act was being practically implemented, pointed out serious shortcomings. There was no data available — barring a few States — on the money received from companies and traders for access and benefit-sharing from use of traditional knowledge and resources. It was unclear if companies had even paid communities despite commitments. In the case of the Iruela Cooperative in Tamil Nadu — traditional knowledge holders of the method of collecting snake venom used for pharmaceutical products — only one company had agreed to pay, but even that promise remained unfulfilled. State boards told Down to Earth that the money collected has not been disbursed to communities because there was no information available about the knowledge holders. The law says that if the information was unavailable, then funds ought to be spent on conservation in the region from where the knowledge-bioresources come. As of now, the funds were lying unutilised, according to State boards. As per law, Indian pharmaceutical companies are required to pay between 3-5% on the extracted bioresources or between 0.01-0.05% on the annual gross ex-factory sales. But companies have resisted paying. In most cases, the courts have held that these companies have to seek prior approval and make payments to the NBA or the State boards. Often, it was not clear who was required to pay, how much or what has already been paid.



The proposed amendments didn't address these issues and so aren't helpful in solving the current challenges of implementation.

#### NEW SPECIES OF SNAKE FOUND IN MEGHALAYA

Meghalaya, the land of the mythical evil spirit that takes the form of a giant serpent called U Thlen, has yielded a new-to-science, venomous green snake.

Recorded simultaneously in Mizoram, the snake has been named Maya's pit viper after the deceased mother of an Army officer, one of seven authors of a study on it. The name of the pit viper, recognised as *Trimeresurus mayaae*. The study was published in the recent edition of PLOS One, a peer-reviewed open access scientific journal published by the Public Library of Science.

Jayaditya Purkayastha, a herpetologist from the wildlife research group Help Earth and a lead author of the study, said the new species was relatively common in Meghalaya, Mizoram and even in Guwahati.

But the snake used to be referred to as either the Pope's Pit Viper (*Trimeresurus popeiorum*) or Gumprecht's Green Pit Viper (*Trimeresurus gumprechtii*) until it was observed closely at the Umroi Military Station.

Mr. Purkayastha collaborated with Colonel Yashpal Singh Rathee of the military station and H.T. Lalremsanga of Mizoram University, who also recorded the same species in Mizoram.

#### NEW ARUNACHAL MONKEY NAMED AFTER MOUNTAIN PASS

A new species of old world monkey recorded from Arunachal Pradesh has been named after a strategic mountain pass at 13,700 ft above sea level.

Sela macaque (*Macaca selai*), the new-to-science primate was identified and analysed by a team of experts from the Zoological Survey of India (ZSI) and the University of Calcutta. Their study has been published in the latest edition of Molecular Phylogenetics and Evolution.

Phylogenetics relate to the evolutionary development and diversification of a species or group of organisms.

The phylogenetic analysis revealed that the Sela macaque was geographically separated from the Arunachal macaque (*Macaca munzala*) of Tawang district by Sela. This mountain pass acted as a barrier by restricting the migration of individuals of these two species for approximately two million years, the study said.

Sela is situated between Dirang and Tawang towns in western Arunachal Pradesh.

"We found the new macaque species in western and central Arunachal Pradesh while exploring the Arunachal macaque's wild population for genetic insights. It was found to be genetically different from the other species of monkeys reported from this region," ZSI's Mukesh Thakur, one of the authors of the study said.

#### Major cause for crop loss

The study describes the Sela macaque as genetically closer to the Arunachal macaque. The two have some similar physical characteristics such as heavy-build shape and long dorsal body hair.





The zoologists identified some distinct morphological traits to differentiate the two species. While the Sela macaque has a pale face and brown coat, the Arunachal macaque has a dark face and dark brown coat.

“According to the villagers, the Sela macaque is a major cause of crop loss in the West Kameng district of the State,” Mr. Thakur said.

The study says the Sela macaque has a tail longer than the Tibetan macaque, Assamese macaque, Arunachal macaque and the white-cheeked macaque but shorter than the bonnet macaque and toque macaque. Sela macaque belongs to the sinica species-group of *Macaca*, but it differs from all other members of this group through attributes such as brown collar hair and muzzle, and the absence of chin whiskers, the study says.

## WHERE TORTOISE CONSERVATION IS DEVOTION

While World Tortoise Day was recently observed to emphasise the need to protect turtles and tortoises and their disappearing habitats, a temple in Kerala’s Kasaragod has been protecting and conserving various tortoise species for several centuries.

Devotees of Thoroath Addukath Bhagavathi Temple at Molothumkavu believe that offering rice (nivedya chor) to tortoises will redeem them of their sins and cure their skin-related ailments.

The tortoises are protected and conserved in the naturally formed pond spread over two acres of temple land.

The pond is about 100 metres from the temple and has a structure (mandapam) in the middle for feeding tortoises. A bridge connects the temple to the mandapam and there are steps into the pond. There is a sculpture of Kurmavata, considered second of the ten incarnations of Lord Mahavishnu, on the mandapam.

“We have no count but there may be more than 400 tortoises in the pond. There are many different species, some of them are endangered,” says A. Gangadharan, a temple staff.

The temple is several centuries old and it is believed that the custom of offering prayers to the tortoises is as old as the temple.

Tortoises emerge from the depth of the pool and eat the rice offering kept on the steps of the mandapam at the sound of a clap. Mr. Gangadharan says devotees across the country and even abroad reach here to pray and feed the tortoises.

The tortoises are an attraction not only for the devotees but also for researchers and officials of the Forest department, who come to study the various species here.

Considered sacred, the temple authorities and local people act as guardians of the tortoises, some of which are believed to be over 100 years old.

## MISSING WOLVES

The wolf recurs in Indian folktales and fables, where it is often identified as a dangerous predator marked by its cunning. A Jataka tale reverses this trope by showing man as deceitful, although not wily enough for the wolf, who outwits him. The most famous wolf in Indian children’s literature is perhaps Akela (aka The Lone Wolf or Big Wolf), the brave leader of the Seonee pack of wolves

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



and Mowgli's adoptive father in Rudyard Kipling's *The Jungle Book* (1894). While he shows courage and wisdom, his partner, Raksha, who adopts the 'man-cub', is all about kindness and protection

'Wolf! Wolf!' The driver in the vehicle facing us silently mouthed, and pointed to his right. Within seconds, a pack of three magnificent Indian grey wolves appeared in the savanna grasslands, less than 100 metres from us. A large male, followed by what appeared to be a heavily pregnant female, and finally a younger male, probably from their previous litter. Eyeing us cautiously, they walked into the adjoining plantation and disappeared.

There were many things special about this sighting. We were observing the top predator of India's grasslands, in their natural habitat, but this was far from any national park or wildlife sanctuary. This was virtually in Pune city's backyard, a landscape full of people, agriculture and domestic livestock. The Grasslands Trust, an NGO based in Pune, has been observing packs in these landscapes for over a decade. They have documented over 10 different breeding packs that use this landscape of around 700 sq. km. The wolves share this incredible landscape with a suite of other endangered species, the Indian gazelle (chinkara), the Indian fox, the striped hyena, and scores of migratory and resident birds. This area is also home to tens of thousands of agro-pastoralists, and is used as the monsoon grazing grounds by the Dhangar community, a tribe of nomadic pastoralists, who wind their way with their herds of sheep and goat across the Western Ghats every year from the coastal regions of Konkan.

#### **Sole survivor**

Unfortunately, for the wolves we saw, the ending was not happy. A few weeks later, the entire pack, including their new pups, was found dead or dying from the deadly canine distemper virus. The female was the only survivor.

Diseases such as canine distemper virus is one of the many problems that this enigmatic predator of the Indian savannas faces. A new study estimates that there may be as few as 3,100 wolves in India. This puts them in the same category of endangerment as tigers. Habitat loss is a primary threat to this species. No wildlife sanctuary is dedicated to the preservation of the Indian wolf, and a recent study shows that less than 5% of open natural ecosystems in the country are protected. The wolf, unlike the tiger, is not a creature of forests. It requires vast areas, and manages to live in the interstices of agricultural spaces that are left fallow by farmers dependent on rainfall as their only source of irrigation.

The semi-arid savanna grasslands and rocky areas of the Deccan plateau, in Karnataka, Maharashtra, Telangana and Andhra Pradesh, along with some areas of Gujarat, Madhya Pradesh and Rajasthan are among the last strongholds of the Indian wolf. Pre-Independence, they would have likely shared their habitat with the Asiatic cheetah, coursing down blackbuck and chinkara. The cheetah is now gone, and so are the vast herds of antelope that roamed the Indian plains. Wolves are unfortunately following the same path and have declined across their entire range.

#### **Deadly disease**

Indian grey wolves are unlike their European and American counterparts. They are smaller, leaner, highly adapted to the hot, arid plains of the Indian subcontinent. They are, along with the Tibetan wolf found in the Himalayas, among the oldest wolf lineages in the world. Scientists have given the Indian wolf its own sub-species status, *Canis lupus pallipes*, and some have argued that



it should be its own unique species. If the Indian wolf were to disappear, this ancient evolutionary lineage would be forever lost, and India's savannas would be bereft of both their top predators.

The Indian wolf's unique genetic signature is under attack from another unlikely source: its own domesticated brethren. The population of free-ranging domestic dogs has exploded in rural India. As the wolf's habitat becomes fragmented, there are more opportunities for dogs to come into contact with wolves. Wolves and dogs have an uneasy love-hate relationship. A solitary dog is likely to be chased away by a pack of wolves, and vice versa. However, if wolf populations are low, and a wolf is unable to find a partner, then it may also mate with a dog, resulting in wolf-dog hybrids. This genetic dilution of wild genes may eventually result in an evolutionary disadvantage for the wolf, robbing it of its ability to hunt prey and remain wild. Dogs can also pass on something more deadly to wolves. Diseases such as canine distemper, canine parvovirus and rabies could easily spread to wolf packs. This is likely to have happened to the pack that we saw near Pune.

### **Not so green**

While all these dangers continue to imperil the wolf's future, perhaps nothing is as bad as the ignominy heaped on the habitat that the wolf calls home. According to the government of India's Wasteland Atlas of India, much of the wolf's native habitat is barren wastelands that are actively prioritised for development activities. It is ironic that one of the greatest dangers to grasslands comes from 'green' projects such as solar energy and tree planting drives.

The survival of the Indian wolf depends on an unlikely ally: nomadic pastoralist communities who graze native sheep and goats in these grasslands. These are the main prey for the wolves, and in many pastoralist communities, such as the Dhargar of Maharashtra, the wolf is worshipped and not begrudged the occasional lamb. But this relationship is not always so rosy. In many other parts of the country, wolves are regularly persecuted by agro-pastoralists, their dens blocked with rocks and pups killed. However, the future of wolves, blackbuck, and that of the pastoralists and their stock is deeply intertwined with the fate of their habitats.

Only by granting the savanna grasslands of India their legitimacy as a natural habitat, and recognising the deep and intricate dependencies between the human and non-human denizens of these vast open landscapes, do we have a chance of saving the wolves.

**DreamIAS**

**BUSINESS & ECONOMICS****THE CRYPTOCURRENCY PRICE FALL**

The story so far: Bitcoin, the most dominant cryptocurrency around, is down more than 50% from an all-time high price of \$68,000, which it achieved just last November. It has, in fact, lost a fourth of its value in the last 30 days. Bitcoin isn't alone. The prices of almost all cryptocurrencies have seen a similar steep downward movement over the last month. Volatile price movements aren't new to the cryptocurrency world but this time the plunge seems to have revealed new insights and vulnerabilities of the market.

**Is the Bitcoin price fluctuation a new phenomenon?**

It isn't. Its history is filled with many instances of big price falls and big price rises within a short period of time. Last year, after hitting a new peak of over \$63,000 in April, its value more than halved by June. China's crackdown on cryptocurrency mining operations was seen as the main reason for this fall. The April price it reached was itself a massive eight to nine times of its year-ago value. So steep was the climb. The new peak in November followed.

Over the years, speculators have flooded in to take advantage of such volatility. It should be noted that the downside risks come swift and steep. At the same time, this inherent volatility effectively rules it out as a medium of exchange which is something that researchers have repeatedly pointed out. All these and the fact that cryptocurrencies are designed to bypass the official monetary mechanism of any country make most governments wary of them.

**What's new about this phase of the cryptocurrency price fall?**

The context is, of course, new. This big sell-off phase has come about at a time when the war in Ukraine and the subsequent disruptions to the global supply chain have resulted in record-high inflation throughout the world. Inflation in the U.K., for instance, is at its highest levels in 40 years. To tackle such conditions, many central banks have gone in for interest rate hikes. Early this month, the U.S. Federal Reserve increased its benchmark interest rate by half a percentage point, the biggest hike in 22 years.

"These aren't normal times," said the 2022 Midyear Economic Outlook report of Morgan Stanley. "Persistent inflation, supply chain constraints, the continuing pandemic and war in Ukraine signal a significant slowdown in global GDP growth this year but not a worldwide recession."

Cryptocurrencies, which are perceived amongst the riskier investments, are weighed down in such an environment where investors want safety more than anything else. Cryptocurrencies, interestingly, were promoted as those that could weather these storms. A recent article in The New York Times said, "Bitcoin was conceived more than a decade ago as 'digital gold,' a long-term store of value that would resist broader economic trends and provide a hedge against inflation. But Bitcoin's crashing price over the last month shows that vision is a long way from reality. Instead, traders are increasingly treating the cryptocurrency like just another speculative tech investment." It has in recent times behaved more in the lines of the technology stocks at Nasdaq and less like gold, which is seen as a store of value. But a vulnerability in the cryptocurrency ecosystem also played its part in the recent price crash.



### **What vulnerability was revealed during this crash?**

The Bitcoin value also got impacted by what's essentially a sub-story in the entire episode — the fate of a stablecoin called TerraUSD. Stablecoins are a type of cryptocurrency that seek to hold their value steady, even if the Bitcoins of the world have a rocky journey. This, they do by pegging to a currency such as the dollar. TerraUSD's idea was to maintain a value of \$1.

The way it maintains its peg is through an algorithmic solution, wherein if it drops below \$1, a trader is encouraged to receive a 'sister' token called Luna at a discounted price in exchange. The TerraUSD, for which Luna was exchanged, then goes out of circulation. The supply falls, and the peg to \$1 is achieved again. That's how it works in theory. What happened in reality is that the peg was lost, and the investors began to pull out, and both the stablecoins had a free fall.

On May 23, TerraUSD was trading below seven cents (it was 99 cents on May 9, a day before the fall began). Luna was trading at \$0.0002044, very close to zero. The Luna Foundation Guard, which backs the Terra ecosystem, had tried selling its Bitcoin reserves to keep its cryptocurrency peg intact. That, among other things, could also have played a part in the Bitcoin value slide.

### **How are governments reacting to this?**

Governments are reacting by talking about regulating stablecoins. CNBC quoted a U.K. government spokesperson as saying that "The government has been clear that certain stablecoins are not suitable for payment purposes as they share characteristics with unbacked cryptoassets." The U.K., the report said, is planning to "bring stablecoins within the scope of electronic payments regulation."

U.S. Treasury Secretary Janet Yellen was quoted as saying in a Congressional hearing, "I wouldn't characterise it at this scale as a real threat to financial stability but they're growing very rapidly."

While the crypto market seems to have stabilised after the big fall early this month, the future course of the prices is anybody's guess. The global inflation risk has still not gone away, nor is the Federal Reserve monetary tightening over.

## **WORLD MAY HAVE LOST 11.2 CRORE JOBS: ILO**

The "world of work" is being buffeted by multiple crises, says the ninth edition of the International Labour Organisation (ILO) Monitor. The report says that after significant gains during the last quarter of 2021, the number of hours worked globally dropped in the first quarter of 2022, to 3.8% below the employment situation before the pandemic. About 11.2 crore jobs might have lost between this period, according to the report.

The gender gap in India's employment scenario is mentioned in the report on the "world of work". The report said both India and lower-middle-income countries excluding India experienced a deterioration of the gender gap in work hours in the second quarter of 2020. "However, because the initial level of hours worked by women in India was very low, the reduction in hours worked by women in India has only a weak influence on the aggregate for lower-middle-income countries. In contrast, the reduction in hours worked by men in India has a large impact on the aggregates," the report mentions.

Explaining the data, an ILO official told The Hindu that for every 100 women at work prior to the pandemic, 12.3 women would have lost their job as an average through the entire period



considered by the report. The official added that, in contrast, for every 100 men, the equivalent figure would have been 7.5. “Hence, the pandemic seems to have exacerbated the already substantial gender imbalances in employment participation in the country,” the official said.

### Global factors

The fresh lockdowns in China, the conflict between Ukraine and Russia, and the global rise in the prices of food and fuel are cited as the main reasons for the findings.

The ILO urged its member countries to take a humane approach to address the situation. Financial turbulence, potential debt distress and global supply chain disruption points at a growing risk of a further deterioration in hours worked in 2022, as well as a broader impact on global labour markets in the months to come, the report said.

The report added that a “great and growing divergence between richer and poorer economies” continues to characterise the recovery.

“While high-income countries experienced a recovery in hours worked, low- and lower-middle-income economies suffered setbacks in the first quarter of the year with a 3.6 and 5.7 % gap respectively when compared to the pre-crisis benchmark,” the report said. Trade unions urged the Centre to address the issue of unemployment. “Women employment in India has come down, particularly in sectors such as healthcare as a result of the pandemic. The ILO report suggests that the purchasing capacity of the workers should be improved. ILO has been proposing decent jobs and decent wages. We do not have decent employment here in India. Most people are on contract without any social security. If there are no decent wages, purchasing power will also come down. The Code on Wages was passed in 2019 but is not yet implemented. The Wage Committee in 1948 asked the government to implement minimum wage, living wage and decent wage. We have not implemented even minimum wage yet under pressure from industrialists,” Bharatiya Mazdoor Sangh general secretary Binoy Kumar Sinha said.

AITUC general secretary Amarjeet Kaur said the ILO’s projections have underestimated the real picture in India. “According to our calculation, 30%-60% of workers — five crore people — who lost jobs during the lockdown have not joined any work.”

## A NEW ROAD FOR INDIA’S FISCAL FEDERALISM

On May 19, in *Union of India vs Mohit Minerals*, the Supreme Court of India delivered a ruling which is likely to have an impact far wider than what the Centre might have imagined when it brought the case up on appeal. At stake was the validity of a levy imposed on importers, of Integrated Goods and Services Tax (IGST) on ocean freight paid by foreign sellers to foreign shipping lines. The Gujarat High Court had declared the tax illegal. The Supreme Court affirmed the ruling through Justice D.Y. Chandrachud’s judgment and held that the levy constituted double taxation — that is, that the importer, which was already paying tax on the “composite” supply of goods, could not be asked to pay an additional tax on a perceived “service” that it may have received.

### Just recommendations

In making this finding, the Court proceeded on a technical reading of various laws, in particular the provisions of the Central Goods and Services Tax Act. That reading, in and by itself, has limited implications. But the Court also made a slew of observations, which, if taken to their logical



conclusion by State legislatures, could potentially transform the future of fiscal federalism in India. It held, for instance, that both Parliament and the State legislatures enjoy equal power to legislate on Goods and Services Tax (GST), and that the Goods and Services Tax Council's recommendations were just that: recommendations that could never be binding on a legislative body.

Reacting to the ruling, the Union Ministry of Finance has claimed that it “does not in any way lay down anything new”, and that it “does not have any bearing on the way GST has been functioning in India, nor lays down anything fundamentally different to the existing framework of GST”. But a close reading of the judgment belies this suggestion. Until now, governments across India have treated the GST Council's recommendations — even where they disagreed with them — as sacrosanct, because they believed that this was indeed the law. What Mohit Minerals holds, though, is that State governments, on a proper construal of the Constitution, need to hardly feel circumscribed by any such limitation. As such, according to the Court, State legislatures possess the authority to deviate from any advice rendered by the GST Council and to make their own laws by asserting, in the process, their role as equal partners in India's federal architecture.

### **Advent of Articles**

When, in July 2017, the Union government introduced the GST regime through the 101st constitutional Amendment, it did so based on an underlying belief that tax administration across India needed unification. ‘One Nation, One Tax’, was the mantra. To give effect to this idea, many entries in the State list of Schedule VII of the Constitution were either deleted or amended. No longer could State governments, for example, legislate on sale or purchase of goods (barring a few exceptions, such as petroleum and liquor) through the ordinary legislative route. Instead, a power to legislate on GST was inserted through a newly introduced Article 246A. This provision overrode the general dominion granted to Parliament and State legislatures to bring laws on various subjects and afforded to them an express authority to make legislation on GST.

In addition, the 101st Amendment also established, through Article 279A, a GST Council. This body comprises the Union Finance Minister, the Union Minister of State for Finance, and Ministers of Finance from every State government. The Council was given the power to “make recommendations to the Union and States” on several different matters. These include a model GST law, the goods and services that may be subjected to or exempted from GST and the rates at which tax is to be levied. In framing the manner in which the Council's votes are to be reckoned with, the Union government was granted a virtual veto.

As I wrote in these pages when the Amendment was first introduced, there was some amount of confusion on whether the Council's decisions would be binding. The use of the word “recommendations” suggested on the one hand that its decisions would be advisory, at best. But, at the same time, the fact that Article 279A directed the establishment of a mechanism to adjudicate disputes between governments on decisions taken by the Council suggested that those governments would, in fact, be bound by any advice rendered to them. If the former reading was to be deployed, the purpose behind the introduction of a common GST would be in jeopardy. But the latter interpretation effectively entailed a destruction of the well-laid plans of the Constituent Assembly. Fiscal responsibilities that had been divided with much care and attention between the Union and the States would now stand dissolved.

### **Not a symmetrical compact**

In its judgment in Mohit Minerals, the Supreme Court has provided what ought to be seen as the final word on this conundrum. Although States had until now proceeded on a tacit belief that the



GST Council's recommendations were binding, such an approach, in Justice Chandrachud's words, would run counter both to the express words of the Constitution and the philosophical values underlying the language deployed. Our federal compact, the judgment holds, is not symmetrical, in that there are certain areas of the Constitution that contain a "centralising drift" — where the Union is granted a larger share of the power — and there are other areas where equal responsibility is vested.

Article 246A, which was introduced by the 101st Amendment, is one such clause. The provision provides concomitant power both to the Union and to the State governments to legislate on GST. It does not discriminate between the two in terms of its allocation of authority. That allocation, according to the Court, cannot be limited by a reading of Article 279A, which establishes a GST Council, and which treats the Council's decisions as "recommendations". "If the GST Council was intended to be a decision-making authority whose recommendations transform to legislation," wrote Justice Chandrachud, "such a qualification would have been included in Articles 246A or 279A." But in the present case, no such qualification can be found.

#### In perspective

The Court's ruling does not mean that a legislature — whether Parliament or the States' — cannot through statutory law make the Council's recommendations binding on executive bodies. Indeed, insofar as the laws today make such a mandate, rulemaking by the executive would necessarily have to be bound by the Council's advice. But a constitutional power, in the Court's ruling, can never be limited through statute. Such curbs must flow only from the Constitution. And in this case, in the Court's analysis, no restrictions on legislative power can be gleaned on a meaningful reading of the Constitution.

Today, because of the ruling in Mohit Minerals, State governments will be free to exercise independent power to legislate on GST. It is possible that this might lead to conflicting taxation regimes, with the idea of 'One Nation One Tax' rendered nugatory. But as the Court puts it, "Indian federalism is a dialogue between cooperative and uncooperative federalism where the federal units are at liberty to use different means of persuasion ranging from collaboration to contestation."

GST was conceived as a product of what some described as "pooled sovereignty". But perhaps it is only in an administrative area, animated by contestation, where we can see synergy between different sovereign units, where our nation can take a genuine turn towards a more "cooperative federalism".

#### ALL HANDS ON DECK

The Union government's decision on Saturday to cut the excise duty on petrol and diesel by ₹8 and ₹6, respectively, is a belated acknowledgement that April's multi-year highs in inflation were spurred in significant measure by high fuel prices. Coming more than six months after its last duty reduction — on Deepavali eve — the latest cut is a welcome step to ease the burgeoning cost burden on producers and consumers. With the price of the Indian basket of crude oil having risen by more than 33% since November, and with a bulk of the surge coming in the wake of the Ukraine war in February, state-run oil marketing companies had raised retail fuel prices sharply over a 16-day period starting March 22. Largely as a result of the higher fuel prices and quickening food costs, inflation based on the Consumer Price Index accelerated to a 95-month high of 7.8% last month, while wholesale price gains soared to a multi-decade high of 15.1%. S&P Global's April





PMI surveys showed that both services and manufacturing companies had in fact flagged the surging input costs as a potential dampener of demand. A desperate RBI decided to stop waiting for Government intervention to cool the supply-side factors fanning inflation and opted instead to raise interest rates earlier this month.

The extent of concern about the inaction on the part of the Government was reflected at the Monetary Policy Committee's two-day meeting earlier this month where a member observed: "Government supply-side action can also reduce future rate rises, output sacrifice and borrowing costs. Both central and State taxes are buoyant... giving them space to cut taxes on fuels." Now that the Centre has acted to ease some of the inflationary pressure emanating from the high excise duty component in fuel prices, the onus is on the States to sink their political differences over the Government's past approach to taxing fuels and help reduce the burden on the common man by paring their respective State taxes as well. With the war in Europe showing no immediate signs of easing, the economic fallout, particularly on global energy and food costs, remains highly uncertain and continues to point to the rising risks of faster inflation coupled with slower growth. In such a volatile scenario, fiscal measures that help cool price pressures and leave an extra rupee or two in the consumer's pocket can only aid to undergird vital consumption demand in the economy. Ultimately, all States must realise that the best way to safeguard their revenue interests would be to ensure that the growth momentum in the economy as a whole remains well supported. This is a moment that calls for all hands on deck. The sooner policymakers at the different levels of government, and of all political hues, realise this and act in concert, the better.

#### RISING GLOBAL RATES, RE FALL MAY SCALE DOWN INDIA INC ECB PLANS

The rise in global interest rates and the depreciation of the rupee is likely to reduce the appetite of India Inc to mobilise funds through external commercial borrowings (ECBs) in the coming months.

The weighted average cost had come down to 1.2 per cent over LIBOR in FY19, but has started increasing subsequently and was at 1.81 per cent in FY22. This is expected to increase further in the coming months with global central banks planning to hike the rates.

London Interbank Offered Rate (LIBOR), the global benchmark basic rate of interest used as a reference for setting the interest rate on other loans, was 2.73 per cent on May 20. When compared to this, State Bank's one-year MCLR (marginal cost of funds based lending rate) is now at 7.20 per cent.

ECBs account for a major share of India's external debt and form for 36.8 per cent of India's external debt as of end of December 2021. ECB approvals rose to \$38.3 billion in FY22 from \$34.8 billion in FY21. "However, with global interest rates poised to edge up, the relative attractiveness of ECB inflows may diminish. Further, the recent depreciation seen in the rupee will also weigh on ECB inflows this year," says a Bank of Baroda research report.

RIL had raised \$4.76 billion through this route last year. Of this, RIL's \$1.5 billion notes were priced at 2.875 per cent to mature in 10 years in 2032.

International capital market remains the major source of funds for Indian companies to raise funds outside. Lower global interest rates have driven corporates to explore funding options in capital markets across the globe. Share of the international capital market in total ECB approvals has increased sharply from 12.6 per cent in FY19 to 33.2 per cent in FY22 amidst a sharp dip in



global interest rates. “Interest rates are rising at home and abroad. The difference in the rates between the two is likely to remain at the same level. So there won’t be a big fall in ECBs,” said a banking source.

The US Federal Reserve followed its first 25 bps rate hike in April 2022 with a double barrel action of another 50 bps hike and a planned balance sheet squeeze starting from May 2022.

The European Central Bank is expected to announce its first rate hike soon. The Bank of England’s Monetary Policy Committee approved a 25-basis point increase, taking the base interest rate up to 1 per cent recently. Global central banks have been hiking key policy rates to tame inflation.

ECBs play an important role in India by supplementing the funding needs of corporates.

India has seen a steady increase in resources mobilised through this route in the last few years.

Improvement in economic activity as well as low global rates have contributed to the attractiveness for this source of funding for India Inc, BoB report said.

Financial services account for a major share of total ECB approvals. However, the share of ECB funds mobilized by this sector has declined from 26.6 per cent in FY19, to 21.7 per cent in FY22. Financial services use such funds for onward lending and would tend to have a continuous demand for ECBs provided other conditions are favourable. Manufacturers of coke and refined petroleum products have raised a significant share of total ECBs, BoB said.

On the other hand, the share of electricity and power transmission has increased substantially from 6.7 per cent in FY19 to 19 per cent in FY22. Funding by this sector has been used mainly by companies engaged in providing renewable energy.

These three sectors have accounted for around 60 per cent of total approvals over the last 4 years.

Companies also utilise funds mobilized through ECBs to fund earlier ECBs. From about 32.3 per cent of total ECB approvals in FY17, the share of this category has declined to 18.4 per cent in FY22.

Firms are also increasingly using ECBs to meet their working capital requirements.

#### POOR RECOVERY, INCREASING DELAYS MAR IBC RESOLUTION PROCESS

When a business turns sick, it starts defaulting on its loan payments and the creditor tries to recover the debt through various means. The recovery process is essential on two counts – one, to recover the maximum amount possible from the defaulter, and two, to do it as soon as possible so that the amount can be freed-up to issue fresh credit. Poor recovery of claims and inordinate delays in resolving bad assets were the problems that plagued the older recovery mechanisms such as SARFAESI, Lok Adalats, and Debt Recovery Tribunals.

In 2016, the Insolvency and Bankruptcy Code was passed to tackle the mounting bad debts and to favour the creditor during the resolution process. While the IBC’s performance has been relatively better than the other recovery mechanisms, it suffers from similar systemic issues. For instance, of the 2,600 cases that were closed by December 2021, 55% ended in liquidation while only 16% were completed with proper resolution plans approved by the lender. The resolution process is also marred by delays. On average, over 700 days were taken in FY22 to complete a resolution process, against the stipulated deadline of 330 days. Moreover, during the fourth quarter of FY22,



the amount to be realised from the resolution process was lower than the liquidation value of assets. Worryingly, the lenders continued to take steep haircuts. The haircut is the debt foregone by the lender as a share of the outstanding claim. In 100 out of 500 companies that saw proper resolutions, the haircuts were above 90%.

## ‘MONETISATION’ AXED, MEITY’S FRESH DRAFT TO ‘ENCOURAGE’ COS TO SHARE NON-PERSONAL DATA

The Ministry of Electronics and Information Technology (MeitY) has floated a fresh draft policy which proposes that private companies be “encouraged” to share non-personal data with startups and Indian researchers through a proposed initiative called the India Datasets programme. This will also include non-personal data of Indian citizens collected by the Central government.

The new draft, called ‘National Data Governance Framework Policy’, is a replacement of the now scrapped data accessibility policy, a draft of which was floated by the MeitY in February. The old draft policy was axed as it faced severe criticism over its proposal to monetise government data.

Experts indicated the fresh draft could also face a pushback, given that private companies are unlikely to be keen on voluntarily sharing non-personal data as there could be trade and intellectual property issues.

The most significant change in the new draft is the omission of perhaps the most contentious provision in the old draft — selling data collected at the Central level in the open market. The old draft — ‘India Data Accessibility and Use Policy’ — floated in February, had proposed that data collected by the Centre that has “undergone value addition” can be sold in the open market for an “appropriate price”. It faced widespread criticism with questions being raised about the government collecting data to monetise it in the absence of a data protection law in India.

Instead, the new draft places significant focus on sharing non-personal data. To do so, it calls for the creation of an India Datasets programme, which will consist of non-personal and anonymised datasets from Central government entities that have collected data from Indian citizens or those in India. Private companies, it says, will be “encouraged” to share such data. The non-personal data housed within this programme would be accessible to startups and Indian researchers, the draft proposal said.

In its most basic form, non-personal data is any set of data which does not contain personally identifiable information. This in essence means that no individual or living person can be identified by looking at such data. The push to harness non-personal data was first proposed by a government committee headed by Infosys co-founder Kris Gopalakrishnan, which was set up to unlock the economic value of such data and also address concerns arising out of it.

Among the stated objectives of the policy are to modernise the government’s data collection, with an aim to improve governance and to enable an artificial intelligence (AI) and data-led research and startup ecosystem in the country. Once finalised, the policy will be applicable to all Central government departments along with all non-personal datasets and related standards and rules governing its access by startups and researchers. State governments will be “encouraged” to adopt the provisions of the policy, according to the draft.

The draft also calls for creation of an India Data Management Office (IDMO), which will be incharge of designing and managing the India Datasets platform that will process requests and provide access to the non-personal datasets to Indian researchers and startups. The IDMO will “prescribe



rules and standards, including anonymisation standards for all entities (government and private) that deal with data that will cause every government ministry/department/organisation to identify and classify available datasets and build a vibrant, diverse and large base of datasets for research and innovation,” according to the draft. For purposes of safety and trust, any non-personal data sharing by any entity can be only via platforms designated and authorised by IDMO, it added.

In what appears to be a potential preventive measure against the new draft running into privacy-related issues, the MeitY has stated that the IDMO will set and publish data anonymisation standards and rules to “ensure informational privacy is maintained”.

Industry experts, meanwhile, pointed out that several contours — such as the composition of the IDMO and the process through which data housed in the India Datasets programme can be accessed by startups and researchers — have not been made clear in the new draft policy.

Experts also said that private companies may not voluntarily share non-personal data. “There may be trade and intellectual property issues, so it is possible that private companies will not share at least non-personal datasets that are critical to their business,” a senior industry professional said.

#### CYBERSECURITY NORMS MAY MAKE IT ‘DIFFICULT’ TO DO BUSINESS IN INDIA: 11 INDUSTRY BODIES TO CERT-IN

India’s recently announced cybersecurity norms are facing a larger pushback. Eleven industry bodies from countries in the European Union, UK, and the US, including the likes of US Chamber of Commerce and US-India Business Council, have written to the Indian Computer Emergency Response Team (CERT-In), raising concerns around its recent cybersecurity norms, arguing that the “onerous nature” of the directive may make it more difficult for companies to do business in India.

In a letter to Sanjay Bahl, the Director General of CERT-In, the industry groupings said that the cybersecurity directive will have a “detrimental impact on cybersecurity for organisations that operate in India, and create a disjointed approach to cybersecurity across jurisdictions, undermining the security posture of India and its allies in the Quad countries, Europe, and beyond”.

In particular, they have flagged the six hour timeline to report cybersecurity incidents, requirements that companies furnish sensitive logs to, an “overbroad” definition of reportable incidents, and that virtual private networks (VPNs) will have to store data on its users for five years. “If left unaddressed, these provisions will have a significant adverse impact on organisations that operate in India with no commensurate benefit to cybersecurity,” the letter said.

The signatories to the letter count big tech companies like Facebook, Google, Apple, Amazon and Microsoft along with other tech firms as members. The signatories include: Asia Securities Industry & Financial Markets Association (ASIFMA), Bank Policy Institute, BSA, Coalition to Reduce Cyber Risk, Cybersecurity Coalition, Digital Europe, Information Technology Industry Council (ITI), techUK, US Chamber of Commerce, US-India Business Council (USIBC), and US-India Strategic Partnership Forum (USISPF). They join a wide range of stakeholders, including VPN providers and the civil society, who have previously criticised CERT-In’s norms.



CERT-In's cybersecurity directive requires entities to report cybersecurity incidents to the agency within six hours. They also mandate VPN providers to store information such as names, email IDs, contact numbers, and IP addresses (among other things) of their customers for a period of five years. The letter comes a week after CERT-In released a set of clarifications on its rules after compliance burden-related concerns were raised by industry stakeholders. The rules were announced on April 28 and are to go into effect after 60 days.

The industry groupings have called for increasing the reporting timeline from the currently prescribed six hours to 72 hours, saying the latter timeline is "in alignment with global best practices".

"A 6-hour timeline is too short. CERT-In has not provided any rationale as to why the 6-hour timeline is necessary, nor is it proportionate or aligned with global standards. Such a timeline is unnecessarily brief and injects additional complexity at a time when entities are more appropriately focused on the difficult task of understanding, responding to, and remediating a cyber incident," they said in the letter.

However, Minister of State for Electronics and IT, Rajeev Chandrashekhkar had earlier said that the government was being "too generous" with the six hour reporting timeline. CERT-In's Bahl, meanwhile, has previously said that countries like France, Japan, Indonesia and Singapore have even shorter timelines for reporting cybersecurity incidents. Despite the prior concerns, the government has decided to press ahead with the rules. Chandrashekhkar has also warned VPN companies that if they do not adhere to the norms, they are free to exit the country

## SUGAR EXPORT CURBS AND THEIR IMPACT

The government Tuesday decided to "restrict" the export of sugar, effective from June 1. The curbs, the first such move in four years, have been ordered to maintain "domestic availability and price stability of sugar", the government said. India is the biggest producer of sugar and the second largest exporter after Brazil. What do these curbs mean for domestic and the international market?

### What are the latest curbs?

The government has moved export of sugar from the 'open category', which requires no government intervention, to 'restricted' category. This means that export of sugar is allowed only with specific permission from the Directorate of Sugar, Department of Food and Public Distribution (DFPD), Ministry of Consumer Affairs, Food & Public Distribution. Also, the curbs come into effect from June 1 and will continue till October 31, or until further orders.

Sugar industry insiders pointed out that unlike wheat, where export has been banned, sugar would continue to be exported, but from June 1, permission would be required to send the shipments out.

Till date, the industry has contracted export orders of 90 lakh tonnes out of which 71 lakh tonnes has been shipped out of the country. From June 1, permission to export would be required for both the pending contracted quantity and any new contracts entered by mills.

### How much did India export during the last few seasons?



Thanks to the bumper crops over the last four seasons, exports too boomed. The Centre also extended subsidies to millers to push sales abroad. Before the start of the sugar season (October to September every year), the central government would announce both the quota for export and the subsidy to achieve the target.

In 2017-18, the government set a target to export 20 lakh tonnes of sugar and sanctioned a budget of Rs 1,540 crores to handle internal transport, freight, handling and few other operations. For that season, the industry recorded exports of 6.2 lakh tonnes and with a reported expenditure of Rs 440 crores of the subsidy budget.

For the next season (2018-19), 50 lakh tonnes export target was set with a subsidy budget of Rs 5,538 crores, of which 38 lakh tonnes of sugar was shipped out using Rs 4,263 crores of the subsidy.

After a bumper crop in 2019-20, export quota was hiked to 60 lakh tonnes with a subsidy budget Rs 6,268 crores. Millers clocked exports of 59.60 lakh tonnes using up Rs 6,225 crores of the subsidy budget.

The traction in the international market helped sugar exports touch 70 lakh tonnes in 2020-21, out of which 60 lakh tonnes was done using Rs 3,500 crores of government subsidy and 10 lakh tonnes was exported without any government aid. The export without government subsidy was done under the open general license regime.

The current season (2021-22) has seen millers enter into contracts to export 90 lakh tonnes of sugar. Out of this, 71 lakh tonnes of sugar has already left the country. The consignments scheduled to leave after June 1 will need government permission.

What also helped exports grow over the last few seasons is the fact that Brazil produced more ethanol than sugar given the exceptional rise in fuel prices. This, and drought hitting other big sugar producers like Thailand helped India venture in countries which otherwise were dependent on Brazilian sugar. India is the second largest sugar producer in the world after Brazil. However, Brazil has always led in terms of exports.

In the current sugar season, international sugar prices have continued to be bullish. Exports have helped millers ensure that farmers are paid on time.

#### **Why the curbs, now?**

Exports, industry insiders say, can continue unabated given the international demand. But for the government, a possible worry is low stocks at the beginning of the next season. This can lead to supply constraints for around three months.

The sugar season officially starts in October, but picks up momentum only after December. If there is scarcity of back-up stocks during this period then prices can escalate in the domestic market. At a time when reining in inflation stays a major priority, the government can ill afford that risk.

Retail prices can see inflation if the October opening stock is anything less than 65-70 lakh tonnes. The present curbs would ensure the government keeps a tab on sugar stock real-time to ensure that there is no shortage at the start of the next season. Retail sugar prices have been almost stagnant year-on-year hovering between Rs 39.50 to Rs 41 per kg.



### **What will be the sugar output this season?**

The country has seen a bumper sugarcane crop. Of the 521 mills engaged in cane crushing this season, 116 mills are still operating with Maharashtra leading. It is expected that the crushing season will end in the second week of June for most part of the country.

A few mills in Tamil Nadu and Karnataka are expected to continue crushing till September. The final production figure is still anybody's guess given the large number of mills in operation, but most in the industry feel the country will see production of 350 lakh tonnes of sugar. Around 34 lakh tonnes of sugar has already been subsumed for production of ethanol. India's domestic consumption is pegged at 260 lakh tonnes.

### **What is the industry view on the latest restrictions?**

The first reaction to this curb was a Rs 50 per tonne drop in the ex-mill prices, which was on expected lines. International prices have remained more or less the same. Prakash Naiknavare, managing director of the National Cooperative Sugar Factories Federation, believes that India would end up exporting around 100 lakh tonnes of sugar this season even with the curbs. "If the present logistic and port congestion issues are resolved, there would be no problem in reaching this figure," he said. Most millers said the curbs would not affect them much and exports would continue without hassle.

## **BEHIND CURRENT FOOD INFLATION**

The world and India are witnessing a resurgence of food inflation. Between September 2021 and April 2022, consumer food price inflation in India has risen from 0.68% to 8.38% year on year. And with the UN Food and Agriculture Organization's (FAO) food price index hitting all-time-highs, it has reignited memories of the last great commodity inflation. That was during the period from the mid-2000s till around 2012-13, briefly interrupted by the 2008-09 global financial crisis.

### **But there's a difference between the two food inflationary episodes, especially in India.**

The former was a structural, demand-led inflation, driven by rising incomes. Real incomes, including of poor and lower-middle class households, going up resulted in declining per capita consumption of cereals and sugar (which basically deliver calories) alongside growing demand for foods incorporating proteins (milk, pulses, egg, fish and meat) and micronutrients (fruits & vegetables). This dietary diversification also had a bearing on inflation. Between 2004-05 and 2012-13, the cumulative rise in the wholesale price index was 93.1% for sugar, 99.9% for cereals and a mere 48.1% for edible oils (1 gm of fat provides 9 calories, more than the 3-4 calories from wheat atta and sugar). The same amounted to 108.1% for milk, 110.1% for vegetables, 141.3% for pulses and 144.5% for eggs, meat & fish.

### **Now and then**

The current food inflation, by contrast, is idiosyncratic and supply shock-driven. And it is more "calorie" than "protein" price inflation, a term coined by the former Reserve Bank of India deputy governor Subir Gokarn.

Since August 2020, when global demand started returning with the gradual lifting of Covid-19 lockdowns, the FAO's vegetable oil, cereal and sugar price indices have soared 141%, 71% and



50%, respectively. These exceed the 32% cumulative rise in the meat price index and 44% for dairy over the same period till April 2020.

Much of the above inflation predated the Russian invasion of Ukraine. Even before the war, Ukraine had drought in 2020-21, while Russia, in December 2020, announced export curbs on wheat, corn, barley, rye, sunflower and rapeseed for quelling domestic inflation. The Ukrainian drought and Russian export controls – coupled with pandemic-induced shortages of migrant workers in Malaysia’s oil palm plantations – drove up global prices of edible oils and cereals.

The war, which began on February 24, only worsened things – by squeezing supplies from the two countries having a substantial share of the world’s wheat, corn, barley and sunflower oil exports. Adding fuel to the fire was Indonesia imposing restrictions (even a temporary ban) on palm oil shipments to contain local inflation (similar to what Russia did earlier in wheat) and surging petroleum crude prices, making it all the more attractive to divert sugar, corn, palm and soyabean oil for bio-fuel production.

There has been no such major inflation, though, in proteins. The FAO’s dairy and meat prices indices have gone up, but that has had more to do with increased cost of feed ingredients (corn, barley, rye and oilseed cakes), as opposed to demand-pull from rising incomes. Since mid-March, prices of skim milk powder (SMP) and anhydrous milk fat at the Global Dairy Trade fortnightly auction platform have eased by over 9.4% and 15%, respectively. It is indicative of demand destruction, with buyers resisting unsustainably high prices at today’s low, if not negative, real income growth rates.

#### **Impact on India**

The transmission of the higher global calorie inflation to prices in India has, however, been limited largely to vegetable fats. Not surprising, given that more than 60% of the country’s edible oil consumption requirement is met by imports. From the accompanying chart, it can be seen that retail edible oil inflation ruled at 20-35% levels all through 2021, well before the surge in the overall consumer food price index from January. Interestingly, inflation in the other two calorie food commodities – cereals and sugar – has been relatively muted, notwithstanding the significant increase in their global prices.

The main reason for no imported inflation, at least till recently, in cereals and sugar is because of the country being a surplus producer of both. India’s exports of cereals and sugar were valued at a record \$12.9 billion and \$4.6 billion, respectively in 2021-22 (April-March). Also, despite some 32.3 million tonnes (mt) of cereals being shipped out – including 21.2 mt rice, 7.2 mt wheat and 3.6 mt maize – overflowing stocks in government godowns still enabled an unprecedented 105.6 mt of grain (55.1 mt rice and 50.5 mt wheat) to be sold through the public distribution system

There has been a pick-up in cereal inflation of late. But that inflation, basically in wheat, has come on the back of crop yield loss caused by the sudden heat wave from mid-March. In other words, desi and not imported. The transmission mechanism here has worked the other way round: With lower domestic production and depleting stocks prompting the Centre to ban wheat exports from India, international prices have firmed up – translating into higher inflation for other (importing) countries.





### What about proteins?

The present food inflation, as already noted, has been more about carbohydrates and fats than proteins and micronutrients. All-India modal or most-quoted retail prices of dals (split pulses) are lower now than a year ago. That includes chana (Rs 70 versus Rs 75/kg), tur/arhar (Rs 97.5 versus Rs 110), urad (Rs 97 versus Rs 105) and moong (Rs 98.5 versus Rs 105). The only exception is masoor, whose modal price of Rs 90/kg is higher than the Rs 85 at this time last year, according to the department of consumer affairs' data.

In milk, the crash in international SMP and butter fat prices has forced some correction in the domestic market as well. Since mid-April, Maharashtra's dairies have lowered their prices of cow milk SMP and yellow butter from around Rs 295 and Rs 400 per kg to Rs 270 and Rs 360-365/kg. They have further slashed the procurement price of milk (containing 3.5% fat and 8.5% solids-not-fat) to Rs 33-34 per litre, from Rs 35-36 till the first week of May. Buffalo milk SMP and white butter prices are still ruling firm, but even these should ease with the arrival of the monsoon rains. Summer months are the peak "lean" season for buffalo milk. Production really picks up from August, when the animals begin calving, and peaks during the winter through the spring months.

One can expect a similar easing of egg and meat prices. The summer heat subsiding should help reduce growing time and mortality of both layer and broiler birds. The poultry industry faced a huge crisis last June-July, when the cost of feed given to egg-laying birds crossed Rs 40 per kg (from Rs 21-22 in March 2021) and that for broiler chicks to Rs 50-52 (from Rs 29-30). This was courtesy of soyabean de-oiled cake (DOC) – the protein-rich feed ingredient obtained as a byproduct of oil extraction – whose prices went through the roof. The Centre's decision in August permitting import of up to 12 lakh tonnes of genetically modified DOC has stabilised layer and broiler feed prices to Rs 30 and Rs 45/kg levels.

On the whole, while there has been a recovery of demand from the reopening of hotels and other lockdown restrictions going, it is unlikely to trigger any "protein inflation". The demand-pull from rising incomes isn't strong enough this time round.

In fruits and vegetables, too, the drivers of inflation (Table 2) have been mostly supply shocks rather than demand-side factors. The mango crop this year was hit by a double whammy of unseasonal rains in December-January (causing flower drop) and early summer (not allowing adequate time for fruit formation and growth). The same happened to lemons, during flowering (in January) and towards harvesting (in March-April).

At the same time, there is not much inflation in onion, potato and also watermelons, cucumber, pumpkin, okra/ladies finger, gourds and other summer vegetables. Tomato prices are high, but not abnormally so for this time of the year. Again, incessant rains have played a part in disrupting market arrivals, particularly in the South.

### Summing up

Food inflation resulting from war, drought, unseasonal rains and heat waves is different from structural demand-pull factors. The inflation now is not only more of the former, but also in foods mainly delivering calories rather than proteins, vitamins and minerals. That, to some extent, makes it worse than the previous inflation, which, in Gokarn's words, was "an inevitable consequence of rising affluence".

While high prices would also induce supply response from farmers, a lot hinges on the monsoon. Last year's monsoon was "normal" in an overall sense, but marked by an extended dry spell in July and then too much rain from late-August, followed by the heavy unseasonal showers of December-January. One has to see how normal the "normal" monsoon forecast by the India Meteorological Department turns out to be.

Meanwhile, the good news is the Centre, on Saturday, cutting the excise duty on diesel by Rs 6/litre and many states also announcing reductions. That should have a further salutary effect on food inflation in the coming days.



# DreamIAS



## LIFE & SCIENCE

### WHEN A NIP AND TUCK GOES AWRY

Reshape, tighten and augment are key words in the exponentially growing world of aesthetic or cosmetic surgery. Estimated at ₹460 crore by industry experts, it's back in news following the death of a 21-year-old television actor who underwent liposuction, a body contouring procedure, and died at a private facility in Bengaluru earlier this week.

The incident threw open vital questions on the safety of aesthetic surgical interventions and the need for adequate regulatory mechanisms.

The industry is currently buoyed by image-driven social media as well as the increasing prevalence of obesity. Promises of magical, instant results lure ill-informed patients. Advertisements at 'beauty centres' promise free consultations with doctors, painless procedures, no stitches/ scarring/ swelling, "no cost EMI" (equated monthly installment), 60-minute sessions, one-day discharge, even pick-up and drop-off facilities.

"Too good to be true advertisements are always a red flag. All interventions come with inherent risk factors and here's where a trained, qualified professional comes into play. All human bodies aren't the same and the one-size-fits-all approach of clinics mushrooming without any quality control is a cause for concern. Patients' unrealistic expectations, coupled with lax legislation and implementation, drives the profit-centric market," Chennai-based consultant dermatologist D. Dinesh Kumar explained.

Dr. Kumar is the honorary secretary general, Indian Association of Dermatologists, Venereologists and Leprologists (IADVL), which is now working with the government to introduce some form of accreditation for dermatology clinics to ensure standardised treatment. "We are also working on a set of guidelines that will bring all professionals on a level playing ground," Dr. Kumar said.

Data from the International Society of Aesthetic Plastic Surgery shows 5,24,064 aesthetic procedures (surgical and non-surgical) were carried out in India in 2020.

Dermatologists in India have welcomed the recent Delhi High Court direction that only trained dermatologists and surgeons can carry out hair transplant procedures. They point out that when profits come into the picture, "patients become customers".

"The industry is plagued by online patient aggregators," said Dr. Sumeet Shah, director, metabolic and bariatric surgery, PSRI Hospital, Delhi. "Factually incorrect advertisements, centres with no hospital back-up, those compromising safety standards, sub-standard staff — all add to the risk factors."

"Stringent regulation is the need of the hour. Patients, doctors and the government need take notice of the need to regulate the industry. We are now concentrating on educating patients to make informed choices, which will ultimately drive the market to offer standardised treatment plans that work for every individual," Dr. Kumar said.

### SIGHTING THE FINISHING LINE IN MEASLES-RUBELLA ELIMINATION

Many would remember the school-based campaigns of measles-rubella (MR) vaccination of children from 5 to 15 years, conducted in all States, in 2017. Success was good in a few States, but

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



not in others. School managements, teachers, children themselves and parents were not informed of the basis of this new programme, which was a deviation from the past. There were some unanswered questions: why was it up to 15 years while the Universal (childhood) Immunisation Programme (UIP) covers only those up to five years? Why administer the rubella vaccine that was not in the UIP list in 2017? Why should children who have had one dose of the measles vaccine get another dose? Why are schools instead of health-care centres used for vaccination?

### **Hurdle of poor information**

The Government decided to eliminate measles and rubella from India by the year 2020 — having missed the earlier set target of 2015. So, in 2017 there was an urgency to accelerate efforts. The basic plan was to create a very high level of vaccination-induced immunity against both diseases, by inoculating MR vaccine. To cover immunity gaps after one dose of measles vaccine, a second dose was necessary. For epidemiological reasons (explained later), rubella vaccination had to cover children up to 15 years. School registration and attendance are high in all States and as a programme, it was easy to seize the opportunity to vaccinate children in schools. We knew that the MR vaccine was safe from any serious adverse event following vaccination/immunisation (AEFI); hence a school-based vaccination programme was very convenient for all. These were all excellent reasons, but due to a lack of information given to the public there was much anxiety — and even antipathy towards — in many places, about the programme, in the minds of parents and school authorities.

The COVID-19 pandemic stole two years from the programme. So the MR elimination target was re-set to 2023. Today, we are at the threshold of a new gargantuan project. We shall begin at the beginning and explain the details for all concerned to be well informed.

### **The basics**

MR elimination is defined as zero transmission of measles and rubella viruses, evidenced by zero clinical disease, sustained over three years. The two arms of intervention are vaccination and surveillance. Surveillance helps identify places where either virus is still in transmission, so that vaccination can be pinpointed there to stop further spread. Two doses of the MR vaccine covering at least 95% children below five years — the first dose between nine and 11 months and second dose ideally in the second year of life — should suffice. The disease is basically fever plus a red rash on the skin. A fever-rash combination has several causes and a throat swab, urine and/or blood sample are collected and tested in the laboratory for identifying measles or rubella.

### **District as nerve centre**

The ideal population-cum-administrative unit for efficiently implementing all activities towards MR elimination is the district; the whole country reaches the finishing line when all 773 districts achieve success. Clinical and laboratory surveillance and vaccination have to be sustained, as either virus, especially measles virus, could be imported from outside; that should be immediately detected and interrupted.

Every district has excellent infrastructure to manage the UIP. If the administration, under the active leadership of the District Magistrate or District Collector, activates the Task Force mechanism overseeing the UIP that is managed by the District Immunisation Officer, the MR elimination target can be reached within six to nine months from start. All districts in a State can be galvanised by the State Government, and all States can be supported by the Immunisation Division of the Union Ministry of Health and Family Welfare.



### Long-term impact

Why should measles be eliminated? In the pre-vaccination era, while polio paralysed about 1% of all children before the age of five, measles actually killed 1% of all under-five children. During measles outbreaks, the case-fatality rate was about 10%-15%. Children who recovered would have lost weight as well as the steady momentum of cognitive development and scholastic performance. Measles affects the immune system rendering the child vulnerable to other infectious diseases, leading to high mortality over the next two to three years. Indeed, there has been much discussion among experts whether measles should have been targeted first for global eradication instead of polio.

Why should rubella be eliminated? The rubella virus is a slower transmitter and the risk of rubella is extended from childhood through adolescence into the reproductive age range. In most individuals, rubella infection is either without symptoms, or with a short fever and a skin rash that is less pronounced than that of measles. Unfortunately, if a pregnant woman gets infected, the virus has a tendency to cross the placenta and damage the developing fetus's eyes, brain, heart and other tissues. Affected babies are born with severe birth defects such as cataracts, deafness, heart defects and developmental delay — this is 'congenital rubella syndrome' (CRS). Fortunately, CRS is preventable with vaccination if given prior to pregnancy. So, in the 2017 school-based vaccination campaign, 15 years was chosen to create immunity in girls for assured future protection, and in boys to prevent community spread.

There are special reasons why MR elimination could be achieved together. The MR vaccine is a combined product, targeting two diseases in one shot. Fever and rash surveillance covers both diseases. Measles elimination is of very high priority; piggy-backing rubella elimination is opportunistic.

We are in May 2022, with 19 months available to achieve the target. In spite of the pandemic, nationally, the UIP has maintained about 85% MR second dose coverage below five years. Thus, we are in a take-off position to reach the finishing line by July-August 2023, still leaving four to five months of buffer time to patch up any "last minute" shortfalls and challenges.

This project design is awaiting final approval by the Government of India. Using the cooperation of parents, health-care personnel at all levels, opinion leaders, influencers, the media, non-governmental organisations such as the Rotary and Lions, all can and must play a role in making this district-by-district programme a story of success.

### LEAN DIABETES IS REALITY THAT NEEDS FURTHER EXAMINATION, SAYS STUDY

Diabetics who have a low body mass index (BMI) have a unique metabolic profile compared with other groups of diabetics, and could be a distinct entity warranting further investigation, a recent article in Diabetes Care has argued.

The study looked at the metabolic factors in subjects who were recruited at the Christian Medical College (CMC), Vellore, against control groups comprising individuals with Type 1 and Type 2 diabetes, and similar BMI subjects without diabetes.

It was conducted with the Global Diabetes Institute, Albert Einstein College of Medicine, U.S.

"Diabetes among individuals with low BMI has been recognised for over 60 years as an entity in low and middle income countries (LMIC), and classified as malnutrition-related diabetes mellitus,



by the WHO,” says Nihal Thomas, co-author, and head of the Department of Endocrinology, Diabetes and Metabolism, CMC, Vellore. The need to establish low BMI (or lean) diabetes (LD) as a distinct form of diabetes, and thereby seek attention for it, arose because the WHO withdrew this category in 1999 due to lack of substantial evidence, he adds.

People with this form of diabetes have a history of malnutrition in utero and continue to have a low BMI into adulthood.

The thrifty phenotype theory in diabetes posits that the phenotype (or the observable physical characteristics of an organism, which basically includes the genes, and the impact on them by environmental factors) adapts in the womb to poor nutrition.

When nutrition improves after birth, this thrifty phenotype becomes disadvantageous to the individual, explains Riddhi Dasgupta, a co-author and endocrinologist.

Meredith Hawkins from the Albert Einstein College of Medicine, New York, further explains: “In individuals whose nutritional status improves after birth, it is likely they might seem thin by Western standards, but, in reality, because of the programming in utero, they have actually accumulated more fat than planned for by the gene, leading to the ‘thin-fat’ phenomenon. However, LD individuals never catch up with nutritional requirements, continuing to remain nutritionally challenged as adults, so the thrifty gene never comes into play. It is estimated that there are about 80 million people across the world living with this condition, but since it does not manifest in other than LMIC countries, there is very little research on the subject,” she adds.

The results of the study demonstrate that the cardinal feature of LD is a defect in insulin secretion capacity versus insulin resistance, as was previously suggested.



**DreamIAS**



## GLASS CLIFF

The term 'Glass Cliff' was coined by researchers from the University of Exeter, United Kingdom after studying the disparity between the promotion of men and women in corporate organisations. They looked at the 100 companies included in the Financial Times Stock Exchange (FTSE) Index and found that women were more likely to be promoted to higher positions when the company was performing poorly or going through a crisis. By doing this, women were set up for failure which was likened to standing at the edge of a cliff.

### Origins of the term

On November 11, 2003, an article titled, 'Women on board: help or hindrance?' was published in The [London] Times, where author Elizabeth Judge claimed that despite all the discourse on breaking the glass ceiling, women's participation as members in London's boardrooms worsened the companies, especially its share price performance. She came to the conclusion that appointing more women to company boards was detrimental to an organisation's performance.

It was this article that prompted Michelle Ryan and Alexander Haslam from the University of Exeter to study the phenomenon in 2005. Taking the sample of 19 companies in the London FTSE 100 that appointed male and female board members in 2003 and looking at their performance five months before and three months after board appointments, it was found that there was greater variability in company performance preceding and following the appointment of a woman. It was also found that women were appointed as board members mostly during an overall market slump or when the company was experiencing turbulence or when there was a decline in performance. Men, on the other hand, were appointed when the company was relatively stable, making sure that their success rates as board members or in higher positions were better. Thus, counter to Judge's claims, the appointment of women was not related to the decline in company performance. The study further showed that, even during times of crisis, women's appointment to leadership positions despite its precariousness and risk, proved positive for the company, because in many cases its performance improved.

### Made a scapegoat

The glass cliff is a phenomenon that reinforces stereotypes about women not being ideal in leadership positions. Although glass cliff mainly refers to the obstacles faced by women, the term also applies to the challenges faced by minorities and other marginalised groups when promoted to leadership roles. The phenomenon occurs in many different fields, including finance, politics, technology, and academia. When a company is performing poorly, it is associated with bad press, financial difficulties, and the need to restructure. During such periods, the company protects its male employees and promotes female employees to leadership positions. By promoting women, the company seems progressive but also sets them up for failure. Further, when the company fails to succeed, women can be replaced with their male counterparts, with the company also having a scapegoat to blame for their failures.

Despite circumstances and studies that show that precarious positions do not necessarily appeal to women compared to men, women are more likely to take up these leadership roles because they rarely get other opportunities for advancement. Men, on the other hand, tend to turn down risky roles, as they are sure to get better opportunities for leadership positions elsewhere or when the companies return to stability.



One of the notable examples of the phenomenon was when Marissa Mayer was appointed as the CEO of Yahoo! in 2012 after the company lost significant market share to Google. Despite the condition of the company in which she took over, when she resigned in 2017 after failing to improve the company's performance, critics attributed the failure of the company to her performance and effort, rather than to the environment in which she was promoted. She was later replaced by Thomas McInerney, a white male.

#### Theories behind the effect

There are many possible explanations as to why this effect prevails. One of the theories explains that when situations of stress or crises occur, women are preferred over men. This 'think crisis think female' theory perceives women to possess the qualities that help them deal with stressful situations better than men. Since stressful situations involve emotional management, women who are assumed to be better managers of people's feelings and problems, are expected to make better leaders during such periods.

Contrasting this, the 'think crisis think not men' theory explains how women are perceived to be less valuable than men, making it easier for the companies to throw them under the bus.

A third theory explains how when a company is going through a crisis, bringing about a significant change in its structure can hold positive connotations. Thus, in order to signal a drastic change, especially to their relevant stakeholders, women or people from minority communities are promoted to positions of leadership as it deviates from the conventional idea of leadership.

While the 'glass ceiling effect' hinders women and people from minority communities from advancing in their careers after a certain level in various organisations, the 'glass cliff effect' ensures that even when promoted, the leadership positions given to these groups are during periods of crisis, so that the company can look progressive and yet replace and blame them for the underperformance of the organisation. Both processes thus, help maintain the status quo and prevent women and members of minority communities from reaching positions of leadership.

#### BATTERY-LIKE DEVICE THAT CAPTURES CARBON DIOXIDE WHILE CHARGING

Researchers have developed a low-cost device that can selectively capture carbon dioxide gas while it charges. Then, when it discharges, the carbon dioxide can be released in a controlled way and collected to be reused or disposed of responsibly, the University of Cambridge said in a press release. The device has been described in the journal *Nanoscale*.

The supercapacitor device, which is similar to a rechargeable battery, is the size of a coin, and is made in part from sustainable materials including coconut shells and seawater. The University of Cambridge said the supercapacitor could help power carbon capture and storage technologies at much lower cost. The most advanced carbon capture technologies currently require large amounts of energy and are expensive.

The supercapacitor consists of two electrodes of positive and negative charge. The team tried alternating from a negative to a positive voltage to extend the charging time from previous experiments. This improved the supercapacitor's ability to capture carbon.

"We found that that by slowly alternating the current between the plates we can capture double the amount of carbon dioxide than before," the release quoted lead researcher Dr Alexander Forse as saying. "The charging-discharging process of our supercapacitor potentially uses less energy





than the amine heating process used in industry now. Our next questions will involve investigating the precise mechanisms of carbon dioxide capture and improving them. Then it will be a question of scaling up.”

## NATURE HAS THE ANSWERS

International Day of Biodiversity was celebrated on May 22. It gave us an opportunity to appreciate the wonder of biodiversity and renew our commitment to nurture and protect all the many forms of life with which we share our planet. We are a nation so defined by the richness of life around us that the words ‘diversity’ and ‘India’ have become synonymous. Our ethnic, cultural, and linguistic diversity has been greatly influenced by the unique features of our land, climate and geography, as well as the forces of migration and evolution. These forces have enriched our land with a multitude of species of plants, animals, and other organisms.

We, the human species, are an integral and influential component of biodiversity. Our own bodies host living microbiomes of tiny organisms without which we cannot survive. Our cultures shape the biodiversity around us, and biodiversity shapes our cultures and our future here on Earth.

Apart from the pandemic, the recent heat waves in much of northern India and floods in Meghalaya are stark reminders of worsening climate change and an uncertain future. The uncertainty is further fueled by the continuing degradation of lands and biodiversity, growing malnutrition and hunger, and inequities and environmental injustice.

### **Nature-based solutions**

Yet, it is our rich, albeit declining, biodiversity that provides us with potential solutions to our most pressing sustainability challenges. Nature-based solutions — the use of biodiversity and what we learn from the natural world to face our challenges — are emerging as the best path to take us forward.

Climate change is arguably the most severe crisis we face today. Global deforestation is one of the main contributors to climate change. Thus, the restoration of deforested and other degraded lands can lead to mitigation of climate change. Restoring biodiversity on large tracts of land is one of the major commitments that India has made under the Paris Accords. This direct connection between biodiversity and climate change was strongly affirmed by most nations in the Conference of the Parties in Glasgow concluded six months ago. Similarly, rejuvenation of our soils and agriculture, elimination of hunger, and improvement of nutrition depends upon our prudent use of biodiversity in the prevailing agricultural systems. Fostering the return of biodiversity to degraded lands and enhancing blue carbon in oceans have immense environmental and considerable economic benefits. Restoration has the potential of creating millions of jobs, diversifying farming systems and agriculture-based livelihoods.

Enterprises based on India’s biodiversity have huge untapped potential. For example, the sector based on the use of molecules of biological origin in biotechnology and healthcare was worth \$70 billion in 2020. And we have barely begun to tap the potential of our rich medical heritage that includes thousands of medicinal plant species.

Nature contributes not only to our economic and physical well-being, but also to our minds and spiritual enrichment. Our country is full of sacred landscapes, riverscapes, and seascapes. We can take refuge in nature for mental solace.



### Strengthening biodiversity science

The biodiversity that is all around us and inside us, that sustains us and protects us, is under assault. We have seen our natural landscapes and waterscapes decline and degrade at an unprecedented rate. Last year, in these pages, I briefly described an effort on the part of the government to launch a National Mission on Biodiversity and Human Well-Being, conceived and planned by the Biodiversity Collaborative pulling together public and private institutions. The Mission will embed biodiversity as a key consideration in all development programmes, particularly in the sectors of agriculture, health, bioeconomy, ecosystem services, and climate change mitigation. It will also seek to develop a system for assessing and monitoring, restoring, and enhancing biodiversity to enable the realisation of the UN's Sustainable Development Goals. Public engagement is another key element of the Mission.

The pandemic has placed this Mission among the most significant national initiatives. We must urgently address the issues laid bare by COVID 19: the emergence of infectious diseases; inadequate food and nutritional security; rural unemployment; and climate change which all place additional stress on nature and public health, and which are what the Mission seeks to address.

Hundreds of professionals have participated in defining the road map for the Mission. International Biodiversity Day should serve as a reminder to our government and people to push forward the Mission and and reimagine our relationship with nature.

### ENGINEERING TOMATOES TO PRODUCE VITAMIN D

Reading the pages of the World Sustainable Development Goals 2 (SDG2) — Eradicating Hunger — is depressing to say the least. According to the estimates made in 2020, nearly 690 million people, who make up close to 8.9% of the world's population, are hungry. This number has increased by 60 million in the preceding five years. The index which was initially decreasing has started to rise since 2015. This does not portend well for the SDG2 which has as its target zero hunger by 2030, and the guess is, if this trend continues, that the world will have 840 million people affected by hunger by 2030.

#### The 'invisible' hunger

There are various ramifications to hunger, and an important part of it is micronutrient malnutrition. This is a term used for diseases caused by deficiency of vitamins and minerals in the diet. This is particularly a problem in developing countries and the number of those suffering from this so-called invisible hunger is huge. Some methods of combating this are to provide micronutrient supplements in the form of tablets or capsules and to fortify food products such as flour or salt by enhancing micronutrients in them. There is also the route of genetically modifying plants to produce biofortified leaves and fruit which can be consumed to alleviate micronutrient hunger.

In this line, a paper in Nature Plants by Jie Li et al tries to address vitamin D deficiency by genetically modifying tomato (*Solanum lycopersicum*) plants so that the fruit contains a significant amount of provitamin D3 which is a precursor from which humans can make vitamin D. Provitamin D3 has the chemical name 7-dehydrocholesterol, or 7-DHC for short. Humans can synthesise Vitamin D from 7-DHC when they are exposed to ultraviolet B (UVB) light. Vitamin D is needed for a process known as calcium homeostasis which is the maintenance of constant concentration of calcium ions in the body. This is needed for, among other things, bone



development and strength, and its deficiency is a cause of conditions such as rickets and osteoporosis.

Other diseases that are associated with vitamin D deficiency are cancer, Parkinson's disease and dementia. Vitamin D3 is present in fish and dairy products. Vegetarian diets are particularly deficient in Vitamin D.

### **Mutant tomatoes**

The recommended intake of vitamin D is 15 microgram per day for children and 20 microgram per day for elders. This can be given through supplements or a careful exposure to sunlight, but there are various caveats for the latter. It is in this context that the work of J. Li et al is significant. The authors of the paper, published in Nature Plants, tweaked a recently discovered pathway in tomato plants to produce cholesterol and a substance called steroidal glycoalkaloid (SGA for short) using the CRISPR-Cas9 gene editing tool. This inhibits the conversion of 7-DHC to cholesterol and instead the former accumulates in the leaves, green and ripe fruits.

Usually, in untreated tomato plants, 7-DHC is present in leaves and to a lower extent in green fruit, but not in ripe fruit — which is the most consumed of the lot. The researchers showed that in their modified plants, the suppression of the activity of a particular gene, “led to substantial increases of 7-DHC levels in leaves and green fruit,” and, according to the paper, while levels of 7-DHC were lower in ripe fruits of the mutant, they remained high enough that if converted to Vitamin D3 by shining UVB light, the amount in one tomato would be equivalent to that in two eggs or 28 grams of tuna, both of which are recommended sources of vitamin D. In addition, the researchers report that the mutants showed a reduction in their leaves of a substance called alpha-tomatine, and they comment that this may even be beneficial because of alpha-tomatine's reported toxicant or antinutritional activity. Surprisingly, the cholesterol levels in both fruit and leaves of the mutants was higher than that of the wild-type. This was despite having blocked the conversion of 7-DHC to cholesterol.

### **Need for deeper understanding**

Prof P. V. Shivaprasad, whose group in National Centre of Biological Sciences, Bengaluru, studies the effect of small RNA biogenesis in establishment of epigenetics (epigenetics is the study of how your behaviors and environment can cause changes in the way your genes work), and who is not involved in this work comments that while the study throws open a welcome new angle to increase vitamin D intake, it needs better understanding. Alpha-tomatine is believed to have a role in the plant's resistance to viral, fungal, insect and herbivorous attacks. Thereby it is important in safeguarding the plant and its self-preservation, and the reduction of alpha-tomatine in the mutants may not necessarily be a good thing. The unexplained levels of cholesterol are also surprising and need to be explained. So, while this experiment is an important one and promises to be fruitful in replenishing vegetarian diets with vitamin D, it needs further scrutiny and a deeper look.

## **WHY PANGOLINS MAY NOT BE THE INTERMEDIATE HOST**

The origin debate on novel coronavirus (SARS-CoV-2) is yet to be settled. Most indications suggest that the virus jumped across the species barrier from bats to humans either directly or through an intermediate host. There is another view that the virus might have escaped or leaked from the Wuhan Institute of Virology lab.



Such lab leaks had indeed happened in the past. In 2004, two researchers in a virology lab in Beijing working on the 2002 SARS virus were independently infected. The virus was transmitted to seven people in all but the outbreak was contained soon enough. A section of scientists and others believe that the SARS-CoV-2 virus might have followed the same course but went on to cause the pandemic.

#### **No conclusive evidence**

While irrefutable evidence in support of a natural origin is lacking as scientists have so far not been able to identify bats harbouring viruses very similar to the novel coronavirus to establish that the virus had indeed jumped directly from bats to humans. Nor have they been able to conclusively identify the intermediate host from where the virus jumped to humans and began spreading among people.

While the SARS-CoV-2 virus is quite similar to the RATG13 coronavirus found in horseshoe bats, the genome of the two viruses have only 96% similarity. So the virus, if it had jumped from bats to humans, is yet to be identified in bats. Pangolin has been suggested as a potential intermediate host that could have harboured the coronavirus before it made the giant leap to spread among humans. Many studies have found similarity between the coronavirus in pangolin and SARS-CoV-2 virus in terms of genome sequences. A study published recently in the journal *iScience* evaluated the biological characteristics of the pangolin coronavirus. The researchers from the Beijing University of Chemical Technology studied the pathogenicity and transmissibility of pangolin coronavirus by infecting Syrian golden hamsters and compared it with hamsters infected with SARS-CoV-2.

They found that the pangolin coronavirus was not only able to effectively infect hamsters but also cause the similar kind of responses in tissues as the novel coronavirus. Though both viruses seem to have the same affinity for the receptors, the pangolin coronavirus was able to efficiently replicate in the respiratory system and brain, much like the SARS-CoV-2. However, the scientists were not able to find infectious pangolin coronavirus in organs other than the respiratory system and brain, which is different from hamsters infected by SARS-CoV-2 virus.

Hamsters infected with pangolin coronavirus did not suffer substantial loss of body, while hamsters infected with SARS-CoV-2 did show a slight reduction in body weight in the first five days of infection and then regained weight.

#### **Pathogenesis difference**

Alveolar wall thickening of lungs of hamsters infected with pangolin coronavirus was “widespread” whereas the alveolar wall thickening in hamsters infected with SARS-CoV-2 was severe. There were other differences in pathogenesis too. In all, pangolin coronavirus produced moderate disease in hamsters and was less virulent than SARS-CoV-2.

There were differences in the way the viruses replicated — SARS-CoV-2 replicated way higher in the hamsters than the pangolin coronavirus could. Viral shedding by hamsters infected with pangolin coronavirus lasted for three days, while hamsters infected with SARS-CoV-2 shed virus for five days.

The most important difference was in the route of transmission. While pangolin coronavirus did not spread via aerosols but only through contact transmission, SARS-CoV-2 showed an “efficient contact transmissibility and an efficient aerosol transmissibility with a transmission efficiency of



100%", the authors write. One reason for lack of aerosol transmission in the case of pangolin coronavirus could be because of the less viral aerosols produced by the infected hamsters. The second likely reason could be the larger size of the viral particles exhaled by hamsters infected with pangolin coronavirus. In contrast, SARS-CoV-2-infected hamsters produced significantly higher amounts of viral aerosols, they found. Also, the amount of virus particles exhaled per minute by hamsters infected with SARS-CoV-2 was nearly 2.5 times more than hamsters infected with pangolin coronavirus.

### Coronavirus spread

Based on the study, the researchers conclude that the infection characteristics of pangolin coronavirus and SARS-CoV-2 are similar though the pathogenicity and transmissibility are much more in hamsters infected with SARS-CoV-2 virus. Though pangolin coronavirus spread from one hamster to another only through direct contact and not through aerosol, the "public health risk of pangolin coronavirus being potential candidates for global dissemination could not be ignored", they write. They also caution that "continual monitoring of the mutation and evolution of pangolin coronavirus should be implemented in the future, and the illegal wildlife trade of pangolins should be effectively controlled".

The study does not conclusively show that pangolins could have been the intermediate host. But the possibility of pangolin coronavirus crossing the species barrier at a future date and infecting humans cannot be ruled out.

## RESEARCHERS SHARE DRAFT GENOME SEQUENCES OF MONKEYPOX VIRUS

Researchers from the National Institute of Health Doutor Ricardo Jorge (INSA), Lisbon, Portugal have shared the draft genome sequence of the monkeypox virus that is rapidly spreading in many European countries. The draft sequence has been posted at the virological.org site.

The released draft genome sequence covers about 92% of the reference sequence. The sample was obtained from a swab collected on May 4 from skin lesions from a male patient in Portugal. As on May 19, Portugal had reported over 20 laboratory-confirmed cases of monkeypox.

### Draft genome sequence

Researchers from Belgium — the Institute of Tropical Medicine, Antwerp, and the University of Antwerp, Antwerp — too have shared a draft genome sequence of monkeypox at the virological.org site. The researchers were able to reconstruct 98.9% of the genome.

The genome was sequenced from a sample collected from a person in Belgium. The 30-year-old male in Belgium has a travel history to Lisbon, Portugal.

In the month of May 2022, many cases of monkeypox have been reported from at least 11 countries and there were about 80 confirmed cases, and 50 pending investigations, the WHO tweeted on May 20.

According to the New Scientist, 127 cases have been identified by May 21. The cases are mainly from Europe — Portugal, the United Kingdom, Spain, France, Italy, Sweden, Belgium — and the U.S.



Monkeypox is not endemic in Europe or the U.S. but is endemic in a few Central and West African countries. The virus is transmitted from one person to another by close contact with lesions, body fluids, respiratory droplets and contaminated materials.

#### **Phylogenetic analysis**

Based on rapid phylogenetic analysis of the draft genome, the researchers have found that the virus now spreading outside Africa belongs to the West African clade. According to the New Scientist, the virus belonging to the West African clade is mild in nature.

“The phylogenetic analysis of the draft genome indicates that the 2022 virus belongs to the West African clade and is most closely related to viruses associated with the exportation of monkeypox virus from Nigeria to several countries in 2018 and 2019, namely the United Kingdom, Israel and Singapore,” write the Portuguese researchers.

And the genome sequenced from the male in Belgium appears to be closely related to the genome shared by the researchers from Portugal. “Preliminary phylogenetic analysis clearly shows that the obtained genome belongs to the West African clade of MPXV [monkeypox] and is most closely related to the recently uploaded genome from the outbreak in Portugal providing further evidence of substantial community spread in Europe,” the researchers from Belgium write. The increased number of cases from multiple countries have raised concerns about enhanced human-to-human transmission of the virus. Evidence about increased human-to-human transmission, which is possible only if the virus has undergone any changes to make it easily transmissible among humans, will come from detailed genome sequence analysis.

#### **Virus transmissibility**

According to the New Scientist, establishing increased transmissibility of the virus that is currently circulating in Europe, the U.S. and Canada will take time as monkeypox has a “large [around 200,000 DNA letters long] and complex genome”. The current outbreak outside Africa is the most widespread and also the largest till date.

According to Nature News, monkeypox has been detected in people who have not come in contact with those with monkeypox infection, which suggests that the virus might be spreading silently. In a statement issued on May 20, the WHO regional director for Europe too said that the “geographically dispersed nature of the cases across Europe and beyond, suggests that transmission may have been ongoing for some time”. Also, except in one case, there has been no travel history to areas in West or Central Africa where the monkeypox virus is endemic.

Monkeypox usually causes very visible skin lesions and hence cannot go unnoticed. The silent spread, if true, might mean that the virus is able to also spread without causing symptoms in some infected people. If monkeypox can indeed spread asymptotically then it would make it harder to track the virus, Andrea McCollum, an epidemiologist at CDC Atlanta told Nature News.

“As more samples are sequenced, it should become clear whether, as suspected, a single variant of monkeypox is responsible for all the cases in the latest outbreak,” the New Scientist notes.