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INTERNATIONAL

FISSURES IN THE WEST'S ANTI-RUSSIA ALLIANCE

The story so far: In a significant departure from the position of the trans-Atlantic alliance (EU-NATO-U.S.) on the ongoing Russia-Ukraine war, French President Emmanuel Macron, in an interview on June 3, said that the West “must not humiliate Russia so that the day when the fighting stops we can build an exit ramp through diplomatic means”. Viewed alongside recent phone calls from Mr. Macron and German Chancellor Olaf Scholz to Russian President Vladimir Putin, the statement hints at a pivot toward a diplomatic solution. This is at odds with the West’s stance so far — adopted in solidarity with Ukraine — that the only acceptable outcome of the ongoing conflict is a military victory for Ukraine, unconditional withdrawal of all Russian forces from Ukrainian territory, and restoration of Ukraine’s pre-2014 territorial boundaries.

How did Ukraine react to Mr. Macron’s comments?

Mr. Macron’s comments elicited strong rebuke from Ukraine. Ukrainian Foreign Minister Dmytro Kuleba tweeted, “Calls to avoid humiliation of Russia can only humiliate France and every other country that would call for it. Because it is Russia that humiliates itself. We all better focus on how to put Russia in its place. This will bring peace and save lives.” Earlier, in May, Ukrainian President Volodymyr Zelensky had already gone on record claiming that Mr. Macron wanted Ukraine to compromise its sovereignty so that Russia can “save face” when deciding to cease hostilities. With Russia now in possession of one-fifth of Ukrainian territory, Kyiv wants the West to supply it with more advanced weapons, especially longer-range missiles, so that Ukraine can strengthen its position before contemplating diplomatic possibilities.

How have other European states responded to these comments?

EU nations which share a border with Russia — the Baltic states of Latvia, Lithuania and Estonia, and Poland — reacted sharply to Mr. Macron’s comments, indicating a growing divergence of views within EU ranks.

From the beginning of the conflict, the West’s response has been to isolate Russia from the rest of the world through a combination of harsh economic sanctions and a 360-degree cultural, political and commercial boycott of Russia, and aggressive military aid to Ukraine with the objective of weakening Russia and forcing it to abandon its military ambitions. But 100 days of the war have gone by, and while an end is nowhere in sight, collateral damage in the EU due to economic sanctions against Russia — rising fuel prices, a sputtering economy, and spiraling cost of living for the average citizen — is beginning to bite, especially in Germany and France, whose dependencies on global trade, supply chains, and commodity imports are high. The possibility of an endless — or long-term — war is making them nervous, vindicating Mr. Putin’s calculation that Russia’s pain threshold is higher than the West’s. Against this background, Mr. Macron seems to believe that an insistence on a military solution — that is, defeat, or “humiliation” of Russia — is an unrealistic goal that would only end up prolonging the war, and attendant pain for Europe, without moving the needle closer to a resolution.

Why have Mr. Macron and Mr. Scholz been in telephonic talks with Mr. Putin?

Historically France has had close links with Russia and Mr. Macron, in particular, has fashioned himself as a mediator between the EU and Russia. He has been in regular talks with Mr. Putin from



December 2021, first attempting to pre-empt the conflict, and when that failed, trying to find a quick negotiated settlement. On June 4, both Mr. Macron and Mr. Scholz had long phone calls with the Russian President where they raised the issue of Russia unblocking the export of grains from Ukraine's Black Sea ports. Russia's month-long blockade has triggered fears of widespread shortages and hunger, especially in developing countries. Mr. Putin, according to reports, promised to allow the export of grains provided the ports are "de-mined" and "relevant sanctions" on Russia were lifted. While France and Germany are hopeful of Russia allowing food exports from Ukraine, other EU nations and the U.S. are not keen on lifting any of the sanctions on Russia.

Are cracks beginning to appear in the 'united front' of the anti-Russia western alliance?

It does seem like two blocs with distinct views are beginning to coalesce. On one side are the U.S., the U.K., the Baltic states, and Poland, whose primary objective is to help Ukraine win the war, and failing that, to weaken and isolate Russia. On the other are EU states like France and Germany, and, for slightly different reasons, Hungary, which favour maintaining lines of communication and commercial links with Russia and are not enthusiastic about the policy of isolating the country. While the former bloc speaks only of restoring Ukraine's sovereignty over its territory and view talks with Mr. Putin as "encouraging" the occupier, the latter, especially Mr. Macron, believes that isolating Russia will not yield a sustainable security architecture for Europe, given the long history between the two. While the bloc in favour of arming Ukraine is dominant for now, the camp favouring a diplomatic resolution could gain fresh converts as more EU nations begin to feel the economic pain of a long-drawn war of attrition.

WHAT ARE THE PRECISION GUIDED ROCKET SYSTEMS BEING SUPPLIED TO UKRAINE?

Ukraine is set to receive the first delivery of precision multiple launch rocket systems (MLRS) from the US and UK, after the civilian and military leadership of the country made urgent requests for the hardware.

Why does Ukraine urgently require MLRS?

The Russians have fielded artillery in great numbers in the war with Ukraine. The lack of precision of Russian artillery systems is offset by the huge numbers that it can deploy in the field. Lately, the Russian artillery has been wreaking havoc on Ukrainian troops in the eastern theatre of war, with artillery salvos of various kinds raining down on Ukrainian forward positions, causing heavy damage and restricting movement of personnel and materials.

In order to counter the Russian artillery onslaught, the Ukrainians need precision artillery weapons which can be used to degrade Russian firepower capabilities. Ukraine's present artillery systems do not allow for a high degree of mobility and firepower which western MLRS can provide. Hence, Ukraine has urgently sought such rocket systems that can offset the Russian advantage at the earliest.

When did Ukraine make the demand for MLRS?

The Ukrainian military has been appealing for the rocket systems for a while now. The US, however, was initially wary of supplying these rocket systems lest Russia escalate the conflict in retaliation.



In the first week of May, Ukrainian President Volodymyr Zelenskyy appealed for the MLRS at a virtual G-7 leaders' summit. In his forceful appeal, he said his country needed the M142 HIMARS and M270 MLRS rocket systems from the West.

Given the tactical and strategic situation in the war, the US and UK finally conceded to his demands and agreed to send the systems at the earliest.

What are capabilities of the rocket systems being sent to Ukraine?

The UK has said it will send long-range M270 MLRS to Ukraine. This weapon system can fire 12 surface-to-surface rockets within a span of 60 seconds and hit targets as far away as 80 km. This range of firepower will be significantly more than what the Ukrainian artillery is currently capable of.

The M270 MLRS is a US-origin weapon system and has been used in conflicts in Iraq and Afghanistan in recent years. It is a highly mobile automated system on a tracked platform which is operated by a three-member crew. As per the manufacture of the system, Lockheed Martin, the M270 can fire 12 Guided MLRS or Extended Range (ER) GMLRS rockets, four Precision Strike Missiles (PrSM) or two Army Tactical Missile System (ATACMS).

The US, meanwhile, has committed to supply four M142 High Altitude Artillery Rocket System (HIMARS) to Ukraine. The HIMARS is a weapon system on a wheeled platform. It gives a very high degree of mobility to the weapons.

The M142 HIMARS also provides for firing precision guided rockets which can degrade concentration of enemy artillery, armour or personnel as far away as 40 km. These can also be used to hit fuel and supply points, and field headquarters with high degree of precision. The shoot-and-scoot capabilities of the system help in protecting it against retaliatory fire by the enemy.

THE UKRAINE WAR AND THE GLOBAL FOOD CRISIS

The story so far: Russia's invasion of Ukraine and the subsequent sanctions on its economy have sent global food prices soaring, threatening to push millions of people, especially those in low-income countries, into starvation. Ukraine and its allies in the West have accused Russia of weaponising food, saying that its blockade of Ukraine's Black Sea ports is the primary reason for the rising prices, while Moscow has blamed Western sanctions for the crisis. As the war, in its fourth month now, is still raging in Ukraine's east with no political solution on the horizon, the United Nations and Turkey have initiated talks with the Russian leadership to facilitate the exports of grains and fertilizers from Russia and Ukraine.

How serious is the food crisis?

Many countries were facing growing food insecurity even before Russia's war. Climate shocks, conflicts and the COVID-19 pandemic had disrupted supply chains, pumping up prices of both commodities and crops. The war in Ukraine has aggravated this situation. As of June 1, 2022, the Agricultural Price Index was 40% higher compared to January 2021, according to the World Bank. Maize and wheat prices rose 42% and 60%, respectively, from the levels of January 2021. Global food, fuel and fertilizer prices are projected to be sharply higher this year and will remain elevated into 2024, the Bank estimates.

Almost all economies in the world have been hit by higher food prices. Across the western world, there's a cost-of-living crisis with food and energy prices rocketing. In the U.S., Treasury Secretary



Janet Yellen told senators on Tuesday that the country was facing “unacceptable levels of inflation” which would stay so in the coming years. In the U.K., inflation numbers have already hit a 40-year high. Almost 90% of emerging markets and developing economies experienced food price inflation greater than 5% this year. Low-income countries that are reliant on imports for basic food consumption, are the hardest hit. According to the UN World Food Programme (WFP), Ethiopia, Nigeria, South Sudan and Yemen remain at ‘highest alert’ as hotspots with “catastrophic conditions”, as Afghanistan and Somalia are added to this category.

How important are Russia and Ukraine for global food security?

Russia and Ukraine together account for more than a quarter of the world's wheat supplies. Russia's share in the global exports of wheat, the world's most widely grown crop, is some 20%, while Ukraine accounts for 8%, according to the U.S. Food and Drug Administration's Foreign Agricultural Service (FAS). Wheat is a staple food for at least 35% of the world's population, as per the estimates of the UN Food and Agriculture Organization (FAO). About 50 countries depend on Russia and Ukraine for more than 30% of their wheat imports, according to the FAO. If Azerbaijan and Georgia source more than 80% of their imported wheat from Russia and Ukraine, Turkey, Egypt, Bangladesh and Lebanon meet over 60% of their imports from these two countries. Besides wheat, Ukraine is the world's eighth largest producer and fourth largest exporter of corn, accounting for 16% of global exports. Furthermore, Ukraine, which produces up to 46% of sunflower-seed and safflower oil is the world's largest exporter of sunflower oil. So, the war and the sanctions have clearly hit the world's bread basket region, adding pressure on food prices.

What is causing the crisis?

Before the Russian invasion of Ukraine started, Ukraine had the capacity to export up to six million tonnes of wheat, barley and maize a month, mainly through its ports in the Black Sea/Sea of Azov. In the eight months before the war, some 51 million tonnes of grain were exported through Ukraine's Black Sea ports, according to the WFP. But exports have collapsed since the invasion as the Russian war effort is entirely focused on Ukraine's eastern and southern parts along the Black Sea/Sea of Azov coast. Now, several Ukrainian port cities, including Mariupol, Kherson and Berdyansk, are under Russian control. Although the southern cities of Mykolaiv and Odessa, which is known as the ‘Pearl of the Black Sea’, are still with the Ukrainians, commercial ships cannot dock at these ports because of two reasons — Ukraine has mined the waters around these ports as a deterrent against potential Russian attacks and Russia has enforced a naval blockade in the waters of the Black Sea.

These factors have in effect brought exports from Ukraine to a grinding halt. According to Ukrainian authorities, more than 20 million tonnes of grain are stuck in warehouses and containers. June marks the beginning of a harvesting season in Ukraine and this season, the country is expected to produce some 30 million tonnes of corn, wheat and sunflower oil, half of which are meant to be exported. But unless the blockade is lifted and Ukraine starts exports, the country would not even find enough warehousing capacity to store this year's harvest. This would make the food crisis worse.

Besides the blockade, the western sanctions on Russia are also contributing to the crisis. Russia, besides being the world's top wheat exporter, is also a leading exporter of fertilizer, an essential commodity for food production. Russia and its ally Belarus together account for some 38% of potassic fertilizers, 17% of compound fertilizers, and 15% of nitrogenous fertilizers. Fertilizer prices are also on the rise, which would make food production costlier. Russia's food and fertilizer



sectors were not directly targeted by western sanctions, but the sanctions on its financial sector, which made payments difficult for Russia, has complicated its exports, including food grains. Also, the targeted sanctions on Russian oligarchs have choked finances for the agricultural industry.

Is there a way out?

Russia has suggested that it would resume exports (not sure whether Ukrainian or Russian grains) from the ports on the Sea of Azov that it controls (Mariupol and Berdyansk) and that it would open a corridor for commercial vessels in the Black Sea if Ukraine demines the ports it controls (mainly Odessa and Mykolaiv). But these proposals, which were discussed in Ankara on Wednesday, could be implemented only as part of a deal between Moscow and Kyiv, with blessings from the West as Russia seeks sanctions relief in return for opening the maritime corridor. Ukraine, however, is sceptical, saying it doesn't trust Moscow. No breakthrough has been achieved so far.

Ukraine has little good options to ship its grains out of the country if its ports remain blockaded. One option is to transfer the grains overland to the Baltic states, either through Poland or Belarus, and then ship them out from the Baltic Sea ports. According to UN officials, Kyiv has dismissed the proposal to seek help from Belarus, a Russian ally that also faces western sanctions. A Wall Street Journal report stated on Tuesday that the U.S. State Department also stays staunchly opposed to giving any concession to Belarus in return for help for moving food grains. Moving them overland via Poland is challenging because the rail track gauge in Poland is smaller than that of former Soviet countries such as Ukraine and the Baltic states — this means cargoes will have to be moved to different trains at the Polish-Ukraine border and then again at the Polish-Lithuania border to start exporting them from the Baltic ports. So, the only practical solution to take Ukrainian grains to the global markets is to open the Black Sea routes. And to ease the pressure on global food items, Russia will also have to step up exports of both grains and fertilizers. For this, Kyiv and its allies may have to strike a deal with Russian President Vladimir Putin.

THE CARTEL AND ITS ALLIES THAT KEEP OIL ON THE BOIL

OPEC Plus countries, an alliance between the Organization of the Petroleum Exporting Countries and other major oil producers, are in the limelight as global oil prices soared above \$120 a barrel last week as supplies failed to keep up with rising demand. The price of oil is expected to remain elevated for some time to come after the European Union decided last week to cut down oil imports from Russia by 90% by the end of this year and block European insurers from selling cover to tankers carrying Russian oil. The move is expected to worsen the present oil supply crunch as non-Russian oil producers may not be able to compensate for the lost Russian supplies and meet the EU's demand for oil within a short span of time.

Under pressure from major oil importers, OPEC Plus last week agreed to raise production by 6,48,000 barrels a day in July and August, a jump of about 50% over the monthly increase set last year under a deal. OPEC Plus countries, which control more than 50% of the world's crude supplies, had joined hands to cut down oil production by 10 million barrels a day in 2020. The decision was taken amid falling oil prices as demand for oil fell drastically due to COVID-19 lockdowns across the world. It is feared that as the global economy gets back on its feet, the failure of OPEC Plus countries to increase output quickly enough to pre-pandemic levels could cause oil prices to stay high.

OPEC Plus refers to a group of 23 oil-producing countries that includes 13 members of OPEC (Saudi Arabia, the UAE, Iran, Iraq, Kuwait, Algeria, Angola, Equatorial Guinea, Gabon, Libya,



Nigeria, the Republic of the Congo, and Venezuela) and 10 other oil-producing countries (Russia, Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, South Sudan and Sudan). Saudi Arabia is the largest oil producer among OPEC members. Russia, which produces more oil than even Saudi Arabia, plays a crucial role, along with OPEC, in influencing global crude oil prices.

Beginning of cooperation

It should be noted that OPEC Plus was created in 2016 when OPEC countries decided to ally with other oil-producing countries outside the group to cut down the global output of oil. Under the pact, called the Declaration of Cooperation (DoC), the countries have worked together to influence global energy prices. To institutionalise the cooperation further, OPEC countries and their allies, in a ministerial meeting held on July 2, 2019, accepted a 'Charter of Cooperation'. "The Charter provides a platform to facilitate dialogue and exchange views regarding conditions and developments in the global oil and energy markets. The goal is to contribute to a secure energy supply and lasting stability for the benefit of producers, consumers, investors and the global economy," according to the OPEC website.

The new grouping was seen as a response by oil-producing countries to protect their interests amid the rise of the U.S. shale industry. U.S. shale oil producers had caused a steep drop in the price of oil by massively increasing U.S. energy supplies and put the finances of OPEC governments under a lot of strain. OPEC itself was formed in 1960 as a cartel to influence the global price of crude oil. The global energy market was largely dominated by western multinational companies, called the 'Seven Sisters'— Anglo-Iranian Oil Company (now BP), Royal Dutch Shell (now Shell), Standard Oil Company of California (later Chevron), Gulf Oil (now merged into Chevron), Texaco (now merged into Chevron), Standard Oil Company of New Jersey-Esso (now part of ExxonMobil) and Standard Oil Company of New York-Socony (now part of ExxonMobil).

In September 1960, Iran, Iraq, Kuwait, Saudi Arabia and Venezuela convened in Baghdad to discuss ways to pump up prices, which led to the formation of the cartel. "OPEC developed its collective vision, set up its objectives and established its Secretariat, first in Geneva and then, in 1965, in Vienna. It adopted a 'Declaratory Statement of Petroleum Policy in Member Countries' in 1968, which emphasised the inalienable right of all countries to exercise permanent sovereignty over their natural resources in the interest of their national development," according to the OPEC site. The "oil shock" of 1973, which led to a doubling of the price of oil within a couple of years and contributed to stagflation in the U.S. which was marked by rapidly rising prices and faltering economic growth, was the result of an OPEC embargo, which also showed the cartel's economic might.

Members of the cartel meet every month to decide the amount of oil they pump into the global market. According to current estimates, 79.4% of the world's proven oil reserves are located in OPEC countries, mostly in West Asia. OPEC members produced about 37.1% of the world's total crude oil in 2020.

Many economists believe that OPEC and its allies have been responsible for keeping oil prices high by artificially limiting supply. Cartels try to influence the price of goods or services by limiting their supply in the market. While this is good for the members of the cartel, it is bad news for consumers who will have less of the goods or services to consume. This, economists believe, has adversely affected the world economy. In the absence of the cartel, there would be no collusion between oil producers to limit supply and hence the total output of oil in the world would be higher. This means that there would be more oil available to fuel various economic activities,



which would in turn mean that more goods and services are produced in the global economy and people enjoy higher standards of living.

Market power

Countries that depend on oil imports to meet their energy needs have been trying to find ways to tackle OPEC's market power. Western countries like the U.S. and the U.K. have been exerting political pressure on OPEC countries to increase their output in order to prevent the global economy from slipping into a recession. The U.S. has also tried to boost its own domestic energy production so that it won't have to rely on OPEC to meet its energy needs. In fact, the American shale revolution, which was driven by private oil producers that were free to exploit resources beneath the ground, managed to cut down America's dependence on oil from West Asia and made the country a net exporter of oil.

India, however, has remained dependent on the import of oil to meet its energy needs. India's domestic crude oil production in FY22 was at its lowest in almost three decades even as domestic oil consumption has increased significantly over the years. Structural reforms in the energy sector could help countries including India to boost domestic production and cut down their reliance on OPEC. Meanwhile, the sanctions imposed by the West on Russia have offered India an opportunity to purchase oil at highly discounted rates from Russia. Russia has been on a search for fresh buyers for its oil ever since the West imposed stringent sanctions on it for invading Ukraine.

Some economists have argued that, if it weren't for OPEC, the global oil market would resemble the U.S. shale market that is characterised by many small producers competing against each other. In such a competitive market, no producer would have the market power to influence prices. Further, the lack of entry barriers would ensure that any attempt at forming a cartel would be busted eventually as abnormally high returns enjoyed by the cartel would attract competitors who want a share of the pie. It should be noted that while private cartels that artificially suppress output are unanimously condemned by everyone, OPEC, which is a massive cartel formed by governments, usually escapes such criticism.

The future of OPEC is likely to depend on the fate of oil as a source of energy in the global economy. Some energy analysts believe that oil will remain a major source of energy in this century and that OPEC will continue to wield significant economic power. Others, however, believe that OPEC's influence will wane as they foresee that the world will move away from its current dependence on fossil fuels.

Whatever the long-term outcome would be, in the near to medium-term the cartel would continue to remain powerful especially as energy prices are rocketing following the Russian invasion of Ukraine.

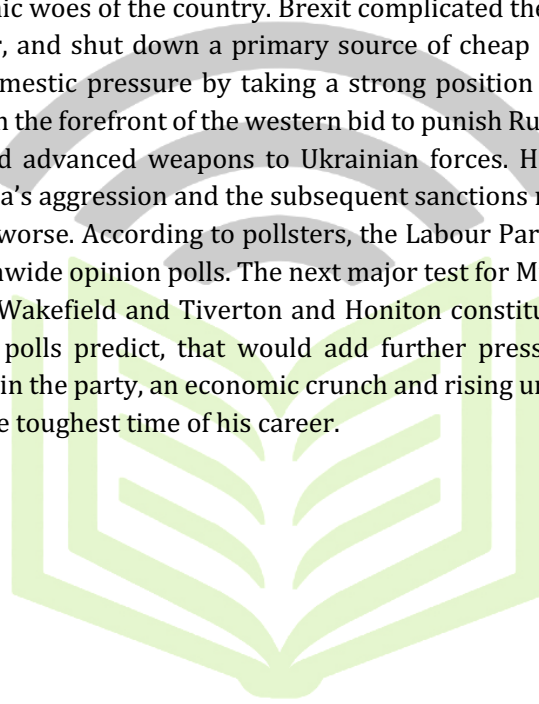
WEAKENED IN VICTORY

British Prime Minister Boris Johnson managed to survive Monday's no-confidence vote against him within the Conservative Party but the fact that 41% of the party lawmakers rebelled against his leadership is a steep fall for a Prime Minister who, just three years ago, led the Conservatives to their greatest victory since Margaret Thatcher's 1987 triumph. When the Johnson-led Tories clinched an 80-seat majority in Parliament, bringing down even the "red wall" of Labour in the Midlands and industrial north, many expected an easy full term for the hardline Brexiteer. But Mr. Johnson's prospects changed after reports that he held social gatherings at Downing Street when



the rest of the country was in a lockdown imposed by his government. The result is a relief for Mr. Johnson. Of the 359 Conservative MPs, 211 supported him (59%). As per the party rules, the rebels cannot challenge his leadership for one year. But the bigger-than-expected rebellion has already dealt a blow to his leadership. His immediate predecessor, Theresa May, survived a no-confidence vote within the party in 2018 with 63% support among Tory MPs, but she did not survive in office for more than six months. In 1990, Thatcher won a confidence vote, but quit immediately thereafter. History offers grim lessons for Mr. Johnson's future.

While the catalyst for the rebellion was Mr. Johnson's lockdown parties, his government is facing bigger problems. Inflation has already hit a 40-year high and many economists predict a recession. The U.K.'s celebrated exit from the EU, which Mr. Johnson personally championed, may have aggravated the economic woes of the country. Brexit complicated the U.K.'s trade with the EU, its largest trading partner, and shut down a primary source of cheap labour. Mr. Johnson tried to deflect some of the domestic pressure by taking a strong position against Russia's invasion of Ukraine. The U.K. was in the forefront of the western bid to punish Russia with crippling economic sanctions, and supplied advanced weapons to Ukrainian forces. However, it did not have the desired outcome. Russia's aggression and the subsequent sanctions made the cost-of-living crisis across the West much worse. According to pollsters, the Labour Party is now much ahead of the Conservatives in nationwide opinion polls. The next major test for Mr. Johnson would be the June 23 by-election for the Wakefield and Tiverton and Honiton constituencies. If the Conservatives lose them, as opinion polls predict, that would add further pressure on the Prime Minister. Growing rebellion within the party, an economic crunch and rising unpopularity among voters all present Mr. Johnson the toughest time of his career.



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NATION

INDIA AND VIETNAM SIGN MUTUAL LOGISTICS AGREEMENT

India and Vietnam on Wednesday signed a Memorandum of Understanding (MoU) on mutual logistics support during the ongoing visit of Defence Minister Rajnath Singh to the Southeast Asian nation.

India has signed several logistics agreements including with all Quad countries, France, Singapore and South Korea beginning with the Logistics Exchange Memorandum of Agreement with the U.S. in 2016.

Logistics agreements are administrative arrangements facilitating access to military facilities for exchange of fuel and provisions on mutual agreement simplifying logistical support and increasing operational turnaround of the military when operating away from India.

Both Ministers also agreed for early finalisation of \$US 500 million Defence Line of Credit extended to Vietnam. Mr. Singh also announced gifting two simulators and monetary grant towards setting up of Language and IT Lab at Air Force Officers Training School for capacity building of Vietnamese armed forces.

Mr. Singh began his official visit by paying respects to President Ho Chi Minh at his Mausoleum in Hanoi. India and Vietnam share a Comprehensive Strategic Partnership since 2016 and defence cooperation is a key pillar of this partnership. Vietnam is an important partner in India's Act East policy.

TIES RESET

Iranian Foreign Minister Hossein Amir Abdollahian's first visit to India this week has many implications for bilateral relations, but it is the multilateral context and timing that stand out. This is the first visit by a member of the 57-member Organisation for Islamic Cooperation, which took offence to comments made in India on the Prophet. The controversy has overshadowed India's other diplomatic engagements. As a result, his visit was an opportunity for New Delhi to project that it has successfully assuaged the Islamic world with the actions of the ruling BJP against its spokespersons. For New Delhi, which always seeks to run a balance in ties between the two rivals, the Iranian visit comes a week after that of Israeli Defence Minister Benny Gantz. It also coincides with the meeting of the Board of Governors of the IAEA in Vienna, which has passed strictures against Iran for its nuclear programme. For Mr. Abdollahian, the visit would be portrayed as a show of support from a powerful country. In addition, Iran and India discussed the situation in Afghanistan under the Taliban, just days after an Indian envoy made the first outreach to Kabul. To this end, India and Iran have discussed further operationalising the Chabahar port, where goods to Afghanistan were sent before the government in Kabul fell last year. Finally, against the backdrop of the Russian war in Ukraine, and western sanctions, Iran has also been keen to convince New Delhi to restore its crude oil purchases, which it cancelled in 2019, after threats of U.S. sanctions. While there was no public statement on the matter during the official part of the visit, External Affairs Minister S. Jaishankar's statement was significant — he called for the U.S. and Europe to allow Iranian and Venezuelan oil back into the international market if they want India to lower Russian oil imports, accusing the West of "squeezing" all alternative sources for India.



On the bilateral front too, India and Iran have catching up to do, with many promises of the last summit in Delhi left unrealised. Instead of increasing Indian oil imports, investments in developing reserves, building up the Chabahar rail project and scaling up trade, India has drastically cut its Iranian engagement due to sanctions, while Iran has looked to China for more infrastructure investment. Bilateral trade dropped to just over \$2 billion (2020-21) from \$17 billion (2017-18). Ties also appeared to have been hit by New Delhi's surprise decision to join the Israel-India-UAE-U.S. group, portrayed as an "anti-Iran" coalition, and by perceptions of Iranian support to Yemeni Houthis behind the drone attack on a UAE oil facility where an Indian was among those killed. Mr. Abdullohaian's visit, and a possible visit by Iranian President Ebrahim Raisi, may be the start of a reset of traditionally strong ties even if it is one that is buffeted by developments in other parts of the world.

AN ENDURING AGREEMENT BRIDGING INDIA-PAKISTAN TIES

The Indus Waters Treaty (IWT) is an established water-distribution treaty between India and Pakistan to use water in the Indus and its tributaries. In the words of former U.S. President Dwight Eisenhower, the treaty has since its existence in 1960, served as "one bright spot ... in a very depressing world picture that we see so often", resolving the long-standing differences between India and Pakistan since Partition.

Following the 118th meeting of the Permanent Indus Commission (PIC) comprising the Indus Commissioners of India and Pakistan held on May 30-31, 2022 in New Delhi, it is important to reflect on the struggles and the high stakes that the two countries have experienced to ensure a long-lasting treaty on the one hand and the lessons that can be drawn to address multiple concerns pending in the region on the other.

Struggles and stakes

After years of arduous negotiations, the Indus Waters Treaty was signed in Karachi on September 19, 1960, by then Indian Prime Minister Jawaharlal Nehru and then Pakistani President Ayub Khan, negotiated by the World Bank. The treaty establishes a cooperative mechanism for exchanging information between the two countries regarding the use of the western rivers (Indus, Jhelum, Chenab) allocated to Pakistan and the eastern rivers (Ravi, Beas, Sutlej) allocated to India. However, the treaty also underlines provisions allowing each country to use the rivers allocated to the other for certain purposes such as irrigation and hydroelectricity. The Permanent Indus Commission, which has a commissioner from each country, oversees the cooperative mechanism and ensures that the two countries meet annually (alternately in India and Pakistan) to discuss myriad issues emerging from the treaty. This year, the commission met twice, in March in Islamabad, Pakistan, and then in New Delhi, in May.

Some differences

India-Pakistan relations have most often been embroiled in the high politics of the region's history resulting in a political stalemate between the two countries. It is a rare feat that despite the many lows in India-Pakistan relations, talks under the treaty have been held on a regular basis.

Nonetheless, throughout its existence, there have been many occasions during which differences between the two countries were discernible. For instance, both countries held different positions when Pakistan raised objections regarding the technical design features of the Kishanganga (330 megawatts) and Ratle (850 megawatts) hydroelectric power plants located on the tributaries of



the Jhelum and the Chenab, respectively, designated as “Western Rivers”. However, under Articles III and VII of the treaty, India is permitted to construct hydroelectric power facilities on these rivers (subject to constraints specified in Annexures to the Treaty).

Differences were also discernible when Pakistan approached the World Bank to facilitate the setting up of a court of arbitration to address the concerns related to these two projects referred to in Article IX Clause 5 of the treaty, and when India requested the appointment of a Neutral Expert referent to Clause 2.1 of Article IX on the settlement of differences and dispute of the treaty, respectively. Disagreements continued on the issue with many meetings brokered by the World Bank to resolve their disagreements. But it was without any success.

Eventually, on March 31, 2022, the World Bank, in view of the differences, decided to resume two separate processes by appointing a neutral expert and a chairman for the court of arbitration. However, the two parties have not been able to find an acceptable solution. The appointment of a neutral expert will find precedence to address the differences since under Article IX Clause 6 of the treaty provisions, Arbitration ‘shall not apply to any difference while it is being dealt with by a Neutral Expert’. Therefore, the two separate processes are more likely to generate technical and legal repercussions.

Similarly, Pakistan, invoking Article VII Clause 2 on future cooperation, raised objections on the construction and technical designs of the Pakal Dul and Lower Kalnai hydropower plants located on Marusudar river, a tributary of the Chenab, in Kishtwar district of Jammu and Kashmir. The 117th and the 118th meetings of the Permanent Indus Commission held this year deliberated this issue. Here, India has assured Pakistan that all the concerned projects are treaty compliant.

Similarly, India has raised concerns on issues such as Pakistan’s blockade of the Fazilka drain, which resulted in water contamination in the border areas, referent to Article II Clause 3 and Article IV Clause 4 and 6 of the treaty. During the 117th bilateral meeting in March, Pakistan assured India of all possible actions to ensure the free flow of the Fazilka drain into the Sutlej.

Notwithstanding the differences, both countries have so far endeavoured to amicably address all such issues with both sides assuring to implement the treaty in letter and spirit.

Lessons from the treaty

Although there are many outstanding issues, the treaty is important and many lessons can be drawn. The treaty is an illustration of a long-standing engagement between the conflicting nations that has stood the vagaries of time. It has withstood tensions, including conflict, providing a framework for cooperation. The treaty, therefore, is considered one of the oldest and the most effective examples of water management cooperation in the region and the world. The 118th bilateral meeting corroborates its effectiveness.

With the exception of differences on a few pending issues, both countries have avoided any actions resulting in the aggravation of the conflict or acted in a manner causing conflict to resurface. The recent bilateral meeting points to mutual respect, communication and a sharing of information, despite differences.

Potential for cooperation

The treaty can serve as an edifice to address the challenges of climate change. Recognising common interests and mutual benefits, India and Pakistan can undertake joint research on the rivers to study the impact of climate change for ‘future cooperation’ (underlined in Article VII).



The Indus Waters Treaty also offers great potential for cooperation and development in the subcontinent which can go a long way in ensuring peace and stability. Given that both India and Pakistan have been committed to manage the rivers in a responsible manner, the Treaty can be a reference point to resolve other water-related issues in the region through regular dialogue and interaction.

TAKING STEPS TO ENSURE SEX WORKERS' RIGHTS

Recently, in *Budhadev Karmaskar v. State of West Bengal & Ors*, while issuing interim directions to States and Union Territories, the Supreme Court re-asserted that sex workers and their children cannot be deprived of their right to live with dignity and human decency. The court said that notwithstanding the profession, every individual in this country has the right to a dignified life. The court's directions are nothing but the recommendations made by the panel constituted by the Supreme Court in July 2011 and headed by a senior advocate, Pradip Ghosh, with regard to "conditions conducive for sex workers who wish to continue as sex workers to live with dignity in accordance with the provisions of Article 21 of the Constitution of India".

Enforcing directives

Since the Government of India had certain reservations about four of the 10 recommendations of the panel, the court directed the government to implement the other six recommendations as well as the provisions of the Immoral Traffic (Prevention) Act (ITPA) of 1956. These are: to provide immediate medical assistance to sex workers who are victims of sexual assault; to release adult sex workers detained in ITPA protective homes against their will; to sensitise the police and other law-enforcement agencies about the rights of sex workers to live with dignity; to ask the Press Council of India to issue guidelines to the media so that they don't reveal the identities of sex workers while reporting on arrest, raid and rescue operations; to not consider health measures that sex workers employ for their safety (such as condoms) as evidence of commission of an offence; and to ensure that the legal service authorities of the Central and State governments educate sex workers about their rights vis-à-vis the legality of sex work.

A provision is already available in the Code of Criminal Procedure (CrPC) on providing medical assistance to sex workers who are victims of sexual assault. However, the law is silent about not revealing the identity of sex workers. Similarly, though an order to send the sex worker to a protective home is passed by a magistrate after due inquiry about her need of care and protection, the ITPA and CrPC may be amended suitably to enforce the directions of the Supreme Court. Other directions may be implemented through executive orders by the governments.

Wider implications

One of the recommendations which the Central government expressed reservation about is of preventing the police from taking any criminal action against a sex worker who is an adult and is participating with consent, on the basis of 'age' and 'consent'. The expression 'sex worker' is not defined in the ITPA or any other law. According to the ITPA (as amended in January 1987), 'prostitution' means the sexual exploitation or abuse of persons for commercial purposes. Therefore, the expression 'prostitution' is not just confined to offering the body to a person for promiscuous sexual intercourse for hire (as per the definition before 1987); taking unjust and unlawful advantage of trapped women for one's benefit or sexual intercourse has been brought within its frame.



The word 'abuse' also has a wide meaning. It implies that being an adult sex worker who is a sex worker voluntarily is not an offence per se, until exploitation or abuse is reported by her or revealed during investigation. It will therefore be appropriate to define 'sexual exploitation' and 'abuse of persons' as well, through an amendment, to rule out multiple interpretations and possible misuse by the enforcement agencies, particularly if offering one's body with consent for consideration is kept out of the criminal framework.

Another recommendation that the government has reservations about notes that since voluntary sex work is not illegal and only running a brothel is unlawful, sex workers should not be arrested or victimised during any raid in the brothel. According to the ITPA, 'brothel' includes any place which is used for purposes of sexual exploitation or abuse for the gain of another person or for the mutual gain of two or more sex workers. What if willing sex workers have no complaint against the brothel owner or manager? Therefore, the government would need to decide as a policy whether the act of two or more sex workers living together for mutual gain and being managed by themselves or by anyone else is to be criminalised or not. This may require wider deliberations to take a considered viewpoint.

The third recommendation says that no child of a sex worker should be separated from the mother merely on the ground that the mother is in the sex trade. If a minor is living in a brothel or with sex workers, it should not be presumed that he/she has been trafficked. Though the law does not mandate separation of the child from the mother (sex worker), it presumes trafficking if a child is found with any person in a brothel. Also, if a child or a minor is rescued from a brothel, the magistrate may place him or her with any child care institute recognised under the Juvenile Justice Act. In *Gaurav Jain v. Union of India* (1997), the Supreme Court had held that children of sex workers ought not to be allowed to live in brothels, and reformatory homes should be made accessible to them. Therefore, keeping in view the child's welfare, a suitable amendment may be made to accommodate the Supreme Court's direction.

The fourth recommendation requires the government to involve sex workers or their representatives in the process of decision-making or in the process of drafting reforms in laws relating to sex work. As the purpose of this exercise is to rehabilitate sex workers and improve their living conditions, their involvement in decision-making will surely make the reforms more enforceable.

It is noteworthy that carrying on sex work outside the notified areas or outside a distance of 200 metres of any place of public religious worship, educational institution, hospital, etc. is not punishable under the ITPA. The irony is that when the essential ingredient of sex work is 'sexual exploitation' or 'abuse of persons' for commercial purpose, how can this be allowed anywhere? Therefore, now with the court's directives on the anvil, it will be apposite for the government to differentiate between prostitution and the work of sex workers and consider banning prostitution per se and allowing voluntary sex work with certain conditions keeping in mind the public interest.

It is not disputed that women in the flesh trade should be viewed more as victims of adverse socioeconomic circumstances rather than as offenders. However, with all our laws and policies, we as a society have failed to contain prostitution. Therefore, the government may now use the Supreme Court's directions as an opportunity to improve the conditions of sex workers and their surrounding environment, facilitate rehabilitation, and remove the various ambiguities and inconsistencies in the applicable laws and bring about clarity.



THE DEBATES AROUND THE SURROGACY ACT

The story so far: Petitioners in the Delhi High Court questioned why marital status, age, or gender were the criteria for being allowed to commission or not commission surrogacy in India. The female petitioner said that she already had a child but the trauma of the first childbirth experience and her need to juggle work with child care persuaded her that surrogacy would be a better option for the second child. But under the provisions of the Surrogacy Act, she was denied a chance at commissioning surrogacy.

As per the Surrogacy Act that kicked in from January this year, a married couple can opt for surrogacy only on medical grounds. The law defines a couple as a married Indian “man and woman” and also prescribes an age-criteria with the woman being in the age group of 23 to 50 years and the man between 26 to 55 years. Additionally, the couple should not have a child of their own. Though the law allows single women to resort to surrogacy, she should either be a widow or a divorcee, between the age of 35 to 45 years. Single men are however, not eligible.

What is the Surrogacy Act?

The Surrogacy (Regulation) Bill was introduced in Parliament in November 2016, and passed in the Winter session of Parliament in 2021.

The Act sought to regulate the surrogacy part of a rather flourishing infertility industry in the country. Defining ‘surrogacy’ as a practice where a woman undertakes to give birth to a child for another couple and agrees to hand over the child to them after birth, it allows ‘altruistic surrogacy’ — wherein only the medical expenses and insurance coverage is provided by the couple to the surrogate mother during pregnancy. No other monetary consideration will be permitted.

Why is there a need for a Surrogacy Act in India?

India has emerged as a hub for infertility treatment, attracting people from the world over with its state of the art technology and competitive prices to treat infertility. Soon enough, due to prevailing socio-economic inequities, underprivileged women found an option to ‘rent their wombs’ and thereby make money to take care of their expenses — often to facilitate a marriage, enable children to get an education, or to provide for hospitalisation or surgery for someone in the family.

Once information of the availability of such wombs got out, the demand also picked up. Unscrupulous middle men inveigled themselves into the scene and exploitation of these women began. Several instances began to emerge where women, in often desperate straits, started lodging police complaints after they did not receive the promised sum.

Other issues also began to crop up. For instance, in 2008 a Japanese couple began the process with a surrogate mother in Gujarat, but before the child was born they split with both of them refusing to take the child. In 2012, an Australian couple commissioned a surrogate mother, and arbitrarily chose one of the twins that were born.

The time therefore, was ripe for proper regulation.

Who all are allowed to make use of the services of a surrogate mother?

Any couple that has ‘proven infertility’ are candidates. The ‘intending couple’ as the Act calls them, will be eligible if they have a ‘certificate of essentiality’ and a ‘certificate of eligibility’ issued by the



appropriate authority. The former will be issued if the couple fulfils three conditions: One, a certificate of infertility of one or both from a district medical board; Two, an order of parentage and custody of the surrogate child passed by a Magistrate's court; Thirdly, insurance cover for the surrogate mother.

An eligibility certificate mandates that the couple fulfil the following conditions: They should be Indian citizens who have been married for at least five years; the female must be between 23 to 50 years and the male, 26 to 55 years; they cannot have any surviving children (biological, adopted or surrogate); However, this would not include a 'child who is mentally or physically challenged or suffers from life threatening disorder or fatal illness.'

Who can become a surrogate mother?

Only a close relative of the couple can be a surrogate mother, one who is able to provide a medical fitness certificate. She should have been married, with a child of her own, and must be between 25 and 35 years, but can be a surrogate mother only once.

What are the controversies behind the Act?

Even at the Bill stage, while there was a general murmur of appreciation, and some strident approval from infertility experts, there was some apprehension about the too restrictive regulations. For instance, it does not allow single women, or men, or gay couples to go in for surrogacy. Representations from these groups emerged even as Health Minister J.P. Nadda introduced the Bill in the House.

Others, primarily those involved in organ transplantation, pointed out how despite a similar, stringent law — the Transplantation of Human Organs Act — organ commerce continues to thrive in the country. Brokers continue to operate, though with less temerity and more covertly, sometimes with hospital authorities, to pull wool over the eyes of the appropriate authority and law enforcement officials. Clearly the issue will have to be handled with a stern visage, even as sensitivities of people are factored in.

What lies ahead?

These apprehensions and perceived hitches due to the exclusionary criteria, have already come to the forefront in the short period that the Act has been operational. A path of litigation is possibly the course ahead, and if a critical mass builds up, amendments might have to be resorted to in order to resolve the grievances and ensure access for all categories of parents.

IS TYING THE KNOT A WAY TO UNTANGLE EVEN GRIEVOUS CASES?

Two recent decisions of the Supreme Court raise the question whether a convicted man can spare himself years of jail time by entering into what seems to be a rather opportune marriage with his victim or to a member of the victim's family.

In June, the court used its extraordinary power under Article 142 to release a man convicted of attempt to murder because he married his victim's sister while the case was still pending in the Madras High Court. The top court noted that all the people involved were living in the same locality. The parties involved had approached the court to set aside the conviction "in order to bring peace and in order to live cordially". The accused had spent just 18 months in jail.



“In the peculiar facts and circumstances of this case, particularly when there is a marriage within the families of the injured and the accused, we consider it a fit case wherein this court could exercise its power under Article 142. We, therefore, permit the parties to compound the offence,” the court observed.

The second case, in May, also from Tamil Nadu, concerned a man who was convicted under the Protection of Children from Sexual Offences (POCSO) Act for raping his minor niece. He had later married her.

Taking note that the custom of avunculate marriage existed in Tamil Nadu, the court set aside his conviction, reasoning that it did not want to “disturb” their “marriage” and “happy family life”. The court said its decision was based, again, on the “peculiar facts and circumstances of the case” and should not be used as precedent.

In both cases, the top court seems to have placed the idea of domestic stability above the punishment due to a convicted man.

The National Commission for Women has reportedly marked a 30% rise in crime against women in 2021 compared with the 2020 figure, with more than half of them against their life and dignity. The NCW had received nearly 31,000 complaints of crimes committed against women in 2021.

Last year, the SC faced a flurry of outrage when the media reported then Chief Justice of India S.A. Bobde asking the lawyer of a rape accused to find out whether his client would be willing to marry the victim or risk the prospect of going to jail. The lawyer had later come back to say that his client had declined as he was already married.

A few days later, Justice Bobde (now retired) clarified that he was misquoted in the media.

On March 18, 2021, a verdict, authored by Justice S. Ravindra Bhat, had set aside a Madhya Pradesh High Court order granting bail to a suspected molester provided he visited his victim at her home and “allowed” her to tie a rakhi on him. In a scathing verdict, Justice Bhat had said judgments and orders continue to reflect “entrenched paternalistic and misogynistic attitudes” even after 70 years as a Republic.

“A woman cannot be herself in the society of the present day, which is an exclusively masculine society, with laws framed by men and with a judicial system that judges feminine conduct from a masculine point of view,” Justice Bhat had quoted Henrik Ibsen.

HOW A ‘GAIT TEST’ HELPED ESTABLISH IDENTITY OF ACCUSED IN MUMBAI RAPE-MURDER

Among the evidence relied upon by a special court in Mumbai while giving the death sentence to a 44-year-old man for the rape and murder of a woman in the Saki Naka area of the city, is a “gait analysis” report.

The prosecution relied on a forensic report comparing images from CCTV camera footage with a sample video of the way the accused walks, to corroborate his identity. This is the first time in Maharashtra that the test has been relied on by a court in a criminal trial.



What is gait analysis?

Gait is defined as a manner of walking or moving on foot. Gait analysis is a technique in podiatry medical care and the treatment of the foot, which is used to evaluate and diagnose conditions that affect walking and posture.

The analysis can help experts zero in on the source of an injury or pain that determines the way in which an individual stands or walks. It can also be used by physiotherapists for treatment, and in athletics training so that athletes can perform better and in greater comfort.

Gait analysis techniques have now been borrowed by forensic sciences experts to identify suspects in criminal cases. With footage from CCTV cameras becoming a crucial element in fighting and preventing a range of crimes especially in the cities, gait analysis has begun to be used as a tool for focusing on or eliminating individuals from a list of suspects.

So what exactly do gait analysts do?

For the analysis, experts compare the gait of a person seen in CCTV footage from the crime spot with a sample of the suspect's walk. Using computer software, the two images are compared.

Is gait analysis a widely used legal technique?

The first widely known case in which gait analysis was admitted as evidence was in a criminal trial in London in 2000 against a man accused of carrying out a series of burglaries. The forensic expert, consultant podiatrist Haydn Kelly, said that the "walking mechanics" of the suspect resembled that of less than five per cent of the British population's.

Criminologists and crime fighters in the United Kingdom, United States, and Japan are working to improve and fine-tune the technology for gait recognition. In China and Japan, the technology has been in use over the past few years as a surveillance tool, which, using artificial intelligence helps in the identification of individuals from their manner of walking in situations where facial recognition is not possible, such as in large crowds.

Has it been used in India earlier?

In India, police have relied on the gait test in a few other cases previously. An expert said that it was a recent addition to forensic sciences in India, and that the field was still developing.

* The National Investigation Agency (NIA) conducted the test on dismissed police officer Sachin Waze in its investigation in the Antilia terror scare case last year. CCTV camera footage near Antilia, the residence of industrialist Mukesh Ambani, showed a person wearing a loose kurta near the vehicle in which the gelatin sticks were planted. The person's face was not visible. The NIA made a sample video of Waze and gave it for forensic analysis through the gait test for comparison.

* The gait test was also used in a murder case in Tamil Nadu last year.

* It was used to establish the identity of the assailants of journalist Gauri Lankesh in Bengaluru in 2017.

* It was also used in a rape case in Surat in 2018, where the investigators said that the analysis enabled them to compare the walking style, body movements and other factors.



How reliable is a gait test in identifying suspects?

The degree of uniqueness of a person's gait compared with other, more precise parameters used to establish identity, such as fingerprints or a DNA test, is yet to be established.

However, experts are using it as corroborative evidence, and to try to whittle down lists of suspects. Efforts are underway to reduce errors in gait analysis by considering various factors including length of the stride, height of the person, and the movement of the hands.

IT IS A BUMPING-OFF OF THE RULE OF LAW TOO

A recent report submitted by the commission of inquiry headed by a former Supreme Court of India judge, Justice V.S. Sirpurkar, indicting the police in Hyderabad for the fake encounter, in 2019, on the outskirts of Hyderabad near Shamshabad, should serve as an eye-opener to senior police officials who by-pass the law and due processes and eliminate suspects with impunity. Decidedly, a fake encounter, the law should now take its own course; a first information report should be filed against the police officials concerned for the murder of the four youth suspected to have gang-raped a veterinary doctor and then murdered her and burnt her body on the night of November 27.

Stretching credulity

That D.R. Karthikeyan, a very senior Indian Police Service officer (also Special Director in the Central Bureau of Investigation who investigated the Rajiv Gandhi murder case), was associated with the commission of inquiry lends credence to the fact that after a thorough investigation, the killing of the youths was deemed to be nothing but a pre-meditated cold-blooded murder. The alleged culprits deserved severe punishment after observing all legal procedures. But definitely not execution by policemen who later boasted about their so-called heroic act — shooting down unarmed men in the early hours of December 6, 2019.

The public outcry to apprehend the men after the crime may have pushed the police to act fast. Indubitably, they did a great job by arresting the criminals in a very short time. But, thereafter, things became murky when the police preferred to take the law into their own hands and eliminate the four youth.

Even as the details of the encounter were reported in the media, it became amply clear that it was indeed a fake encounter. The version by the police, that the four youth attempted to escape after throwing mud in the eyes of the policemen and attempting to snatch their weapons, was silly and nothing but a cover up; it was a murderous act. That unarmed youth, who should have been in handcuffs, attempted to overpower a large number of policemen sounds too ludicrous to believe.

A signal from the top

In November 2017, the Uttar Pradesh Chief Minister, Yogi Adityanath, had publicly stated that criminals would be jailed or killed in encounters. The message that went to the law-enforcing agencies, though in a subtle manner, was that they had been given a free hand to deal with criminals; no questions asked. By the end of his first term as the Chief Minister, 151 criminals had been killed and over 3,300 maimed by gunshot injuries, mostly in the legs, in over 8,500 encounters; 13 policemen are reported to have been killed and 1,157 injured.



Following the lead of Uttar Pradesh, the Chief Minister of Assam too gave clear directions to the Assam police personnel that criminals who attempted to escape should be shot. The message was loud and clear. It was for the police to prove that a criminal was shot dead while trying to escape. Between May 10, 2021 and January 28, 2022, as many as 28 suspects were killed and 73 injured by the police, a majority of them from the minority community and most others from ethnic communities.

Following three murders within 24 hours in three districts of Bihar in March last year, three legislators of the State (from the Bharatiya Janata Party) suggested that the Uttar Pradesh model of encounter killings by the police be adopted in Bihar too, in order to bring down the crime rate. In the same manner, the recent 'bulldozer policy' of Uttar Pradesh has also been adopted in Madhya Pradesh and Delhi, giving established legal procedures a go-by.

Extra-judicial killings go against the very spirit of rule of law. What is mind boggling is the fact that the very same veterans of the Indian Police Service who confabulate on fake encounters and custodial deaths on various television channels, condemning police actions, are also the ones who while serving in the police setup acquiesced to public outcry or political diktats and went with the tide. There are exceptions, of course.

When commissions are set up to inquire into fake encounters, it is usually low-ranking officers, from constables to inspectors, who have to face the brunt. Senior police officers who may have given their consent to eliminate the criminals are allowed to go scot free and are rarely indicted. If personnel from the ranks are incarcerated for fake encounters, so should senior officers; it is their responsibility to ensure that the rule of law is strictly followed in their jurisdiction.

Complaints of fake encounters need to be attended to on top priority and the judiciary activated immediately after a complaint is received. For obvious reasons, the police will not readily register a complaint of a fake encounter lest comrades in khaki land in trouble.

On magisterial inquiries

Magisterial inquiries conducted by local magistrates turn out to be farce as they have to work in consonance with the police of the district; they would be inclined to go with the police version and give them a clean chit. A solution would be to nominate magistrates from other States who would be impartial and fair in their inquiries. Commissions of inquiry should comprise police officers from other States who enjoy a reputation of moral rectitude and fair play. But for the intervention of the Supreme Court of India that had constituted the inquiry commission to look into the Hyderabad case, the 10 policemen accused of carrying out the murder of four youths would have escaped censure and may have been looking for more such opportunities to wear and demonstrate the "encounter specialist" tag placed on them.

It would not be a surprise if those indicted in fake encounters have been awarded police gallantry medals. These medals or citations should be withdrawn as fake encounters do not in any way give an opportunity to display an act of courage. Killing unarmed and helpless suspects who may not decidedly be criminals is an act of cowardice.

If States begin to adopt extra-judicial strategies to bring down the crime rate, the day may not be far off when the country would be ruled by criminals in uniform, with the judiciary watching mutely as the protective cover of rule of law is torn to pieces.



Back in August 2011, a Bench of the Supreme Court comprising Justices Markandey Katju and C.K. Prasad (while hearing a fake encounter case of an alleged gangster by the Rajasthan police in October 2006) had said: “Fake encounter killings by cops are nothing but cold-blooded brutal murder which should be treated as the rarest of rare offence and police personnel responsible for it should be awarded death sentence. They should be hanged.” The sooner it is done after trial through fast track courts, the better it would be for the nation, as it will serve as a signal and deterrent to other policemen.

ELECTION COMMISSION WANTS EMPLOYERS TO TRACK GOVT, PVT STAFF WHO TAKE LEAVE, DON'T VOTE

In a bid to address voter apathy in urban areas, the Election Commission (EC) is set to write to all Union and state government departments, central and state PSUs, and private companies with over 500 employees to monitor how many employees avail special casual leave on polling day but don't vote.

The EC, through its local district election officers, will ask government departments, PSUs and private companies to appoint nodal officers who will keep tabs on employees who skip voting. “We would then urge the employer to send employees who skipped voting for special voter awareness workshops organised by the EC. The aim is to tackle voter apathy, especially in urban areas,” said a senior EC official who did not want to be identified.

“It's unfortunate if people are availing leave but not casting their vote. No one would like to get named for not voting. We hope the act of being identified and sent for a workshop after being found to have skipped voting will discourage apathy,” the official added.

According to Section 135B of the Representation of the People Act, 1951, every registered voter employed in any business, trade, industrial undertaking or any other establishment and entitled to vote in a Parliament or Assembly election has to be granted a paid holiday for the purpose. The state and central governments always notify polling day as a paid holiday within the meaning of Section 25 of Negotiable Instruments Act, 1881.

According to EC data, voter apathy is acute in urban areas despite high awareness about voting rights. In the 2019 Lok Sabha elections, 67.40% of the registered voters cast their vote. Constituencies like Dhubri (Assam), Bishnupur (West Bengal) and Arunachal East recorded the highest turnout with 90.66%, 87.34% and 87.03 %, respectively. In contrast, urban seats such as Srinagar (14.43%), Anantnag (8.98%), Hyderabad (44.84%), Patna Sahib (45.80%) recorded lower turnout.

“Additionally, we have also directed all district election officers/ returning officers to identify at least five lowest voter turnout booths in each Assembly constituency. They will visit these booths to identify factors for low voting turnout and make targeted interventions to mitigate the factors hampering the voting process,” said the official.

THE BATTLEFIELD FOR THE UPCOMING RAJYA SABHA ELECTIONS

The story so far: While 41 candidates have been elected unopposed out of the 57 Rajya Sabha seats up for election across 15 States, the contest for the 16 remaining seats will be witnessed on June 10 in Haryana, Rajasthan, Maharashtra, and Karnataka, where parties have fielded more nominees



than their legislative strength in the State Assemblies. The race for the biennial Rajya Sabha polls in those four States intensified as parties traded allegations of poaching or horse-trading.

How are Rajya Sabha members elected?

Only elected members of the State Legislative Assemblies can vote in a Rajya Sabha election. Polls are held to send a batch of new members to the Upper House every two years for a six-year term. A third of Rajya Sabha MPs from each State retire once in two years and polls are held to fill up the vacancies. The Rajya Sabha is a permanent House and is not subject to dissolution.

Candidates of a particular party can be elected to the Upper House based on their party's strength in the State Legislative Assembly. Voting is by single transferable vote which means elector can vote for any number of candidates in order of their preference. A candidate requires a specified number of first preference votes to win and each vote has a value of 100.

The number of first preference votes required for a single MP varies in each State based on the size of the Legislative Assembly and the number of seats for which elections are taking place.

Polling will be held from 9 am to 4 pm in the respective State Assemblies and votes would be counted from 5 pm on June 10.

What is the current composition of the Rajya Sabha?

The strength of the Rajya Sabha is 245, out of which 95 seats are held by the Bharatiya Janata Party (BJP) as of May 25. The Congress (INC) holds the second-highest number of seats at 29, followed by the All India Trinamool Congress (AITC) at 13, Dravida Munnetra Kazhagam (DMK) at 10, and the Biju Janata Dal (BJD) and Aam Aadmi Party (AAP) at eight each.

Notably, while its current tally is 95, the BJP had reached a tally of 100 in the Rajya Sabha last month, after winning three seats in the North East. The tally came down to 95 in early May as the terms of five of its MPs ended.

Out of the 57 seats in the current round, 11 are in Uttar Pradesh; six seats each from Maharashtra and Tamil Nadu; five from Bihar; four each from Rajasthan, Andhra Pradesh, and Karnataka; three each from Madhya Pradesh and Odisha; two each from Telangana, Chhattisgarh, Jharkhand, Punjab, and Haryana; and one from Uttarakhand.

The BJP held 24 of the 57 seats that became vacant; nine were Congress seats, and four held by the Samajwadi Party (SP). Of the BJP's 24 seats, it is likely to retain only 20 seats in the upcoming Rajya Sabha polls, potentially bringing its current total of 95 members down to 91.

Prominent parties in States

The contest in Rajasthan is set to be tricky as both the Congress and the BJP have fielded candidates beyond their legislative strength in the Rajasthan Assembly. While the Congress is well placed to secure two wins as it has a majority of 108 seats in the 200-member Legislative Assembly, the BJP, with 71 seats in the Assembly, has the strength set to secure one Upper House berth.

In Maharashtra, of the six seats being contested, the Maha Vikas Aghadi coalition comprising the Shiv Sena, NCP, and Congress is set to secure three of the six Upper House berths. The BJP, which



is numerically the single largest party (with 106 seats) is set to comfortably get two seats but has decided to contest for a third seat.

In Karnataka, the contest for the fourth seat is expected to be tricky. While three seats were left vacant due to the retirement of Union Minister Nirmala Sitharaman, BJP MP K.C. Ramamurthy and senior Congress member Jairam Ramesh, the fourth seat has been vacant since 2021, following the death of former Union Minister Oscar Fernandes.

HOW THE PRESIDENT IS ELECTED

On July 18, elected MLAs and MPs across the country will vote to elect India's 15th President. Under Article 62(1) of the Constitution, "an election to fill a vacancy caused by the expiration of the term of office of President shall be completed before the expiration of the term". President Ram Nath Kovind's tenure ends on July 25.

A look at the process for electing the President, parties' relative strengths currently, and how previous elections have played out.

What is the election process?

The President is elected by an electoral college consisting of MPs of both Houses of Parliament and MLAs of the states and Delhi and Puducherry. Nominated members of Rajya Sabha, Lok Sabha and the Assemblies, and members of state Legislative Councils, are not part of the electoral college.

The votes are weighted, their value determined by the population of each state as per Census 1971. The value of each MLA's vote varies from a high of 208 in Uttar Pradesh to a low of 7 in Sikkim. This means that UP's 403 MLAs contribute $208 \times 403 = 83,824$ votes to the electoral pool, while Sikkim's 32 MLAs contribute $32 \times 7 = 224$ votes. The weighted votes from all the Assemblies add up to 5.43 lakh.

The process demands that the 776 MPs (543 in Lok Sabha, 233 in Rajya Sabha) should contribute the same total of votes as the MLAs. Thus, the value of each MP's vote is 5.43 lakh divided by 776, rounded off to 700. The combined electoral pool from the Assemblies and Parliament adds up to 10.86 lakh.

How are the ruling alliance and the opposition placed?

The BJP-led NDA is far ahead of the Congress and its allies, but still short of the halfway mark at the moment. Adding up the votes of the MLAs and MPs on either side, but not counting the 57 vacant Rajya Sabha seats (16 of which go to polls on Friday while the other 41 have had MPs elected unopposed), the NDA has 48% of the votes (BJP 42% and allies 6%), while the Congress (13.5%) and its allies (10.5%) have 24%. These allies include the DMK, Shiv Sena, NCP, JMM and smaller parties like the Muslim League, VCK, RSP and MDMK.

Beyond the two alliances, the Trinamool Congress has 5.4%, YSRCP 4%, Biju Janata Dal 2.85%, and the Left parties 2.5%, with the rest of the votes held by various parties.

The BJP is banking on the YSRCP and the BJD and some other parties to support its candidate. Support from either YSRCP or BJD would take the NDA candidate beyond the halfway mark. Odisha Chief Minister Naveen Patnaik met Prime Minister Narendra Modi on May 30, and Andhra Pradesh CM Y S Jagan Mohan Reddy called on the PM last week.



On the Opposition side, it remains to be seen which way the TRS, Samajwadi Party and AAP will vote. The TRS, which was once considered a fence-sitter and even backed the government on some key Bills, has been attacking the BJP of late. The AAP is at loggerheads with both the Congress and the BJP.

How keenly contested have previous elections been?

1952: The first election was a no-contest. Rajendra Prasad won with 5,07,400 votes. Chaudhary Hari Ram polled 1,954, contesting because he did not want Prasad to be elected unopposed. The Left fielded K T Shah, a former alumnus of the London School of Economics and a member of the Constituent Assembly, who got 92,827 votes. The fray also had Thatte Lakshman Ganesh (2,672) and Krishna Kumar Chatterjee (533).

1957: Prasad was fielded for a second by the Congress. It was again a no-contest: he got 4,59,698 votes against Nagendra Narayan Das (2,000) and Chowdhry Hari Ram (2,672).

1962: The Congress fielded Sarvapalli Radhakrishnan, who was Vice President during President Prasad's tenure. He got 5,53,067 votes against Chowdhry Hari Ram (6,341) and Yamuna Prasad Trisulia (3,537).

1967: The Congress candidate, Vice President Zakir Hussain, won 4,71,244 votes against Kota Subbarao (3,63,971). Subbarao, who retired as Chief Justice of India that year, was the Opposition's consensus candidate.

1969: This election, necessitated by the sudden passing of President Hussain, was the most controversial of them all. Under Article 65(1) of the Constitution, Vice-President V V Giri assumed office as acting President, but resigned in July 1969 as Vice President and also as acting President. Tensions within the Congress — between Prime Minister Indira Gandhi and a group of veterans known as the Syndicate — came to a head when the party officially fielded Neelam Sanjeeva Reddy while Gandhi threw her weight behind Giri, contesting as an independent. She famously called on party MPs and MLAs to vote according to conscience. Giri won with 4,01,515 votes to Reddy's 3,13,548. The Congress split after then party president S Nijalingappa expelled Gandhi. Among other candidates, C D Deshmukh, fielded by Swatantra Party and Jana Sangh, polled 1,12,769. There were 12 more in the fray, and the law was changed to prevent non-serious candidates from contesting.

1974: The Congress fielded Fakhruddin Ali Ahmed, and the opposition veteran Tridib Chaudhuri, a Lok Sabha MP from the Revolutionary Socialist Party. Ahmed polled 7,65,587 votes to Chaudhuri's 1,89,196.

1977: Following Ahmed's death, Vice President B D Jatti took over as acting President. When the poll was held, 37 candidates filed their papers but on scrutiny all but one were rejected. The only valid one was Congress's Neelam Sanjiva Reddy, who was elected.

1982: The Congress's Giani Zail Singh (7,54,113 votes) won against H R Khanna (2,82,685). Nine opposition parties had fielded Khanna, a Supreme Court judge who had resigned in protest against the appointment of M H Baig as CJI in 1977. Khanna had come into prominence a year before, when he disagreed with majority judges that Article 21 can be suspended by the declaration of Emergency.

1987: The Left parties fielded legal luminary and former Supreme Court Justice V R Krishna Iyer against incumbent Vice President R Venkataraman, who won comfortably (7,40,148 votes against



Iyer's 2,81,550). The third contestant Mithilesh Kumar, an independent candidate from Bihar, got 2,223 votes. The elections became politically interesting as incumbent President Singh, whose equations with Prime Minister Rajiv Gandhi had hit a low, was prodded to contest as an independent candidate by some Congress dissidents and Devi Lal of the Lok Dal(B), but he declined.

1992: The Congress's Shanker Dayal Sharma (6,75,804 votes) won comfortably against the opposition's George Gilbert Swell (3,46,485), a former Lok Sabha Deputy Speaker, a former Ambassador Norway and Burma, and a tribal who was a force behind the movement that culminated in statehood for Meghalaya. His candidature was pushed by former Prime Minister V P Singh and the BJP backed him. Two others were in the fray: Ram Jethmalani (2,704 votes) and the famous Kaka Joginder Singh aka Dharti-Pakad (1,135), who contested — and lost — over 300 elections during his lifetime.

1997: K R Narayanan, fielded by parties in the United Front government and the Congress and backed by the opposition BJP, won one of the most one-sided polls ever, polling 956,290 votes against former Chief Election Commissioner T N Seshan's 50,361. Seshan had the support of the Shiv Sena and some independent MLAs.

2002: The Congress and most opposition parties decided to back scientist A P J Abdul Kalam, the BJP's choice. The Left fielded Captain Lakshmi Sahgal. Kalam (9,22,884) won a one-sided contest against Sahgal (1,07,366).

2007: Pratibha Patil, the UPA-Left nominee, became India's first woman President with 6,38,116 votes against BJP candidate Bhairon Singh Shekhawat (3,31,306). The Shiv Sena, then part of the NDA, chose to back Patil, who is from Maharashtra.

2012: UPA candidate Pranab Mukherjee became the 13th President, polling 713,763 votes against the BJP's P A Sangma (3,15,987).

2017: In the last election, the Opposition fielded former Lok Sabha Speaker Meira Kumar against Kovind. She had the support of 17 Opposition parties but the JD(U) chose to support Kovind. Kovind bagged 7,02,044 votes, and Kumar 3,67,314.

CRIME AND COPYRIGHT INFRINGEMENT

The Supreme Court of India has passed a far-reaching judgment resolving the question of whether copyright infringement, which is punishable with imprisonment for a term which may extend up to three years under the Copyright Act of 1957, is a cognisable offence under the Code of Criminal Procedure (CrPC), 1973. While the *Knit Pro International v. The State of NCT* judgment is sparse in its reasoning, its conclusion is clear: copyright infringement is a cognisable offence under the CrPC.

In simple English, this means that the police can begin investigations into allegations of copyright infringement on receiving a complaint. If the court had held copyright infringement to be a non-cognisable offence, the police could have started investigations only after a judicial magistrate had taken cognisance of the offence and directed the police to initiate an investigation. The immediate consequence of this judgment is that many copyright owners, especially in the software and music industries, will use the threat of police involvement to scare potential infringers, to extort licence fees in excess of the amount payable in a scenario where the police cannot get involved without prior judicial authorisation. As a result of the offence being made cognisable and non-bailable, it



takes away the right of the accused to post a bail bond with the police and shifts the responsibility on to the courts for judicial determination on a case-by-case basis.

Tricky questions of law

There are several reasons to be sceptical about allowing the police to begin criminal investigations into copyright infringement. To begin with, unlike trademark law, it is not mandatory under the Copyright Act to register copyrights as a necessary precondition in order to enforce the same. Rather, a copyright is created the moment a piece of art or music or literature is fixed on a medium, provided it is original. Now, whether or not the said piece of art or music or literature is in fact 'original' is another complicated question of law, especially since a 2008 Supreme Court judgment. Even presuming that the question of originality is undisputed, there is the question of whether the use of the copyrighted work is permissible under all the provisions in Section 52 of the Copyright Act outlining the limitations and exceptions to copyright infringement. One of the provisions in Section 52 deals with 'fair dealing', which in itself a vexatious question of law. Then there are special clauses under the Copyright Act which extinguish copyright in copyrighted works in certain circumstances — for example, if a work is qualified for protection under the Designs Act of 2000, it can no longer claim protection under the Copyright Act once it is reproduced beyond a certain threshold. Even the very question of determination of copyright infringement would require the court to apply the test of substantial similarity (both qualitative and quantitative) on a case-by-case basis.

Any investigation by the police into copyright infringement will have to take into account all of the above issues, many of which have vexed the most experienced of lawyers, judges and academics. As a country, do we have faith in the ability of the average police sub-inspector, given their present levels of training and funding, to conduct an efficient investigation into copyright infringement, particularly on complicated questions of law? We think not.

The deeper question that requires a re-look is the criminalisation of copyright infringement in India. In 1914, when the British extended the Imperial Copyright Act, 1911, to India, copyright infringement was punishable only with a monetary fine. It was independent India that introduced imprisonment for one year as punishment for the offence of copyright infringement in 1957. Since then, the prison term for copyright infringement has been tripled by Parliament to three years.

India's international law obligations under the Trade-Related Aspects of Intellectual Property Rights (TRIPS) do not require India to criminalise all kinds of copyright infringement. Article 61 of the TRIPS agreement requires criminal measures to be applied for at least "wilful copyright piracy" on a "commercial scale". Although the term copyright piracy itself remains undefined in TRIPS, a World Trade Organization panel in the China — Enforcement of intellectual property rights dispute observed that the law does make a distinction between copyright infringement and copyright piracy. In fact, the panel cited negotiating documents to show that the term infringement of copyright on a commercial scale was specifically rejected. Consequently, all piracy of copyrighted works is an act of infringement, but all infringement cannot be termed as piracy. So, for example, a person indulging in the mass reproduction of copyrighted books without the authorisation of the copyright owner would be guilty of copyright piracy. On the other hand, a dispute between two publishing houses on similar content in their textbooks would qualify only as copyright infringement and not copyright piracy. This is an important distinction made in TRIPS because most cases of copyright infringement not amounting to copyright piracy involve tricky questions of law. Establishing guilt beyond reasonable doubt is almost impossible in such cases, given the ambiguity of the law. Why then do we insist on criminalising conduct, where it is



not possible for reasonable persons to know with some degree of certainty whether certain acts qualify as criminal conduct, particularly when civil remedies are available?

Unless the law is amended to not only differentiate between the different acts of copyright infringement but also require prior judicial cognisance as a precondition of criminal investigation by the police, the Supreme Court's recent decision will pave the way for the police to impinge on civil liberties, impede the ease of business and have chilling effects on free speech.

FORMER CAG PUSHES FOR MORE ACCOUNTABILITY IN GOVERNMENT

Retired Comptroller and Auditor General of India (CAG) Rajiv Mehrishi on Friday said that the CAG, the supreme audit institution of the country, did not even meet the standards of chartered accountants of private companies when it came to assurances.

Mr. Mehrishi said the CAG officials see only the accounts that government departments want them to see. He was addressing a conference on the digitisation of public expenditure organised by the George Washington University and Bill and Melinda Gates Foundation here.

"If you see the audit reports of CAG, we do not come up even to the insufficient standards of chartered accountants of private companies in the matter of assurance. We don't use the word assurance in our reports," Mr. Mehrishi said.

He said the CAG officials were faced with a strange situation where they were under pressure of time and the officers concerned said the "file is lost".

"That entire process is not auditable, so you get what the department wants to give... The way the accounts are, they are not properly auditable," he said.

The larger issue was that of the fundamental principle of Parliamentary democracy, that every rupee earned or spent had to be accounted for by the legislature. "Now, with the kind of data we have, Parliament can draw no assurances that every rupee is earned or spent is consistent with what they have approved," Mr. Mehrishi said.

The solution to the problem was not just digitisation, but "business process re-engineering". For example, he said, about 25% of the expenditure of several State governments was labelled as "other" expenditure. The data available was "obscure" and "error-ridden", he added.

THE FUTURE OF A UNIFORM CIVIL CODE

Uttarakhand Chief Minister Pushkar Singh Dhami recently set up a committee to prepare a draft Uniform Civil Code (UCC) for the State. Several leaders of BJP-ruled States have batted for a UCC in India. Though implementation of a UCC has been a key agenda of the BJP and has found a mention in the last two manifestos, the party's regional leaders have been more vocal in championing this cause than its national leaders. One wonders whether the BJP is employing a bottom-up strategy to accomplish its long-standing ideological goal, by urging a few States to pass their respective UCCs so that it can use these for its national campaign for one.

Opposition to UCC

Muslim groups, particularly Ulemas, have been opposed to the idea of a UCC for a long time. The Jamiat Ulama-i-Hind, led by Mahmood Asad Madani, recently passed a resolution against a UCC at



a meeting in Deoband which was attended by over 2,500 of its members. The All India Muslim Personal Law Board (AIMPLB) has been consistently opposing a UCC because it fears that such a code will undermine Muslim identity. Indeed, it owes its existence to this fear. The AIMPLB was set up in 1973 at the initiative of Muhammad Taiyab, who was then Muhtamim of the Deoband madrasa. When H.R. Gokhale, as Law Minister, tabled an Adoption Bill in Parliament, which was not consistent with Muslim religious laws on guardianship, Muslim clergies were anxious. They saw the Bill as a precursor to a UCC. A small meeting took place in Deoband followed by a larger congregation in Mumbai on December 27-28, 1972. The AIMPLB was born four months later. The fear of a UCC and the preservation of Muslim personal law were the reasons for the formation of the AIMLAB. Over the years, the body began to champion diverse Muslim issues such as protection of disputed Islamic religious structures.

Ever since the passage of the Hindu Code Bill, the Hindu Right is of the view that Muslims are being pampered by being allowed to have their own personal laws in a Hindu majority country and therefore need to be 'disciplined' and brought under a UCC. In 1996, Prime Minister Atal Bihari Vajpayee called for a national debate on UCC during his speech against a no-confidence motion in Parliament. During the speech, he appreciated the practice of consent by brides in Muslim marriage rituals as progressive. One wonders how the Hindu Right would react if this practice is accepted as part of a UCC. Responding to the debate, former Prime Minister P.V. Narasimha Rao cited the age-old tradition of marriages between uncles and nieces among Hindus in Andhra Pradesh, and challenged the BJP to address it. Should this tradition of Hindus of Andhra be abolished or be made applicable among Hindus outside Andhra? The truth is that there are plenty of customs and traditions in Hindu society that have to be creatively addressed to do justice to the idea of a UCC. Moreover, Flavia Agnes and other feminists have recognised many anti-women biases in the Hindu Code Bill, which are not adequately brought forward in Indian public debate. This has resulted in the public perception that Muslim personal laws alone need reform.

What will a UCC look like?

It is plausible that a serious and honest exercise might end up causing more consternation in Hindu society than in Muslim society. In an erudite inaugural remark, Upendra Baxi, in a workshop on 'Dispelling Rhetorics: Law of Divorce and Gender Equality in Islam' in 2017, said: "Do we know enough about the personal law of various tribal communities from which the UCC may choose?... Do we know enough about the religious personal law of other Indian communities? It is a sad mistake to think UCC is all about Hindu- Muslim relations and identities..."

The BJP has been able to realise two of its key ideological agendas over the last eight years: abrogating special status for Jammu and Kashmir and facilitating the construction of a Ram Mandir in Ayodhya. Comparatively speaking, the task of realising a UCC is not going to be easy. The truth is, the caste system which is integral to Hindu society celebrates hierarchy, which in turn is incompatible with the idea of uniformity or equality. Sadly, since independence, no group, either in favour of or against a UCC, has been able to prepare a text of what a UCC would realistically mean for a confusingly diverse Indian society. Given the toxic political climate of our time, it is plausible that the efforts by various BJP State-level regimes may lend a majoritarian spin to such an exercise. Such an outcome will raise the political temperature of numerous secular groups and religious minorities and invite enduring dissent against a UCC.



HATE SPEECH HURTS THE NATION AND THE NATIONAL INTEREST

One lesson from Sunday is that an electoral majority does not entitle a political party to believe there are no red lines to its conduct, that it can dismiss every criticism as petty pandering to a “vote bank”. The hate speech against Islam that two spokespersons of the BJP peddled so glibly, on a national television channel and on social media, is reprehensible but the truth is that it was no sudden eruption of bigotry. The BJP’s electoral victories since 2014, and especially after 2019, have emboldened party activists and others of the saffron brigade to an extent that they indulge in casual everyday anti-minority actions with the confidence that they have a free hand to do this. The government, from Prime Minister Narendra Modi down, and the party, from J P Nadda down, prefer silence as the baying gets more loud and shrill, as so-called dharam sansads advocate no less than mass murder and men, in saffron, claiming to redeem Hinduism, peddle hate and misogyny. Result: Every such act that is allowed to go unpunished and uncensored emboldens the next.

If the party acted to suspend spokespersons Nupur Sharma and Naveen Jindal on Sunday, it was because the anger against their remarks was not something that could be dismissed as expressions of “sickularism” but is resonating throughout the Islamic world threatening to upend India’s most important relationships, alliances key to its strategic imperatives that Prime Minister Modi himself has nurtured. But the condemnation of hate speech for the sake of international optics is like sticking a band-aid on a festering wound. In the diplomatic embarrassment that Vice-President M Venkaiah Naidu had to suffer while on an official visit to Qatar — the Indian envoy was summoned and lectured to — is the second lesson. Such conduct is no longer protected by silos, and has wider repercussions. Prime Minister Modi once claimed that the Congress was upset that he had good relations with the Islamic world. All it took was 30 seconds of unadulterated hate spewed by the party’s face on television to send that goodwill evaporating. External Affairs Minister S Jaishankar, whose erudition in Bratislava is being hailed as India’s coming-of-age speech, will have to provide a better explanation for the conduct of his colleagues than reasoning that they mark the rise of the “non-elites” and “India’s way” of “correcting historical wrongs”.

India has the second largest Muslim population in the world, and irrespective of the fact that the BJP does not need their votes, as a party in office, it needs to show by word and deed that it is a government of all communities. On social media, the “trads” — hardline Hindutva trolls — are tearing up the BJP for caving in to international pressure. They are invoking the liberal posters of Salman Rushdie and Charlie Hebdo and the principles of free speech. The Government will be mistaken if it thinks two sound-bites are the problem and two suspensions the solution. Hate speech is unacceptable in itself, from the mouths of ruling party members targeting a minority it mainstreams bigotry, causes dangerous divisions, and is against the national interest. It is time this message went out from the very top. This doesn’t — and shouldn’t — need a prod from an ally in the Gulf.

THE GULF OF SENSITIVITY THAT INDIA WILL HAVE TO CROSS

The strong and widespread targeting of India in the Islamic world over the past few days arose from a specific theological consideration. It was not directly related to the politics or policies of India’s ruling dispensation though its opponents within India would wish to give it that colour. The veracity of this assessment is borne out by the general apathy of the Islamic ummah towards India’s Muslim population. From time to time, the Organisation of Islamic Cooperation (OIC) has criticised the Indian state’s alleged discrimination of its Muslim minorities. However, the



organisation's views have never formed the basis of its member-states' bilateral ties with India. And, Islamic states have not been swayed by Pakistan's consistent portrayal of the Narendra Modi government as fascist and anti-Muslim.

Indeed, India's relations with some significant Muslim countries such as Saudi Arabia and the United Arab Emirates (UAE) have strengthened since Prime Minister Narendra Modi assumed office in May 2014. It is possible that the current resentment, even outrage, on account of the present controversy may lead to a greater scrutiny in the ummah of the Modi government's policies towards the country's Muslims. India's social situation may come under a deeper focus but the governments of Islamic countries would not want their India policies to be determined by theological considerations; they have an array of interests at stake in their India ties.

There is a distinction

That the Islamic governments protested against the comments made regarding the Prophet by the former Bharatiya Janata Party (BJP) National Spokesperson, Nupur Sharma, and the former media head of the party's Delhi unit, Naveen Kumar Jindal, was not surprising. What was so though was that neither the Government nor the ruling party seemed to have realised the great offence they constituted to all Muslims worldwide and the anger the comments would generate. At least the astute External Affairs Minister, S. Jaishankar, who has been a distinguished diplomat in his earlier avatar, should have known that despite enormous differences within themselves, Muslims venerate the Prophet; they all find any perception of disrespect towards him to be intolerable. Thus, there is a distinction between criticising some social practices of Muslims and what is perceived to be an attack on the personality of the Prophet.

Ms. Sharma's remarks during a talk show on a prominent TV channel were made on May 26. The next day a clip of these remarks was added to a tweet. That drew wide attention in India and Ms. Sharma complained of having received threats to her person and also her family members. At the same time a Muslim organisation lodged a legal complaint against Ms. Sharma. It was inevitable that in these times of instant communications and social media, Ms. Sharma's comments would find an audience in Islamic countries; and, that anti-India elements would also seek to publicise them. Yet, it appears that the Indian establishment perhaps thought if attention was given to this matter at all, that Ms. Sharma's remarks would be placed in the context of the shrill charges and counter-charges made daily on Indian TV, and would therefore not be taken seriously.

End misperceptions

Is this because the Indian system, including the ruling dispensation, has an inadequate appreciation of the sensitivities of different faiths? Is it because the Indian intellectual tradition as it has evolved after Independence does not pay sufficient attention to faith, perhaps, considering it backward? And, now while there is an assertion of religiosity, there is also a lack of curiosity about other faiths. This seems to cut across all segments of society and has led to a lack of knowledge of other religions, leading to misperceptions. This is illustrated in simple things such as innocently sending 'happy' messages on occasions of mourning of adherents of another faith or in works of art. But there is a darker side to society too which is witnessed in the reinforcement of prejudice about other faiths and the use of words and expressions which cause offence. This can also be witnessed in extolling the virtues of one's own faith and putting another in an unfavourable light. Clearly, all this points to the need to foster an understanding in society at large of other faiths and their sensitivities. This is especially needed in our multi-faith society at a time when religiosity is rising sharply across the world.



During a VIP visit

It was unfortunate that the situation arising out of Ms. Sharma's remarks occurred at a time when the Vice-President of India, M. Venkaiah Naidu, was on a three-nation tour of Gabon, Senegal and Qatar. Mr Naidu left India on May 30 and after visiting the two African countries, was to reach Doha on June 4. Clearly, the Indian foreign policy establishment led by the External Affairs Minister missed the sentiment brewing in the Islamic world because of Ms. Sharma's comments. If the External Affairs Minister had assessed what was happening, he would have surely taken action to prevent any embarrassment to the Vice-President on foreign soil. It can hardly be disputed that the President of India, the Vice-President and the Prime Minister, should never be put even in an uncomfortable position when they are abroad. Did this lapse occur because of a lack of appreciation of how Islamic sentiment is roused because of a perception of an insult to the Prophet?

According to a report in this newspaper, the "damage control" process began when the Vice-President was flying from Senegal to Doha and the Qataris conveyed that the ceremonial banquet of Mr. Naidu's host, the Deputy Amir of Qatar, would have to be called off because he was suspected to have been exposed to COVID-19. In such circumstances a very senior person hosts the customary banquet but it is not cancelled. It also appears now that the Indian side was taken aback when the Indian Ambassador in Doha was called in on June 5 and Qatar while appreciating the action taken against Ms. Sharma and Mr. Jindal by the BJP demanded that India issues a public apology for Ms. Sharma's remarks against the Prophet. There is no question of making one for the remarks of a party functionary.

This can only be called a very offensive action against India by Qatar. It could only have caused the greatest embarrassment to Mr. Naidu. It is to his credit that he proceeded with the visit. After the Qataris went public with their action, other Islamic countries lodged protests too. India did well to reject the statements of the OIC and Pakistan for they reeked of political considerations.

The last word

There is a mutuality of interests between the Arab states and India, and hence when the temperature cools, the flow of relations will go on. But India must take the obvious lessons from this entire episode, beginning with greater sensitivity to all faiths both for social harmony and promotions of India's external interests.

TEXTBOOK CONTROVERSY

The story so far: The Karnataka textbook revision committee, headed by Rohith Chakrathirtha, has included a speech by Rashtriya Swayamsevak Sangh (RSS) founder K.B. Hedgewar in the Class 10 Kannada (first language State syllabus) textbook. Works by several authors associated with the progressive stream in Kannada literature have been left out. As a mark of protest, many writers have written to the BJP government withdrawing permission to use their works in textbooks. In another development, seers associated with the Veerashiva-Lingayat and Vokkaliga castes, two powerful communities of Karnataka, have raised objections to some comments of Mr. Chakrathirtha.

What is the genesis of the controversy?

When COVID-19 struck two years ago, to manage the burden of a heavy syllabus in a truncated academic year, the government reduced 30% of the syllabus for all classes. In the process, lessons



on Tipu Sultan, Sangolli Rayanna, Rani Chennamma and a few other historical figures were excluded for that year from the social science syllabus of Class 6 to Class 8.

Around the same time, the Karnataka Brahmin Mahasabha submitted a memorandum to the Primary and Secondary Education Minister B.C. Nagesh and Commissioner of the Department of Public Instruction demanding revision of some lessons in the Class 6 and Class 8 social science textbooks which they said “hurt the sentiments of the Brahmin community.” On the basis of this memorandum, the government formed a 16-member textbook revision committee and appointed Mr. Chakrathirtha as the chairperson in September 2021. Initially, the government had announced that the committee would only revise Class 6 and Class 8 social science textbooks which “hurt community sentiments.” However, eventually, the committee was given the responsibility of all the textbooks from Classes I to 10. The committee took around six months and submitted its report to the government in March, 2022.

What are the major changes in the textbooks?

While Hegdewar’s speech was added, the committee dropped texts of writers P. Lankesh, Sara Aboobacker, Aravind Malagatti, Neela, B.T. Lalita Naik, A.N. Murthy Rao among others, known for their progressive views. The committee included works of writers including Bannanje Govindacharya, Shatavadhani R. Ganesh, S.L. Bhyrappa and others. Inclusion of a chapter by Chakravarthi Sulibele, a strong defender of the BJP and Prime Minister Narendra Modi, was among the highlights. A chapter on Bhagat Singh authored by Marxist scholar G. Ramakrishna, initially dropped, was later restored.

There was outrage over dropping portions that spoke of social reformer Narayana Guru, Periyar and others, while the government in its defence said they were not dropped but only juggled between texts to make them more contextual. The manner in which details about Basaveshwara as well as Dr. B.R. Ambedkar were edited in Class 9 textbooks has also drawn criticism.

What has been the response to the revisions?

Writers identified with progressive streams, Dalit organisations, student unions and others across the State protested against the “saffronisation” and “Brahminisation” of textbooks. Over 10 writers, including Devanooru Mahadeva and Prof. Ramakrishna, have told the government that they do not wish their writings included in the textbooks revised by the committee. Opposition Congress and Janata Dal (Secular) and other parties have also opposed the changes.

Vokkaliga community organisations, leaders and mutt seers like Dr. Nirmalanandanatha Swamiji have demanded action against Mr. Chakrathirtha on the grounds that he has in the past defamed Jnanpith awardee and literary icon Kuvempu, who belonged to the community, by sharing a distorted version of the “nada geethe” (State anthem) penned by Kuvempu. Various Veerashiva-Lingayat seers have taken exception to the content on Basaveshwara, the 12th century philosopher-poet-social reformer and a proponent of Lingayat philosophy, which has now been partially addressed by a promise to revise it. Dalit organisations are unhappy with the portrayal of B.R. Ambedkar, on which the government has made no promises. Some old tweets and social media posts of Mr. Chakrathirtha have been questioned over their alleged anti-women and casteist stances. Critics also questioned his qualification to head the committee, which the government vociferously defended.



What is the government saying?

The BJP government in Karnataka, which had earlier stuck to its stand that there was no question of rolling back the changes, late on Friday showed signs of buckling under pressure from religious heads. Chief Minister Basavaraj Bommai's statement that the government had an "open mind" followed a prolonged discussion with Minister B.C. Nagesh. While Mr. Bommai announced that the material related to Basaveshwara would be "suitably altered in order not to hurt sentiments", there is no sign of anything else being changed in the textbooks so far. The government in its statement emphasised that the revision committee has been disbanded — the purpose for which it was set up has been met and its term has ended.

IISC IS TOP INDIAN UNIVERSITY IN GLOBAL RANKINGS, OVERTAKES IITS

Rising 31 places in a year, Indian Institute of Science (IISc) in Bengaluru has emerged as the highest ranked Indian institute in the 2023 edition of the QS World University rankings, pushing IIT-Bombay to the second position, followed by IIT-Delhi.

Apart from IISc at 155, IIT-Bombay (IIT-B) and IIT-Delhi (IIT-D), which have risen five and 11 places to rank 172 and 174 respectively, are the only other Indian institutes in the global league of top 200, in continuation of a trend since 2017. The total number of Indian institutes among the top 1,000 globally has risen to 27 from 22.

Speaking to The Indian Express, QS spokesperson William Barbieri attributed the remarkable rise of IISc, which is one of the eight public Institutes of Eminence (IoE), to improvement across four out of six parameters based on which the rankings are prepared.

These parameters are — academic reputation (AR), employer reputation (ER), faculty-student ratio (FSR), citations per faculty (CpF), international faculty ratio and international students ratio.

According to the CpF indicator of Quacquarelli Symonds (QS), which is a London-based higher education analytics firm, when universities are adjusted for faculty size, IISc Bengaluru is the world's top research university, achieving a perfect score of 100/100 for this metric. "Furthermore, IISc Bengaluru is the fastest rising South Asian university among the QS World University Rankings top-200," said a QS statement.

Overall, Indian education institutes, 41 of which made it to the rankings, have performed poorly across many key metrics. For instance, 30 out of 41 ranked universities have suffered declines in the FSR indicator, with only four recording improvements.

"However, on an encouraging note, now two Indian universities rank among the top 250 for Faculty/Student Ratio, compared to none in previous editions. The highest performing in this metric is Savitribai Phule Pune University (225 th for FSR) and O.P. Jindal Global University (235 th for FSR), followed by IISc Bengaluru (276 th for FSR)," QS noted.

Globally, the Massachusetts Institute of Technology was declared the best university for the 11th straight year. The second place went to the University of Cambridge, followed by Stanford University. China has 28 universities among the top 500, including six in the top 100 with Peking University getting rank 12 and Tsinghua University placed 14th.



Notably, all the IITs, barring one, which feature in the rankings have improved their standing. In fact, IIT-Indore made the highest-ranking debut in the list, securing the 396th slot globally, while IIT-BHU made its maiden appearance in the 651-700 band.

The report shows that India's presence in the top 500 category is also IIT-driven. Apart from IISc, eight IITs (Delhi, Bombay, Madras, Kanpur, Kharagpur, Roorkee, Guwahati, Indore) are ranked among the top 500 globally. No other Indian university, public or private, has found a place in this category, five years into the launch of the Institute of Eminence scheme.

One of the objectives of the IoE scheme was to help ten public and as many private Indian higher education institutions break into the top 500 of reputed rankings such as QS within a decade, and in the top 100 "over time". The scheme continues to languish in the absence of an empowered expert committee which is meant to drive it.

Among the eight public IoEs, five (IISc, IIT-B, IIT-D, IIT-Madras and IIT-Kharagpur) improved their rankings, while the University of Delhi and University of Hyderabad slipped from band 501-510 to 521-530 and 651-700 to 751-800, respectively.

Banaras Hindu University, the only other public IoE, has been ranked outside the top 1,000, in the 1,001-1,200 band.

Also, one of the three private IoEs, OP Jindal Global University, with a rank in the 651-700 band, is the highest-ranked private university in the country, according to QS. The other two private IoEs — Manipal Academy of Higher Education and BITS-Pilani — were placed in the 751-800 and 1,001-1,200 bands, respectively, same as last year.

The report was prepared on the basis of responses from 1,51,000 academics and 99,000 employers across the world.

Ben Sowter, QS Senior Vice President, said: "This edition of the QS World University Rankings reflects the excellent work that several Indian universities are doing to improve their research footprint, with positive consequences for their reputation on the global stage. Conversely, our dataset also suggests that the Indian higher education sector still struggles to provide adequate teaching capacity."

NEW INDIA NEEDS FREE AND QUALITY HIGHER EDUCATION

At a time when the demand for quality education and research in leading universities in India and advanced nations is on the rise, the staggering tuition fees demanded by universities of repute, besides deterring the meritorious from pursuing their degrees from world-class universities, create compulsions to turn professions into business propositions rather than opportunities to serve and excel.

Carving out a niche in the annals of the global education architecture, New York University's NYU Grossman School of Medicine announced that from the 2021-22 academic year, it will pay the tuition fees for all its students admitted in its MD programme, regardless of their financial needs, thereby becoming the first major American medical school to do so.

Kenneth G. Langone, Chair of NYU Langone Health's Board of Trustees, who made his U.S.\$3.5 billion fortune as a co-founder of Home Depot, with his wife Elaine, has given U.S.\$100 million to



fund the tuition package. NYU has already raised more than U.S.\$450 million of the U.S.\$600 million it needs to fund the programme.

In India too, the burden of tuition fees in professional courses is becoming unbearable. Besides, it is causing a serious concern of reducing quality professional education to a commodity rather than the noble service that it ought to be.

Educational loans, even with government collateral guarantee, are no answer, as the mounting debt of educational loans will cripple the economy of development and public welfare. What we need is a university system that fosters an environment of learning in which world-quality education can be provided without taxing learners with the burden of tuition fees.

The Nordic model

The Nordic countries — Denmark, Finland, Iceland, Norway, and Sweden – provide free higher education to their people, and overseas students were able to study for free until recently. In Denmark, however, tuition fees were introduced for international students from outside the European Union and the European Economic Area, in 2006. Sweden followed suit in 2011. Only Finland, Norway, Iceland, and Germany do not charge international students tuition fees. This ensures that students receive quality education in the streams that they desire rather than pursuing streams that allow them to earn highly so as to repay their student debt.

As an article in January 2022 says: ‘the Nordic model has attracted a significant amount of attention from other nations. Many people wonder if it provides a template for smaller countries where citizens are more homogeneous in terms of their opinions and experiences, yet live in poverty or repression as a result of government policies’.

Despite some attempts to impose fees, all these countries are outliers in a world where international students are frequently a valuable source of revenue for institutions. Last year, the topic resurfaced in Finland when the government recommended that institutions be allowed to charge tuition for international students from outside the European Union. Following a heated public debate, the Finnish government opted not to proceed with the proposals.

All Nordic countries have a strong legacy of equality, extending to equal opportunities in the education system. The Nordic countries have measures in place to promote gender equality and assist students from lower socioeconomic categories to gain access to higher education. It is no wonder that these countries continue to figure in top of the world happiness index (Finland at No.1, Denmark at No. 2, Iceland at No.4, Norway at No.8 and Germany at No.14, as per the World Happiness Index 2022).

It reshapes student choices

A ray of hope for evolving a progressive university system in professional education has been provided by NYU’s Grossman School of Medicine. In its announcement, the NYU had pointed out the fact that “overwhelming student debt” is reshaping the medical profession in ways that are bad for the health-care system. Such debts prompt graduates to pursue high-paying specialties rather than careers in family medicine, paediatrics, and obstetrics and gynaecology. The lead taken by the NYU is bound to inspire many other leading universities to consider and value the student’s intellectual acumen rather than financial investment.

But then, universities need funds for education and research. Education is a noble service and an investment to charter a bright future for humanity. If students pay for education, they would be

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



forced to earn from the degrees they acquire. The profession then becomes a privilege to earn rather than a privilege to serve and excel, as it ought to have been.

There is a strong case for reviving philanthropy and community support for higher education in India. Corporates, generous alumni, and people at large can join in to create strong philanthropic support for higher education and make quality education tuition-free. The government, for its part, should be generous enough to declare such philanthropic donations to the cause of higher education and research tax-free, now that the treasury is full of funds from the ever-growing list of income tax and the Goods and Services Tax (GST) payers.

Can we, then, make the prophecy of the great management guru, Philip B. Crosby, come true in higher education, who, during the quality revolution in the late 1970s, advocated that “Quality is Free!”

THE NEED FOR DIGITAL COLLABORATION

The fact that the University Grants Commission (UGC) has simplified its approval process for local universities to collaborate with their counterparts abroad, to offer joint degrees, dual degrees, and twinning programmes, is heartening. As per the rules, any Indian Higher Education Institution (HEI) accredited by the National Assessment and Accreditation Council with a minimum score of 3.01 on a 4-point scale or featuring in the top 1,000 of the Times Higher Education or QS World University Rankings will be eligible to participate in the collaboration. For Indian institutes, being in the top 100 list of the National Institute Ranking Framework is also an acceptable criterion. Foreign institutes willing to enter a partnership must rank in the top 1,000 in either of the two world university rankings.

While multiple steps taken by the present dispensation to meet the unprecedented challenges posed by the pandemic include leveraging the potential of information and communication technology in the teaching and learning process, the fact that the UGC's regulations do not allow academic collaboration with foreign institutions for online learning and open and distance learning (ODL) is puzzling.

Distance learning

In order to increase the gross enrolment ratio in HEIs in India, the National Education Policy of 2020 suggested that more ODL and online programmes be started, especially to improve access for those living in remote areas. ODL programmes impart education to people for whom the regular mode of learning is a distant dream owing to financial, personal and professional constraints. Often, part-time employees in both the organised and unorganised sectors are the ones who opt for ODL in order to upgrade their qualifications for better career prospects.

At the postgraduate, undergraduate, PG Diploma, Diploma, and Certificate levels, the share of distance enrolment in university is 13.8%, 35.9%, 1.1%, 1.5% and 0.4%, respectively (All India Survey on Higher Education, or AISHE, 2019-2000). Distance enrolment constitutes 11.1% of the total enrolment in higher education. These programmes are more affordable compared to the in-person programmes and are therefore popular among disadvantaged sections.

In order to promote online education in India, initiatives such as MOOCs, SWAYAM and NPTEL are sponsored by the UGC, the Department of Education, and other national institutes of repute. Of late, universities and colleges are centrally funded under the RUSA and TEQIP-III programmes to create and strengthen infrastructure for online and digital education. The Union Budget too



announced the establishment of a digital university. It is inexplicable, therefore, that while online education is being encouraged on the one hand through several government initiatives, online programmes are being kept out of the ambit of international collaboration efforts by the UGC on the other.

According to AISHE's findings, 49,348 international students from 168 countries are enrolled in courses offered by Indian universities. The highest share of foreign students (45.6%) come from four neighbouring nations: Nepal, Afghanistan, Bangladesh and Bhutan. Reaching out to the HEIs of such countries for international collaboration, notwithstanding their present standing and rank, will pave the way for an increase in the footfall of international students in India. This may especially prove to be a game changer for the financially constrained HEIs. Also, it will help to compensate the outflow of foreign exchange from India.

A disadvantage

The allocation of grants to central universities has risen to ₹9,420 crore from ₹7,643.26 crore last year in higher education. Monetary support to the IITs has increased by ₹658.9 crore and to the IIMs by ₹177.9 crore in 2022-23 compared to last year. These institutions, generously funded by the Centre, outplay their State-sponsored counterparts in other academic indicators too, such as faculty strength and modernised laboratories and libraries. Hence, that State-funded HEIs do not perform well in the ranking system is no surprise. Now, their chances for smooth international collaboration is also impeded by the UGC regulations. This will only exacerbate the divide between central and State institutes.

The UGC needs to revisit its policies for foreign collaborations. It must look at the present and overall needs of the education system so that students studying in State-sponsored HEIs and opting for ODL and online education are not deprived of benefits in India.

EXPLAINED: HOW NAS SURVEY ASSESSES WHAT SCHOOL STUDENTS HAVE LEARNT; WHAT IT HAS FOUND

A nationwide survey carried out by the Union Ministry of Education has found that between 2017 and 2021, the literacy and numeracy skills of school students in India worsened considerably across subjects and grades.

The outcomes of the National Achievement Survey (NAS), the latest edition of which was carried out in the shadow of the prolonged closure of schools due to the Covid-19 pandemic, are supposed to guide interventions by authorities across the country to bridge the learning gaps among students enrolled in Classes 3, 5, 8 and 10.

What is the objective of the NAS?

The NAS is a periodic exercise carried out broadly in alternate years to monitor the health of the country's school education system. It has been designed by the Ministry of Education along with the National Council for Educational Research and Training (NCERT) to provide a snapshot of learning outcomes in key subjects — essentially “what students know and can do” — at the end of Classes 3, 5, 8 and 10. These classes are generally seen to mark important stages in the development of a child's cognitive abilities.



Since when has the NAS been carried out?

The first edition of NAS was carried out in 2001. In the beginning, the survey was supposed to be an independent project of the NCERT, but it was soon brought under the ambit of the Sarva Shiksha Abhiyan, the government's flagship programme to achieve universalisation of elementary education (UEE), which has now been subsumed into the overarching Samagra Shiksha Abhiyan.

Over the years, the structure of the survey has undergone changes. Between 2001 and 2015, each cycle of the survey covered students of just one grade — so, students of Class 3 were covered in 2003, 2007, 2012, and 2015; students of Class 5 were surveyed in 2001, 2005, 2009, and 2014; those of Class 8 were surveyed in 2002, 2007, 2010, and 2015; and students of Class 10 were covered in 2015 and 2018.

What is the current structure of the survey?

In 2017-18, the NAS was redesigned. For the first time, students of all four grades were covered on the same day. Also, instead of states, districts were made units of reporting, leading to a much bigger sample size.

So, until 2017-18, each cycle of NAS had a sample size of 1-2 lakh students; in 2017-18, over 20 lakh students were covered on the same day. The latest (2021) round covered 34 lakh students in 1.18 lakh schools across 720 rural and urban districts.

And what exactly does the NAS assess?

Until 2015-16, the survey assessed the competency of students based on the core curriculum followed by states and UTs. In 2017-18, the focus moved to mapping the progress of learning outcomes as listed under the Right to Education Rules as amended in 2017.

Questions asked by the NAS are framed to assess whether students can read, and carry out simple mathematical operations that are required in daily life. The levels of difficulty and complexity of the questions vary from one grade to another. In the higher classes, the survey also assesses the knowledge acquired by students in areas related to the Constitution of India.

The survey covers schools run by the central and state/UT governments, government-aided schools, and private unaided schools. Language, mathematics and environmental science are assessed in Classes 3 and 5; language, maths, science and social science in Class 8; and maths, social science, science and English are assessed for students in Class 10.

So what does NAS 2021 show?

Compared with 2017 (in 2018 only Class 10 students were assessed), performance has taken a hit across grades. A comparative analysis shows that the national average scores of students across subjects have dropped by up to 47 marks. Consider:

In Class 3, the average scores of students in language, maths and EVS have dropped by 13, 15 and 14 marks respectively.

In Class 5, the scores in language, maths and EVS have dropped by 10, 26 and 27 marks. Class 8 has seen national average scores of language, maths, science and social science come down by 5, 14, 24, and 23 marks respectively. And in Class 10, maths, science, social science, and modern



Indian language scores have dropped by 34, 47, 23 and 6 marks respectively. Only the English score has risen by 24 marks.

Are there regional-, gender-, or community-wise variations?

Except for Punjab and Rajasthan, the performance of nearly all states have declined compared to 2017 levels. In terms of 2021 numbers, 14 states and four UTs performed below the national average in Class 3; four UTs and 18 states performed below the national average in Class 5; 16 states and three UTs performed below the national average in Class 8.

There were no marked differences between the scores of boys and girls. There were some variations among communities, though.

For instance, in the case of Class 8 science, the scores of general category students have dropped by 9 marks, as compared to 28, 26, and 19 marks for SCs, STs, and OBCs respectively. There is a distinct rural-urban divide — the maths scores of Class 8 students in rural schools have dropped by 12 marks as against 4 marks shedded by their urban counterparts.

What are the implications of the findings?

According to Rukmini Banerji, CEO of Pratham Foundation which publishes the Annual Status of Education Report (ASER), the NAS findings once again highlight the need for urgent interventions to improve foundational learning levels.

“All data that is coming out is indicating that we need to seriously work on foundational learning and NAS is no exception. It has come at the right time and as the new year school begins, and schools reopen after the summer holidays, the work is cut out for authorities. What NAS says is what we have all been worried about,” Dr Banerji said.

CONTROL AND DELETE

The Government’s plan to set up a panel that can overturn content moderation decisions made by social media platforms is problematic in many ways. The idea, which has been proposed as an amendment to the controversial IT Rules, 2021, is to constitute one or more appellate committees which will have the final word on any content moderation issue facing a social media platform. The trigger for these Government-appointed committees to come to life will be, say, an appeal by a social media user who feels aggrieved by an order of the platform’s grievance officer. “Government policies and rulemaking are committed to ensure an open, safe, and trusted and accountable Internet for its users. As Internet access continues to rapidly expand in India, new issues related to the above commitments also keep emerging,” the draft reportedly says. It will be naive to think of such an aggrieved user as someone who has no axe to grind. With billions of users, social media is well and truly an influencing machine, and filled with influencers of all hues and shades. It is, therefore, important for democracy’s sake that it is not taken over by any one influential player, even if it is the Government, with an agenda.

But this is exactly what the mechanism will help to serve — tighten the Government’s grip on messaging on social media intermediaries, which not long ago served to disseminate alternative voices. Imagine how absurd it will be, for instance, if a Government-appointed committee sits to decide on an issue in which the aggrieved user is a Government entity or a ruling party member. How fair can that be? What makes it worse is in recent years, the Government has not covered itself with glory when dealing with dissent, in the real world and on social media. This will not

only add another layer of complexity to the problematic IT rules that were introduced last year but also another lever of Government control. The IT rules were widely criticised, including by this newspaper as “deeply unsettling” for the kind of leverage that they give to the Government over digital channels, with troubling implications for freedom of expression and right to information. Ironically, they were launched by the then-Minister as a “soft-touch oversight mechanism”. It should be noted that the last word has not been said on those rules, what with pending legal challenges to them. All this is not to say that social media platforms should not be regulated. Far from it. What should be clear after all these years is that a Government committee is not the right answer for many woes, let alone social media ones. And in this case, it comes with dangerous implications for free speech. It is best, therefore, that the proposal is dropped.

ONLINE GAMING: T.N. TO PROMULGATE ORDINANCE

The Tamil Nadu government on Friday constituted a committee, headed by K. Chandru, a retired judge of the Madras High Court, to examine issues related to online gaming and submit a report within two weeks. Based on it, the government would take steps to promulgate an ordinance against online gaming.

According to the terms of reference, the committee will suggest ways to identify the games that are addictive, leading to a huge financial loss and disastrous consequences, like suicide, and study whether these games really involved skill or mere tricks.

Empirical data

It would collate the empirical data on the ill-effects of online gaming such as suicides and financial loss, besides examining a ban on advertisements relating to online gaming. It would examine the feasibility of curtailing online payments for playing these games.

The committee would study the algorithm of online games to determine whether it could be tweaked to the benefit of the gaming companies and make recommendations on the proposed legislation to “rid the menace of such games”, one of the terms of reference in the government order issued by the Home Department said. It would also make suggestions on any other aspect that would help to achieve the purpose.

‘Falling into debt trap’

The meeting was held against the backdrop of some persons getting addicted to virtual games, losing money and falling into a debt trap. Some of the victims took their own lives.

An official release issued by the government said the committee would examine the adverse effect of online rummy, like financial loss and suicides, besides examining the impact of advertisements promoting online rummy on society and ways to regulate them. It would submit its report to the government in two weeks.

The government noted that the number of internet users was on the rise every other day; so were those playing online rummy. Though legislation banning online gaming was enacted by the Tamil Nadu Assembly in February last year, the Madras High Court struck it down in August last. The appeal preferred by the Tamil Nadu government in the Supreme Court in November last year has not been taken up for hearing yet. The legislation enacted by other States, including Karnataka and Kerala, was also struck down by the respective High Courts.



CHECKING CONTENT IN THE MUSIC INDUSTRY

Traditional Indian music from 'gharanas' with rich cultural traditions and values has wafted through the air from time immemorial carrying legacies of fables, legends and ballads. But today the music industry — we are specifically looking at the music emanating from Punjab — is being tested on several fronts, including crass commercialism, vulgar overtones and misogynistic lyrics.

What are the laws on music in India?

Section 294 of The Indian Penal Code, 1860, punishes singing, reciting or uttering any obscene song in or near any public place with imprisonment of three months or fine or both. Entry 60 of The Union list of the Constitution of India empowers the Central government to enact laws for sanctioning of cinematograph films for exhibition. The Censor Board, in turn classifies films for restricted or unrestricted public exhibition. Further, the Government of India, under the Union list, can enact laws for wireless, broadcasting and other like forms of communication. Besides, there are content restrictions for cable television in the Cable Network Act, 1995 and restraints for internet in Section 67 of The Information Technology Act, 2000 which prohibits publication of obscene material in electronic form. Internet content is also controlled by guidelines for internet service providers who are under an obligation to prevent any obscene, objectionable and unauthorised material over their networks.

What about the States?

Besides these laws, States too have regulations in place to keep obscene content in check. For example, the Punjab Cinemas (Regulation) Act, 1952, governs matters relating to licensing and regulation of cinemas in the territory of Punjab. The Punjab Dramatic Performances Act, 1964, provides for better control of dramatic performances in Punjab and empowers the District Magistrate to prohibit any objectionable dramatic performance in a public place. The Music in Muslim Shrines Act, 1942 was enacted to control performances by girls in Muslim shrines and barred any woman or girl to either sing or dance in a Muslim shrine. Other than this, music for society in general, is unregulated by any State enactment applicable in Punjab, primarily because it is within the domain of the Government of India to make a regulatory law applicable throughout the territory of India.

Why is there a yawning gap?

Irrespective of the matter being a central subject, Entry 33 of the State list of the Constitution of India, empowers the State government to enact laws for theatres and dramatic performances, sports, entertainment and amusement. Since sound recordings are not regulated by any central enactment like the Censor Board certification for films under the Cinematograph Act, 1952, the music industry goes unchecked as song content has no regulatory mechanism. A song which is a combination of lyrics, composition and voices of a performer recorded in a studio, the producer is its first owner under the Copyright Act, 1957. Regardless, pirated music sold at abnormally low costs rules the roost. However, offensive and vulgar lyrics do not find statutory road blocks other than Section 294 of the IPC for punishing obscene acts and songs.

What is the remedy?

Under Entry 33 of the State List of the Constitution of India, the Government of Punjab is well within its powers to consider music as a part of "entertainment" and enact a new regulatory law to curb 'vulgar' music. The Music in Muslim Shrines Act, 1942 and The Punjab Dramatic



Performances Act, 1964 are examples of Punjab legislation which can be emulated to put this proposition into practice. The need of the hour is to enact stricter legislation to keep an eye on composers and lyricists, after defining the contours of an indecent song.

FREEZE ON NEW IAS DEPUTATION RULES

As the Centre continues to face a shortage of Indian Administrative Service (IAS) and Indian Police Service (IPS) officers, a proposal mooted last December to send them and Indian Forest Service (IFoS) officers on Central deputation without necessarily taking the State governments' approval appears to have been put in cold storage.

The Department of Personnel and Training (DoPT) said in a Right to Information (RTI) response that a final view on the proposal is yet to be taken and it cannot disclose the information held in a "fiduciary relationship".

The Section, which exempts a public authority from disclosing information, states: "Information available to a person in his fiduciary relationship, unless the competent authority is satisfied that the larger public interest warrants the disclosure of such information."

Multiple issues

The proposal was moved as the Union government is facing an acute shortage of All India Services — IAS, IPS and IFoS — officers, and despite existing provisions, the States are not sponsoring an adequate number of officers for Central deputation. In many cases, the officers are not willing to serve in the Union government.

According to the DoPT, only 10% of mid-level IAS officers were posted with the Union government in 2021, a sharp fall from 19% in 2014.

On May 13, the Appointments Committee of the Cabinet approved the appointment of 23 officers of the rank of Joint Secretary in various Ministries, out of which only six were IAS officers and one belonged to the IPS. The remaining belonged to other Central services such as the Indian Audit and Accounts Service, Indian Civil Accounts Service, Indian Railway Service of Electrical Engineers, Indian Post and Telecommunication Accounts and Finance Service, and Indian Ordnance Factories Service.

Till November 2021, 20 posts in the level of Joint Secretary were vacant in the Government of India (GOI). A Joint Secretary is the third highest-ranking officer in the GoI.

In 2021, the Union Public Service Commission (UPSC) recommended 31 candidates, mainly from the private sector, for appointment as Joint Secretary, Director and Deputy Secretary in various Union Ministries under the "lateral entry" programme. The last such lateral appointments were made in 2019, when nine candidates were selected. Two resigned later.

The DoPT asked the States to respond to its proposal to amend the IAS (Cadre) Rules, 1954 first on December 20, 2021. It sent reminders on December 27 and January 6 and further revised the proposal on January 12, empowering the Union government to relieve AIS officers and depute them to its offices even if the State governments disagreed.

So far, eight States — Odisha, Meghalaya, Jharkhand, Rajasthan, West Bengal, Kerala, Tamil Nadu and Telangana — have opposed the move.

**BUSTING ILLICIT ORGAN TRADE IS IMPERATIVE. EQUALLY IMPORTANT IS CREATING AWARENESS ON DONATIONS, MAKING PROCESSES TRANSPARENT**

Last week's busting of a network of kidney traffickers in Delhi evokes a sense of déjà vu. In the last week of May, a similar racket was unearthed in Pune. The latest scam in Delhi is the third such incident in the capital in less than 15 years. Like in most such cases, the web involved doctors and other healthcare personnel, hospital administrators and donors who have fallen on bad days — they cater to patients with end-stage kidney diseases who cannot be treated with medicines or dialysis and require a transplant. Reports and surveys suggest that more than 1.5 lakh people in the country require such a procedure every year. However, the number of organ donors is a small fraction of this requirement. In Delhi, for instance, barely 10 per cent of renal failure patients manage to get a transplant. Therefore, while the cleaning up of what medical anthropologists refer to as “kidney zones” is imperative, stopping the illicit trade would require plugging the vast gap between patients' needs and the organs available for harvesting.

The Transplantation of Human Organs and Tissues Act, 2011 recognises three kinds of donations by living organ donors. Those by near-relatives (parents, siblings, and spouses), altruistic donations and swap donations when a near relative is medically incompatible with the recipient, the pair is permitted a swap transplant with another related unmatched donor-recipient pair. The black market in organ trade flourishes by disguising illegal trafficking as “altruistic donation”. That in case after case — including the latest scam in Delhi — the desperately poor are lured into selling their organs speaks of the failure of the procedures that aim to establish the donor's “altruism”. Suggestions to increase the transparency in the work of committees that scrutinise organ donations have been largely ignored by the country's medical authorities.

In recent years, the “opt out” system — it assumes all citizens to be willing organ donors after death, unless they “opt-out” of doing so — has gained currency in several Western countries. However, medical ethicists caution that such a policy may not be always sensitive to the families of the deceased, especially in countries where awareness of organ donation related issues is low. India's organ transplant law recognises cadaver donations with family approval. However, declaring a person brain-dead in time for the organs to be harvested is a complicated procedure and most hospitals in the country would be hard put to summon the expertise and facilities required for this purpose. With the number of people suffering lifestyle diseases increasing exponentially in the past two decades, addressing such challenges, in an ethical manner, cannot be postponed for too long

CHANCELLOR CONUNDRUM

The West Bengal government's decision to make the Chief Minister the Chancellor of State-run universities, instead of the Governor, appears to be an outcome of the severely strained relations between Governor Jagdeep Dhankhar and Chief Minister Mamata Banerjee. They have often differed on issues concerning the appointment of Vice-Chancellors and the functioning of universities. Mr. Dhankhar had alleged that VCs were appointed without the approval of the Chancellor, the appointing authority; on some occasions, VCs had not turned up for a meeting with the Governor-Chancellor. Friction has arisen elsewhere too. Tamil Nadu recently passed Bills to empower the State government, instead of the Chancellor, to appoint VCs. It also passed a separate Bill to establish a new university for alternative systems of medicine with the Chief Minister as its Chancellor. The Bills are yet to receive the Governor's assent. In Kerala, there is a different kind of controversy, with Governor Arif Mohammed Khan asking the Chief Minister to take over the



Chancellor's role in the light of alleged political interference in the functioning of universities. These developments underscore that the conferment of statutory roles to Governors may be a source of friction between elected regimes and Governors who are seen as agents of the Centre.

The original intent of making Governors hold the office of Chancellor and vesting some statutory powers on them was to insulate universities from political influence. Even in the 1980s, as noted by the Justice R.S. Sarkaria Commission, the use of discretion by some Governors in some university appointments had come in for criticism. It acknowledged the distinction between the Governor's constitutional role and the statutory role performed as a Chancellor, and also underlined that the Chancellor is not obliged to seek the government's advice. However, it did say there was an obvious advantage in the Governor consulting the Chief Minister or the Minister concerned. The Justice M.M. Punchhi Commission, which examined Centre-State relations decades later, was quite forthcoming in its 2010 report. Noting that the Governor should not be "burdened with positions and powers... which may expose the office to controversies or public criticism", it advised against conferring statutory powers on the Governor. It felt that the practice of making the Governor the Chancellor of universities ceased to have relevance. Quite presciently, it took note of the potential for friction: "... Ministers will naturally be interested in regulating university education, and there is no need to perpetuate a situation where there would be a clash of functions and powers." The time may have come for all States to reconsider having the Governor as the Chancellor. However, they should also find alternative means of protecting university autonomy so that ruling parties do not exercise undue influence on the functioning of universities.

PM MODI LAUNCHES NEW SERIES OF COINS, PORTAL FOR CREDIT-LINKED GOVT SCHEMES

Launching Jan Samarth, a portal connecting 13 credit-linked government schemes, Prime Minister Narendra Modi on Monday said it is necessary to focus on making domestic banks and currency an important part of the international supply chain and trade.

Inaugurating the week-long events by the Ministry of Finance and Corporate Affairs as part of 'Azadi Ka Amrit Mahotsav', from June 6-11, PM Modi also released a special series of Re 1, Rs 2, 5, 10 and 20 coins, which will have the 'Azadi Ka Amrit Mahotsav' design but are not commemorative coins and will be part of the circulation. "These new series of coins will remind people of the goal of 'amrit kal' and motivate people to work towards the development of the country," Modi said.

PM Modi said India has developed various financial inclusion platforms and there is a need to create awareness about them for their optimum utilisation. There should be an effort to extend these financial inclusion solutions globally, he said.

The Jan Samarth portal will be an 'end-to-end delivery platform' and more people will come forward to avail loans because of the ease of compliance, he said.

On the sidelines of the launch event, Bank of India MD A K Das said that this portal will help reduce turnaround time and facilitate faster sanction of loans to beneficiaries. More schemes can be

The GeM portal has brought in new ease for procurement in government and made selling to the government very easy, he said. The purchase figure for the GeM portal has crossed 1 lakh crore, Modi informed. He said India has 70,000 startups and every day a dozen new startups are coming up.



ACTION ON CYCLIST'S HARASSMENT COMPLAINT IS AN ENCOURAGING SIGN. OVERLOOKING ABUSIVE BEHAVIOUR CAN DEVASTATE THOSE PREYED UPON

Within days of a top woman cyclist accusing the national sprint team chief coach R K Sharma of “inappropriate behaviour”, the Sports Authority of India (SAI) swung into action and terminated his contract, noting that “prima facie, the case is established and the allegations of the athlete are found to be true”. The swift action on the cyclist’s complaint is a welcome departure from how similar cases have been dealt with in the past: In 2020, an investigation by this newspaper had found that over a 10-year period, there were 45 complaints of sexual harassment at the SAI — 29 against coaches — which had resulted in five coaches being penalised with pay reduction, the contracts of two being terminated and the suspension of one. Many of the accused were simply transferred or penalised with a small cut in pension and, in several cases, even as enquiries dragged on, the coaches were allowed to continue working with young sportspersons.

This most recent case is a grim reminder of how vulnerable India’s young athletes remain to predators — many of whom are trainers, physiotherapists etc. with whom they work in close physical proximity, often travelling and sharing hotel rooms with them. There is a dreary familiarity to the sordid episode: The cyclist, who was part of a team that travelled to Slovenia to train for the Asian Championship, has alleged that Sharma forced himself into her room, offered her a “post-training massage”, asked her to sleep with him and said he wanted her to “be his wife”. Any resistance, he allegedly warned her, would mean the end of her career. Similar tactics of intimidation were alleged to have been used by P Nagarajan to silence many young women athletes, who had accused the Chennai-based athletics coach last year of preying on them under the guise of holding training sessions. The harrowing details recounted by Nagarajan’s accusers — of relentless mental and emotional pressure, nervous breakdowns and anxiety — find an echo in the cyclist’s account.

Overlooking abusive behaviour can, as in the Larry Nassar episode in US gymnastics — where investigation into the hundreds of complaints of sexual abuse was botched, with over 90 survivors now suing the FBI — take a devastating toll on the mental, emotional and physical wellbeing of those who are preyed on. The revelations of sexual abuse in India’s sporting centres should also spur all stakeholders to come together and formulate better ways to protect athletes, many of whom are minors. The immediate response to the cyclist’s complaint and her removal to safety, and the fact that Sharma was punished are encouraging signs.

RUSSIA DELIVERS MORE EFFICIENT NUCLEAR FUEL FOR KUDANKULAM

Rosatom State Corporation of Russia has supplied the first batches of more reliable and cost-efficient nuclear fuel over the existing one, the TVS-2M nuclear fuel, to India for the Units 1 and 2 of Kudankulam Nuclear Power Plant (KNPP), the company said in a statement on Friday.

Once the new TVS-2 M fuel is used in the next refuelling, the reactor will start operations with an 18-month fuel cycle. It means the reactor, which has to be stopped for every 12 months for removing the spent fuel and inserting the fresh fuel bundles and allied maintenance, will have to be stopped for every 18 months.

Compared to the current fuel model, the TVS-2M fuel assemblies have a number of advantages making them more reliable and cost-efficient, according to Rosatom. Firstly, it is the rigidity of a bundle. Because of the welded frame, the fuel assemblies in the reactor core retain their geometry.



The spacer grids protect the fuel rod cladding from fretting wear and the additional spacer grid makes the fuel assemblies more vibration-resistant.

Secondly, the new fuel has increased uranium capacity — one TVS-2M assembly contains 7.6% more fuel material as compared to the earlier fuel bundles. In addition, the special feature of the Kudankulam fuel in particular is the new generation anti-debris filter protecting bundles from debris damage, which may be caused by small-sized objects in the reactor core, the statement explained.

Operation in longer fuel cycles also enhances the economic efficiency of a plant: As reactors have to undergo stoppage and refueling less frequently, the power units can produce more electricity. Besides, the plant needs to buy less fuel, and as the result, has to deal with smaller amounts of spent fuel.

Russia is building the KNPP under an Inter-Governmental Agreement (IGA) of 1988 and follow on agreements in 1998 and 2008. The first stage, consisting of power units No. 1 and No. 2, was commissioned in 2013 and 2017, respectively. Power units No. 3, 4 and No. 5, 6 are currently under construction.

THE STATUS OF EVTOL: A SOON TO BE REALITY?

The story so far: The Union Civil Aviation Minister, Jyotiraditya Scindia, has said that the Government of India is exploring the possibility of inviting manufacturers of Electric Vertical Take off and Landing (eVTOL) aircraft to set up base in India. The Minister had been on a visit to the U.S. and Canada in April and in his interactions with key players in the industry, it was said that several eVTOL players were 'keen on setting up production centres' in the country. In late May, while speaking at "India@2047", which was part of the seventh edition of the India Ideas Conclave in Bengaluru, the Minister also said that India is in 'conversation' with a number of eVTOL producers — the implication being a futuristic vision for India.

What is eVTOL?

As the acronym suggests, an electric vertical take-off and landing (eVTOL) aircraft is one that uses electric power to hover, take off, and land vertically. Most eVTOLs also use what is called as distributed electric propulsion technology which means integrating a complex propulsion system with the airframe. There are multiple motors for various functions; to increase efficiency; and to also ensure safety. This is technology that has grown on account of successes in electric propulsion based on progress in motor, battery, fuel cell and electronic controller technologies and also fuelled by the need for new vehicle technology that ensures urban air mobility (UAM). Thus, eVTOL is one of the newer technologies and developments in the aerospace industry.

NEXT-GENERATION CORVETTES, AND THE COMBAT EDGE NAVY SEEKS THROUGH THEM

The Defence Acquisition Council (DAC) has given the Acceptance of Necessity (AoN) for several capital acquisition projects of the Indian defence forces. This includes the procurement of next-generation Corvettes for the Indian Navy at an approximate cost of Rs 36,000 crore. A look at the features of these naval vessels and their efficacy in the modern naval battlefield.



What is a Corvette?

A Corvette is the smallest class of naval ships and it falls below the warship class of a frigate. These are highly agile ships and are categorised as missile boats, anti-submarine ships, coastal patrol crafts and fast attack naval vessels. The word corvette itself is derived from French and Dutch origin. Corvettes date back to the 18th and the 19th century when they were extensively used in the naval warfare duels that were fought at high seas. However, these were powered by sails and masts, and disappeared for a while when steam powered naval ships made their appearance. During World War II, the term Corvette was used to describe vessels which had anti-submarine roles assigned to them. Modern Corvettes can go up to 2,000 tons in displacement which helps in keeping them agile.

What kind of Corvettes does the Indian Navy possess?

The Indian Navy at present has the Kamorta Class Corvettes, which are also known as Project 28. These ships have an anti-submarine role and are manufactured at Garden Reach Shipbuilders and Engineers in Kolkata. The four Kamorta Class Corvettes that the Indian Navy possesses are named INS Kamorta, INS Kadmatt, INS Kiltan and INS Kavaratti. The first of these was commissioned in 2014 and the last one in 2020.

What new capabilities will the new generation Corvettes have?

The next-generation Corvettes will be manufactured for various roles like surveillance missions, escort operations, deterrence, surface action group operations, search and attack and coastal defence. It is worth noting that these roles will be in addition to the anti-submarine roles being already performed by the existing Corvettes in the Navy.

As per the AoN accorded by the DAC, these next-generation generation Corvettes will be constructed based on new in-house design of the Indian Navy using latest technology of ship buildings and would contribute to further the government's initiative of Security and Growth for all in the region (SAGAR).

The in-service Kamorta Class Corvettes also have a high degree of indigenous equipment being used on the platform. This includes Bharat Electronic Limited (BEL) manufactured 'Shikari' sensor and processing system and Bomber and Electronic Warfare Suits also manufactured by BEL and named 'Ajanta'. These vessels also have the 'Sanket' electronic warfare systems and 'Kavach' decoy launchers.

WHAT 46-KM FLIGHT IN GUJARAT COULD MEAN FOR FUTURE OF DRONE DELIVERY

In what potentially lays the ground for postal delivery by drones, Gurugram-based drone startup TechEagle delivered a parcel this week in Gujarat under a pilot project in collaboration with India post.

DELIVERY & PURPOSE: The drone flight delivered a parcel in the Kutch region of Gujarat, travelling a distance of 46 km in less than 30 minutes. In a statement, TechEagle said that this was five times faster than the speed of surface transportation. Notably, the drone delivery was among the longest single delivery flights made by a drone in the country. It travelled when the wind speed was up to 30 kph.



Last month, the company launched a hybrid-electric vertical take-off and landing (VTOL) drone called 'VertiplaneX3' with a payload capacity of 3 kg, a range of 100 km and a top speed of 120 kph. The VTOL drone has the capability to take off and land vertically like a helicopter from a small area of 5mx5m.

Anshu Abhishek, co-founder-COO at TechEagle, said the project was aimed at enabling faster deliveries across the country, be it in urban cities or any rural village. "The learnings from the project would help stakeholders to scale up and commercialise the drone delivery of mail across the country," he said.

OTHER TRIALS: Bengaluru-based logistics and delivery platform Swiggy last month began deployment of drones on a trial basis to make deliveries from its grocery service Instamart. For these trials, which are being conducted in two phases, the company has roped in four 'drone-as-a-service' operators, of which TechEagle is one.

Several other drone operators have partnered with state governments and other authorities to conduct trials of vaccines and healthcare supplies deliveries through drones. Logistics services company Delhivery in December announced the acquisition of California-based Transition Robotics, which develops drone platforms.

Globally, internet giant Alphabet's drone delivery unit Wing recently delivered its first consignment in a major US metropolitan area by supplying boxes of medicines from Walgreens in Dallas, Texas.

NHAI'S ROAD-LAYING FEAT ENTERS GUINNESS

The National Highway Authority of India has entered the Guinness World Records for the longest continuously laid bituminous lane of 75 km in 105 hours and 33 minutes on the National Highway between Amravati and Akola districts in Maharashtra.

Mentioning the record, Union Road Transport and Highways Minister Nitin Gadkari on Wednesday said the project was implemented by 720 workers, including a team of independent consultants, who worked day and night. The total length of the 75 km of single lane continuous bituminous concrete road is equivalent to 37.5 km of a two-lane paved shoulder road and the work started at 7.27 a.m. on June 3 and was completed at 5 p.m. on June 7, the Minister said in a video message.

The previous Guinness World Record for the longest continuously laid bituminous was for building 25.275 km of road that was achieved in Doha, Qatar, in February 2019 and that task was completed in 10 days, Mr. Gadkari said.

KOLKATA, CENTURIES BEFORE JOB CHARNOCK: WHAT NEWLY EXCAVATED FINDS TELL US

Recent archaeological excavations in Dum Dum, some of them dating back as far as the first century CE, have provided further evidence of human habitation in Kolkata from centuries before the time British administrator Job Charnock was said to have founded the city. The excavations were carried out by the Kolkata Circle of the Archaeological Survey of India (ASI) at a mound outside Clive House in March-April.



Documented history

Charnock, who worked for the East India Company, has historically been credited with founding the city in 1690 when the Company was consolidating its trade business in Bengal. Calcutta comprised Kalikata, Gobindapur and Sutanuti villages, which the British bought from local landlords. Between the 14th and 16th centuries, the area was under the rule of the Bengal Sultanate of the Mughals.

The view about Charnock being the founder was challenged, and in 2003, Calcutta High Court declared that Charnock ought not to be regarded as the founder. It ordered the government to purge his name from all textbooks and official documents containing the history of the city's founding.

Based on a report from an academic committee, the court found that a "highly civilised society" and "an important trading centre" had existed on the site long before Charnock established his settlement. The committee found that a place called Kalikatah was an important religious centre adjacent to Kalighat village with its Kali temple. The site is mentioned in Bipradas Pipilai's Manasa Mangala (1495) and Abul Fazl's Ain-I-Akbari (1596). In 1608, Emperor Jehangir granted the jagirdari of Kalikatah to a zamindar family, known as the Sabarna Roy Choudhury family.

What's been excavated

The new finds include 12 cultural layers of habitations over virgin soil, various types of potteries belonging to various periods (Gupta, post-Gupta, Kushan, Islamic, early mediaeval, mediaeval); coins including some with punch marks and some of copper; broken parts of terracotta figurines; copper antiquities such as hairpin and iron nail; fish hooks, stone beads etc. Soil samples, charcoal and pottery have been sent for scientific dating, and a report will arrive in 6 to 8 months.

"There is definitely a history of this place which predates the colonial era," said Subha Majumdar, Superintending Archaeologist, ASI Kolkata Circle, who is heading the excavation. "Even before the zamindari of Sabarna Roy Choudhury and others, the place had settlements. After preliminary examination of the findings, we can say that there was human settlement in this area dating back to first and second centuries CE. Once we get the report, we will be able to say clearly when the first settlement took place," Majumdar said.

Why Clive House

Majumdar said Clive House and the mound outside were selected for excavation for the site's historical significance.

In 2001, an excavation by the ASI at Clive House had found some evidence indicating that the city could have had a history predating the colonial era. Those finds, however, were not scientifically dated. "In 2019, further excavation began. However, the work was suspended due to the pandemic. In March-April, the work resumed," Majumdar said.

Clive House, which itself stands on a mound, is one of the oldest buildings in Kolkata. Some portions of it have been encroached. It is named after Robert Clive, the first British Governor of Bengal Presidency, who used it as a country house. Details are vague as to who built it and when: Some records mention a treaty between Nawab Siraj ud-Daulah and Robert Clive in this building on February 6 or 9, 1757.



It is close to a site called Chandraketugarh, where excavations in the 1950s and 1960s revealed an almost continuous sequence of habitations from six periods from the pre-Mauryan to the Pala periods. "The house was built at a strategic position given it stood en route to Chandraketugarh which once thrived with settlements. And the house was on a mound, which provided a strategic view of the area. After moving in, Clive modified the building," Majumdar said.

THE SANT TUKARAM TEMPLE AND ITS SIGNIFICANCE

On Tuesday, Prime Minister Narendra Modi will inaugurate the Sant Tukaram Shila Mandir in the temple town of Dehu in Pune district. Shila refers to a rock that is currently on the Dehu Sansthan temple premises, and that for centuries has been the starting point of Wari, the annual pilgrimage to Pandharpur.

The Shila Mandir

The Bhakti saint Sant Tukaram had sat on this piece of rock for 13 continuous days when challenged about the authenticity of the Abhyangs he had written. Nitin Maharaj More, president of the Jagatguru Sant Tukaram Maharaj Sansthan Dehu, said that prior to this, the saint had immersed his entire work in the Indrayani river; the work miraculously reappeared after 13 days, proving their authenticity. "The very rock where Sant Tukaram Maharaj sat for 13 days is pious and a place of pilgrimage for the Warkari sect," More said.

On the Dehu Sansthan temple premises, the rock used to be covered by a silver cast with an image of Sant Tukaram, and devotees would pay obeisance. In 2008, the silver mask was stolen, and found on the banks of the Indrayani after a few days. The Sansthan decided to replace the silver covering with an image of Sant Tukaram Maharaj on the Shila, with a temple housing both. "This is the temple the Prime Minister will inaugurate on Tuesday," he said.

The Warkari sect

Sant Tukaram and his work are central to the Warkari sect spread across Maharashtra. His message about a casteless society and his denial of rituals had led to a social movement. Sant Tukaram is credited with starting the Wari pilgrimage.

The Wari sees lakhs of devotees congregating in the temple towns of Dehu and Alandi to accompany the padukas of Sant Tukaram and Sant Dyaneshwar respectively as they start for Pandharpur. Participants finish their sowing before they set off. The pilgrims reach Pandharpur on the day of Ekadashi with the Chief Minister performing the mahapuja.

The pilgrimage is being resumed after a gap of two years.

Significance of visit

This will be Modi's first visit to the temple. Traditionally, the Warkari sect has been courted by all political parties. Various influential leaders of the sect had taken a stance on various issues but steered away from politics directly. Former President Prathibha Patil had visited the temple in 2009, and Modi would be the first PM to visit the temple in the current years.

Modi's visit comes ahead of elections to various local bodies this year. Ever since the NCP-Shiv-Sena came to power, the BJP has been trying to get back. Of the three bypolls held since 2019, BJP has won just one while the ruling alliance have won two.



A MELANCHOLY MUSIC

The santoor is in mourning. Within the space of a month, the 100-stringed instrument from Kashmir has lost two of its finest practitioners. Just three weeks after Shiv Kumar Sharma passed away in Mumbai, Bhajan Sopori died in a Gurugram hospital on Thursday. Both had left the Valley to pursue their art in less cool climes. But in the cities they lived and performed in, their santoor brought alive a piece of the Valley.

Sopori was born into a family of musicians. His grandfather Pandit Samsar Chand Sopori and father, Pandit Shamboo Nath Sopori were greatly respected musicians in Jammu and Kashmir and they initiated young Sopori into the world of music. Their music represented the composite Shaivite-Sufi tradition of the Valley. The santoor, a musical instrument distinct to Kashmir, has been an essential feature of the Valley's folk and devotional music. Bhajan Sopori reinvented it for the Hindustani concert platform, combining aspects of Sufiyana mausiqui and the classical raga system. He was helped by the fact that Sharma had prepared the ground for the santoor to be accepted as an instrument in its own right for the classical concert stage. Together, they raised the profile of the santoor, and found an inventive playing style which allowed the exploration of Hindustani ragas. Their work is comparable to the effort of Baluswamy Dikshitar, who in the 19th century adapted the violin, then seen as an exclusively western instrument, for Carnatic music, first as an accompanying instrument and then for solo concerts.

Sopori, who worked with All India Radio, was forced to shift out of Kashmir when violence engulfed the Valley in the '90s. Kashmir became a memory that found its voice in his music. His santoor was a raga in which listeners heard the gurgle of mountain streams, experienced the quiet of mountain peaks, and sensed the deep blue of the lakes.

HISTORY AND SIGNIFICANCE OF MELA KHEERBHAWANI FOR KASHMIRI PANDITS, BEING HELD TODAY

On Wednesday (June 8), Kashmiri Hindus, locally known as Pandits, will celebrate the Zyestha Ashtami at the Mata Kheerbhawani temple at Tulmulla in central Kashmir's Ganderbal. The temple is dedicated to the goddess Ragnya Devi. Situated 30 km from Srinagar city, it is one of the most sacred pilgrimage sites for Kashmiri Hindus. The temple gets its name from kheer, or milk and rice pudding, that pilgrims pour into the spring inside the temple complex as an offering to the goddess.

Legend has it that the water of the temple's spring changes colour from white to red and black. The colour of the water is said to predict the impending future. If it changes to black, it is seen as inauspicious or an impending disaster. Kashmiri Pandits say that the water had turned black before they were forced to flee Kashmir during the militancy of 1990.

Every year, a mela or festival is held at the temple. The festival, known as Mela Kheerbhawani, is the largest gathering of Hindus in Kashmir after the annual Amarnath Yatra. While only a handful of devotees visited the temple in the 1990s, the festival was revived over a decade ago when large numbers of Kashmiri Hindu pilgrims resumed visits to the temple on Zyestha Ashtami from Jammu and New Delhi as well. In 2018, the then PDP-BJP government facilitated the annual festival by providing free transportation to the pilgrims living in Jammu and Delhi. Sevaks at the temple say that over 10,000 pilgrims visited the temple during the festival.

Hundreds of local Muslims, too, traditionally join the celebrations.



Over the last two years, gatherings at the temple during the annual festival were limited because of the pandemic. While the pandemic is over, this year's festival would be celebrated under the shadow of fear because of the recent targeted killing of Kashmiri Pandits in the Valley.

AN OCEAN IN THE SKY

The fossil beds of the Zeewan-Khonmoh belt were formed when Kashmir was still submerged under the Tethys Sea. The Guryul ravines possess geological records of the Permian period, millions of years before dinosaurs roamed the planet. The site also bears evidence of the Permian-Triassic extinction event, also known as the Great Dying, which took place around 252 million years ago, and wiped out 70% to 90% of flora and fauna. When the Indian plate started drifting northward, towards the Eurasian plate, and created the Himalayas, the water drained off the rising land and exposed the aquatic life. More recent research suggests that this mass extinction was because of global warming, which left ocean life without oxygen and unable to breathe. G.M. Bhat, from the Department of Geology, Jammu University, says that although ocean anoxia (absence of oxygen) has long been believed to be a direct mechanism that caused the mortality of organisms, little has been published on the extent and timing of this anoxia in Gondwana, a supercontinent that began to break up during the Jurassic period.

Butt has been visiting the place for years to make sure locals and authorities understand its significance. In fact, he saw the richness of the area waning when the entire Khonmoh area was opened up for quarrying by the government in the late 90s. Except for nature lovers, no one would walk around in the dusty area that buzzes with trucks entering and leaving with stones of different shapes and sizes.

Specimens from the Triassic Age here were first documented by Sir Walter Lawrence, an Indian Civil Service in the late 1800s. Ever since, the place remained of great interest for geologists around the globe; but that was not the case with State authorities who allowed cement factories in and around the area.

Treasures from the past

But now, the ball has been set rolling to turn this site into a fossil park. The Environmental Policy Group (EPG), an umbrella group of environmentalists and civil society members, are trying to save whatever remains of these treasures from the past. An MoU was signed in 2018 between the Penn Dixie Fossil Park in the U.S. and EPG to support the setting up of a fossil park.

But it's not an easy dream to realise with rampant illegal mining in Khonmoh. The ongoing political turmoil in the region and unabated mining has threatened this scientific heritage. The researchers who recently surveyed the area warned that Kashmir's expanding cement industry in the last two decades has crushed fossils to cement.

Change is in the air

However, there could be a ray of hope. Funds have been earmarked for the development of the fossil park by the Srinagar Smart City Ltd and the Department of Tourism.

Finally, students, tourists and geology enthusiasts will get access to the remnants of a geological event, a devastating and enormous mass extinction.



RHINO REINTRODUCTION A HIT IN ASSAM RESERVE

The one-horned rhinos of western Assam's Manas National Park, bordering Bhutan, are expected to have high life expectancy and significant growth in population, the 14th Assam rhino estimation census has revealed.

But on the flip side, the 500-sq.-km park does not have "a wider representation of calves and sub-adults" to sustain the population structure unless it is supplemented through conservation translocations.

Manas, a UNESCO World Heritage Site and a tiger reserve, had about 100 resident rhinos prior to 1990, but a prolonged ethno-political conflict thereafter took a heavy toll with extremist groups known to have traded the horns of the herbivores for weapons.

A rhino reintroduction programme under the Indian Rhino Vision 2020 was started in 2006. This entailed the translocation of rhinos from Kaziranga National Park and Pobitora Wildlife Sanctuary besides orphans hand-reared at the Centre for Wildlife Rehabilitation and Conservation at Kaziranga. The current rhino population in the park was estimated at 40 after the census on April 1 and 2.

A detailed census report by Vaibhav C. Mathur, the field director of Manas, said the park's rhinos have a male-female sex ratio of 1:1, arrived at without considering 10 calves and five sub-adults. But such a population may suffer losses if not supplemented through translocations, the report warned. "A suitable strategy to bring in more rhinos from other rhino-bearing areas is required so as to have a wider representation of calves and sub-adults over time," the census report said.

Speed limit

Meanwhile, the Kaziranga National Park authorities have restricted the speed of vehicles on the highway adjoining the park to 40 km per hour. This is an annual step taken to prevent vehicles from hitting animals that move out of the park during floods.

Officials said six sensor-based cameras have been installed at nine designated animal corridors of the park to measure the speed of vehicles and impose fines on those who violate the order.

The cameras are equipped with automatic number plate recognising system with radar for determining speed, a divisional forest officer said.

As per the orders of the National Green Tribunal, owners of vehicles that do not adhere to the speed limit will be penalised.

70 YRS AFTER EXTINCTION IN INDIA, 1ST BATCH OF CHEETAHS SET TO ARRIVE FROM AFRICA IN AUGUST

In a first, a batch of cheetahs will be translocated from South Africa to India in August this year after delays caused due to the Covid pandemic, Ministry officials announced on Tuesday.

Declared extinct 70 years ago, the first batch of five-six Cheetahs will be translocated from South Africa to Kuno National Park in Madhya Pradesh. This is the first time that a trans-continental shifting of a large carnivore will take place.



“All the modalities for bringing the Cheetah have been completed and the agreement with South Africa is in place. Now the final clearance from Ministry of External Affairs is awaited. One of our teams is currently in South Africa,” said a senior official in the Environment Ministry on Tuesday.

A team of experts from South Africa will arrive in India on June 15th, and visit the park to oversee the arrangements for the translocation.

The Ministry is coordinating with the National Tiger Conservation Authority (NTCA) as well as the Wildlife Institute of India, which has been spearheading the project on behalf of the Indian government.

The Cheetah is believed to have disappeared from the Indian landscape when the Maharaja Ramanuj Pratap Singh Deo of Koriya is believed to have hunted and shot the last three recorded Asiatic cheetahs in India in 1947. In 1952, the Indian Government declared the Cheetah extinct in the country.

The only large carnivore till date to have gone extinct in the country, due to a combination of hunting and loss of habitat, the plan to reintroduce the Cheetah in the country has been afoot for decades.

While plans to reintroduce the Cheetah to India have been afoot for decades, the current proposal was first floated in 2009. The plan was cleared by the Supreme Court in 2020. Of the six sites – Mukundara Hills Tiger Reserve and Shergarh Wildlife Sanctuary in Rajasthan and, Gandhi Sagar Wildlife Sanctuary, Kuno National Park, Madhav National Park and Nauradehi Wildlife Sanctuary in Madhya Pradesh – which had been previously assessed in 2010, were re-assessed by WII, out of which Kuno was found to be ready for the Cheetah relocation.

WII experts have said that over the coming decades, 35-40 Cheetahs are likely to be translocated to sites across the country, once the first batch of African Cheetahs are able to acclimatise to Indian conditions.

TAMIL NADU SCULPTURES RECOVERED FROM AUSTRALIA, US

Ten antiquities (sculptures) retrieved from Australia and the United States were handed over to the Government of Tamil Nadu in Delhi last week. Union Culture Minister G Kishan Reddy said at the event, “Bringing Our Gods Home is an initiative by the government that is rooted in preserving, promoting and propagating our heritage”. He said only 13 antiquities had been brought back to India between Independence and 2013, compared to 228 antiquities since 2014.

Some of the returned antiquities, and how they had gone missing:

Dvarapala: Retrieved in 2020 from Australia, this stone sculpture belongs to the Vijayanagar dynasty dating to the 15th-16th century. He is holding a gada in one hand and has another leg raised up to the level of his knee. The sculpture was burgled from Moondreeswaramudayar Temple, Tirunelveli in 1994.

Nataraja: Retrieved in 2021 from the US, this image of Nataraja, a depiction of Shiva, in his divine cosmic dance form, is in tribhanga posture, standing on the lotus pedestal. It is dateable to the 11th-12th century. Possibly, ananda tandava or the Dance of Bliss is portrayed here. The sculpture was burgled from the strong room of Punnainallur Arulmigu Mariyamman Temple, Thanjavur, in 2018.



Kankalamurti: Retrieved in 2021 from the US, Kankalamurti is depicted as a fearsome aspect of Lord Shiva and Bhairava. The sculpture is four-armed, holding ayudhas such as damaru and trishula in the upper hands and a bowl and a trefoil shaped object, as a treat for the playful fawn, in the lower right hand. The idol is dateable to the 12th-13th century, and was stolen from Narasinganadhar Swamy Temple, Tirunelveli in 1985.

Nandikeshvara: Retrieved in 2021 from the US, this bronze image of Nandikeshvara, dateable to the 13th century, is shown standing in tribhanga posture with folded arms, holding an axe and a fawn in the upper arms, with his forearms in namaskara mudra. This sculpture was stolen from Narasinganadhar Swamy Temple, Tirunelveli, in 1985.

Four-armed Vishnu: Retrieved in 2021 from the US, dateable to the 11th century, and belonging to the later Chola period. The sculpture has Lord Vishnu standing on a padma pedestal holding attributes such as shankha and chakra in two hands; while the lower right hand is in abhaya mudra. It was stolen from Arulmigu Varadharaja Perumal Temple, Ariyalur, in 2008.

Goddess Parvati: Retrieved in 2021 from the US, the image depicts a Chola-period sculpture dateable to the 11th century. She is shown holding a lotus in the left hand whereas the right is hanging down near her kati. This sculpture was also stolen from Arulmigu Varadharaja Perumal Temple, Ariyalur in 2008.

Standing child Sambandar: Retrieved in 2022 from Australia. Sambandar, the popular 7th-century child saint, is one of the Muvar, the three principal saints of South India. The sculpture is dateable to the 11th century. The legend goes that after receiving a bowl of milk from Goddess Uma, the infant Sambandar devoted his life to composing hymns in praise of Lord Shiva. The sculpture displays the saint's childlike quality, while also empowering him with the maturity and authority of a spiritual leader. It was stolen from Sayavaneeswarar Temple, Nagapattinam, between 1965 and 1975.

WORLD'S FIRST FISHING CAT CENSUS DONE IN CHILIKA

The Chilika Lake, Asia's largest brackish water lagoon, has 176 fishing cats, according to a census done by the Chilika Development Authority (CDA) in collaboration with the Fishing Cat Project (TFCP).

This is the world's first population estimation of the fishing cat done outside the protected area network.

According to the CDA, phase 1 of the estimation was conducted in 2021 in the 115 sq.km marshland in the north and north-eastern section of Chilika and its surrounding areas. Phase 2 was conducted in 2022 in the Parikud side along the coastal islands of Chilika.

A total of 150 camera traps were deployed in two phases with each fixed in the field for 30 days. Spatially explicit capture recapture method was used to analyse the data, the CDA said in a statement.

The CDA said the globally threatened cats are found in wetlands in major South and Southeast Asian river basins starting from the Indus in Pakistan till the Mekong in Vietnam and in Sri Lanka and Java. They are found in 10 Asian countries but have stayed undetected in Vietnam and Java since the last decade or so. "Wetlands in Asia are being lost at alarmingly rapid rates and proper data on their current status or even baseline data are missing. The status of many wetland species



remains understudied and highly threatened. Tracking specialist species such as the fishing cat gives us an indication of what might be happening to these ecosystems, which are safeguards against climate change and droughts,” said Tiasa Adhya, the co-founder of TFCP.

AS MITHALI RAJ RETIRES FROM CRICKET, IT'S A MOMENT TO ACKNOWLEDGE A TRUE GREAT OF THE GAME

A career almost as long as that of Sachin Tendulkar, a body of work that puts her among the finest ever in women's cricket, one-day international batting average and captaincy numbers that match those of MS Dhoni — Mithali Raj, who bids farewell to her playing days, was the first superstar of Indian women's cricket. She was the single most transformative figure in women's cricket in her country. She broke barriers and boundaries and changed perceptions. The force of her personality, the gift of her stroke-making and the dint of her leadership influenced the coming of age narrative of Indian women's cricket, uplifted them from outsiders to genuine title contenders, and injected them with self-belief. Any summation of her career should comprise three parts. Mithali as a trailblazer of women's cricket, as a world-conquering batter and as a World Cup captain.

She leaves the stage as the highest run-getter in the 50-over format in the world — 7,805 runs at an average of 50.68 in 211 innings. No one has come in the vicinity of her tally of 50-plus scores — 71 (64 half-centuries and 7 centuries). She straddled formats with ease, accumulating 699 runs in 19 Test innings including a double hundred and 2,364 T20 runs at 37.52 per knock. She mastered conditions, prospering in as contrasting climes as dewy Milton Keynes to sun-baked Karachi. Most of those victories came under her captaincy too — she captained 155 times and won 89 games, an unsurpassed feat in world cricket. She steered India to their maiden — and so far only — World Cup triumph in 2017, though her team lost in the finals of the T20 World Cup in 2020.

In so many respects, her career was Tendulkar-like. Both played for more than two decades, both racked up records that will take gifted players to break. Mithali's last days in cricket were controversy-laden too, the coach-feud saga raged on, there were rumoured rifts in the team. But none of these should come in the way of Mithali being considered as a true great of not just women's cricket, but cricket.

DreamIAS



BUSINESS & ECONOMICS

EUROPEAN UNION'S COMMON CHARGING PORT NORMS, AND WHY IT COULD HIT APPLE

European Union lawmakers have reached a provisional agreement to mandate mobile device makers include a standard USB-C charging port for devices sold in the region starting autumn 2024.

On Tuesday, the European Parliament announced that it reached a deal that would amend the Radio Equipment Directive and compel manufacturers to adopt the USB-C as the common charging port for a variety of devices, such as smartphones, tablets, and cameras.

What had the European Commission proposed?

In October last year, the European Commission had proposed USB-C as a common charging port to allow consumers to charge their devices with the same USB-C charger, regardless of the device brand.

It also proposed unbundling the sale of chargers from the sale of electronic devices to limit the number of “unwanted chargers” purchased or left unused. The proposal, however, only covers wired chargers and excludes wireless charging from its ambit, meaning that only if a device uses a cable to be charged will it need to have a USB-C port. In case the device is only to be charged wirelessly, there is no compulsion to have a USB-C port in the device.

Why was this proposal made?

The European Commission had said earlier that on average, consumers in the EU own around three mobile phone chargers, of which they use two on a regular basis. Despite this, 38 per cent of consumers reported having experienced problems at least once. They said they could not charge their mobile phones because the available chargers were incompatible.

The Commission added that consumers spend approximately €2.4 billion annually on standalone chargers that do not come with electronic devices.

In addition, disposed of and unused chargers are estimated to pile up to 11,000 tonnes of e-waste every year.

What could be the impact of the new rules?

Most prominently, the new rules would force iPhone maker Apple to introduce USB-C ports on its devices. Given the value that Apple derives from uniformity in its production lines for markets across the globe, this could potentially result in Apple devices being changed for other jurisdictions as well.

It is noteworthy, though, that over the years Apple itself has been moving away from the Lightning cable. It has already introduced MacBooks and iPads that use USB-C charging ports.

Also, it is rumoured that Apple has been working on a port-less iPhone that would be exclusively charged using a wireless charger.



When would the rules become applicable?

According to Gizmodo, the new requirements will apply to only those products that are released after the law becomes applicable.

Manufacturers will be given a grace period of 24 months after the law is published in the EU Official Journal.

The European Parliament and Council are expected to formally approve the agreement after the summer recess.

Gizmodo also reported that the common charger requirement will also apply to laptops, but manufacturers will be given 40 months to adapt their devices to the new standards.

THE INDIAN PATENT REGIME AND ITS CLASH WITH THE U.S. NORMS

The story so far: The U.S. Trade Representative (USTR) said in a report released last month that India was one of the most challenging major economies as far as IP protection and enforcement is concerned. It has decided to retain India on its Priority Watch List along with six other countries—Argentina, Chile, China, Indonesia, Russia and Venezuela. Among the issues raised in the report are India's inconsistencies regarding patent protection, including concerns about what can be patented, waiting time for obtaining patents, burdensome reporting requirements, and doubts about data safety. India had undertaken an intellectual property review exercise last year, where a Parliamentary Standing Committee examined this subject.

The Indian patent regime

A patent is an exclusive set of rights granted for an invention, which may be a product or process that provides a new way of doing something or offers a new technical solution to a problem. Indian patents are governed by the Indian Patent Act of 1970.

India has gradually aligned itself with international regimes pertaining to intellectual property rights. It became a party to the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement following its membership to the World Trade Organisation on January 1, 1995.

India is also a signatory to several IPR related conventions, including the Berne Convention, which governs copyright, the Budapest Treaty, the Paris Convention for the Protection of Industrial Property, and the Patent Cooperation Treaty (PCT), all of which govern various patent-related matters.

An interesting point is that the original Indian Patents Act did not grant patent protection to pharmaceutical products to ensure that medicines were available at a low price. Patent protection of pharmaceuticals were re-introduced after the 2005 amendment to comply with TRIPS.

Last month, the U.S. released its yearly Special 301 report, its annual review highlighting the state of intellectual property rights protection in different countries which are its trading partners around the world.

In its India section, the report highlighted a range of issues in domains ranging from copyright and piracy to trademark counterfeiting and trade secrets, saying that India "remained one of the world's most challenging major economies with respect to protection and enforcement of IP."



It said patent issues continued “to be of particular concern in India,” highlighting the threat of patent revocations, lack of presumption of patent validity and narrow patentability criteria as issues which “impact companies across different sectors.”

The USTR had also released a similar report in 2021, addressing much of the same concerns.

These, and general issues regarding IPR were extensively tackled by the Parliamentary Standing Committee which undertook a ‘review of the intellectual property rights regime in India’. The Committee tabled its findings before the Rajya Sabha and Lok Sabha in July last year.

Article 3(d) of the Indian Patent Act

This offered an insight into the landscape of Indian intellectual property law and where it is reasonably in sync with American patent laws and where it diverges. One of the main points of contention between India and the U.S. has been Article 3(d) of the Indian Patent Act.

Section 3 deals with what does not qualify as an invention under the Act, and Section 3(d) in particular excludes “the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant” from being eligible for protection under patent law.

This was addressed by the Parliamentary Standing Committee as well, which pointed out that the section “acts as a safeguard against frivolous inventions in accordance with the flexibility provided in the TRIPS agreement.”

Section 3(d), as mentioned above, prevents the mere discovery of any new property or new use for a known substance from being patented as an invention unless it enhances the efficacy of the substance repetitive. This prevents, what is known as “evergreening” of patents.

According to the Committee’s report, Section 3(d) allows for “generic competition by patenting only novel and genuine inventions.”

TRIPS and the Doha Declaration

The Doha Declaration on the TRIPS Agreement and Public Health was adopted on November 14, 2021, by the WTO member states. This declaration recognises the “gravity of public health problems affecting developing and least developed nations” and stresses the need for TRIPS to be part of the wider national and international action to address these problems.

It recognises that “intellectual property protection is important for the development of new medicines,” and acknowledges concerns about its effects on prices. Saying that the TRIPS agreement “does not and should not prevent members from taking measures to protect public health,” the declaration points out that the agreement “can and should be interpreted and implemented in a manner supportive of WTO members’ right to protect public health and, in particular, to promote access to medicines for all.”

Compulsory licences can be invoked by a state in public interest, allowing companies apart from the patent owner to produce a patented product without consent.



It concluded that India must not compromise on the patentability criteria under Section 3(d) since as a sovereign country it has the “flexibility to stipulate limitations on grants of patents in consistence with its prevailing socio-economic conditions.” It said that this ensures the growth of generic drug makers and the public’s access to affordable medicines.

It indicated that India should resolve its differences with the U.S. regarding the disqualification of incremental inventions through bilateral dialogue.

Positive steps

The report highlighted some positive steps taken by India in the recent past, such as the accession to the World Intellectual Property Organisation (WIPO) Performances and Phonograms Treaty and WIPO Copyright Treaty, collectively known as the WIPO Internet Treaties, in 2018 and the Nice Agreement in 2019.

The Parliamentary Standing Committee too noted amendments pertaining to Form 27, under the Patents (Amendment) Rules, 2020. Some notable changes include allowing a single Form 27 to be filed for multiple related patents, filing of joint forms if there are more patentees and allowing authorised agents to submit forms.

India and the U.S. will continue to engage on IP matters, the report says, especially through the Trade Policy Forum’s Intellectual Property Working Group.

MSP BOOST COULD BOLSTER GOVT’S CEREAL STOCKS. BUT IT MUST KEEP SIGHT OF CROP DIVERSIFICATION, THE LONG-TERM REFORM MEASURE

The Narendra Modi government has hiked the minimum support price (MSP) for this year’s paddy crop by Rs 100 per quintal over 2021-22. It is higher than the Rs 72, Rs 53 and Rs 65 per quintal increase during the preceding three years, while below the Rs 180-200 of 2018-19, which was in the run up to the 2019 general election. This time’s MSP raise has less to do with politics. The Commission for Agricultural Costs & Prices (CACP) has estimated the average production cost of paddy (all paid-up expenses plus an imputed value of unpaid family labour) for 2022-23 at Rs 1,360 per quintal. The MSP of Rs 2,040 per quintal for common paddy, then, translates into a 50 per cent return over cost. Last year’s MSP of Rs 1,940 also delivered the same return over a projected cost of Rs 1,293 per quintal. Farmers, thus, are only being compensated for higher cultivation costs.

Production cost going up — probably more than the CACP’s 5.2 per cent estimate — is not the sole reason for the Modi government granting an above-trend MSP hike in paddy. A more pertinent factor has to do with public foodgrain stocks, which, at 311.42 lakh tonnes (lt) for wheat as on June 1, are the lowest in 14 years for this date. Although rice stocks, at 496.76 lt, are above last year’s corresponding level of 491.50 lt, the government clearly isn’t taking any chances. With the next wheat crop arriving only in April 2023, there will be that much added dependence on rice now to meet the requirements of the public distribution system. Hence, the need to ensure adequate stocks and procurement of paddy, whose plantings take off in June and marketing from October. Barely three months ago, the country had enough grain for free distribution through ration shops and also for exports. The post-March heat wave that took a toll on wheat crop yields and more than halved government procurement has made things a tad precarious.

There is a perverse side to the short-term imperative to bolster government cereal stocks. It undermines the cause of crop diversification. Weaning farmers — especially in states such as



Punjab, Haryana, Telangana and Maharashtra — away from water-guzzling paddy and sugarcane to growing oilseeds, pulses, cotton, fruits, vegetables and other high-value crops is what is necessary from a long-term nutritional as well as agro-ecological perspective. The current system of assured MSP and open-ended procurement for only paddy, wheat and sugarcane cultivated in a handful of states is simply unsustainable, both fiscally and environmentally. Depleted public stocks and high global prices of cereals are a temporary phenomenon. The Modi government should not take its eye off the real reform road ahead.

OF WHAT GOOD IS A BAD BANK?

The story so far: Finance Minister Nirmala Sitharaman on Monday announced that the National Asset Reconstruction Company (NARCL) along with the India Debt Resolution Company (IDRCL) will take over the first set of bad loans from banks and try to resolve them. While the problem of bad loans has been a perennial one in the Indian banking sector, the decision to set up a bad bank was taken by the Union government during the Budget presented last year in the aftermath of the nationwide lockdowns, and the moratorium was subsequently extended to borrowers by the Reserve Bank of India (RBI).

It should be noted that the health of the balance sheets of Indian banks has improved significantly over the last few years with their gross non-performing assets (GNPA) ratio declining from a peak of 11.2% in FY18 to 6.9% in Q2FY22.

What is a 'bad bank'?

A bad bank is a financial entity set up to buy non-performing assets (NPAs), or bad loans, from banks. The aim of setting up a bad bank is to help ease the burden on banks by taking bad loans off their balance sheets and get them to lend again to customers without constraints. After the purchase of a bad loan from a bank, the bad bank may later try to restructure and sell the NPA to investors who might be interested in purchasing it. A bad bank makes a profit in its operations if it manages to sell the loan at a price higher than what it paid to acquire the loan from a commercial bank. However, generating profits is usually not the primary purpose of a bad bank — the objective is to ease the burden on banks, of holding a large pile of stressed assets, and to get them to lend more actively.

What are the pros and cons of setting up a bad bank?

A supposed advantage in setting up a bad bank, it is argued, is that it can help consolidate all bad loans of banks under a single exclusive entity. The idea of a bad bank has been tried out in countries such as the U.S., Germany, Japan and others in the past.

The troubled asset relief program, also known as TARP, implemented by the U.S. Treasury in the aftermath of the 2008 financial crisis, was modelled around the idea of a bad bank. Under the program, the U.S. Treasury bought troubled assets such as mortgage-backed securities from U.S. banks at the peak of the crisis and later resold it when market conditions improved. It is estimated that the Treasury through its operations earned a nominal profit of anything between \$11 billion to \$30 billion, although some contest these figures.

Many critics, however, have pointed to several problems with the idea of a bad bank to deal with bad loans. Former RBI governor Raghuram Rajan has been one of the fiercest critics of the idea, arguing that a bad bank backed by the government will merely shift bad assets from the hands of public sector banks, which are owned by the government, to the hands of a bad bank, which is



again owned by the government. There is little reason to believe that a mere transfer of assets from one pocket of the government to another will lead to a successful resolution of these bad debts when the set of incentives facing these entities is essentially the same.

Other analysts believe that unlike a bad bank set up by the private sector, a bad bank backed by the government is likely to pay too much for stressed assets. While this may be good news for public sector banks, which have been reluctant to incur losses by selling off their bad loans at cheap prices, it is bad news for taxpayers who will once again have to foot the bill for bailing out troubled banks.

Will a 'bad bank' help ease the bad loan crisis?

A key reason behind the bad loan crisis in public sector banks, some critics point out, is the nature of their ownership. Unlike private banks, which are owned by individuals who have strong financial incentives to manage them well, public sector banks are managed by bureaucrats who may often not have the same commitment to ensuring these lenders' profitability. To that extent, bailing out banks through a bad bank does not really address the root problem of the bad loan crisis.

Further, there is a huge risk of moral hazard. Commercial banks that are bailed out by a bad bank are likely to have little reason to mend their ways. After all, the safety net provided by a bad bank gives these banks more reason to lend recklessly and thus further exacerbate the bad loan crisis.

Will it help revive credit flow in the economy?

Some experts believe that by taking bad loans off the books of troubled banks, a bad bank can help free capital of over ₹5 lakh crore that is locked in by banks as provisions against these bad loans. This, they say, will give banks the freedom to use the freed-up capital to extend more loans to their customers. This gives the impression that banks have unused funds lying in their balance sheets that they could use if only they could get rid of their bad loans. It is, however, important not to mistake banks' reserve requirements for their capital position. This is because what may be stopping banks from lending more aggressively may not be the lack of sufficient reserves which banks need to maintain against their loans.

Instead, it may simply be the precarious capital position that many public sector banks find themselves in at the moment. In fact, many public sector banks may be considered to be technically insolvent, as an accurate recognition of the true scale of their bad loans would show their liabilities to be far exceeding their assets. So, a bad bank, in reality, could help improve bank lending not by shoring up bank reserves but by improving banks' capital buffers. To the extent that a new bad bank set up by the government can improve banks' capital buffers by freeing up capital, it could help banks feel more confident to start lending again.

ARE FEARS OF STAGFLATION IMPACTING MARKETS?

The story so far: Authorities worldwide, particularly central bankers, are feverishly trying to formulate the appropriate set of policies to ensure that inflation, currently running at multi-decade highs in some advanced economies including the U.S., is cooled without triggering a recession. Former Federal Reserve Chairman Ben Bernanke told The New York Times last month that he foresaw a period in the near future "where growth is low, unemployment is at least up a little bit and inflation is still high", adding, "So you could call that stagflation".



What exactly is stagflation?

Most economists typically focus on the three key macroeconomic gauges to assess the health of an economy. Economic output measured by gross domestic product, the level of unemployment and thirdly inflation or the pace at which the prices of goods and services are rising in the economy.

The challenge for policymakers, especially central banks, is to ensure optimum conditions whereby output grows at a healthy pace, helping businesses in the economy to create jobs at a steady pace and thus keeping unemployment low, and most crucially having all of this happen in an atmosphere when prices remain relatively stable.

However, in the real world, more often than not, high economic growth invariably spurs faster inflation which is why many central banks have a specific mandate of ensuring that the pace of price gains does not exceed a specified target level or range.

The most difficult and messy problem for policymakers is when inflation runs high even as economic output either stagnates or, worse, shrinks. The slowdown in economic activity, in turn, leads businesses to shed jobs and the resultant situation is termed as 'stagflation'.

How does it manifest?

One of the classic instances when most economies including the U.S. faced 'stagflation' was during the 'oil shock' of the early 1970s when an embargo led by the oil producers' cartel OPEC caused the price of crude to almost quadruple in a period of just under six months.

"Countries like the U.S. that imported a lot of oil experienced both high inflation and recession," Veronika Dolar, an Assistant Professor of Economics at SUNY Old Westbury in the U.S., wrote in an article published by the online journal The Conversation in March. "The Consumer Price Index exceeded 10% for the first time since the 1940s, unemployment jumped from 4.6% in 1973 to 9% in 1975, and the GDP plunged," she observed.

What has sparked the latest concerns about stagflation?

While the outbreak of the COVID-19 pandemic and the curbs imposed to contain the spread of the virus caused the first major recent economic slowdown worldwide, the subsequent fiscal and monetary measures taken to address the downturn, including substantial increases in liquidity in most of the advanced economies, fuelled a sharp upsurge in inflation.

While the Fed and the Bank of England are among central banks that have started raising interest rates to cool soaring prices, the ongoing war in Ukraine following Russia's invasion of its southern neighbour and the consequent Western sanctions on Moscow have caused a fresh and as yet hard-to-quantify 'supply shock'.

With the prices of commodities ranging from oil and gas to foodgrains, edible oils and fertilizers all surging sharply in the wake of the conflict, authorities face an uphill battle to contain inflation that is now less a function of demand (and so can be controlled by regulating credit) and almost entirely caused by supply factors that are far harder to manage.

To add to the concerns, several business leaders including Tesla's Elon Musk and JP Morgan Chase & Co.'s Jamie Dimon are warning of an impending 'recession'.



What lies ahead?

Current Fed Chairman Jerome Powell summed it last month at the post-federal open market committee press conference when asked if a recession was inevitable to tame inflation. “Basically, we’ve been hit by historically large inflationary shocks since the pandemic. This isn’t anything like regular business... it’s been a series of inflationary shocks that are really different from anything people have seen in 40 years. So we have to look through that and look at the economy that’s coming out the other side. And we need to somehow find price stability out of this. And it’s obviously going to be very challenging.”

MAY SERVICES PMI HITS A 133-MONTH HIGH

The S&P Global India Services PMI Business Activity Index for May signalled that the country’s services sector may have recorded its best monthly expansion in more than 11 years, with the survey-based PMI gauge rising to 58.9 last month from April’s 57.9. A reading higher than 50 indicates growth.

Services providers reported the quickest increase in business activity since April 2011, with new orders rising at the highest rate since July 2011, even as input cost pressures quickened at the fastest pace since the survey started in December 2005.

May marked the 23rd successive month when firms reported rising input prices, led by higher food, fuel, labour, material, retail and transportation costs, compelling them to raise selling prices at the second-highest rate in almost five years.

Despite stronger domestic demand, service providers still shed jobs in May, as global orders fell for the 26th month in a row since the COVID-19 lockdowns of March 2020, and sentiment remained low on concern inflation may dent the recovery.

Within services, consumer services was the brightest spot even though it also faced the highest surge in input costs. Transport, information and communication services firms passed on higher costs to buyers at the fastest pace.

‘Price outlook worsens’

“The reopening of the Indian economy continued to help lift growth in the service sector [but] the inflation outlook appeared to have worsened as input prices rose at the sharpest pace in the survey history,” said Pollyanna De Lima, economics associate director at S&P Global Market Intelligence.

Ms. De Lima noted that output charge inflation eased only slightly from April, being the second-highest in just under five years, as several firms mentioned the need to transfer mounting costs through to clients.

“Elevated price pressures continued to restrict business optimism. Despite picking up from April, the overall level of sentiment among service providers was historically subdued,” Ms. De Lima concluded.

The S&P Global India Composite PMI Output Index, which factors in both services and manufacturing sectors’ performance, rose to 58.3 in May, from 57.6 in April, marking the fastest rate of expansion since November 2021.



“Aggregate cost burdens rose at the fastest rate since March 2011,” S&P Global said in a note. “Concurrently, output charges at the composite level rose further, with the overall rate of inflation little-changed from April’s nine-year high.”

THE RBI RATE HIKE AND ITS IMPACT

In its bi-monthly review on Wednesday, the Reserve Bank of India hiked the repo rate by another 50 basis points. This move, and the RBI’s focus on the withdrawal of its accommodative policy, both in response to rising inflation, are expected to lead to a further rise in interest rates in the banking system.

Why has RBI hiked the repo rate?

The 50-basis-point hike, which follows a 40-basis-point hike on May 4, has been done with a view to taming inflation. Noting that headline inflation has risen by 170 bps between February and April 2022, the RBI has projected it at 7.5% in Q1 Of FY 22, 7.4% in Q2, 6.2% in Q3, and 5.8% in Q4, with a baseline inflation of 6.7% for 2022-23. The RBI aims to bring inflation down to its targeted 4% ($\pm 2\%$). The two hikes in repo rates over the last five weeks, totalling 90 bps, takes the rate to 4.9%.

Repo rate refers to the rate at which the RBI lends to commercial banks. When interest rates are raised, it makes money more expensive, thereby resulting in reduction of demand in the economy and bringing down inflation.

Even as it looks to support the economic recovery from the impact of the pandemic, RBI’s concerns around inflation has been the primary factor in raising the rates. It said in its statement on Wednesday, “The war in Europe is lingering and we are facing newer challenges each passing day which is accentuating the existing supply chain disruptions. As a result, food, energy and commodity prices remain elevated... A large part of the rise in inflation is primarily attributed to a series of supply shocks linked to the war. In these circumstances, we have started a gradual and orderly withdrawal of extraordinary accommodation instituted during the pandemic.”

How will it impact borrowers and depositors?

While both borrowers and depositors are expected to see a hike in lending rates and offering on deposit rates, respectively, over the coming days and weeks, borrowers are likely to be impacted earlier. Banks and housing finance companies, which have already raised their lending rates between 40 bps and 50 bps points following the 40 bps hike in repo rate in May, are now expected to raise the rates again.

If the 90-bps hike in repo rate raises the lending rate by 100 bps, it will have a significant impact on EMIs. For example, if the rate on your home loan goes up by 100 basis points from 7% in April to 8% in the next couple of weeks, the EMI on principal outstanding of Rs 50 lakh for 15 years will go up from Rs 44,941 to Rs 47,782 — a jump of Rs 2,841 monthly if you keep the tenure unchanged.

Should the rates rise by 150 bps by the end of the year (which is expected given RBI’s enhanced concerns around inflation), the loan rate would go up to 9.5%, and the EMI for the the same loan to Rs 49,236 — an increase of Rs 4,295 per month. This would severely hit individuals whose incomes have already declined compared to pre-Covid levels.



So, more rate hikes are expected?

Given the RBI's projected inflation of 6.7% for 2022-23 and enhanced concerns around it, market participants feel it may go for an additional hike of 50-100 bps over the remaining part of the year. Indeed, RBI Governor Shaktikanta Das has said future decision on rate hikes would be in line with developments around inflation. "These are extremely uncertain conditions and it is not possible to provide outlook on guidance... we will deal as the situation arises," Das told the media on Wednesday.

In a report released after the RBI's rate hike, Bank of Baroda said, "RBI's hawkish policy is focussed largely on heightened inflationary concerns. It has raised policy rate by 50bps. CPI forecast has been revised upward by 100bps in FY23 to 6.7% (our est.: 6.5%). More importantly in the next three quarters, headline CPI is expected to be above RBI's upper tolerance band... We expect another 50-75b ps rate hike in the current cycle."

A report by HSBC Global Research has estimated that RBI may hike repo rates by 60 bps to 5.5% by December 2022 and by 110 bps to 6% by mid-2023.

What's the RBI assessment on inflation?

Inflation is expected to be above 7% — much above the RBI's comfort level of 4% ($\pm 2\%$) — in the first two quarters of the current fiscal. RBI has projected inflation at 7.5% in the June quarter and 7.4% in the September quarter. International crude oil prices remain elevated, with risks of further pass-through to domestic pump prices. There are also upside risks from revisions in the prices of electricity. Edible oil prices remain under pressure from adverse global supply conditions, notwithstanding some recent correction due to the lifting of an export ban by a major supplier. Early results from manufacturing, services and infrastructure sector firms polled in RBI's surveys show they expect further pressures on input and output prices.

The RBI expects inflation at 6.2% in the December quarter and 5.8% in March 2023. The elevated level for calendar years 2022 is likely to force the RBI to hike rates further and withdraw liquidity from the system.

What will be the impact of withdrawing the accommodative policy?

Interestingly, the RBI removed the word "accommodative" from the policy stance. The RBI's policy panel, chaired by the RBI Governor, has decided to remain focused on withdrawal of accommodation to ensure that inflation remains within the target. The RBI had pumped huge liquidity into the system in 2020 to counter the impact of the pandemic. While this did support economic recovery, it has also been the main reason for the rise in inflation.

The RBI's market operations had led to a decline in liquidity in May. Still, overall system liquidity remains in large surplus, with the average daily absorption under the liquidity adjustment facility (LAF) moderating to Rs 5.5 lakh crore during May 4-31, from Rs 7.4 lakh crore during April 8-May 3, in consonance with the policy of gradual withdrawal of accommodation. The withdrawal will also put upward pressure on interest rates.

Will consumer spending be impacted?

The policy withdrawal and the rate hike are expected to impact consumption and demand in the economy. The impact is likely to be more pronounced in non-discretionary spending by consumers. "Recently released GDP data showed a sliding year-on-year growth for private



consumption expenditure, an indication that economic activity remains slow,” said Indranil Pan, Chief Economist, Yes Bank.

According to the RBI policy panel, the forecast of a normal monsoon should boost kharif sowing and agricultural output. This will support rural consumption. The rebound in contact-intensive services is expected to sustain urban consumption. RBI’s surveys suggest further improvement in consumer confidence and households’ optimism for the outlook a year ahead.

“The RBI’s optimism on growth is significant because the performance of the economy in the first two months is quite impressive. Interest rate hike will help to ensure that growth is not affected as unchecked inflation can affect discretionary consumption, which in turn will affect growth,” said Madan Sabnavis, Chief Economist, Bank of Baroda.

WHY BOND YIELDS ARE RISING, AND WHAT IT MEANS FOR MARKETS AND INVESTORS

With the Reserve Bank of India hiking rates to rein in inflation, which is expected to remain above 7% until at least September, bond yields have risen to their highest levels in three years. What does that mean for the markets and investors?

The big jump

The yield on benchmark 10-year government bonds has shot up by 149 basis points to 7.50% in the last one year. Since the start of the year, long-term yields have risen by over 100 bps, and short-term yields by over 150 bps.

Bond yields have been rising across the world amid higher inflation and plans for policy normalisation. Seeing the writing on the wall, buyers of government bonds have been demanding higher yields. “Data showing further increase in inflation leading to higher-for-longer inflation expectations may result in further increase in bond yields and correction in markets. We expect inflation in India to trend down sharply in the second half of FY23 on high base effects but note upside risks to inflation from higher-than-expected domestic food prices and global fuel prices,” said a report from Kotak Securities.

What it means

The rise in yields means markets have already factored in the worst of the rate movements. This also hints at the possibility of overnight rates rising to 6%-plus over the medium term. With current repo rates at 4.90%, this implies incremental rate hikes of more than 100 bps have been factored into bond yields. The rise indicates that the cost of funds in the financial system is rising and so are interest rates. A section of the market also attributes the rise in yields to the RBI’s plan to exit from its accommodative stance and tighten interest rates in the coming months.

The rise means the government will have to pay more as yield (or return to the investors), leading to a rise in cost of borrowings. This will put upward pressure on general interest rates in the banking system. Further, if the RBI opts for normalisation of the monetary policy and intervenes less in the market, interest rates are bound to go up.

Analysts say expectations of higher inflation and the possibility of a rate hike can trigger a flight of capital from bank fixed deposits to RBI sovereign guaranteed bonds, as the difference in yields is now almost 150 bps.



SERVICE CHARGE, PLEASE

THERE is the challenge of rising inflation, slowing growth, sputtering reforms, collapse of consumer spending, not to talk of geo-political uncertainties, and the mighty Indian sarkar is playing mai baap for the consumer, seized of a pressing issue: Paying tips. No less than the Union Minister of Consumer Affairs, who is working hard to revitalise exports, has called the levying of service charge on a restaurant bill an act of deceit. Officials have held meetings with restaurant associations and called for a “robust framework” to ensure compliance with guidelines that forbid the levy of service charges by hotels and restaurants. According to the government, levying charges for anything other than “prices displayed on the menu card along with the applicable taxes”, without “express consent” of the customer, constitutes “unfair trade practices”. Such nonsense would be laughable — had it not been for the seriousness of its implications.

For, this is a throwback to the licence permit raj when ill-thought through and heavy-handed government interventions marked economic policymaking. Clearly, that attempt to intrude and micro-manage that which the government should leave well alone, continues to be all too frequent. Representatives of restaurant associations are right to stand their ground. Collecting service charge is neither illegal nor in violation of law. Restaurants pay GST on the entire bill, including service charge, so the government doesn't lose anything. In one form or another, service charges exist across sectors: Government transactions have processing fees; food-delivery services have “restaurant charges”; ticketing platforms charge a “convenience fee”. The restaurant sector has been battered by the pandemic — as per latest GDP estimates, value added by trade, hotels, transport and communication at the end of 2021-22 is much lower than its 2019-20 levels. Few would object to a charge designed to help the countless men and women employed in the sector. Moreover, as this is not uniform across restaurants, the presence of alternatives implies no restrictions on choice — there is no coercion of the consumer. Restaurants clearly mark the service charge as such and waive it if the consumer does not wish to pay. Most collections from service charge go to the staff and are often seen as an incentive in lieu of tips.

Of course, the levy of the service charge should be — as it is in most cases — clearly communicated to the consumer. It's unclear what provoked this government intervention, where exactly are consumers being made to pay service charge kicking and screaming. The official action mirrors the arbitrariness with which a domineering state continues to wield power in economic matters. Considering the challenges the economy faces as it emerges out of the long Covid shadow, the finest financial minds in North Block should work on matters more pressing than how a restaurant tip should be paid — or not.

WHY ARE FPIs DUMPING INDIAN STOCKS?

The story so far: Foreign portfolio investors (FPIs) have been on a selling spree in India. May figures of about ₹44,000 crore formed the highest monthly quantum of sell-off since March 2020 when India announced a nationwide lockdown. Last month was also the eighth on the trot that FPIs had sold net of their assets — i.e., sold more than they had purchased.

Their selling actions have triggered a significant decline in benchmark indices resulting in a drop in market capitalisation of companies.



What are FPIs?

Foreign portfolio investors are those that invest funds in markets outside of their home turf. Their investments typically include equities, bonds and mutual funds. They are generally not active shareholders and do not exert any control over the companies whose shares they hold. The passive nature of their investment also allows them to enter or exit a stock at will and with ease.

What factors spur FPI moves?

Promise of attractive returns on the back of economic growth draws investors including FPIs into a country's markets. For example, as per data from the National Securities Depositories Ltd. (NSDL), FPIs brought in about ₹3,682 crore in 2002. This grew to ₹1.79 lakh crore in 2010. This correlates with the concurrent expansion of economic output in that period, despite the 2008 global financial crisis which saw FPI sell-offs in that time-frame in the country. The year 2017 saw FPI inflows exceed ₹2 lakh crore.

Likewise, FPIs withdrew ₹1.18 lakh crore in March 2020 alone — the month when India announced a nationwide lockdown, triggering concerns around economic growth. In tandem, benchmark stock index Sensex fell from 42,270 in February 2020 to 25,630 in March 2020.

FPIs also show keenness to invest in bonds when there is a favourable differential between the real interest rates on offer in the country they aim to invest in, and other markets, but more specifically, compared with the largest economy in the world, the U.S.

Why have FPIs been selling India holdings?

FPIs sold assets worth ₹44,000 crore in May 2022. This is the second highest sell-off in a month since 1993, after March 2020. Post-pandemic, recovery in the Indian economy has been uneven. The second wave of the COVID-19 pandemic in 2021 devastated lives and livelihoods. The economy stuttered again when a third, albeit less severe, wave saw the spread of the Omicron variant early this year. Add to this the return of pent-up demand in economies worldwide as the pandemic subsided. The pace of recovery caught suppliers off guard, contributing to supply-side shortages.

Even as industry was grappling with this challenge, Russia launched an attack on Ukraine. Sunflower oil and wheat supplies, for example from these two nations were impacted, leading to a rise in global prices for these crops. As supplies in general tightened across the globe, commodity prices too rose and overall inflation accelerated. India witnessed a quickening pace in price rise that stayed above the Reserve Bank's upper comfort level of 6% for four months running, touching 7.8% in April. Industrial production too has seen a bumpy ride without giving confidence of a full and final recovery from the pandemic. Consumption expenditure too has remained weak in the subcontinent.

With each of these factors contributing to a decline in confidence of robust economic performance, foreign portfolio investors have been reducing market investments over these past months. Add to the mix the U.S. Federal Reserve raising the benchmark interest rate starting March this year. The key rate went up from 0-0.25% in March to 0.75-1% in May and is expected to rise by 50 basis points at each of the next two Fed meetings. When the differential between the interest rates in the U.S. and other markets narrows, and if such an occurrence is accompanied by the strengthening of the dollar, then the ability of investors to realise healthy returns is impacted. For returns are measured not only by the value appreciation of assets but also by exchange rate



changes. If the dollar strengthens against the rupee, then an investor is able to realise fewer dollars for a given quantum of rupee assets liquidated. Further, if inflation quickens in the overseas market where the investor has placed funds, then the real returns are even further impacted. They then tend to exit assets seen as 'risky' such as in emerging markets like India, Brazil or South Africa.

What impact does an FPI sell-off have?

When FPIs sell their holdings and repatriate funds back to their home markets, the local currency takes a beating. After all, they sell rupees in exchange for their home market currency. As supply of the rupee in the market rises, its value declines. In this instance, the rupee has recently been seeing all-time lows. About a year ago, it was trading in the region of 73 to a U.S. dollar; it is now flirting with the 78 level. With a weaker rupee, we have to shell out more funds to import the same unit of goods. The most telling impact is on the cost of our crude oil imports that contribute to 85% of our oil needs.

'USE & FILE': NEW LIFE INSURANCE PRODUCTS SANS NOD

Insurance watchdog Irdai on Friday extended the 'use and file' procedure for most life insurance products, thereby allowing insurers to launch new products without the regulator's prior approval.

However, the 'use and file' system will not be allowed in individual savings, individual pensions and annuity schemes.

The Insurance Regulatory and Development Authority of India (Irdai) had earlier extended similar relaxations to health insurance products as well as general insurance covers.

Irdai said it has extended the 'use and file' procedure for most of the life insurance products in its continuous endeavour towards the reform agenda taken up towards having a fully insured India.

"This means now the life insurance companies can also launch these products without prior approval of Irdai," the regulator added.

Earlier when the industry was in its nascent stage, it was mandatory for insurance companies to take prior approval of Irdai before launching any life insurance product.

However, with the maturity attained by the industry, it is envisaged that necessary relaxations may be allowed, Irdai said. "This move will enable life Insurers to launch most of the products (except individual savings, individual pensions and annuity) in a timely manner according to the dynamic needs of the market," it said.

According to Irdai, the relaxation will result in improving ease of doing business for insurance companies as well as lead to expansion of the choices available to policyholders.

"The life insurance industry is expected to use this opportunity to respond faster to the emerging market needs, in terms of designing and pricing of insurance products resulting in more choices for the policyholders, which will further help in increasing the insurance penetration in India," it said.

The life insurers are expected to have a board-approved product management and pricing policy, Irdai added.



EXPLAINED: WHAT IS D2M TECHNOLOGY, AND HOW COULD IT CHANGE YOUR MOBILE BEHAVIOUR?

The Department of Telecommunications (DoT) and India's public service broadcaster Prasar Bharati are exploring the feasibility of a technology that allows to broadcast video and other forms of multimedia content directly to mobile phones, without needing an active internet connection.

The technology, called 'direct-to-mobile' (D2M) broadcasting, promises to improve consumption of broadband and utilisation of spectrum.

What is direct-to-mobile broadcasting?

The technology is based on the convergence of broadband and broadcast, using which mobile phones can receive terrestrial digital TV. It would be similar to how people listen to FM radio on their phones, where a receiver within the phone can tap into radio frequencies. Using D2M, multimedia content can also be beamed to phones directly.

The idea behind the technology is that it can possibly be used to directly broadcast content related to citizen-centric information and can be further used to counter fake news, issue emergency alerts and offer assistance in disaster management, among other things. Apart from that, it can be used to broadcast live news, sports etc. on mobile phones. More so, the content should stream without any buffering whatsoever while not consuming any internet data.

What could be the consumer and business impact of this?

For consumers, a technology like this would mean that they would be able to access multimedia content from Video on Demand (VoD) or Over The Top (OTT) content platforms without having to exhaust their mobile data, and more importantly, at a nominal rate. The technology will also allow people from rural areas, with limited or no internet access, to watch video content.

For businesses, one of the key benefits of the technology is that it can enable telecom service providers to offload video traffic from their mobile network onto the broadcast network, thus helping them to decongest valuable mobile spectrum. This will also improve usage of mobile spectrum and free up bandwidth which will help reduce call drops, increase data speeds etc.

What is the government doing to facilitate D2M technology?

The Department of Telecommunications (DoT) has set up a committee to study the feasibility of a spectrum band for offering broadcast services directly to users' smartphones, DoT Secretary K Rajaraman said on Wednesday. "Band 526-582 MHz is envisaged to work in coordination with both mobile and broadcast services. DoT has set up a committee to study this band," he said. At the moment, this band is used by the Ministry of Information & Broadcasting across the country for TV transmitters.

Public service broadcaster Prasar Bharati had last year announced a collaboration with IIT Kanpur to test the feasibility of the technology.

What are the possible challenges to the technology's rollout?

While still at a nascent stage, Prasar Bharati's CEO has said bringing key stakeholders like mobile operators onboard will be the "biggest challenge" in launching D2M technology on a wide scale.



Information and Broadcasting Ministry Secretary Apurva Chandra said a mass roll out of the technology will entail changes in infrastructure and some regulatory changes.

CERT-IN MAY FLOAT PORTAL FOR CYBERSECURITY INCIDENTS

The country's cybersecurity agency is expected to soon come out with a fresh set of clarification on its recent cybersecurity directive, people in the know said. During a meeting with a select group of stakeholders Friday, the Indian Computer Emergency Response Team (CERT-In) is learnt to have assured clarifications on the six-hour timeline to report cybersecurity incidents, know-your-customer norms, and storage of customer logs, among others.

The rules will kick in from June 27.

The meeting took place after CERT-In's cybersecurity norms were met with widespread pushback by a range of industry stakeholders. It was attended by Minister of State for Electronics and IT Rajeesh Chandrashekhar, CERT-In chief Sanjay Bahl, and representatives from industry bodies like Internet and Mobile Association of India, Confederation of Indian Industry, US-India Business Council, US-India Strategic Partnership Forum, American Chamber of Commerce, FICCI, BSA|The Software Alliance, ITI Council, and Cellular Operators Association of India. Digital rights groups like Access Now also participated.

One of the most contentious issues between the government and stakeholders was the requirement to report cybersecurity incidents within six hours, which the industry believes is too short and stringent. During Friday's meeting, stakeholders, it is learnt, were told that MeitY or CERT-In will not offer any relaxations in terms of the required reporting timelines. Instead, the agency may come up with a prescribed format for reporting cybersecurity incidents. "CERT-In may also come up with a specific portal for reporting such incidents so that entities have clarity on how much information they have to share with the agency," a source said.

In a clarification on the six-hour reporting timeline to make it seem less burdensome, Bahl told stakeholders that they are only required to intimate the agency within six hours after discovering such an incident. "CERT-In only expects you to drop in an email within six hours alerting us about a cybersecurity incident," he is learnt to have said. A formal clarification is expected soon on this, sources said.

While a large part of the meeting was centred around reporting timelines, which also led to CERT-In's assurance to issue clarifications, the topic of some virtual private network (VPN) pulling out of India did not draw such assurances, sources said. The rules require VPNs to save an extensive amount of user information for five years. "We want VPNs to store data for five years because sometimes it takes a very long time for cyber incidents to be investigated," Bahl is learnt to have clarified at the meeting. VPN providers like Surfshark and ExpressVPN have shut down their India servers in response to the norms. Queries sent to the IT Ministry remained unanswered until the time of going to press.

CERT-In, it is learnt, may also soon issue a clarification on how entities can come up with an effective KYC process. The rules require that crypto exchanges and wallets must maintain KYC details and records of financial transactions for five years. Industry stakeholders at the meeting pointed out that it was difficult to validate identity of users under current processes, sources said. "A discussion on Aadhaar as a KYC document came up during the meeting and the ministry will mull on some KYC models that can be effective," a person said.



During the meeting, which lasted over an hour, the cybersecurity agency also tried to assuage privacy concerns arising out of the rules and told stakeholders that it will not ask for user logs that contain personal identifiable information of individuals, instead it will only need incident-specific logs. The rules mandate entities to maintain logs of all their ICT systems for 180 days which will have to be provided to the agency upon an order.

Small companies and startups could be given a leeway as they may need more time than bigger corporations to adjust to the rules, it is learnt. “MSMEs and startups can write to CERT-In asking for a relaxation in complying with the rules explaining why they need an extension and the agency may consider it on a case by case basis,” a source said.

SECTION 25 COMPANY: A NOT-FOR-PROFIT COMPANY WITH DEFINED OBJECTIVES

The Enforcement Directorate on Wednesday, summoned Sonia Gandhi and Rahul Gandhi following a trial court order that allowed the Income Tax Department to probe the affairs of the National Herald newspaper — owned by AJL— and conduct a tax assessment of Sonia and Rahul.

BJP MP Subramanian Swamy had in his complaint in 2013 alleged cheating and misappropriation of funds on part of the Gandhis in acquiring the newspaper. He had alleged that the Gandhis acquired properties owned by the National Herald by buying the newspaper’s erstwhile publishers, AJL, through an organisation called Young India — a Section 25 company — in which they have 86% stake. Sonia and Rahul had been granted bail in the case by the trial court on December 19, 2015.

While the Congress has described the case as “weird” since “no money was involved”, it said that AJL became an indebted company and it converted its debt into equity by assigning its debt to a new company— Young India — and became debt-free.

The Congress has said that since Young India has been created under a special provision of the Companies Act — Section 25 — it has to be a not-for-profit company and no dividend can be given to its shareholders or directors.

So, what is a Section 25 company?

As per the Companies Act, 1956, a Section 25 company — similar to what is defined under Section 8 under Companies Act, 2013 — is a not-for-profit charitable company formed with the sole object of “promoting commerce, art, science, religion, charity, or any other useful object, and intends to apply its profits, if any, or other income in promoting its objects, and to prohibit the payment of any dividend to its members”.

Section 8 of the Companies Act, 2013 includes other objects such as sports, education, research, social welfare and protection of environment among others.

While it could be a public or a private company, a Section 25 company is prohibited from payment of any dividend to its members. Section 25 states that by its constitution the company is required/ intends to apply its profits, if any, or other income in promoting its objects and is prohibited from paying any dividend to its members.”

What are prominent examples of Section 25 or Section 8 companies?

According to details available with the Ministry of Corporate Affairs, a large number of companies have been formed under the Section. Among these are Reliance Foundation, Reliance Research

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

Institute, Azim Premji Foundation, Coca Cola India Foundation, and Amazon Academic Foundation.

Why are companies formed under Section 25 when there is a Trust structure in place?

Experts say that most people looking to form a charitable entity go for forming a company under Section 25, now Section 8, rather than a Trust structure because most foreign donors like to contribute to a company rather than Trust because they are more transparent and provide more disclosures.

Tax experts say that if a company has to be converted into a not for profit company, they can't be converted into a Trust, however, they can be converted into a Section 25/ Section 8 company.



DreamIAS



LIFE & SCIENCE

WHAT IS THE ENVIRONMENT INDEX, AND WHY HAS INDIA QUESTIONED IT?

The newly released Environmental Performance Index (EPI) 2022, measured by Yale and Columbia universities, ranks India at the bottom position among 180 countries. The Environment Ministry has issued a rebuttal saying the indicators used in the assessment are based on “unfounded assumptions”.

So, what is the Environmental Performance Index?

The EPI is an international ranking system of countries based on their environmental health. It is a biennial index, first started in 2002 as the Environment Sustainability Index by the World Economic Forum in collaboration with the Yale Center for Environmental Law and Policy and Columbia University Center for International Earth Information Network.

EPI 2022 uses 40 performance indicators to assess and rank 180 countries. The report says it uses the most recent data, and the indicators “measure how close countries are to meeting internationally established sustainability targets for specific environmental issues”.

The 40 indicators are under the broad categories of climate change performance, environmental health, and ecosystem vitality. The 2022 EPI has included new parameters to its earlier assessments, with projections of progress towards net-zero emissions in 2050, as well as new air quality indicators, and sustainable pesticide use.

How poor is the EPI assessment of India?

With a rank of 180 and a score of 18.9, India has fallen from rank 168 and a score of 27.6 in 2020. India comes after Pakistan, Bangladesh, Vietnam and Myanmar, the poorest performers. Denmark tops the list with a score of 77.9.

India ranks close to the bottom on a number of indicators including ecosystem vitality (178th), biodiversity (179th), biodiversity habitat index (170th), species protection index (175th), wetland loss, air quality (179th), PM 2.5 (174th), heavy metals such as lead in water (174th), waste management (151st) and climate policy (165th) including projected greenhouse gas emissions (171st).

India has also scored low on rule of law, control of corruption and government effectiveness, according to the report.

What objections has India raised?

In a statement on Wednesday, the Ministry of Environment, Forest and Climate Change: “Some of these indicators used for assessing performance are extrapolated and based on surmises and unscientific methods.”

Ministry officials cited two major concerns – that baseline data does not seem to have been used, and that there has been no explanation for the weightages assigned to certain indicators. “It is not like comparing apples to apples but apples to oranges,” said an official.

The Ministry said the shifting of weightage on many indicators has resulted in India’s low ranking. For example, for black carbon growth, India’s score actually improved from 32 in 2020 to 100 (the



top score) in 2022, but the weightage of this indicator has been reduced to 0.0038 in 2022 from 0.018 in 2020.

The government has objected to calculations of greenhouse gas projections for 2050, which ties into countries' net zero goals. India has set a net zero target for 2070, unlike developed nations that have set 2050.

What is the objection with the projection?

The government said the projection for greenhouse gas emissions has been computed based on the average rate of change in emission of the last 10 years rather than modelling that takes into account a longer period, extent of renewable energy capacity and use, additional carbon sinks, energy efficiency etc. It said crucial carbon sinks that mitigate GHG, such as forests and wetlands, have not been taken into account. India's low emissions trajectory, unlike high historical trajectories of developed countries, has been ignored, it said.

The government has objected to the low weightage given to per-capita GHG emissions (2.6%). "No indicator talks about the renewable energy, energy efficiency and process optimization," it said.

Among other objections raised: the index emphasises the extent of protected areas rather than the quality of protection that they afford; the computation of biodiversity indices does not factor in management effectiveness evaluation of protected areas the index computes the extent of ecosystems but not their condition or productivity; indicators such as agro biodiversity, soil health, food loss and waste are not included even though they are important for developing countries with large agrarian populations.

CHINA TO NOT GIVE ADVANCED SAFETY TO EMPEROR PENGUINS

China has blocked efforts to step up protection of emperor penguins that are increasingly threatened by the effects global warming is having on their natural habitat in Antarctica, officials said on Friday.

Dozens of countries had backed giving the world's largest penguins special protection status at a 10-day meeting in Berlin of parties to the Antarctic Treaty. The treaty was forged in 1959 to ensure that the continent remains the preserve of science, and free of arms.

While a formal decision was "blocked by one party," it said that most countries attending the meeting planned nevertheless to put in place national measures to protect emperor penguins.

Chinese delegates attending the meeting, who spoke on condition of anonymity, said Beijing had made clear that it wanted more time to consider the implications of upgrading the protection status of the penguins.

Russia, which like Ukraine is active in Antarctica, was represented at the meeting by an official from its embassy in Berlin, with other delegates participating remotely by video link.

Despite differences with Beijing over the penguins and the deep diplomatic discord between Moscow and the West over Ukraine, the meeting was able to adopt by consensus a package of conservation measures for Antarctica.

These included moves to designate four new protected areas in the future and limit tourism to the frozen continent.



CHELONOIDIS PHANTASTICUS, A GIANT TORTOISE SPECIES DISCOVERED AFTER A CENTURY

A giant tortoise, found alive in 2019, has been confirmed to belong a Galápagos species long believed extinct. Named Fernanda after her Fernandina Island home, the tortoise is the first of her species, *Chelonoidis phantasticus*, to be identified in more than a century. Researchers has reported the confirmation in a paper in Nature Communications Biology.

Chelonoidis phantasticus means “fantastic giant tortoise”. Commonly called the Fernandina Island Galápagos giant tortoise, the species was so far known only from a single individual, collected in 1906.

When Fernanda was discovered in 2019, many ecologists doubted that she was actually a native *phantasticus* tortoise. She differed in appearance from the male historical specimen, although scientists speculated that her stunted growth may have distorted her features, Princeton University said in a press release.

Although Fernanda was found on Fernandina Island itself, and although tortoises can’t swim from one island to another, they can be carried from one Galápagos island to another during major storms. There are also historical records of seafarers moving the tortoises between islands.

To determine Fernanda’s species definitively, Gaughran sequenced her complete genome and compared it to the genome he was able to recover from the specimen collected in 1906. He also compared those two genomes to samples from the other 13 species of Galápagos tortoises — 12 living, one extinct. He showed that the two known Fernandina tortoises are indeed members of the same species.

EXPLAINED: WHICH IS THE LARGEST PLANT IN THE WORLD, SPREAD OVER 20,000 FOOTBALL FIELDS?

The world’s largest plant has recently been discovered off the West Coast of Australia: a seagrass 180 km in length.

But stretching across 150 km — which is about the distance between Mumbai and Pune – is not even the only remarkable thing about the plant.

The ribbon weed, or *Posidonia australis*, has been discovered in Shark Bay by a group of researchers from Flinders University and The University of Western Australia. These researchers have also found that the plant is 4,500 years old, is sterile, has double the number of chromosomes than other similar plants, and has managed to survive the volatile atmosphere of the shallow Shark Bay.

So how remarkable is this plant’s size?

The ribbon weed covers an area of 20,000 hectares. The next on the podium, the second largest plant, is the clonal colony of a quaking Aspen tree in Utah, which covers 43.6 hectares. The largest tree in India, the Great Banyan in Howrah’s Botanical Garden, covers 1.41 hectares.

If it is so large, how come it has just been discovered?



The existence of the seagrass was known, that it is one single plant was not. Researchers were interested in what they then thought was a meadow because they wanted to study its genetic diversity, and collect some parts for seagrass restoration.

The University of Western Australia quotes UWA student researcher and lead author of the study, Jane Edgeloe, as saying that the team “sampled seagrass shoots from across Shark Bay’s variable environments and generated a ‘fingerprint’ using 18,000 genetic markers.”

“The answer blew us away – there was just one!” Edgeloe was quoted as saying. “That’s it, just one plant has expanded over 180km in Shark Bay, making it the largest known plant on earth.”

The findings were published in the journal Proceedings of the Royal Society B.

How did it grow, and survive for, so long?

Sometime in the Harappan era, a plant took root in the Shark Bay. Then it kept spreading through its rhizomes, overcoming everything in its way, and here we are today.

Ribbon weed rhizomes can usually grow to around 35cm per year, which is how the scientists arrived at its lifespan of 4,500 years.

The researchers found that the ribbon weed cannot spread its seeds, something that helps plants overcome environmental threats. Also, Shark Bay sees fluctuations in temperature and salinity and gets a lot of light, conditions challenging for any plant.

Yet the ribbon weed has managed to survive, and a part of the reason may be that it is a polyploid – instead of taking half-half genome from both parents, it took 100 per cent, something not unheard of in plants. Therefore, this ribbon weed has twice the number of chromosomes other plants of the same variety have.

“Polyploid plants often reside in places with extreme environmental conditions, are often sterile, but can continue to grow if left undisturbed, and this giant seagrass has done just that,” the University of Western Australia quoted Dr Elizabeth Sinclair, a senior author of the study, as saying.

All that is cool, but why should I be excited about some grass in Australia?

Because seagrass performs a vital role in the environment, and if some of it is hardy, it is good news for everyone in a world threatened by climate change.

In India, seagrass is found in many coastal areas, most notably in Gulf of Mannar and Palk Strait. Apart from being home to a variety of small organisms, seagrass trap sediments and prevent water from getting muddy, absorb carbon from the atmosphere, and prevent coastal erosion.

The Shark Bay ribbon, thus, has served as sinkhole, hospitable city, and firewall for centuries. And it has done all this without mating, so maybe it has one more distinction – being one of the oldest champions of sologamy.

CARBON DIOXIDE LEVELS ARE NOW COMPARABLE TO 4 MILLION YEARS AGO

Carbon dioxide measured at the Mauna Loa Atmospheric Baseline Observatory, Hawaii, run by the US National Oceanic and Atmospheric Administration (NOAA), peaked for 2022 at 421 parts



per million in May. This has pushed the atmosphere further into territory not seen for millions of years, scientists from NOAA and Scripps Institution of Oceanography announced last week.

NOAA's measurements averaged 420.99 parts per million (ppm), an increase of 1.8 ppm over 2021. Scientists at Scripps independently calculated a monthly average of 420.78 ppm.

Prior to the Industrial Revolution, carbon dioxide levels were consistently around 280 ppm for almost 6,000 years of human civilisation. Since then, humans have generated an estimated 1.5 trillion tonnes of carbon dioxide pollution, much of which will continue to warm the atmosphere for thousands of years, NOAA said.

Compared to the 280 ppm before the Industrial Revolution, the currently 420 ppm is 50% higher than those levels.

"The science is irrefutable: humans are altering our climate in ways that our economy and our infrastructure must adapt to," an NOAA statement quoted its Administrator Rick Spinrad as saying.

THAILAND MAKES MARIJUANA LEGAL, BUT SMOKING DISCOURAGED

Thailand made it legal to cultivate and possess marijuana as of Thursday, like a dream come true for an aging generation of pot smokers who recall the kick the legendary Thai Stick variety delivered.

The stated intention of the country's public health minister to distribute 1 million marijuana seedlings, beginning Friday, has added to the impression that Thailand is turning into a weed wonderland.

Some Thai advocates celebrated Thursday morning by buying marijuana at a cafe that had previously been limited to selling products made from the parts of the plant that do not get people high. The dozen or so people who turned up at the Highland Cafe were able to choose from a variety of buds with names such as Sugarcane, Bubblegum, Purple Afghani, and UFO.

So far, it appears there would be no effort to police what people can grow and smoke at home, aside from registering to do so, and declaring it is for medical purposes. For the time being, however, would-be marijuana tourists might want to proceed with caution.

And extracted content, such as oil, remains illegal if it contains more than 0.2% of tetrahydrocannabinol, or THC, the chemical that makes people high.

The status of marijuana is still in considerable legal limbo because while it is no longer treated as a dangerous drug, Thai lawmakers have yet to pass legislation to regulate its trade.

Thailand has become the first nation in Asia to decriminalize marijuana – also known as cannabis, or ganja in the local lingo – but it is not following the examples of Uruguay and Canada, the only two countries so far that have legalized recreational marijuana on a national basis.

Thailand mainly wants to make a splash in the market for medical marijuana. It already has a well developed medical tourism industry and its tropical climate is ideal for growing cannabis. "We should know how to use cannabis," Public Health Minister Anutin Charnvirakul, the country's biggest marijuana booster, said recently.



“If we have the right awareness, cannabis is like gold, something valuable, and should be promoted.” But he added, “We will have additional Ministry of Health Notifications, by the Department of Health. If it causes nuisances, we can use that law (to stop people from smoking).” He said the government prefers to “build an awareness” that would be better than patrolling to check on people and using the law to punish them.

Some immediate beneficiaries of the change are people who have been locked up for breaking the old law. “From our perspective, a major positive outcome of the legal changes is that at least 4,000 people imprisoned for offences relating to cannabis will be released,” Gloria Lai, Asia regional director of the International Drug Policy Consortium, said in an email interview.

“People facing cannabis-related charges will see them dropped, and money and cannabis seized from people charged with cannabis-related offences will be returned to their owners.” Her organization is network of civil society organizations worldwide advocating drug policies “grounded in principles of human rights, health and development.” However, economic benefits are at the heart of the marijuana reforms, projected to boost everything from national income to small farmers’ livelihoods.

There is concern over whether the benefits will be distributed equitably.

One fear is that giant corporations could be unfairly served by proposed regulations involving complicated licensing processes and expensive fees for commercial use that would handicap small producers. “We have seen what happened with the alcohol business in Thailand. Only large-scale producers are allowed to monopolize the market,” said Taopiphop Limjitrakorn, a lawmaker from the opposition Move Forward party. “We are worried the similar thing will happen to the cannabis industry if the rules are in favor of big business,” His party wants laws now being drafted to tackle the problem.

TESTOSTERONE DEFICIENCY AND THE SAFETY OF REPLACEMENT THERAPY

Hypogonadism is a condition caused by the deficiency of the male sex hormone, testosterone, and a new study in Lancet Health Longevity looks at the short- to medium-term safety of testosterone treatment. Analysis of data from more than 3,400 patients with hypogonadism from 17 clinical trials found little evidence that testosterone treatment increases the risk of cardiovascular events such as arrhythmia, heart attack, and stroke, in the short to medium terms.

Testosterone replacement therapy is the standard treatment for hypogonadism, which can cause sexual dysfunction, weakening of bones and muscles, and reduced quality of life. Risk factors include ageing (as testosterone levels decline with age), obesity and diabetes. Contacted via email, Dr Channa Jayasena, Reader in Reproductive Endocrinology, Imperial College London and study author, said that worldwide, 2% of men aged over 40 are affected, and this is growing as the population gets older.

Despite being widely used, the cardiovascular safety of testosterone treatment had so far remained unclear due to inconsistent findings. Most previous clinical studies relied on aggregate data, rather than individual participant data and have not published details of individual adverse events.

Funded by the UK National Institute for Health Research Health Technology Assessment Programme, the study identified 35 eligible clinical trials published since 1992, of which 17 provided individual participant data. None of the studies were from India, Dr Jayasena said.

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



The researchers found that testosterone significantly reduced serum total cholesterol, HDL, and triglycerides compared with placebo.

However, there were no significant differences in LDL, blood pressure, glycaemic parameters, diabetes incidence, and prostate adverse outcomes between the testosterone and placebo groups, according to the report.

The authors have acknowledged some limitations to their study. There was little available data evaluating the cardiovascular safety of testosterone treatment beyond 12 months, and the very small number of deaths recorded during testosterone trials hampered the authors' ability to analyse why they occurred. However, the longer-term safety of testosterone treatment is currently being investigated in another clinical trial, Dr Jayasena said.

THE SCIENCE BEHIND THE CANCER CURE, AND THE THERAPY'S FUTURE IN INDIA

In a medical trial, results of which were published in The Indian Express on Wednesday, 12 patients in the United States were completely cured of rectal cancer without requiring any surgery or chemotherapy.

The trial used a monoclonal antibody called dostarlimab every three weeks for six months for the treatment of a particular kind of stage two or three rectal cancer. The study was done by doctors from the Memorial Sloan Kettering Cancer Centre in New York, and its results have been published in the New England Journal of Medicine.

What are the findings?

The trial showed that immunotherapy alone – without any chemotherapy, radiotherapy, or surgery that have been staples of cancer treatment – could completely cure the patients with a particular kind of rectal cancer called 'mismatch repair deficient' cancer".

All 12 patients had completed the treatment and were followed for six to 25 months after.

"No cases of progression or recurrence had been reported during the follow-up," the study said. The response too was rapid, with symptoms resolving in 81% of the patients within nine weeks of starting the therapy.

What is this deficiency, and how was it cured?

'Mismatch repair deficient' cancer is most common among colorectal, gastrointestinal, and endometrial cancers. Patients suffering from this condition lack the genes to correct typos in the DNA that occur naturally while cells make copies.

The immunotherapy belongs to a category called PD1 blockades that are now recommended for the treatment of such cancers rather than chemotherapy or radiotherapy. PD1 is a type of protein that regulates certain functions of the immune system, including by suppressing T cell activity, and PD1 blockade therapy looks to release the T cells from this suppression.

"The anomalies in the DNA result in cancerous growths in patients with mismatch repair deficient cancers. If you imagine the immune system to be a car, PD1 acts as the brakes for the T cells of the immune system. By giving the PD1 blockades, we release the brakes and allow the T cells to destroy the cancerous growth," said Dr P K Julka, former professor of radiotherapy at the All India Institute of Medical Sciences, New Delhi and the current chairman for Max Oncology Daycare



Centre. Dr Julka did the first immunotherapy treatment in India while at AIIMS in 2015. He was not involved in the US study.

If PD1 therapy was already in use, what's new in the trial?

Earlier, this therapy was used post-surgery, but the study has shown that a surgery may not be required.

“Although the therapy is usually used for cancers that have metastasised (spread to locations other than where the cancer formed), it is now recommended for all mismatch repair deficient cancers as they result in quicker improvement and lesser toxicity as compared to traditional chemo and radiotherapy. So far, we have been using the therapy after a patient undergoes surgery; it is used for 10 to 15 indications. This study shows that even the surgery was not needed in these patients,” Dr Julka said.

Speaking about his own practice, Dr Julka said that in all tumours, they now look for mismatch repair deficiency to see whether immunotherapy can be used.

Eliminating other treatments can improve a patient's quality of life by preserving fertility, sexual health, and bladder and bowel functions.

When can such a treatment be accessible in India?

Cost is believed to be a major hurdle.

Dr MD Ray, professor of surgical oncology at AIIMS-Delhi, who disagrees with the immunotherapy approach, said: “These patients can be well managed with chemotherapy and radiotherapy as well. Around 10 to 15% of cancer patients actually do not need surgeries. The problem with immunotherapies is that they are expensive and unaffordable for most people in India, and certainly for those coming to AIIMS. A genetic test can also cost up to Rs 30,000, the patients here cannot afford all this.”

He added that precision medicine, such as using particular immunotherapy drugs for particular types of cancers, is still at a nascent stage in India. “Precision medicine for cancer treatment is happening in India, but it is still in nascent stages. It would take at least ten years for it to become commonplace,” he said.

So, how much does immunotherapy cost?

An immunotherapy treatment can cost around Rs 4 lakh per month, with patients needing the treatment for six months to a year.

“People may end up using their life-savings for the treatment. We usually end up giving the treatment only to those who can bank on schemes such as CGHS for sponsoring their treatment or receive free doses from the companies as part of their assistance programme,” said Dr Julka.

However, he added: “One day, cancer will be like any other chronic disease. Like people with diabetes go to work after taking a tablet, cancer patients would too. The future of cancer treatment is molecular oncology – you find a mutation in one gene, you give a particular medicine for it; you find it in another, you give another medicine.”

WHAT ARE THE LATEST GUIDELINES ON MONKEYPOX?



The story so far: India's Health Ministry has issued guidelines on the management of the monkeypox disease. So far, no cases of the virus have been confirmed in India but reports of the virus' spread in non-endemic countries have led to guidelines being issued.

What do the guidelines say?

The 23-page document, available on the Health Ministry website, is an information sheet that lists out the global prevalence of the disease as of May 31, its epidemiology or disease characteristics including the kind of virus that causes the disease, its likely origins, incubation period, how long before symptoms manifest and so forth.

It also highlights how long it takes to subside, modes of transmission, symptoms, the probable modes of exposure, the test to confirm the presence of the virus, the government's surveillance strategy in place to identify cases and clusters of infection.

What are the most important recommendations?

The guidelines recommend that contacts be monitored every day for the onset of signs/symptoms for a period of 21 days (as per case definition) from the last contact with a patient or their contaminated materials during the infectious period. Suspected cases of monkeypox include a person of any age with a history of travel to affected countries within the last 21 days and presenting an unexplained acute rash and one or more of symptoms, including swollen lymph nodes, fever, head/body ache and profound weakness.

Other symptoms include pain in the eye or blurring of vision, shortness of breath, chest pain, difficulty in breathing, altered consciousness, seizure, decrease in urine output, poor oral intake and lethargy.

A case of monkeypox is confirmed in a laboratory by detection of unique sequences of viral DNA either by polymerase chain reaction (PCR) and/or sequencing, much like a test for COVID-19. However, there are no commercial tests for monkeypox yet and all clinical specimens are to be transported to the apex laboratory of the ICMR-NIV (Pune) routed through the Integrated Disease Surveillance Programme (IDSP) network of the respective district/State.

There is no treatment protocol or medicines specific to monkeypox and a patient has to be managed on the basis of the symptoms they present. For instance, dehydration ought to be treated with oral fluids; fever with sponging and paracetamol, nausea and vomiting with antiemetics.

How prevalent is monkeypox globally?

The World Health Organization has said that cases of monkeypox have been reported from 12 member states that are not endemic for monkeypox virus. Reported cases thus far do not have established travel links to endemic areas. Based on currently available information, cases were mainly, but not confined to, men who have sex with men (MSM) seeking care in primary care and sexual health clinics.

To date, all cases whose samples were confirmed by PCR testing have been identified as being infected with the West African clade of the virus. The genome sequence from a swab sample from a confirmed case in Portugal, indicated a close match of the monkeypox virus causing the current outbreak, to exported cases from Nigeria to the U.K., Israel and Singapore in 2018 and 2019.



Countries where the virus was endemic are, according to the WHO, Benin, Cameroon, the Central African Republic, the Democratic Republic of the Congo, Gabon, Ghana (identified in animals only), Ivory Coast, Liberia, Nigeria, the Republic of the Congo, Sierra Leone, and South Sudan.

Are there vaccines?

Historically, vaccination against smallpox had been shown to be protective against monkeypox. While one vaccine (MVA-BN) and one specific treatment (tecovirimat) were approved for monkeypox, in 2019 and 2022 respectively, they aren't widely available. A vaccination with small pox is said to be protective against monkeypox but this vaccine would be in individuals over 40-50 years of age, who've been inoculated with the small pox vaccine and here too it's unclear how long lasting the protection is.

INHALED VACCINE TO BE MORE EFFECTIVE

A multidisciplinary team from the McMaster University, Toronto is working to make inhaled vaccines a reality.

Fiona Smail, Professor of Pathology and Molecular Medicine, McMaster University, and a part of the multidisciplinary team, said that they are testing a next-generation COVID-19 vaccine that the earlier research in animals suggests will last longer, will be more effective and stand up well to future variants of the virus.

"Before COVID-19 emerged, our team of researchers at McMaster University were working to develop a new inhaled form of vaccine delivery that could finally take on one of the most challenging respiratory infections —tuberculosis— still a scourge in low-and middle-income countries and in remote areas across the globe. In Canada, it disproportionately affects people living in Inuit Nunangat and First Nations living on reserve," she said.

The COVID-19 pandemic, being truly global, created a huge demand for vaccines, such as the now-familiar ones from Pfizer, Moderna and AstraZeneca.

These vaccines have got us through the immediate crisis, as the COVID-19 virus was spreading rapidly, and have served us well, preventing serious illness and death in countries where vaccines were available.

"These vaccines represent great strides, but they are not as effective in all populations, nor are they as robust against new variants as they are against the original strain of SARS-CoV-2, the virus that causes COVID-19," she said.

She added that after decades of work, the progress made was steady, but slow.

She added that her team's research suggests that the next-generation COVID-19 vaccine that they are currently testing will be more effective for longer use, and will protect against new variants.

"We are conducting human trials of our new COVID-19 vaccine. The phase one clinical study is evaluating safety of the vaccine, as well as testing for evidence of immune responses in blood and the lungs. Our new multivalent vaccine, manufactured for our clinical trial in the Robert E. Fitzhenry Vector Laboratory, targets multiple viral proteins, both the spike protein on the surface and also the proteins inside the virus," she said.



BOOST FOR BOOSTERS

With the Indian drug regulator greenlighting Corbevax as a booster dose for all adults above 18 years who have received two doses of either Covishield or Covaxin as part of primary vaccination, a heterologous booster shot has come a step closer to being administered to people. Though booster shots have been administered since January 10 beginning with health-care and frontline workers, and people over 60 with comorbidities, India has been using the same vaccine for both primary vaccination and booster (homologous boosting). In clinical trials, a booster dose using a vaccine that is different from the one used for primary vaccination — technically called heterologous boosting — produced higher immune responses when compared with a same vaccine for primary and booster vaccination. A trial by the Christian Medical College, Vellore, too found the same result. As expected, Bio E's phase-3 heterologous booster vaccine trial using Corbevax in people who have received two doses of either Covaxin or Covishield did produce significantly higher immune responses. But with the control group not receiving a homologous booster shot but only a placebo, the trial failed to bring out the enhanced immune responses by using Corbevax as a heterologous booster. Any vaccine administered as a booster — immaterial of being homologous or heterologous — months after primary vaccination will, by default, increase the immune responses. The trial has thus only shown that Corbevax as a heterologous booster increases the immune responses but failed to show that heterologous boosting with this vaccine produces superior immune responses than homologous boosting with Covishield or Covaxin. It is all the more surprising that the booster trial used a placebo for the control arm as even the phase-3 clinical trial to study the immunogenicity of Corbevax for primary vaccination used the comparator vaccine Covishield for the control group.

With Corbevax being approved as a heterologous booster based on a poorly designed heterologous booster trial, the drug regulator can be expected to soon greenlight Covishield and Covaxin as heterologous boosters based on the results of the CMC Vellore trial. Especially as the trial clearly demonstrated the advantages of heterologous boosting compared with using the same vaccine for primary vaccination and boosting. While the National Technical Advisory Group on Immunisation (NTAGI) is quite likely to approve Corbevax as a heterologous booster shot without much delay, it remains to be seen whether it greenlights it for all adults above 18 years. Given the greater likelihood of NTAGI approving Corbevax as a heterologous booster, the Government is not likely to side step the expert group, as in mid-March. As booster shots have been rolled out for all adults above 18 years, the Government should not hurry to approve Corbevax without NTAGI's nod.

INDIA'S FIRST COVID-19 VACCINE FOR ANIMALS: WHY THE NEED WAS FELT

The Agriculture Ministry on Thursday unveiled India's first Covid-19 vaccine for animals. Developed by the Hisar-based National Research Centre on Equines, the vaccine, called Ancovax, can protect animals against the Delta and Omicron variants of SARS-CoV-2.

HOW IT WORKS: Ancovax can be used in dogs, lions, leopards, mice, and rabbits. It is an inactivated vaccine developed using an infectious part of the Delta variant. In addition, it uses Alhydrogel as an adjuvant to boost the immune response.

This is the first Covid-19 vaccine for animals developed in India. There were reports from Russia last year that that country, too, had developed a vaccine against animals such as dogs, cats, minks, and foxes.



THE NEED: There have been reports of Covid-19 infection in several animals, including dogs and cats. “The vaccine can protect animals in the zoo. It can also prevent transmission from companion animals to the humans,” said Dr Jyoti Misri, senior scientist, Indian Council of Agricultural Research.

The risk of animals spreading the infection to humans is considered low, according to the US Centers for Disease Control and Prevention.

The aim of the vaccine is to protect endangered animals such as lions and tigers. India reported at least nine Covid infections in Asiatic lions in Chennai zoo last year, with one of the lioness likely to have died of it. This prompted closure of tiger reserves for tourism. Other than that, a study by the Indian Veterinary Research Institute found at least three natural Covid infections in wild Asiatic lions, and a dead leopard cub was found dead and then tested positive for Covid-19.

“There have been a few cases reported in wildlife across the world, some from the zoo, and some in pets. However, percentage-wise, it is very low. The animals develop similar symptoms to humans – cough, cold, fever, and lung lesions. However, since the disease is zoonotic [it can be transmitted from animals to humans], a vaccine would help. However, which vaccine we use has to be carefully decided,” said Dr AB Shrivastav, former director, School of Wildlife Forensic and Health, Jabalpur.

WHY TYPE MATTERS: While declining to comment on this vaccine specifically, Dr Shrivastav said a killed vaccine for wild animals is always better than a live-attenuated vaccine (where a weakened live virus is used).

“We avoid live vaccine in wild animals. This is because a live vaccine might have been attenuated for one particular species, but it can still cause disease in another. Some 15 or 20 years back, a rabies vaccine developed for dogs was given to wolves in Africa and unfortunately the entire pack died. A killed virus vaccine will not harm the animals,” he said.

DreamIAS