

current affair for UPSC

22ND NOVEMBER TO 5TH DECEMBER
DREAMIAS



TABLE OF CONTENTS

International	5
<i>debate on Marijuana</i>	5
<i>Seasoned faces who could aid the return of America</i>	6
<i>No leverage for Biden on Iran</i>	7
<i>Iran moves to step up nuclear enrichment</i>	8
<i>U.S. Senate clears Bill on immigrant visas</i>	9
<i>U.S. to block import of 'slave labour' cotton from China</i>	9
<i>U.S. tightens visa rules for CCP members</i>	9
<i>What is Germany's new boardroom quota for women?</i>	10
<i>Why right wing groups in Germany have compared a Covid-19 law to Nazi-era 'Enabling Act'</i>	10
<i>Nobel Peace Prize Winners who disappoint</i>	11
<i>Why a large yellow rubber duck has become a symbol of Thailand's protests</i>	12
<i>132 countries attend global meet on criminal finances</i>	13
<i>First Rohingya arrive at Bangladesh island</i>	13
Foreign Affairs	14
<i>Bhutan establishes formal ties with Germany</i>	14
<i>'Carefully monitoring' Brahmaputra developments: India</i>	14
<i>India hosts SCO</i>	15
<i>Buddhist philosophy connects SCO nations</i>	16
<i>Kashmir, India and the OIC</i>	16
<i>India, Thailand, Singapore naval exercise concludes</i>	18
<i>Boris Johnson invited as chief guest for R-Day</i>	18
Nation	19
<i>President's powers to pardon - in US, India</i>	19
<i>Is a person's address public information? (Shailesh Gandhi - a former Central Information Commissioner and Prashant Reddy T. - a lawyer)</i>	19
<i>Consent for Contempt</i>	21
<i>Let there be noise</i>	23
<i>Change in stance over Sabarimala entry draws flak</i>	23



SC stays HC gag order in Amaravati land scam	24
Tech tact	24
Why has Tamil Nadu banned online games?.....	25
Castes count.....	26
Parliamentary panel bats for laws to counter bio-terrorism	26
Trudeau's sermon	27
<i>The perils of deregulated imperfect agrimarkets (R. Ramakumar - Professor at the Tata Institute of Social Sciences, Mumbai)</i>	<i>28</i>
Why Punjab's claim over Chandigarh is stronger than that of Haryana.....	31
A Hyderabad temple, and the city's name.....	32
Muslim ministers: numbers lag far behind share in population	33
J&K's Roshni Act: who it helped own land, and why it's been scrapped.....	34
Peaceful possibilities	35
Plea in SC against bigamy among Muslims: Opposed to public policy, decency, morality	36
The so-called 'Love Jihad'	36
How NRIs could vote by post.....	39
Maharashtra Council polls, in perspective	41
Kerala puts new libel law on hold	41
Now, dial M.P. Information Commission helpline for RTI	42
Why the protests against Bru resettlement in Tripura have flared up now.....	42
Why prefixing '0' will be mandatory for landline to mobile calls from Jan 15?.....	43
New guidelines for cab aggregators: What they mean for drivers and riders.....	44
Surgery as part of Ayurveda	46
GenePath Diagnostics wins ₹2.5 crore grant.....	48
International Day of Persons with Disabilities	49
What is regional navigation satellite system or IRNSS that India is 4th nation to have	50
India's push for gender equity in science	51
How kala-azar was eliminated from a highly endemic district in Bihar.....	52
Honey, the sweetener on your plate may be sugar syrup.....	53
What are desalination plants and what is their feasibility?	53



Why has the Northeast monsoon remained subdued this year?	54
Storm Nivar.....	56
Sparkling stone sparks frenzy in Nagaland	56
'Sea sparkle' has affected marine food chain: CMFRI.....	57
MDH's asli sach: The Mahashay of Spices with a taste for life	57
The journey of an Annapurna idol, from Varanasi to Canada and back.....	58
Business & Economics.....	59
PMI signals.....	59
Chhattisgarh picks Centre's borrowing proposal; 27 states, 3 Union Territories on board	59
Choppy tidings	60
Indian Economy in recession.....	60
Fiscal deficit reaches 120% of annual target	61
RBI holds rates, sees FY GDP contraction at 7.5%.....	61
RBI tightens oversight of NBFCs, UCBs.....	62
RBI halts HDFC Bank from issuing new credit cards.....	62
Corporates as banks: What led to this recommendation, and why has it come in for criticism?	62
Moratorium on banks	65
What is the case against Karvy and what next for its clients?.....	67
Competition Bill: Options for faster case disposal, CCI to name probe arm chief.....	68
Insider trading case: Sebi bars NDTV promoters, others; Roys to file appeal	69
Life & Science	70
What is the Sentinel-6 satellite and why is it important?.....	70
What is China's Chang'e-5 probe to the Moon about?.....	70
the "great conjunction"	71
China turns on 'artificial sun'	73
The GMRT selected as a 'Milestone' facility by IEEE	73
Remains of two Vesuvius volcano victims found: What was the eruption of 79 AD?	73
Twice hit by climate change.....	74
'World's loneliest elephant' Kaavan starts trip to Cambodia	75
New species of gecko found in the Eastern Ghats	75



<i>In UK, examining world's first 'foul air death'.....</i>	76
<i>The Paris Agreement is no panacea.....</i>	77
<i>Lab-grown meat: cleared in Singapore, emerging alternative worldwide.....</i>	79
<i>Why is a US anti-doping Act with a Russian name being seen as controversial?</i>	80
<i>Pilot study finds potential signal indicative of loss of tone in blood vessels after cardiac surgery</i>	81
<i>Why influenza makes people vulnerable to bacterial infection</i>	82
<i>A looming health crisis (Atul Bagai - Head, UN Environment Programme, Country Office, India)</i>	83
<i>From dolphins and whales, new insights on Covid-19</i>	85
<i>Coronavirus mutations do not increase its transmissibility</i>	86
<i>What's emergency use approval.....</i>	86
<i>UK vaccination</i>	88
<i>The purpose of a vaccine (Mathew George - Professor at the Centre for Public Health, School of Health Systems Studies, Tata Institute of Social Sciences, Mumbai).....</i>	89
<i>Five reasons the Oxford-AstraZeneca vaccine is better news than the Pfizer, Moderna shots.....</i>	90
<i>Rein in the vaccine nationalism, the profiteering (Dr. K.R. Antony - public health consultant at Kochi and an independent monitor for the National Health Mission).....</i>	91
<i>Being active could prevent 5 mn deaths yearly:WHO.....</i>	93
<i>RT-LAMP: a new technology for detecting COVID-19 (D.M. Vasudevan - Head of postgraduate programmes and research at Amrita Institute of Medical Sciences, Kochi).....</i>	93
<i>Similar symptoms in Covid, lung injury caused by vaping.....</i>	94
<i>3D printed swabs now in use worldwide: developers</i>	95
<i>Scientists probe cell membrane defence against coronavirus</i>	95

DreamIAS



INTERNATIONAL

DEBATE ON MARIJUANA

Amidst the din of the US elections which has left a polarised nation even more divided, many have overlooked the fact that Americans did unite around one issue — getting stoned. *Alongside the presidential election, the question of whether marijuana, which is available in various forms in India (ganja, charas and bhang), should be legalised for recreational or medicinal use was presented to voters in a number of states. Even if folks in New Jersey and Arizona disagreed with those in Montana and South Dakota as to who they preferred to be the President, they all agreed that getting wasted should be legal. Since 2012, when Colorado became the first state to approve the recreational use of marijuana, two-thirds of American states now allow its use for medicinal purposes, including 15 just for fun.* And Americans, who were imprisoned for toking, can look forward to Biden's presidency, not only because it promises decriminalising the use of marijuana but also the rubbing out of past convictions. For a country which, only a few decades ago, had launched its infamous “war on drugs”, imprisoning millions of young people (most often, blackmen) for using drugs, the remarkable march towards legalising the most commonly used drug of all is reflected in the dramatic shift in public attitudes towards marijuana with *over two thirds of adults now supporting its legalisation, up from just about 10 percent 50 years ago. Over this period, attitudes towards marijuana have also softened globally, with Canada and Uruguay now offering nationwide marijuana stores, while several others have decriminalised its use.* This transformation is founded upon *a substantial body of science demonstrating that the harms associated with marijuana use were greatly over estimated and that, like all substances which affect our mental health, society should respond to its use through progressive public health policies — in short, as with alcohol, rather than banning them and criminalising users, to implement a range of strategies to control their use and reduce the harms associated with them. These strategies include health education, age restrictions, taxation, limiting the dose of the active ingredients and access to counselling for those who wish to stop.* In doing so, you root out the criminal mafias, empty jails of young people whose only crime was to have a bit of fun, free up precious police time to go after the real crooks and generate a new source of income for the state. These dramatic changes in attitudes stand in stark contrast to the exuberant efforts by India's Narcotics Control Board to investigate, interrogate and arrest people with small amounts of marijuana. If they keep this up, they are going to need a whole lot more officers to chase the *30 million people in the country who owned up to using marijuana in 2019* to the government of India. Given that admitting to such behaviour in a state-sponsored survey could lead to prison or, more likely, being extorted into paying a bribe, even this substantial figure must be viewed as a conservative estimate. While the NCB has assumed the patriotic task of defending India's moral purity from harmful foreign influences, it may benefit from a history lesson: Marijuana has a long and colourful history of use in India, dating back at least two millennia and the laws criminalising its use were imposed by foreigners. First, it was the British who tried to ban the substance on several occasions, finally giving up when its own commission declared that that “the moderate use of these drugs is the rule” and that even amongst the “exceptional” excessive users “the injury is not clearly marked” and that “the effect on society is rarely appreciable”. These astute observations have stood the test of time, with hundreds of studies over the past century confirming these conclusions. *India continued to resist foreign pressure after independence when, in 1961, it opposed the inclusion of marijuana in the Convention on Narcotic Drugs, citing its role in its social and religious customs. The international community allowed India a reprieve on two conditions—that the government would not export marijuana and*



that it would be ultimately criminalised in 25 years. And thus India's own Narcotic Drugs and Psychotropic Substances Act was conceived in 1985 which, while criminalising marijuana, continued to permit the use of bhang (equivalent to banning cigarettes, but allowing beedis). There is no doubt that marijuana use has its risks, as do all other substances which affect the brain. One has to be particularly concerned that, with legalisation in wealthy countries, newer hybrid strains of marijuana which contain much higher concentrations of the active ingredient (THC) are beginning to swamp the market. There is evidence that these more potent forms of the drug are dangerous for young people with vulnerabilities to develop mental health disorders and this is why strict regulations must be part of any policy to legalise marijuana. Only legalisation offers the opportunity for implementing effective harm minimisation policies for the vast, criminalised systems of production and sale are outside the scope of any regulation. Reassuringly, the winds of change are blowing as a motley crew of politicians, like-minded cops, an assortment of sadhus and civil society groups, such as the Great Legalisation Movement (a fittingly trippy name!), join a chorus to demand legislative reforms. And if science and common sense aren't sufficient, invoking our ancient scriptures and rejecting colonial prejudices may be an effective argument for our times. It surely can't be long before millions around this country can lustily sing Dum maro dum or the iconic lyrics of Bob Marley, the talisman of marijuana aficionados from Kingston to Candolim, "I feel so high, I even touch the sky, so here I come again". I know many of you will be humming the rest of this song.

SEASONED FACES WHO COULD AID THE RETURN OF AMERICA

The President-elect of the United States, Joe Biden, recently announced nominations for some key national security posts. During the campaign, Mr. Biden argued for a liberal internationalist foreign policy to "once more place America at the head of the table". Whereby, Washington would reassume the role of a steward on global governance issues, lead in the advocacy of democratic values and human rights, and sustain its network of alliances from western Europe to northeast Asia. *Given this restorationist agenda for "rescuing" U.S. foreign policy after Donald Trump's 'America First' conduct, most of Mr. Biden's nominations are veterans of the Barack Obama administration.* However, the decision to nominate his former colleagues also seems to be a very calculated one.

The band back together

With Mr. Trump overseeing America's withdrawal from the UN Human Rights Council and UNESCO, Mr. Biden has tapped career diplomat Linda Thomas-Greenfield to represent Washington at the global high-table. Biden will also restate the post to cabinet rank, since Trump had it downgraded. Moreover, Ms. Thomas-Greenfield's experience as Barack Obama's Assistant Secretary of State for Africa (at the critical time of responding to the Ebola outbreak) would be particularly relevant in the U.S.'s effort to "increase trust with non-Western diplomats", at a time when China has sought to do the same to expand its influence at the UN. From the standpoint of rekindling America's relationship with its prime allies, *Mr. Biden's nomination of former Deputy Secretary of State Antony Blinken for Secretary of State is significant.* After Mr. Trump's derision of Europe as America's "foe" and for allegedly having "ripped off" Washington on collective security, European capitals will now deal with someone who is fluent in French and considers them as partners of "first resort, not last resort." In addition, *the decision to tap former Secretary of State John Kerry as Special Presidential Envoy for Climate is reflective of the high priority Mr. Biden would accord to the issue. Apart from Mr. Biden's pledge to reverse Mr. Trump's withdrawal from the Paris climate agreement*



*(which Mr. Kerry helped negotiate), he is expected to elevate the position as part of his National Security Council. Finally, Jake Sullivan, who most recently served as National Security Adviser to Vice-President Biden, will “take on the same title — but now to a President Biden”. His appointment as the gate-keeper of Mr. Biden’s national security agenda, will most definitely have bearing on Mr. Biden’s pledge to rejoin the Iran nuclear deal, since **Mr. Sullivan was a key player in the secret negotiations that led to the 2015 deal**. During his time as the Deputy Chief of Staff to Secretary of State Hillary Clinton, **Mr. Sullivan also worked on the implementation of her ‘Pivot to Asia’ policy — arguably the early precursor to the Indo-Pacific strategy**.*

NO LEVERAGE FOR BIDEN ON IRAN

The murder of Iranian nuclear scientist Mohsen Fakhrizadeh has not only exposed the vulnerabilities of Iran’s military intelligence, but also triggered a series of questions concerning the future of Iran-U.S. relations after the recent election of Joe Biden as President of the U.S. Many inside Iran and around the world have pointed the finger at Israel’s intelligence agency, Mossad, which is suspected to have killed Iranian nuclear scientists earlier this decade. *In the Mossad’s point of view, Fakhrizadeh was the brain behind the militarisation of Iran’s nuclear programme and therefore represented an imminent threat to the security of Israel*. Israeli Prime Minister Benjamin Netanyahu even mentioned him by name during a May 2018 press conference while revealing secretly stolen documents on Iran’s nuclear programme. Unsurprisingly, President Donald Trump retweeted Israeli writer Yossi Melman’s tweet that said Fakhrizadeh’s assassination is a “psychological and professional blow” to Iran. As for Mr. Biden, he has been silent on the matter. The reason is not because he does not want to interfere in presidential matters until he assumes office; the truth is that Fakhrizadeh’s assassination could easily damage and diminish any hope for future dialogues with Iran.

No easy solutions

Consequently, the Iranian authorities also find themselves in a difficult position. There are no easy solutions to the challenges posed by Fakhrizadeh’s assassination. At a time when Iran is weighing its options for taking revenge for Fakhrizadeh’s death, its political scene seems divided. While the Iranian hard-liners are shouting for an immediate “harsh revenge”, President Hassan Rouhani has announced that his government will not fall for Israel’s trap by responding hastily. Iran’s response will depend on how the dialogue with the future U.S. administration will evolve. That said, it is no secret that *many in Tel Aviv and Riyadh are against any efforts to revitalise U.S.-Iran diplomacy. Israel has repeatedly underlined the fact that returning to the 2015 nuclear deal with Iran would be a mistake*. Even so, Israel and Saudi Arabia are confident that it won’t be easy to put the nuclear deal back together in a way that can last. *Despite the encouraging statements by both the Biden camp and officials in the Rouhani administration, there is a remarkable degree of scepticism surrounding the prospect of the U.S. returning to the Joint Comprehensive Plan of Action (JCPOA)*. But the Iranian population is hoping that Mr. Biden and his group of experts will enable a return to the short period between the implementation of the JCPOA in January 2016 and the election of Mr. Trump in November that year. Addressing the possible impact of U.S. elections on U.S.-Iran relations, Iran’s Supreme Leader Ayatollah Ali Khamenei said, “We follow a sensible, calculated policy which cannot be affected by changes of personnel.” The policy to which he was referring is that of engaging in a deal with Iran while respecting its vital strategic interests.



Importance of the IRGC

What is certain is that the killing of General Qasem Soleimani in an American drone attack in January 2020 did not have a major impact on Iran's projection of power in the Persian Gulf region. The Iranian Revolutionary Guard Corps (IRGC) still has the upper hand in many operations taking place in Iraq and Lebanon through the Shi'a militias, the Hashd al Sha'abi (Popular Mobilisation Forces), Kata'ib Hezbollah or the Lebanese Hezbollah. Despite the popular rage against Iranian interference in Baghdad and Beirut, the IRGC continues to play an important role in shaping Iranian foreign policy in West Asia. The IRGC is the unique pre-eminent power in Iran which is capable of replacing Ayatollah Khamenei after his death and is likely to impact the future of U.S.-Iran relations. As such, there is little likelihood of any flexibility towards the Iranian regime from the American side while the IRGC has total control of Iranian domestic and foreign policies. Last but not the least, the end of the Trump administration does not necessarily mean the end of economic sanctions and "maximum pressure" on Iran. It is true that Iranians are suffering from rampant inflation and a decline in the value of the Iranian rial against the U.S. dollar, but Mr. Trump's sanctions have not coerced the Iranian government into talks. Mr. Trump's withdrawal from the JCPOA followed by economic coercion offer Mr. Biden no real leverage on Iran. Iran's adaptability to sanctions pressure shows quite well that the future Biden administration would need more than promises of sanctions relief — promises to bring the Iranian policymakers to the negotiating table. Mr. Biden will face a tough road ahead, especially if an element of the IRGC wins in the next year's presidential election in Iran.

U.S. President-elect Joe Biden will insist Iran agrees to new demands if it wants the U.S. to return to a nuclear deal and lift sanctions, The New York Times said. The Times said the Biden administration would seek to extend the duration of "restrictions on Iran's production of fissile material that could be used to make a (nuclear) bomb" in a new round of negotiations. Iran would also have to address its "malign" regional activities through proxies in Lebanon, Iraq, Syria and Yemen in the talks that would have to include its Arab neighbours like Saudi Arabia, the report said.

IRAN MOVES TO STEP UP NUCLEAR ENRICHMENT

Iran's watchdog body approved a law that obliges the government to halt U.N. inspections of its nuclear sites and step up uranium enrichment beyond the limit set under Tehran's 2015 nuclear deal, if sanctions are not eased in a month. In retaliation for the killing last week of Iran's top nuclear scientist, which Tehran has blamed on Israel, Iran's hardline-dominated Parliament approved the Bill with a strong majority, hardening Iran's nuclear stance. Under the new law, Tehran gives one month to the deal's European parties to ease sanctions on Iran's oil and financial sectors, imposed after Washington quit the pact between Tehran and six powers in 2018. It also says the *government should resume uranium enrichment to 20% and install advanced centrifuges at its Natanz and Fordow nuclear facilities.* The law pushed by hardline lawmakers would *make it harder for U.S. President-elect Joe Biden, who will take office on January 20, to rejoin the agreement.* Mr. Biden has said he would return to the pact and would lift sanctions if Tehran returned to "strict compliance with the nuclear deal". Iran's pragmatist President Hassan Rouhani, the architect of the 2015 deal, criticised Parliament's move as "harmful to diplomatic efforts" aimed at easing U.S. sanctions.



U.S. SENATE CLEARS BILL ON IMMIGRANT VISAS

The U.S. Senate has unanimously passed a Bill that eliminates the per-country numerical limitation for employment-based immigrant visas and raises it for family-based visas, a legislation that will hugely benefit hundreds of thousands of Indian professionals in America who have been waiting for years to get their green cards. The Fairness for High-Skilled Immigrants Act comes as a big relief to Indian IT professionals who come to the U.S. on H-1B work visas. Their current waiting period for the Green Card or permanent residency is running into decades. *Originally passed by the U.S. House of Representatives on July 10, 2019 by a bipartisan 365 to 65 votes, the legislation increases the per-country cap on family-based immigrant visas from 7% of the total number of such visas available that year to 15%.* It was sponsored by Republican Senator Mike Lee from Utah in the Senate. The provision will facilitate removal of the massive backlog of Indian IT professionals in the US. Currently, there is a backlog of almost one million foreign nationals and accompanying family members residing in the U.S. who have been approved for, and are waiting to receive, employment-based Green Cards. The largest number of them are from India.

U.S. TO BLOCK IMPORT OF 'SLAVE LABOUR' COTTON FROM CHINA

The United States will block imports of cotton that, it says, is harvested with "slave labour" in China's Xinjiang region, authorities have announced. Beijing has come under intense international criticism over its policies in the resource-rich territory, where rights groups say as many as one million Uighurs and other mostly Muslim minorities are being held in internment camps. The new rule allows Customs and Border Protection officials to detain shipments containing cotton originating from the Xinjiang Production and Construction Corps, a major paramilitary group already sanctioned by the U.S. Treasury.

U.S. TIGHTENS VISA RULES FOR CCP MEMBERS

The Trump administration issued new rules to curtail travel to the U.S. by members of the Chinese Communist Party (CCP) and their immediate families, a move certain to further exacerbate tensions between the two countries. The new policy, which took immediate effect, limits the maximum duration of travel visas for party members and their families to one month, according to a State Department spokesman. Previously, party members, like other Chinese citizens, could obtain visitor visas for the U.S. that were valid for 10 years. Travel visas for party members will also be limited to a single entry rather than multiple entries as was possible before, according to two people familiar with the changes. The new measures do not affect party members' eligibility for other kinds of visas, such as immigration or employment. The State Department spokesman added that no current visas would be revoked as a result of the policy changes. The new visa rules add to the conflict, now years long, between the two countries on trade, technology and much else. Coming in the twilight of the Trump administration and aimed squarely at China's ruling elite, the visa restrictions and the likely Chinese response will be yet another challenge to President-elect Joe Biden, who is inheriting a U.S.-China relationship that is in its worst state since the normalisation of diplomatic ties in 1979.



WHAT IS GERMANY'S NEW BOARDROOM QUOTA FOR WOMEN?

A working group of Germany's ruling coalition parties headed by Chancellor Angela Merkel agreed to impose a mandatory quota for the number of women working in senior management positions in the country's listed firms. A final decision on the key points of the legislature, called the Second Management Positions Act, will be made by the cabinet this week. The move has been called "historic" by Germany's Federal Minister of Women Franziska Giffey, and is being seen as the next step in narrowing the gap of sexual inequality in the country. However, the proposal has also been criticised, with Germany's Green Party saying it does not do enough to achieve gender equality when it comes to representation in the workplace.

WHY RIGHT WING GROUPS IN GERMANY HAVE COMPARED A COVID-19 LAW TO NAZI-ERA 'ENABLING ACT'

Thousands of protesters gathered in Berlin on November 18 to protest the country's amended Infection Protection Law, which gives the government the legal basis to issue coronavirus restrictions, such as closing stores and other public venues and imposing rules about masks and social distancing. While the amendment was swiftly approved by both houses of parliament, Right wing groups compared it to the Enabling Act of 1933, a law that had solidified Adolf Hitler's dictatorship over the country.

The new German law

The amended Infection Protection Law provides a legal basis for the German government to restrict certain constitutional freedoms while enacting Covid-control measures. According to a DW report, *the amendment transfers some law making power from the country's legislature to the executive, thus strengthening the ability of the government to pass coronavirus restrictions by decree. However, the law specifically lists the restrictions that state governments can enforce, and stipulates that protective measures will be triggered when a threshold of 50 new infections in 7 days per 1 lakh people is crossed. Anti-corona ordinances have been restricted to four weeks, and will require a justification from the government.* At the same time, the law separates "culture" from entertainment, meaning that restrictions on cultural venues would require justification from federal and state governments. The German government hopes that the law's passing would shield its pandemic measures from challenges in courts, as per the German Press Agency (DPA).

The Nazi-era Enabling Act

In the past few months, Berlin has seen repeated protests against the country's coronavirus restrictions. While the government has generally received praise for its handling of the pandemic, resistance to its policies has also grown during the period. Trying to take advantage of this sentiment, Right wing groups, including the ultra-right Alternative for Germany (AfD) party, have compared the new law to the Enabling Act of 1933, a Nazi-era law that cemented Adolf Hitler's leadership over the country. *In the parliamentary elections of March 5, 1933, Hitler's far-right Nazi party failed to secure an absolute majority, despite its many attempts to intimidate opponents during the election. Following this, on March 23, Hitler asked the German parliament to approve what was called the "Enabling Act", or the "Law to Remedy the Distress of People and the Reich". Except for the Social Democrats, who valiantly opposed the measure in the face of Nazi intimidation tactics, all other parties present that day chose to approve the law, which was passed with the required two-*



thirds majority. The German Communist Party, which was also opposed to the law, was not present in parliament when the vote was passed, as all of its members by that time had either been stripped of authority, arrested or had fled to avoid arrest. The law drastically increased Hitler's power, by allowing his government to make laws or sign agreements with other countries without legislative approval — making the German parliament redundant. Constitutional liberties were suspended, and all political parties except the Nazis were either banned or forced to disband, making the March election the last multi-party election. The next election, in November 1933, had only the Nazi party on the ballot. Multi-party democracy only resumed after Germany's defeat in World War II.

Reactions to the comparison

Mainstream politicians have dismissed the amendment's comparison to the Nazi law. German foreign minister Heiko Maas tweeted, "To "help out with facts": The Nazis undermined democracy with the Enabling Act. We're doing the contrary today with the German Infection Protection Act. Arbitrariness is excluded, legal clarity is created." "Of course, everyone has the right to criticize the measures. Our democracy lives from the exchange of different opinions. However, anyone who downplays or relativises the Holocaust has learned nothing from our history," Maas said.

NOBEL PEACE PRIZE WINNERS WHO DISAPPOINT

When Ethiopia's Prime Minister Abiy Ahmed launched a large-scale military offensive against separatists in the restive Tigray province, which led to the deaths of possibly thousands and forced tens of thousands to flee as refugees, a familiar disquiet arose across the world. Had the Nobel Committee made a mistake in awarding the 2019 Peace Prize to Mr. Abiy, who until last year was hailed as a beacon for democratising Ethiopia and befriending Eritrea? *With ethnic tensions spiralling and Mr. Abiy resorting to violent means to manage the nationwide turbulence, was the Nobel Committee naïve in having so much hope in him?*

Failing to live up to ideals

There was similar heartburn over President Juan Manuel Santos of Colombia failing to live up to ideals. Mr. Santos won the Peace Prize in 2016 for ending the decades-long civil war with FARC (Revolutionary Armed Forces of Colombia) guerrillas. Despite his image as a peacemaker, Mr. Santos's presidency saw continuing paramilitary excesses and rampant human rights violations by agents of the state. Likewise, when the Nobel Committee gave the 2009 Peace Prize to U.S. President Barack Obama, it proved a controversial choice. Shortly after receiving the Prize, Mr. Obama ordered an American troop surge in Afghanistan, deepening a bloody war. In 2011, he also backed a disastrous military intervention in Libya and subsequently abandoned it when there was chaos. Yet another much-maligned Nobel Peace Prize winner is Myanmar's Aung San Suu Kyi. She was chosen in 1991 while in house arrest for her courageous activism against military dictatorship and her campaign for democracy. But once she assumed the title of State Counsellor in 2016 under a power-sharing arrangement with the military in Myanmar, calls for revoking her Prize echoed in international public discourse. Ms. Suu Kyi's decision to team up with the repressive armed forces and defend her government at the International Court of Justice against charges of genocide of the Rohingya triggered a global uproar. Several other awards heaped on her have lately been rescinded, with Amnesty International slamming her for "shameful betrayal of the values she once stood for". While there is no question that Mr. Abiy, Mr. Santos, Mr. Obama and Ms. Suu Kyi have disappointed legions of admirers, what is common to them is that they have



been holders of executive state power. The very logic of *raison d'état* pushes these personalities to work under compulsions and make compromises. Mr. Abiy has justified his war in Tigray as part of the Ethiopian government's "responsibility to enforce rule of law" and the writ of the state. Should his regime collapse, there could be anarchy or a return to the authoritarian *ancien régime*. Ms. Suu Kyi feels she has no option but to cooperate with the military if Myanmar's democratisation transition has to eventually succeed. If she openly challenges the military in the transitional period or steps down on conscientious grounds, the dream of full transfer of authority to civilian leadership could be lost. Mr. Obama too rationalised his actions. He said that as "a head of state sworn to protect and defend my nation", he believed that "force is sometimes necessary".

Unrealistic expectations

It is unrealistic to expect Nobel Laureates running government machineries to behave like saints. Giving the Nobel Prize to sitting prime ministers or presidents is inherently risky and these recipients should not be held to the gold standard of a Mother Teresa or Malala Yousafzai. If one adopts a less perfectionist lens, all the problematic Nobel Laureates have done some good and some harm. Unless the Nobel Committee consciously avoids picking incumbent politicians altogether in the future, there will always be reasons to be dejected by such Laureates' records in hindsight. Understanding them in their political contexts and in particular moments may help us reach a balanced final judgment.

WHY A LARGE YELLOW RUBBER DUCK HAS BECOME A SYMBOL OF THAILAND'S PROTESTS

Since protests started in Thailand in July this year, seeking the removal of Prime Minister Prayuth Chan-ocha and demanding reform of the Thai monarchy, the movement has seen protesters adopt different mascots to get their message across; everything from singing the Thai version of one of the 1980s musical *Les Misérables'* principal songs "Do You Hear the People Sing?" to dinosaur costumes to displaying the three-finger salute. The latest addition to this compendium is the use of large inflatable pool ducks. *But over the past week, these inflatable ducks have become more than just a mascot at the protests.*

Why are protesters using inflatable ducks?

News reports quote protesters saying that these inflatable ducks had initially been brought out onto the streets as a joke, while some protestors have told news publications that the rubber ducks were used to mock the government and the monarchy. But they took on a new role as the Thai government's crackdown on the protests intensified. According to a Reuters report, these yellow rubber ducks had first made an appearance on Tuesday this past week, when protesters had gathered outside the police headquarters in Bangkok, on what was the day of the most violent of demonstrations. The protestors had used these ducks as shields and advanced towards police lines when police forces began firing water cannons. In recent photographs and videos from the protests, protesters can be seen carrying large yellow plastic ducks hovering above the crowds.

What are these yellow inflatable ducks?

Observers say that this yellow inflatable rubber duck has been inspired by Dutch artist Florentijn Hofman's series of floating sculptures titled 'Rubber Duck' that has been exhibited in several cities around the world, including Hong Kong, Baku and Sydney. But a few weeks after it was installed in Hong Kong's Victoria Harbour in May 2013, China's government began imposing censorship on



online discussions of the term “Big Yellow Duck” after activists started photoshopping images of the duck into the iconic photo of the Tank Man from the 1989 Tiananmen Square Protests. Since then, this yellow duck has become an unusual symbol of protests around the world.

Where else have these ducks surfaced in protests?

In 2016, groups that were calling for the impeachment of Brazil's President Dilma Rousseff began using the rubber duck as a mascot. But at that time, Hofman, the artist, had claimed that the use of the figure by these protest groups amounted to copyright infringement. Versions of these rubber ducks were seen during the 2017-2018 anti-corruption protests in Russia, where among other demands, protestors called for the resignation of Vladimir Putin and his government. The ducks also surfaced during protests last year in Hong Kong, where protesters confronted police and were photographed carrying these small plastic ducks. One iconic image from these protests in Hong Kong shows a battalion of police standing on one side of a road with a small yellow rubber duck placed on the ground in front.

132 COUNTRIES ATTEND GLOBAL MEET ON CRIMINAL FINANCES

Over 2,000 representatives from 132 countries attended the virtual 4th Global Conference on Criminal Finances and Cryptocurrencies organised by the Interpol, Europol and the Basel Institute on Governance from November 18 to 19. The conference is an initiative of the Working Group on Cryptocurrencies and Money Laundering established in 2016 by the three organisations, launched with an objective of strengthening knowledge, expertise and best practices for investigations into financial crimes and intelligence on virtual assets and cryptocurrencies. The conference underlined the need to expand capabilities on ways to probe virtual assets and regulate virtual asset service providers to prevent money laundering. The conference's agenda included trends and investigations on cryptocurrency related offences, exploring criminal flows and operations in the dark markets, ransomware and sextortion case studies, money laundering involving virtual assets, and the transfer of drug proceeds using cryptocurrencies.

FIRST ROHINGYA ARRIVE AT BANGLADESH ISLAND

Authorities in Bangladesh sent the first group of more than 1,500 Rohingya refugees to an isolated island despite calls by human rights groups for a halt to the process. *The 1,642 refugees boarded seven Bangladeshi naval vessels in the port of Chittagong for the trip to Bhashan Char, according to an official who could not be named in accordance with local practice. After about a three-hour trip they arrived at the island, which was once regularly submerged by monsoon rains but now has flood protection embankments, houses, hospitals and mosques built at a cost of more than \$112 million by the Bangladesh navy. Located 34 km from the mainland, the island surfaced only 20 years ago and was never inhabited.* Saleh Noman, a Bangladeshi journalist who travelled with the refugees, said by phone from the island that the refugees were given rice, eggs and chickens for lunch after their body temperatures were measured by health workers as a corona virus precaution. The island's facilities are built to accommodate 100,000 people, just a fraction of the million Rohingya who have fled waves of violent persecution in their native Myanmar and are currently living in crowded refugee camps. The UN has voiced concern that refugees be allowed to make a “free and informed decision” about whether to relocate to the island in the Bay of Bengal.



FOREIGN AFFAIRS

BHUTAN ESTABLISHES FORMAL TIES WITH GERMANY

Bhutan announced that it had established diplomatic relations with Germany, increasing the restricted number of capitals that Thimphu has formal ties with to 53 states and the EU. The move, which was announced at an “Exchange of Verbal Notes ceremony” in Delhi by Bhutan’s Ambassador to India Major General Vetsop Namgyel and Germany’s Ambassador Walter Lindner, was described by the German Foreign Office as a “special day” and a “rare” event. “With the establishment of diplomatic relations, the two Ambassadors expressed the desire to further deepen the friendship and cooperation between the two countries,” said the Bhutanese Ministry of Foreign Affairs. In an article on its website, the German Federal Foreign office credited Bhutan’s current Prime Minister with the decision. “The government of Prime Minister Dr. Lotay Tshering, in office since November 2018, has continued to cautiously open up the country — leading to the decision to establish diplomatic relations with Germany,” the release said, adding that Germany did not plan to set up an embassy in Thimphu at present, and would conduct its relations through its embassy in Delhi from “across the border”. Bhutan and Germany also maintain honorary consulates in each other’s capitals. Official sources in New *Delhi said the government had “noted” the development.* “We are aware that the two countries already established consular relations in July 2000. Germany is an important development partner of Bhutan. This is a further step on that path,” they said. *Since 1949, when Bhutan first signed a friendship agreement with India, which kept the two countries closely engaged on all foreign policy issues, Bhutan has been historically cautious about establishing ties with other countries.*

First election

Until 2007, when Bhutan conducted its first election, it had formal relations with just 22 countries, mostly donor countries such as Japan, Australia and several Nordic countries. It also made a firm decision not to open ties with any of the permanent five members of the UN Security Council, despite many requests from them and in particular from the U.S. and China. After the election of Prime Minister Jigme Thinley in 2008, however, the Bhutanese government rapidly increased its diplomatic forays, signing agreements with 31 countries in five years, possibly with a view to winning the election for a non-permanent seat election at the UNSC in 2013-14, which it eventually lost. The ties with Germany mark the first new diplomatic agreement made by Bhutan since March 2013, when it had established ties with Oman. “Even in the absence of diplomatic relations, Germany had been supporting Bhutan’s socio-economic development since the 1970s. More significantly, *Bhutan continues to receive support from the European Union of which Germany is the largest contributor to the Union’s budget.* People-to-people contacts between Bhutan and Germany have also increased over the years,” the Bhutanese MFA said in its statement.

‘CAREFULLY MONITORING’ BRAHMAPUTRA DEVELOPMENTS: INDIA

India said it “carefully monitors all developments on the Brahmaputra” river, even as Beijing said it was its “legitimate right” to develop hydropower projects on the lower reaches of the river. *A State-run Chinese hydropower firm, POWERCHINA, is planning to build the first downstream dam on the Brahmaputra, known as the Yarlung Zangbo in Tibet. Officials from the firm said last week that they were eyeing the enormous potential of the river’s “Great Bend” just across the border from*



Arunachal Pradesh in Tibet's Medog county, where the river falls over a 2,000-metre drop before turning to flow into India. While China in 2015 operationalised its first hydropower project at Zangmu in Tibet and is constructing three other dams at Dagu, Jiexu and Jiacha, these are run-of-the-river dams on the upper and middle reaches. The proposed new dam is also likely to be a run-of-the-river hydropower project that will not divert water, but will be the first on the lower reaches. "Any project we undertake will go through scientific planning and research and we fully consider the impact on the downstream areas, taking into account the interests of both the upstream and the downstream. At present, the development of a hydropower station at the lower reaches of the Yarlung Zangbo river is still in the early planning and research stage, and there is no need to interpret too much into it." *It remains unclear whether technical feasibility studies will allow construction to go ahead, as POWERCHINA is not the first company to propose a downstream dam and previous projects did not take off.* Ms. Hua said China had "for a long time carried out good cooperation with India and Bangladesh in flood reporting, flood control, disaster relief, and emergency management" and "will maintain communication with India and Bangladesh through existing channels". Asked about China's plans, External Affairs Ministry spokesperson Anurag Srivastava said at his weekly briefing that the "government carefully monitors all developments on the Brahmaputra river."

INDIA HOSTS SCO

Three years after joining the eight-nation *Shanghai Cooperation Organisation (SCO)*, India hosted the SCO heads of governments (HoG) meeting for the first time on Monday. The focus of the 66-point joint communiqué at the end of the virtual conference was in developing a "Plan of Priority Practical Measures for 2021-2022 to overcome the socio-economic, financial and food consequences of COVID-19 in the region". Members committed to strengthening multilateralism and the UN charter while welcoming the fact that the grouping is now being seen as an "influential and responsible participant in the modern system of international relations". The meeting also showed up persisting differences. *Although the HoG Council consists of the Prime Ministers of all SCO countries, neither Prime Minister Narendra Modi nor Pakistan Prime Minister Imran Khan attended the meet, ostensibly due to a protocol mismatch between the position of PMs in parliamentary democracies versus those in the former Soviet bloc and China.* Mr. Modi was represented by Vice-President Venkaiah Naidu, who made strong observations on cross-border terrorism; he called it the SCO region's "biggest challenge", in comments aimed at Pakistan. Pakistan's representative too spoke of the need to combat what she called "state terrorism" in disputed areas, in a reference to Jammu and Kashmir. The SCO is a rare forum where India-Pakistan troops take part in joint exercises under the Regional Anti-Terror Structure, although it would seem the two countries have come no closer on the issue. Neither statement on terrorism was reflected in the final joint statement, which focused on trade and economic issues. India also marked its differences with China over the BRI by not joining other SCO members in a paragraph endorsing the BRI. Mr. Naidu made a pitch for "transparent and trustworthy" trade practices, seen as a sidebar aimed at China.

Regardless of the differences, the Modi government has consistently maintained the importance of the SCO grouping, referred to as the "Asian NATO" although it does not mandate security alliances. The SCO is one of the few regional structures India is a part of now, given a decline in its engagement with SAARC, BBIN and the RCEP. The SCO provides *India a convenient channel for its outreach — trade and strategic ties — to Central Asian countries. It has afforded a platform, when*



needed, for bilateral discussions with the two countries India has the most tense ties with: China and Pakistan. While the government has eschewed meetings with Pakistan for the last five years, it has used the SCO for talks with China, including this year amidst the LAC stand-off, when Rajnath Singh and S. Jaishankar met their counterparts on the sidelines of SCO meets. Above all, the SCO has been seen as a grouping worth pursuing as it retains India's geopolitical balance, a useful counterpoint to New Delhi's otherwise much more robust relations with the western world, and hosting the SCO meeting was one more step towards developing that engagement.

BUDDHIST PHILOSOPHY CONNECTS SCO NATIONS

A virtual exhibition on the shared Buddhist heritage of the Shanghai Cooperation Organisation (SCO) countries was launched by Vice-President M. Venkaiah Naidu during the meeting of the SCO Council of Heads of Government meeting held via video-conference on Monday. In a statement, the Culture Ministry said the exhibition, which is curated by the National Museum, Delhi, can be accessed at nmvirtual.in. "Buddhist philosophy and art of Central Asia connects SCO countries to each other. This presents an excellent opportunity for visitors to appreciate and compare Buddhist art antiquities from SCO countries on a single platform and from the comfort of their home. Such a transnational exhibition also has potential to connect, heal and rejuvenate communities in current pandemic times," the Ministry said. The exhibition includes Buddhist treasures from India, including from the Gandhara and Mathura schools, Nalanda and Sarnath, in 3D format. Objects depicting the life of Gautam Buddha from Karachi, Lahore, Taxila, Islamabad, Swat and Peshawar museums are also included.

KASHMIR, INDIA AND THE OIC

India hit out at the Organisation of Islamic Cooperation (OIC) for making factually incorrect and unwarranted references to Jammu and Kashmir. The 47th session of the OIC Council of Foreign Ministers on November 27-29 at Niamey, Niger, had made a reference to India over its policies on J&K. In a statement, India advised the OIC to refrain from making such references in future and said it is regrettable that the grouping continues to allow itself to be used by a certain country "which has an abominable record on religious tolerance, radicalism and persecution of minorities". This was a reference to Pakistan.

What is the OIC?

The OIC — formerly Organisation of the Islamic Conference — is the world's second largest inter-governmental organisation after the UN, with a membership of 57 states. The OIC's stated objective is "to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony among various people of the world". *OIC has reserved membership for Muslim-majority countries. Russia, Thailand, and a couple of other small countries have Observer status.*

What is India's relationship with OIC as an organisation?

At the 45th session of the Foreign Ministers' Summit in 2018, Bangladesh, the host, suggested that India, where more than 10% of the world's Muslims live, should be given Observer status, but Pakistan opposed the proposal. In 1969, India was dis-invited from the Conference of Islamic Countries in Rabat, Morocco at Pakistan's behest. Then Agriculture Minister Fakhruddin Ali Ahmed



was disinvented upon arrival in Morocco after Pakistan President Yahya Khan lobbied against Indian participation. In 2019, India made its maiden appearance at the OIC Foreign Ministers' meeting, as a "guest of honour". External Affairs Minister Sushma Swaraj addressed the Inaugural Plenary in Abu Dhabi on March 1 2019, after having been invited by Sheikh Abdullah bin Zayed Al Nahyan, UAE Foreign Minister. The Ministry of External Affairs said then that the invitation was a "welcome recognition of the presence of 185 million Muslims in India and of their contribution to its pluralistic ethos, and of India's contribution to the Islamic world". This first-time invitation was seen as a diplomatic victory for New Delhi, especially at a time of heightened tensions with Pakistan following the Pulwama attack. Pakistan had opposed the invitation to Swaraj, and its Foreign Minister Shah Mehmood Qureshi boycotted the plenary after the UAE turned down his demand to rescind the invitation.

What is the OIC's stand on Kashmir?

It has been generally supportive of Pakistan's stand on Kashmir, and has issued statements criticising the alleged Indian "atrocities" in the state/Union Territory. These statements over the last three decades became an annual ritual, of little significance to India. *Last year, after India revoked Article 370 in Kashmir, Pakistan lobbied with the OIC for their condemnation of the move. To Pakistan's surprise, Saudi Arabia and the UAE—both top leaders among the Muslim countries—issued nuanced statements, and were not as harshly critical of New Delhi as Islamabad had hoped.* Over the last one year, Islamabad has tried to rouse sentiments among the Islamic countries, but *only a handful of them—Turkey and Malaysia—publicly criticised India.*

How has India been responding to such criticism?

India has consistently underlined that J&K is an "integral part of India and is a matter strictly internal to India". The strength with which India has made this assertion has varied slightly at times, but never the core message. It has maintained its "consistent and well known" stand that the OIC had no locus standi. This time, India went a step ahead and said the grouping continues to allow itself to be used by a certain country "which has an abominable record on religious tolerance, radicalism and persecution of minorities".

What is India's relationship with OIC member countries?

Individually, India has good relations with almost all member nations. Ties with the UAE and Saudi Arabia, especially, have looked up significantly in recent years. The Crown Prince of Abu Dhabi, Sheikh Mohammed bin Zayed Al Nahyan, was a very special chief guest at the 68th Republic Day celebrations in 2017, the first time India had laid out the Republic Day red carpet for a leader who was neither a head of state nor a head of government. The Crown Prince had earlier visited India in February 2016, following a visit by Prime Minister Narendra Modi to the UAE in August 2015. Days before the OIC invitation to Swaraj in 2019, Saudi crown prince Mohammed bin Salman had visited India. The invite may have been an important outcome of the MBS visit, apart from being an indication of India's improved ties with both Saudi and the UAE. The OIC includes two of India's close neighbours, Bangladesh and Maldives. Indian diplomats say both countries privately admit they do not want to complicate their bilateral ties with India on Kashmir, but play along with OIC.



What is the significance of India's latest statement?

India now sees the duality of the OIC untenable, since many of these countries have good bilateral ties and convey to India to ignore OIC statements—but sign off on the joint statements which are largely drafted by Pakistan. New Delhi's statement on Sunday targeting the OIC grouping as being led by Pakistan has to be read in that context. South Block feels it is important to challenge the double-speak, since Pakistan's campaign and currency on the Kashmir issue has hardly any takers in the international community. India also wants to challenge this issue because of the possibility that the Joe Biden administration in the US — which may have a strong view on human rights in Kashmir — may issue statements that may complicate India's image at the global stage. With New Delhi preparing to take over a non-permanent member's seat at the UN Security Council, it wants to use its diplomatic clout and good will to bury this issue at the global body in the next two years—and bring up the Pakistan-sponsored cross-border terrorism high on agenda.

INDIA, THAILAND, SINGAPORE NAVAL EXERCISE CONCLUDES

The second edition of the *India, Thailand and Singapore trilateral naval exercise, SITMEX-20*, concluded in the Andaman Sea on Sunday. The 27th edition of *India-Singapore bilateral maritime exercise, SIMBEX-20*, is scheduled to be held in the same area from November 23 to 25. "The exercise, being conducted as a 'non-contact, at sea only' exercise in view of COVID-19 pandemic, highlights growing synergy, coordination and cooperation in the maritime domain between the three friendly navies and maritime neighbours," the Navy said in a statement. The Indian Navy deployed indigenous Anti-Submarine Warfare corvette INS Kamorta and missile corvette INS Karmuk for the exercise held on November 21 and 22 and hosted by the Singapore Navy. Singapore deployed a 'Formidable' Class frigate Intrepid and 'Endurance' Class Landing Ship Tank Endeavour and the Royal Thai Navy deployed a 'Chao Phraya' Class frigate Kraburi for the exercise. The first edition of the exercise was hosted by the Indian Navy and was held off Port Blair in the month of September last year.

BORIS JOHNSON INVITED AS CHIEF GUEST FOR R-DAY

India has invited U.K. Prime Minister Boris Johnson as chief guest for the Republic Day celebrations in January 2021 and a decision on this is awaited from London, according to diplomatic sources. The invitation was extended last Friday during the telephone conversation between Prime Minister Narendra Modi and Mr. Johnson, a diplomatic source said on Wednesday. However, there was no confirmation from the British High Commission on this, with officials saying that Mr. Johnson was keen on visiting India as soon as possible. It has learnt that before this invitation, discussions were under way for a visit by Mr. Johnson for the Raisina Dialogue. There was no response from the Ministry of External Affairs (MEA) to questions on the visit. There has been no top level visit since U.S. President Donald Trump's visit in February due to COVID-19. Also, *with the number of COVID-19 cases in India crossing 9.5 million, there is still no clarity on the Republic Day celebrations next year.*



NATION

PRESIDENT'S POWERS TO PARDON - IN US, INDIA

With less than two months of his tenure remaining, US President Donald Trump exercised his powers under the Constitution to pardon Michael Flynn, his former National Security Advisor, who had twice pleaded guilty to lying to the FBI. What is the extent of the US President's power to pardon?

How US President pardons

The President of the US has the constitutional right to pardon or commute sentences related to federal crimes. The US Supreme Court has held that this power is "granted without limit" and cannot be restricted by Congress. Clemency is a broad executive power, and is discretionary- meaning the President is not answerable for his pardons, and does not have to provide a reason for issuing one. But there are a few limitations.

For instance, Article II, Section 2 of the US Constitution says all Presidents "shall have Power to grant Reprieves and Pardons for Offenses against the United States, except in Cases of Impeachment." Further the power only applies to federal crimes and not state crimes - those pardoned by the President can still be tried under the laws of individual states.

How Indian President pardons

Unlike the US President, whose powers to grant pardons are almost unfettered, the President of India has to act *on the advice of the Cabinet*. Under *Article 72* of the Constitution, "the President shall have the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence where the sentence is a *sentence of death*". Under Article 161, the Governor too has pardoning powers, but these do not extend to death sentences. The President cannot exercise his power of pardon independent of the government. *Rashtrapati Bhawan forwards the mercy plea to the Home Ministry, seeking the Cabinet's advice. The Ministry in turn forwards this to the concerned state government; based on the reply, it formulates its advice on behalf of the Council of Ministers.* In several cases, *the SC has ruled that the President has to act on the advice of the Council of Ministers while deciding mercy pleas.* These include *Maru Ram vs Union of India in 1980, and Dhananjay Chatterjee vs State of West Bengal in 1994.* Although the President is bound by the Cabinet's advice, *Article 74(1) empowers him to return it for reconsideration once. If the Council of Ministers decides against any change, the President has no option but to accept it.*

IS A PERSON'S ADDRESS PUBLIC INFORMATION? (SHAILESH GANDHI - A FORMER CENTRAL INFORMATION COMMISSIONER AND PRASHANT REDDY T. - A LAWYER)

Recently, in a case involving activist Saket Gokhale, the Bombay High Court ordered the Ministry of Information and Broadcasting to remove Mr. Gokhale's contact details from its website. His address was revealed to the general public when the Right to Information application filed by him was displayed on the Ministry's website. According to Mr. Gokhale, once his phone number and address were displayed, he began receiving threats on the phone. A mob gathered outside his house chanting slogans against him because of his activism against the ruling party. What happened to



Mr. Gokhale is unacceptable and the state must take all possible steps to prosecute those who threatened him and his family. The larger question here is whether a person's address is public or private information. The answer to this will have significant implications for transparency in governance and the fight against corruption in India.

Addresses in public records

The instinctive reaction of most people is to consider their address private information and this is entirely understandable. However, it is also important to note that the address of people's residence or office has never been considered private under Indian law. Back in the day, government telecom service providers used to supply *telephone directories* to everyone containing the names, telephone numbers and addresses of every subscriber in the city. Similarly, *electoral voter lists* include the addresses of all voters in each and every ward. *These lists are now available online in a digital format on the website of the Election Commission.* Land records, containing details of ownership, are open for public inspection across the country and play a crucial part in ensuring confidence in the volatile land markets in India. Similarly, all FIRs in cognisable cases must be displayed on the website, according to a Supreme Court judgment. These would display the names and addresses of the complainants and the accused. Ironically, even the courts, including in Mr. Gokhale's case, disclose the addresses of litigants in their judgments as a regular practice. Many of the new transparency initiatives such as the *Jan Soochna Portal in Rajasthan make available the details of all beneficiaries of all welfare schemes administered by the State government.* The rationale for such disclosures is quite simple. As has been demonstrated repeatedly by grassroots activists working on the Mahatma Gandhi National Rural Employment Guarantee Scheme and the Public Distribution Scheme, access to information about beneficiaries, including addresses, is critical to weeding out 'ghost beneficiaries' created by officials looking to pilfer funds or rations. In all of these cases, the disclosure of addresses of citizens in the public domain plays a crucial role in boosting public confidence in governance systems and ensuring efficiency while also combating corruption in its various forms.

Privacy and information

Questions such as privacy, which involve fundamental rights, must be dealt with not just on the basis of the consequences that may follow from the disclosure of their addresses but also first principles of the law and this is where the judgment of the Bombay High Court is on thin ice. In its order in Mr. Gokhale's case, the Bombay High Court relies heavily on a brief order of the Calcutta High Court in the case of *Avishek Goenka v. Asish Kumar Roy (2013)*. In the Goenka case, an RTI activist wanted to provide a P.O. Box number as his address while filing a RTI application in order to not disclose his residential address and thereby protect himself from possible reprisals. However, the public authority insisted that he disclose his residential address. The Calcutta High Court ruled in favour of the RTI applicant because the RTI Act does not require information seekers to disclose personal details except those which may be required for contacting him. At the same time, the Calcutta High Court, confoundingly, also permitted authorities to disallow P.O. boxes and insist on personal details in cases where the Public Information Officers faced "difficulty". This was followed with the caveat that in all such cases, *personal details should be hidden by the government from public disclosure in order to prevent harassment of the RTI activist.* This part of the Calcutta High Court's order formed the basis of the Bombay High Court's order in Mr. Gokhale's case. Both the Calcutta High Court and the Bombay High Court followed a consequential line of reasoning i.e., the information in question should be treated as private



because its disclosure may lead to threats against the RTI applicant. With all due respect to the honourable High Courts, this is the wrong approach and will lead to inconsistent outcomes as visible in Mr. Gokhale's case, *where the government was upbraided for disclosing his address while the High Court did not think twice about disclosing his address in its own judgment that is published on the Internet for all to access.*

RTI v. Privacy

Thus, the correct question to ask in such cases is, which law or principle of law prevents the state from disclosing such information about the addresses of citizens? The RTI Act clearly lays down that all information held by the government must be shared with citizens unless it is exempted under Section 8 or 9 of the Act. The exemption relating to privacy is given under Section 8 (1)(j) which exempts "information which relates to personal information the disclosure of which has no relationship to any public activity or interest, or which would cause unwarranted invasion of the privacy of the individual unless the Central Public Information Officer or the State Public Information Officer or the appellate authority, as the case may be, is satisfied that the larger public interest justifies the disclosure of such information: Provided that the information, which cannot be denied to the Parliament or a State Legislature shall not be denied to any person." While this provision protects the privacy of citizens, it requires disclosure of information bearing a nexus to public activity. Generally, most of the information in public records arises from a public activity. Applications for a government job, ration card, caste certificates are some examples of public activity. However, there may be some personal information which may be with public authorities which is not a consequence of a public activity, e.g. medical records, or transactions with a public sector bank. Similarly, a public authority may come into possession of some information during a raid or seizure which may have no relationship to any public activity. These would be exempt. Everything else should be published in the public domain. In the meanwhile, RTI activists looking to protect themselves should be urged to use P.O. boxes as a means to preserve the anonymity of their addresses.

CONSENT FOR CONTEMPT

Attorney General for India K K Venugopal granted consent to initiate criminal contempt of court proceedings against comic illustrator Rachita Taneja for allegedly scandalising the judiciary through her tweets and illustrations. A law student had brought the tweets and illustration by Taneja—made in the context of the Supreme Court's decision to grant bail to Republic TV editor-in-chief Arnab Goswami who was arrested for allegedly abetting a suicide — to the notice of the AG.

What is the procedure for bringing a criminal contempt of court case against an individual?

The Contempt of Courts Act, 1971, lays down the law on contempt of court. Section 15 of the legislation describes the procedure on how a case for contempt of court can be initiated. In the case of the Supreme Court, the Attorney General or the Solicitor General, and in the case of High Courts, the Advocate General, may bring in a motion before the court for initiating a case of criminal contempt. However, if the motion is brought by any other person, the consent in writing of the Attorney General or the Advocate General is required. The motion or reference made for initiating the case will have to specify the contempt of which the person charged is alleged to be guilty.



But why does the Attorney General have to grant consent?

The procedure in cases of criminal contempt of court, which means the publication of material that scandalises or lowers the dignity of the court or prejudices or interferes with the proceedings of the court, the consent of the Attorney General is required under the law. The objective behind requiring the consent of the Attorney General before taking cognizance of a complaint is to save the time of the court. Judicial time is squandered if frivolous petitions are made and the court is the first forum for bringing them in. *The AG's consent is meant to be a safeguard against frivolous petitions, as it is deemed that the AG, as an officer of the court, will independently ascertain whether the complaint is indeed valid.*

Is the AG's consent mandatory for all contempt of court cases?

The AG's consent is mandatory when a private citizen wants to initiate a case of contempt of court against a person. Before such a plea can be filed, the Attorney General must sign off on the complaint, determining if it requires the attention of the court at all. However, when the court itself initiates a contempt of court case, as it did in the case of Prashant Bhushan recently, the AG's consent is not required. This is because the court is exercising its inherent powers under the Constitution to punish for contempt and such Constitutional powers cannot be restricted because the AG declined to grant consent.

And what happens if the AG denies consent?

If the AG denies consent, the matter all but ends. In August, AG Venugopal had refused to grant consent to initiate criminal contempt proceedings against actor Swara Bhasker for allegedly making derogatory comments against the Supreme Court. Last week, he turned down a request to initiate contempt proceedings against author Shefali Vaidya as the tweets were made over a year ago. *The law has a limitation period of one year for bringing in action against an individual. The complainant can, however, separately bring the issue to the notice of the court and urge the court to take suo motu (on its own motion) cognizance.* If the court does take suo motu cognizance, as it did in the case of Prashant Bhushan, the consent of the senior-most law officer is not required. **Article 129** of the Constitution gives the Supreme Court the power to initiate contempt cases on its own, independent of the motion brought before it by the AG or with the consent of the AG. "The Supreme Court shall be a court of record and shall have all the powers of such a court including the power to punish for contempt of itself," Article 129 states.

What happens after the AG has granted consent?

Once the consent of the Attorney General is given in writing, a notice under The Contempt of Courts Act is served personally on the person against whom the proceedings are sought to be initiated by the court. If the court decides not to serve the notice personally, the law requires the court to record the reasons for it. If the court is satisfied that the alleged contemnor is likely to abscond or evade judicial proceedings, it can order attachment of property of a value that it deems reasonable. Once the notice is served, the alleged contemnor may file an affidavit in support of his defence, explaining the nature and circumstances of her remarks. *The case is required under the Act to be heard by a Bench of at least two judges.* The court then takes into account any evidence available to check the affidavit, and pass appropriate orders.



LET THERE BE NOISE

In this long season of prickliness about matters of free speech, when tweets less than 280 characters are enough to trigger displeasure and worse from the mighty state and mightier judiciary, when slogans land teenagers in jail for sedition, when governments rush into police are as of social media they ought not to tread, the Bombay High Court has introduced a welcome dose of sanity. And a useful thumb rule: Let the young express their opinions, however intemperate; those in public office in a democracy must chin up to criticism "day in and day out". A division bench of the HC made those comments while hearing a plea by a Navi Mumbai resident who was booked by the Mumbai and Palghar police for allegedly making offensive remarks against Maharashtra Chief Minister Uddhav Thackeray and his son. "Will you act against every person who says something on Twitter?" the court asked the state government. In doing so, the court has underlined a basic premise of democracy — that the fundamental right to free speech available to citizens can, and often will, produce a raucous cacophony. But this noise is a sign of adult societies that do not shrink from the untidiness of divergent opinions, which is a defence against authoritarianism. *As societies move increasingly online, where speech is more unfettered than on traditional media, there is all the more reason why governments must ignore verbal exuberance if it does not cross over into inciting violence.* Unfortunately, this view, once a part of the political and judicial common sense in India, appears to be in danger, as institutions grow increasingly touchy about criticism. This was illustrated by the contempt case against Prashant Bhushan and the decisions of Attorney-General K K Venugopal, who approved contempt proceedings against stand-up comic Kunal Kamra for mocking the SC's role in granting bail to Arnab Goswami and has now green-signalled another contempt case against comic artist, Rachita Taneja, who, too, found in the SC's apparent alacrity to rush to Goswami's rescue an apt theme for satire. Neither the Supreme Court's nor the Maharashtra CM's authority is so brittle that it needs to be defended from a joke or a cartoon or a diatribe. *Free speech is not a favour that the state doles out to the people. It is democracy's touch stone.* Talking back to the powerful is a way for the disenfranchised to claim power, or to contest a consensus that leaves them out. *The anxiety about improper speech evident today belies a reluctance of those in power to be held accountable. Let there be noise. As the Bombay HC has emphasised, it is vital to the workings of democracy.*

CHANGE IN STANCE OVER SABARIMALA ENTRY DRAWS FLAK

The Kerala government's reported change in stance over entry of women to the Ayyappa temple at Sabarimala has raised eyebrows. The portal for virtual queue booking states that women and other genders (trans) below 50 and above 65 years will not be allowed darshan. The restriction has come up when the portal commenced booking for additional pilgrims being allowed for darshan during weekdays and weekends during the remaining pilgrimage season. When the temple was opened for pilgrimage on November 16, the government had announced that children below 10 years and people above 65 years will not be permitted to the temple because of COVID-19 restrictions. But, the sudden change in the stance of the government just before the local body poll has come in for flak. The new condition comes two years after the Left Democratic Front government had given police support for two young women to visit the temple in the wake of the Supreme Court verdict.

Age-old customs

The government's decision has come in for opposition from devotees who wanted to stick to the age-old customs of the temple. The LDF government had also opposed the review pleas filed



against the September 28, 2018 verdict that allowed women's entry to the temple. *With the reported change in stance, the government and the Travancore Devaswom Board (TDB) have gone back to preserving the age-old customs at Sabarimala.* Responding to the restrictions, TDB president N. Vasu said on Friday that the portal was maintained by the Kerala Police since 2010. "We have not given any instruction to this effect. Moreover, the entry of women below 50 years is a non-issue now. We want peaceful situation to prevail at Sabarimala. There are several other pressing issues before us to be addressed for pilgrims," Mr. Vasu said. "No one in this age group has evinced interest for darshan nor has come after the temple was opened last month for the season. Except for media reports, no organisation has raised it officially so far. It is still with the Supreme Court," he added.

SC STAYS HC GAG ORDER IN AMARAVATI LAND SCAM

The Supreme Court stayed an interim direction of the Andhra Pradesh High Court to gag the media from reporting on an FIR registered on the alleged "illegal purchase" of land in Amaravati. A three-judge Bench, led by Justice Ashok Bhushan, gave four weeks to former State Additional Advocate General and first respondent Dammalapati Srinivas to file his response. Mr. Srinivas is named in the FIR. Others named include the relatives of a sitting Supreme Court judge. The FIR shows offences under the Prevention of Corruption Act, criminal breach of trust and cheating under the Indian Penal Code. The allegations include abuse of official positions in the State, sharing of privileged information and causing loss to the public exchequer. The High Court passed the gag order within hours of the registration of the FIR on September 15.

TECH TACT

India's decision to block another 43 Chinese mobile applications hardly comes as a surprise. Since June, following escalation of tensions with China at the border, India has blocked over 250 Chinese mobile apps, a bunch at a time, on the grounds that they have been engaging in activities "which are prejudicial to sovereignty and integrity of India, defence of India, security of state and public order". The latest instance of app blocking has come at a time when the two sides, while still talking, are struggling to come up with an agreement for disengagement along the Line of Actual Control. With the immensely popular TikTok and PUBG already blocked, this time it was the turn of the likes of Alipay Cashier, Snack Video, Chinese Social, Adore App, and Alibaba Workbench to meet the same fate. *China, not for the first time either, has charged India with using national security as an excuse to target Chinese apps.* Zhao Lijian, spokesperson of the Chinese Foreign Ministry, has asked India to "correct its discriminatory approach and avoid causing further damage to bilateral cooperation". *China crying discrimination is ironical — its version of the Internet is tightly controlled and heavily censored, and has been so for years.* There may not be much to argue against decisions made on the grounds of national security. But the question to ask is: would this have come about if all was hunky-dory between the two countries?

In the short run, it may be useful for India to use its vast market for Internet services as a leverage in its attempts to keep China in check at the border. Indian app alternatives may also find the much-needed space to grow now, and initial reports indicate as much. But there are a few risks with this approach, especially given India's global ambitions in technology. First, this approach runs the *risk of triggering an unconventional battle between the two countries in the larger technology realm, if not in the larger business space.* China, being an important player in the technology global supply chain, *will be hard, if not impossible, to sideline.* Second, there is a risk that moves such as blocking



apps *would be perceived adversely by global investors and Internet companies*. While it is true that there has been some push back against Chinese companies and technology globally, *India must stick to a rules-based approach in regulating the Internet*. There is a need to implement the long-pending data protection law. It is also important to engage with the ecosystem and provide clarity on these issues as India has to win the technology battle as well.

WHY HAS TAMIL NADU BANNED ONLINE GAMES?

Tamil Nadu Governor Banwarilal Purohit promulgated an ordinance that banned online gaming in the state, with a fine up to Rs 5,000 and imprisonment of up to six months.

What constitutes online games and gambling?

The earliest versions of community-based games were gaming arcades, which were very popular in the US and Japan in the early 1990s. These arcades required the gamer to buy in-game time with some chips. From the arcade, the games moved to house consoles, and then further to personal computers. With the invention of the internet and the arrival of connectivity on personal computers, these multiplayer games saw players hosting gaming parties using local area networks. With the arrival of affordable internet, all the arcade-based multiplayer games moved online. These days, though nearly all games are played online when the user connects their device to a central server hosted by the gaming company, most of them are free and meant only for entertainment. Multiplayer games such as Defense of the Ancients or Dota, Players Unknown's Battleground or PUBG, Counter-Strike (CS) though free for most users, give the option of buying in-game additions to the player's avatar. Other multiplayer card games such as Rummy, Blackjack, and Poker require the user to invest some money to enter the game to play with other players across the globe.

Why has Tamil Nadu banned online games?

In the ordinance banning the game, the Governor said that due to online gaming, innocent people, mainly youngsters, are being cheated, and some people have committed suicide. The state has thus decided to ban online gaming to "avoid such incidents of suicide and protect the innocent people from the evils of online gaming". Any form of wagering or betting in cyberspace by using computers or any other communication device, common gaming houses, and any electronic transfer of funds to distribute winnings or prize money has also been banned. *This effectively means that players in the state will not be able to purchase any add-on for the games they play, go to gaming arcades or participate in online gaming tournaments*. Some multiplayer games such as Counter-Strike host weekly tournaments with a buy-in of up to Rs 10,000. While there has been some debate on whether online games are a matter of pure luck or skill, the arrival of money has further complicated matters. Most adversaries of online games and gambling have said that *since there are no regulations, most players end up spending a lot of money for buy-in in these games. Critics have also said that since these games are also played by kids of all ages, the lack of money to buy these add-on puts different kinds of peer pressure leading to unpleasant circumstances*.

Which other states have banned online games and gambling?

While gambling and betting as a sport are banned across the country, nearly ten states in India such as Assam, Arunachal Pradesh, Goa, Kerala, Maharashtra, Mizoram, Nagaland, Punjab, Sikkim and West Bengal have their lottery systems. These lotteries have very strict controls over the number



of tickets printed and the prize money distributed. Most states, however, are opposed to online gambling or betting as there are very few regulations to control the number of players and the investment that can be made in the game. By *banning online games and gambling, Tamil Nadu joined its neighbours Andhra Pradesh and Telangana in banning some forms of online games and gambling. The state's neighbour on the other side, Karnataka, also has been mulling a law to ban online games and gaming.*

CASTES COUNT

The idea of a caste census is back in the realm of public debate, following the Tamil Nadu government's decision to establish a commission to collect caste-wise data. The move may have been born out of political expediency, in response to the restive pre-election agitation organised by the Pattali Makkal Katchi demanding 20% exclusive reservation in education and government jobs for the Vanniyar community, its main electoral base. However, it is equally true that there is a social and legal necessity for compiling caste-wise data. *The Supreme Court has been asking States to produce quantifiable data to justify their levels of reservation, and it would help Tamil Nadu to retain its 69% total reservation.* At the same time, some castes that have either electoral or numerical importance across India have been restive about the manner in which affirmative action programmes based on classes and communities have been implemented so far. Be it the Gujjars, or Jats or the Patidars, or the Vanniyars, some sections have been linking their prospects of advancement to exclusive reservation. In Tamil Nadu, sections of the Vanniyars, whose violent 1987-88 agitation resulted in the creation of a 'most backward classes' category entitled to 20% reservation, *are apparently dissatisfied about being clubbed with over a hundred other castes. It is a sobering reflection on how reservation operates that some castes feel crowded out in the competition and aspire for the safety of exclusive reservation.*

The proposed commission may not conduct an elaborate enumeration on the lines of the Centre's decennial census. Its mandate is to examine the methodology for collecting caste-wise particulars, conduct a survey based on that and submit a report. It will be quite a challenge to arrive at a sound assessment of the social and educational backwardness of each caste. *The Census of India has not collected caste-wise data since 1931, with the exception of details about SCs and STs. The Centre conducted a 'socio-economic caste census' in 2011, in an attempt to link the collection of caste data along with socio-economic data so that there could be a comprehensive assessment of levels of deprivation and backwardness in society. However, presumably because of the lack of reliability of the data collected, or its political and electoral sensitivity, the caste portion of the SECC has not been disclosed so far.* The State government could possibly seek access to this data pertaining to Tamil Nadu as part of its exercise. However, it should not treat this as a politically expedient move to quell a possible electoral setback due to the agitation of one party or community. Rather, it should seek to rationalise and deepen its social justice policy with a true assessment of the backwardness of various castes. After all, *progress towards a casteless and equal society ought to remain the state's ultimate goal.*

PARLIAMENTARY PANEL BATS FOR LAWS TO COUNTER BIO-TERRORISM

Formulating effective laws to counter bio-terrorism is one of the important lessons to be learnt from the COVID-19 pandemic, *a Parliamentary Standing Committee on Health has said in a report, "The Outbreak of Pandemic COVID-19 And its Management."* Among other things, the report said low testing and shoddy contact tracing were responsible for the spike in cases. *The committee,*



headed by Samajwadi Party MP Ramgopal Yadav, submitted its report to the Rajya Sabha Chairman on Saturday.

Strategic partnerships

“The adverse effects of the COVID-19 pandemic have taught the lesson on the importance of controlling biological agents and the need for strategic partnerships among different nations. The committee, therefore, feels that the present time is the most appropriate for the government to formulate effective laws to counter bio-terrorism,” the report said. The report has suggested that the Health Ministry should engage with agencies and actively participate in ongoing international treaties.

Capacity building

The report did not explicitly state that the COVID-19 virus was a bio-weapon. The international scientific community has also repeatedly debunked the conspiracy theory that the COVID-19 virus was developed as a bio-weapon. The standing committee report blamed “poor contact tracing and slow testing” for the alarming rise of positive cases in the first few months of the pandemic.

The plethora of guidelines issued by the Health Ministry caused confusion and chaos, the report noted. Many of these guidelines were contradictory and different quarantine rules imposed by the State governments added to the panic, the report said. The committee has also pulled up the Union Health Ministry for “grossly inadequate” number of hospital beds in government hospitals. Citing an example, the report said, “The committee is pained to observe that in RML Hospital, out of 1,572 beds, only 242 were dedicated COVID-19 beds whereas in Safdarjung Hospital, out of 2,873 beds, only 289 were reserved for COVID-19 patients. The committee fails to understand the rationale behind the miniscule number of beds reserved for COVID-19 patients in the Central government hospitals, especially at a time when the number of patients was increasing rapidly in the capital city.” Since the demand for oxygen cylinders has reported an exponential increase, the committee has strongly advocated that necessary measures be taken to cap their price.

TRUDEAU’S SERMON

Canadian Prime Minister Justin Trudeau’s comments professing solidarity with farmers from Punjab protesting at Delhi’s borders against the recently approved farm legislation should not have come as a surprise to South Block. After all, in recent years, India has made a point of harnessing the political power of its diaspora across the world. From “Howdy, Modi” to “Namaste, Trump”, from “Namaste, Wembley” to “Bharat ki Baat, Sabke Saath”, and other glitzy events in world capitals, the government has underlined since 2014 that it considers Indians who are citizens of other countries as force multipliers for Delhi, and indeed, for the BJP, in the larger world. In turn, some world leaders have tried to talk up their relations with the Indian leadership to win the hearts of their constituencies. David Cameron’s declaration at a packed Wembley stadium in London in 2015, with Prime Minister Narendra Modi by his side, that “achche din aa gaye hain”, was an early example of this, much before the back-to-back Trump-Modifests in Houston and Ahmedabad. The Canadian PM’s intervention, however, may remind India of a time when elected leaders in the mother country did not have diaspora seating out of their hands, and these diasporas used their political clout in their adopted countries to highlight perceived issues and problems back home. In this backdrop, *Delhi’s response to Trudeau, calling his comments “ill-informed”, sounded churlish, as if only India has the right to play diaspora politics.* More than that, it made it appear insecure and resentful. The



fact is, Indian diplomacy has come along way since the “foreign hand” bogey, when a large amount of its energies were devoted to convincing the rest of the world about India’s credentials as a robust democracy—think Gerald Kaufman, British parliamentarian of another era, and 1990s Kashmir. *If Trudeau is misinformed in his perception that the right of peaceful protest is in danger in India, it only goes to show that there are large gaps in Delhi’s outreach to Canada that it needs to plug.* Having said that, however, it would be in Trudeau’s interests, and Canada’s, to be aware of the hazards of *playing to certain galleries in the Sikh diaspora in Toronto and Vancouver.* Canada has its own share of tragic memories, and political and security failures on the “Khalistan” issue. Trudeau’s week-long sojourn in India in February 2018 would have made it clear to him that in today’s Punjab, there is little tolerance for extremism 2.0. *His government has steered clear of backing the Pakistani-sponsored “2020 Sikh referendum”.* But by reaching out to the protesting farmers outside Delhi under pressure from a section of the Liberal Party Sikh MPs, *Trudeau is only putting the farmers at risk of what they are themselves keen to avoid—being identified with those outside the country who would want to stir trouble in Punjab once again.*

THE PERILS OF DEREGULATED IMPERFECT AGRIMARKETS (R. RAMAKUMAR - PROFESSOR AT THE TATA INSTITUTE OF SOCIAL SCIENCES, MUMBAI)

The eruption of massive farmers’ protests across India against the Farm Acts has shocked those in the seat of power in Delhi. According to the government, many private markets will be established, middlemen would disappear, farmers would be free to sell to any buyer and farmgate prices would rise. But the protesting farmers do not accept these claims. They believe that farmgate prices would fall with the intensification of a corporate presence in agricultural markets. They also believe that the government, ultimately, wants to phase out the Minimum Support Price (MSP) system. Let us look at the major claims and their merits. Due to space constraints, the focus here will only be on the Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 (FPTC Act).

More mandis needed

An important assumption behind the FPTC Act is that mandis controlled by Agricultural Produce Marketing Committees (APMC) are monopsonies in rural areas. This assumption itself is specious. First, official data show that even for paddy and wheat, respectively, only 29% and 44% of the harvest is sold in a mandi, while 49% and 36% is sold to either a local private trader or an input dealer. In other words, de facto, a large proportion of Indian harvest is not directly sold in a mandi. Farmers are forced to sell outside the mandis for two reasons. The first is that there are not enough mandis. *In 1976, there were 4,145 large markets in India, with the average area served at 775 km². The National Commission on Agriculture (NCA) had recommended that every Indian farmer should be able to reach a mandi in one hour by a cart. . Thus, the average area served by a mandi was to be reduced to 80 km². For this, the number of mandis was to increase to at least 41,000. But there were only 6,630 mandis in 2019 with an average area served of 463 km². Using another set of criteria, a government committee in 2017 had recommended that India should have at least 10,130 mandis.* So, by all counts, *India needs not less but more mandis.* The second reason is that most small and marginal farmers, given their small marketable surplus, do not find it economical to bear the transport costs to take their harvests to mandis. Thus, they end up selling their harvest to a village trader even if at a lower price. Even if private markets replace mandis, small and marginal farmers will continue to sell to traders in the village itself. The situation will change only if economies of scale rise substantially at the farm-level. Second, de jure too, the freedom to sell outside mandis



already exists in many States. *Already, 18 States have allowed the establishment of private markets outside the APMC; 19 States have allowed the direct purchase of agricultural produce from farmers; and 13 States have allowed the establishment of farmer's markets outside the APMC.* Despite such legislative changes, no significant private investment has flowed in to establish private markets in these States. Private markets have emerged in some pockets for some crops, but these are by no means widespread. The reason for poor private investment in markets is the presence of high transaction costs in produce collection and aggregation. When private players try to take over the role of mandis and the village trader, they incur considerable costs in opening collection centres and for salaries, grading, storage and transport. The more the number of small and marginal farmers are, the higher will these costs be. Corporate retail chains face additional costs in urban sales and storage, as well as the risk of perishability. This is why many retail chains prefer purchasing bulk quantities of fruits and vegetables from mandis rather than directly from farmers.

Transaction costs

Even if private markets emerge, the size of transaction costs are likely to offset any decline in mandi taxes. As a result, there is no assurance that farmers would receive a higher price in private markets. In the existing private markets too, there is no evidence of farmers receiving higher prices than in the mandis. In fact, if transaction costs exceed mandi taxes, the costs would be transferred to the farmers as a lower price. This, then, would imply a stronger squeeze on the farmer than at present. *Many commentaries treat taxes in mandis as wasteful. This assertion is not fully true. First, much of the mandi taxes are reinvested by APMCs to improve market infrastructure. A fall in mandi taxes would reduce the surplus available with APMCs for such investment. Second, in States such as Punjab, the government charges a market committee fee and a rural development fee. The Punjab Mandi Board uses these revenues to construct rural roads, run medical and veterinary dispensaries, supply drinking water, improve sanitation, expand rural electrification and provide relief to farmers during calamities. Such rural investments will also be adversely affected if mandis are weakened.*

The fate of MSPs

Without doubt, MSPs would continue to survive on paper as the government will have to procure to maintain a minimum buffer stock. However, many policy signals point to a strategic design to weaken the MSPs. First, input and labour costs are rising sharply in agriculture. This necessitates a regular upward revision of MSPs to keep pace with costs of living. However, MSPs are rising at a far slower rate over the past five to six years than in the past. Second, *the government has not yet agreed to fix MSPs at 50% above the C2 cost of production.* As a result, farmers continue to suffer a price loss of ₹200 to ₹500 per quintal in many crops. Third, *the Commission for Agricultural Costs and Prices (CACP) has been recommending to the government that open-ended procurement of food grains should end.* These policy stances have set alarm bells ringing among farmers. In Punjab, Haryana and western Uttar Pradesh, most crop sales are at the MSP through procurement centres including the mandis. *The farmers in these regions legitimately feel that they have been dealt a double whammy. If mandis weaken and private markets with no commitment to MSPs expand, they fear a gradual erosion of their entitlement to a remunerative price. If mandis weaken and private markets do not sufficiently replace them, they fear that the void would be filled by unscrupulous and unregulated traders.* As Barbara Harriss-White, a scholar of India's agricultural markets once observed, "deregulated imperfect markets may become more, not less, imperfect than regulated imperfect markets".



Steps to be taken

Discussions between the government and the farmers can be structured using a broad framework based on two focus points. First, India needs an increase in the density of mandis, expansion of investment in mandi infrastructure and a spread of the MSP system to more regions and crops. This should happen hand-in-hand with a universalisation of the Public Distribution System as an affordable source of food for the poor. Second, we need not just more mandis, but also better mandis. APMCs need internal reform to ease the entry of new players, reduce trader collusion and link them up with national e-trading platforms. The introduction of unified national licences for traders and a single point levy of market fees are also steps in the right direction. However, *if we go by the Union Finance Minister's statement in November 2019, the government thinks that the APMC system has "served its purpose" and the States should "reject" and "dismantle" mandis.* Such statements betray the real intent of the government, which has not missed the attention of the protesting farmers. Further, *the branding of protesters as "anti-national" and "Khalistanis" has only helped to further alienate the farmers from the government.* The government's legislative adventurism with the Farm Bills was misplaced to begin with. . But it is never too late to rethink. Unconditional talks with farmers would be an appropriate starting point.

Article 246 of the Constitution places "agriculture" in entry 14 and "markets and fairs" in entry 28 of the State List. But entry 42 of the Union List empowers the Centre to regulate "inter-State trade and commerce". While trade and commerce "within the State" is under entry 26 of the State List, it is subject to the provisions of entry 33 of the Concurrent List—under which the Centre can make laws that would prevail over those enacted by the states. Entry 33 of the Concurrent List covers trade and commerce in "food stuffs, including edible oilseeds and oils", fodder, cotton and jute. The Centre, in other words, can very pass any law that removes all impediments to both inter- and intra-state trade in farm produce, while also overriding the existing state APMC Acts. The FPTC Act does precisely that. However, some experts make a distinction between agricultural "marketing" and "trade". Agriculture per se would deal with everything that a farmer does—right from field preparation and cultivation to also sale of his/her own produce. The act of primary sale at a mandi by the farmer is as much "agriculture" as production in the field. "Trade" begins only after the produce has been "marketed" by the farmer. Going by this interpretation, the Centre is within its rights to frame laws that promote barrier-free trade of farm produce (inter- as well as intra-state) and do not allow stockholding or export restrictions. But these can be only after the farmer has sold. Regulation of first sale of agricultural produce is a "marketing" responsibility of the states, not the Centre. Farmers, for their part, would want no restrictions on the movement, stocking and export of their produce. Maharashtra's onion growers have vehemently opposed the Centre's resort to ban on exports and imposition of stock limits whenever retail prices have tended to go up. But these restrictions relate to "trade". When it comes to "marketing"—especially dismantling of the monopoly of APMCs — farmers, especially in Punjab and Haryana, aren't very convinced about the "freedom of choice to sell to anyone and anywhere" argument. The reason for this is simple: Much of government procurement at minimum support prices (MSP) — of paddy, wheat and increasingly pulses, cotton, groundnut and mustard — happens in APMC mandis. In a scenario where more and more trading moves out of the APMCs, these regulated market yards will lose revenues. "They may not formally shut, but it would become like BSNL versus Jio. And if the government stops buying, we will be left with only the big corporates to sell to," said a Panipat (Haryana)-based farmer.



WHY PUNJAB'S CLAIM OVER CHANDIGARH IS STRONGER THAN THAT OF HARYANA

Earlier this month, Haryana Deputy Chief Minister Dushyant Chautala said it would be better if both Haryana and Punjab agreed on Chandigarh as a Union Territory and make their independent capitals and Benches of High Courts. On November 1, Haryana was celebrating 54 years of its formation as a separate state after it was carved out of undivided Punjab in 1966. The statement once again brought into focus the long-simmering dispute between the two states over one of India's most modern cities. But Punjab has always refuted Haryana's claims over Chandigarh. We tell you why:

Why was Chandigarh created?

Chandigarh was planned to replace Lahore, the capital of erstwhile Punjab, which became part of Pakistan during the Partition. In March 1948, the Government of (India's) Punjab, in consultation with the Centre, approved the area of the foothills of the Shivaliks as the site for the new capital. From 1952 to 1966 (till Haryana was carved out of Punjab), Chandigarh remained the capital of Punjab.

How did it become a shared capital?

At the time of reorganisation of Punjab in 1966, the city assumed the unique distinction of being the capital of both Punjab and Haryana, even as it was declared a union territory and was placed under the direct control of the Centre. The properties in Chandigarh were to be divided in 60:40 ratio in favour of Punjab.

Punjab's claim

The-then Prime Minister Indira Gandhi had announced that Haryana, in due course, would have its own capital and Chandigarh would go to Punjab. As per documents submitted in the Lok Sabha, the Centre had even issued a formal communication in this regard on January 29, 1970, almost three years after Haryana came into being. "After very carefully weighing the claims of the two states, the capital project area of Chandigarh should, as a whole, go to Punjab," says the note. Again, in 1985, under the Rajiv-Longowal accord, Chandigarh was to be handed over to Punjab on January 26, 1986, but the Rajiv Gandhi government withdrew at the last minute.

Haryana's counter-claim

As per the 1970 documents, the Centre had considered various alternatives for settling the matter, including dividing the city. But that wasn't feasible since Chandigarh was built as a planned city to serve as the capital of one state. Haryana was told to use the office and residential accommodation in Chandigarh only for five years till it shifts to its own new capital. The Centre had offered Rs 10 crore grant to Haryana and an equal amount of loan for setting up the new capital. In 2018, Haryana CM Manohar Lal Khattar suggested to set up a special body for development of Chandigarh, but the Punjab CM rejected it, saying the city "indisputably belonged to Punjab". Haryana, on its part, has been demanding a separate High Court and even locked horns with Punjab by passing a resolution in the Vidhan Sabha demanding 20 rooms in the Vidhan Sabha complex that have been in the possession of Punjab.



A HYDERABAD TEMPLE, AND THE CITY'S NAME

Union Home Minister Amit Shah visited the Bhagyalakshmi temple while on a trip to Hyderabad to campaign for the city's municipal elections. And Uttar Pradesh Chief Minister Yogi Adityanath, campaigning in Hyderabad, made a pitch for renaming the city as Bhagyanagar, which BJP leaders claim used to be its name earlier. "Some people were asking me if Hyderabad can be renamed as Bhagyanagar. I said —why not?" he said. Shah is the latest in a line of BJP leaders who have visited the Bhagyalakshmi temple over the last several days. Some BJP leaders claim the temple derives its name from Bhagyanagar.

What is the Bhagyalakshmi temple?

It is a small temple dedicated to Goddess Lakshmi, adjacent to the southeast minar of Charminar. Made of bamboo poles and tarpaulins, it has a tin roof, and the southeast minar forms its backwall. There is no definitive version on how and when exactly it came up, but it has been there since at least the 1960s. *Secunderabad MP G Kishan Reddy claimed that the temple predates Charminar, whose construction was started in 1591.* Sources in the Archaeological Survey of India said the temple encroaches on the protective perimeter of Charminar. *Officials say a small guard pillar erected to protect the monument from vehicles was found painted in saffron sometime in the 1960s and some people started performing aarti there. When a state road transport bus hit the guard pillar damaging it, a small structure made of bamboo was built overnight and the idol of the goddess was placed.* "After that incident, the shrine started expanding by a foot or two during every festival until the High Court directed police to stop any expansion in 2013," said Mohammed Shabbir Ali, Leader of Opposition in the Telangana Legislative Council. A large number of Hindu traders and businessmen who have shops in Charminar area visit the temple daily. During festivals, especially Diwali, the temple attracts long queues.

Why is it in the news now?

It is because of the visits by BJP leaders in the run-up to the elections to the Greater Hyderabad Municipal Corporation, and the connection being made with the name Bhagyanagar. On November 18, on the directions of the State Election Commission (SEC), the Telangana government stopped distribution of flood relief as the model code of conduct was effect. The ruling TRS alleged that the BJP's Telangana chief, Bandi Sanjay Kumar, had written to the SEC complaining against the distribution of relief. Sanjay denied this and challenged TRS leaders to visit the Bhagyalakshmi temple and take an oath of truth. On November 20, Sanjay himself visited the temple and said under oath that he had not written a complaint to the SEC. Since then, several BJP leaders have visited the temple, including Amit Shah. Shah said his visit was to seek blessings, and denied that it was symbolic or a statement.

What is it called Bhagyalakshmi temple?

Devotees associate the name with their belief that praying in the temple brings goodluck and fortune. On the other hand, Hindu organisations associate the name with Bhagyanagar. BJP leaders say Hyderabad was earlier known as Bhagyanagar but it was changed to Hyderabad by Muhammed Quli Qutub Shah.



Has the temple been the subject of controversy before?

It has witnessed violence in the past:

■ In November 1979, after an armed group seized the Grand Mosque in Mecca, the MIM called for a bandh in the Old City of Hyderabad. As Diwali was approaching, many Hindu shopkeepers requested the MIM to allow them to keep their shops open. This resulted in clashes and the Bhagyalakshmi temple was attacked and desecrated.

■ In September 1983, banners put up on the temple on the Ganesh festival caused tensions as it was reported that the temple had expanded, and the temple as well the Allwyn mosque were attacked.

■ In November 2012, clashes broke out after reports that the temple management was expanding it by replacing the bamboo structure with a sheets. The then Andhra Pradesh High Court halted any construction activity of the temple.

MUSLIM MINISTERS: NUMBERS LAG FAR BEHIND SHARE IN POPULATION

Last week, a 15-member NDA Cabinet took charge in Bihar, with the BJP as the largest party in the alliance and without a single Muslim representative. This was the first time in decades that the Bihar government did not have a Muslim minister. This lack of representation of Muslims in the government isn't limited to Bihar-or to just an NDA government alone, records scrutinised by The Indian Express show. In fact, in most states, when it comes to Muslims in Cabinets, the share of the community is way below their share in the population. And if the BJP's politics doesn't open any spaces, even states where the Congress is in power have shown little by way of representation. Of the top 10 states, where 80 per cent of India's Muslims reside, the total strength of the Council of Ministers is 281, out of which only 16 are Muslims. The representation of the community in the Council of Ministers is only 5.7 per cent -less than a third of their share in the states population. Four of these 10 states, Assam, Karnataka, Gujarat and Bihar - all where the BJP is in power- do not have a single Muslim representative in government. The only BJP-ruled state that has a Muslim minister is Uttar Pradesh -where Mohsin Raza is the MoS in charge of Minority Welfare. Just before the 2014 Lok Sabha elections, there was only one state, Gujarat, amongst these 10 states which did not have a Muslim minister. The number of Muslim ministers in these 10 states was also almost double at 34 pre-2014. Muslims as per the 2011 census make up 14.2 per cent of the country's population, however their representation as ministers is only 3.93 per cent. In the three states out of the 10 where Congress is part of the government Rajasthan, Maharashtra, and Jharkhand only three of the total 38 ministers are Muslims. In Punjab and Chhattisgarh where the Muslim population is smaller, the Congress state governments have one Muslim each out of 17 and 13 ministers respectively. Almost every major non-BJP ruled state has a Muslim minister, with the highest representation in West Bengal (7), followed by Maharashtra (4) and Kerala (2). The BJP says the absence of Muslim ministers in its governments is because of the absence of support from the community, and their hesitancy to join the party. "You need reciprocity for any relationship to work. You can't treat a party like a pariah and then expect it to share power with you. More than the BJP, it is for the (Muslim) community to introspect on this issue. Once the community joins hands with the party, it will be in a better position to bargain for power," said Jamal Siddiqui, national president of the BJP Minority Cell. Across India, the BJP has only one elected Muslim MLA: Aminul Haque Laskar, who was elected from Sonai in Assam, and who was recently elected Deputy Speaker of the Assembly, The



only Muslim minister in Uttar Pradesh, Mohsin Raza, is not an MLA - he was elected to the Legislative Council by the BJP-led state government. In Lok Sabha, too, the BJP has no Muslim representative.

J&K'S ROSHNI ACT: WHO IT HELPED OWN LAND, AND WHY IT'S BEEN SCRAPPED

The Jammu & Kashmir administration has recently released a series of lists of alleged beneficiaries of the Roshni Act of 2001, now scrapped, which gave ownership rights to the unauthorised occupants of state land against payment of a premium. Political leaders and bureaucrats have been among those named. The transfers are being probed by the CBI. Following a recent order by the Jammu & Kashmir High Court, the administration has annulled the Act (it was earlier repealed prospectively) and decided to retrieval and transferred under the Roshni scheme. Right-wing groups in Jammu have described the scheme as being aimed at changing the demography of Jammu region, while mainstream political parties have accused the government of being selective against Muslims.

What was the Roshni Act?

Formally the Jammu and Kashmir State Land (Vesting of Ownership to the Occupants) Act, 2001, it was passed by the then National Conference government led by Farooq Abdullah to give ownership to people in possession of state land, with *a cut-off of 1990*, and against a payment as determined by the government. *Since the aim was to generate resources for hydro electric power projects, it was called Roshni (Light) Act.* In 2005, the PDP-Congress coalition government led by Mufti Mohammad Sayeed amended the Act to relax the *cut-off year from 1990 to 2004*. In a later amendment, the Ghulam Nabi Azad government set the premium at 25% of the market rate and the *cut-off date at 2007*. The government gave free ownership rights on agricultural land to farmers occupying it, who only needed to pay ₹100 per kanal of land as documentation fee.

How much was transferred and how much did the government earn?

At the time it passed the Act, the government expected to transfer the ownership of 20.46 lakh kanals (1.02 lakh hectares) of state land—16.02 lakh kanals in Jammu region and 4.44 lakh kanals in Kashmir. *The government set a speculative target of ₹25,000 crore. However, transfer of ownership was approved for only 6.04 lakh kanals — 5.71 lakh kanals in Jammu and 33,392 kanals in Kashmir. And only 3.48 lakh kanals land was actually transferred. The government revised its target to Rs 317.55 crore, and earned only Rs 76.46 crore — Rs 54.05 crore from Kashmir (target Rs 123.49 crore) and Rs 22.40 crore from Jammu region (target Rs 194.06 crore). Ownership of 3 lakh kanals (17,500 hectares) has been vested in Jammu region as against 33,000 kanals in Kashmir. In Kashmir, most of this land had been leased out to business houses and for residential purposes, in some cases for almost 100 years.*

Why has it been controversial?

In its 2014 report, the CAG termed the scheme a Rs-25,000-crore scam. It flagged irregularities and said arbitrary reduction of prices by a standing committee was done to benefit politicians and influential people. Shortly after the government had approved the Act, the then State Vigilance Organisation filed an FIR against some people who didn't satisfy the criteria but managed to vest ownership of land under the scheme. *A prominent case came to be known as the Gulmarg land scam, in which several top bureaucrats are accused of illegally transferring land of the Gulmarg Development Authority to private parties.* One of the main accused in this case, IAS officer Baseer Ahmad Khan, was appointed Adviser to the Lt Governor of J&K in March this year. No action was



taken against top bureaucrats in similar cases in Jammu region. A petition was also filed in the High Court to check violations of the Act based on the 17 FIRs.

When was the Act scrapped?

In October 2018, then Governor Satya Pal Malik repealed the Roshni Act prospectively. "All pending proceedings under the Act shall stand cancelled immediately... any action taken under the provisions of the repealed Act shall not be invalid," his order read. In September 2019, Malik ordered a probe by the state Anti-Corruption Bureau into all dealings under the Roshni Scheme. Following this, another petition was filed in the High Court seeking transfer of the probe to the CBI.

What did the court say?

In October this year, the High Court declared the Roshni Act "illegal, unconstitutional and unsustainable" and held allotments under the Act as void ab initio. It ordered a CBI probe into transfer of ownership, sought action against bureaucrats involved, and asked the government to make public the names of prominent people allotted land. In lists of beneficiaries made public so far, names of politicians, bureaucrats and businessmen were enumerated with parents' names, residence, job profile and affiliation. For others, only names and parents' names were specified.

Why did groups in Jammu campaign against the Roshni Act?

Some right-wings groups in Jammu have alleged the Roshni Act was meant to change the demography of the Hindu-majority Jammu district. "The court observation has proved that there was a demographic change. Thirty thousand cases of land transfer were reported in the state government order, out of which over 25,000 cases were from Jammu and only 4,500 from Kashmir," said petitioner and lawyer Ankur Sharma, who heads the group Ik Jutt Jammu. Government figures show that ownership rights have been transferred for 44,912 kanals in Jammu district — which is more than the land transferred in the entire Kashmir Valley.

PEACEFUL POSSIBILITIES

The coming local body elections in Jammu and Kashmir could be an opportunity to open a new political dialogue in the Union Territory, particularly on the question of restoring its statehood. In the first democratic exercise since the Centre revoked J&K's special status and reorganised it into two UTs in August 2019, Panchayati Raj elections are scheduled over eight phases beginning November 28. *For the first time, this part of India will have the entire 73rd Constitutional Amendment coming into operation. In October, the UT administration amended the Panchayati Raj Act, providing for District Development Councils (DDC) in each district, and establishing the three-tier PR structure.* Alongside the election of 280 DDC members, by-elections for around 12,000 panchayat seats and over 230 urban body seats will also take place. Peaceful, participatory election in a troubled region can be the most forceful demonstration of the resilience of Indian democracy. It is for this reason that elections are a target for those who believe that only violence can achieve popular aspirations in Kashmir. Four JeM militants who were planning a terror attack in the Valley to disrupt the elections and sow chaos were neutralised last week.

A violence-free election is necessary, but not sufficient for a vibrant democracy. *The BJP's strident political posturing, portraying all its political opponents as anti-national and separatist might be electorally useful for it in the Jammu region but is harmful for the national integration that it*



professes. When such statements come from the Home Minister of India, it is even more counterproductive. Choices before the people of J&K must not be framed as a binary of macabre violence of Islamist separatism and dehumanising submission of their cultural identity to authoritarian ultranationalism. There are other viable possibilities for J&K's progressive, respectful and accommodative association with the rest of India, which preserve national integrity and honour the region's identity. *A coalition of regional parties including the PDP and the National Conference, once the BJP's allies, and the CPI(M), under the banner of People's Alliance for Gupkar Declaration, has made the restoration of J&K's special status and its statehood central to its politics.* The alliance leaders have complained about restrictions on their campaigning. The Congress, which was in touch with the alliance earlier, has now snapped its ties with it. The government must encourage the widest voter participation, the clearest route to this being through an unrestrained and freewheeling campaign that mobilises and expresses the whole range of public opinion. All that might be said would not be acceptable or desirable. But meaningful dialogue is essential, and elections are the best way to open up peaceful possibilities.

PLEA IN SC AGAINST BIGAMY AMONG MUSLIMS: OPPOSED TO PUBLIC POLICY, DECENCY, MORALITY

A group of women has moved the Supreme Court challenging the provisions in the Shariat Act and Indian Penal Code which allow the practice of bigamy in the Muslim community. The plea filed through Advocate Vishnu Shankar Jain, said that *though there are UN conventions against bigamy, "in India the irony is that bigamy has been made punishable under Section 494 of IPC subject to applicability of personal law". The practice is disallowed by Hindu, Christian and Parsi laws but permitted under Section 2 of the Muslim Personal Law (Shariat) Application Act, 1937, the plea said, adding this "is opposed to public policy, decency and morality and is discriminatory within the meaning of Article 14 of the Constitution of India".* "Therefore, the provision of Section 2 of Shariat Act in so far it protects the bigamous marriages by Muslims is liable to be struck down being unconstitutional and void," the petition prayed. The plea said Section 494 of IPC provides that "who ever, having a husband or wife living, marries in any case in which such marriage is void by reason of its taking place during the life of such husband or wife, shall be punished with imprisonment of either description for a term which may extend to seven years, and shall also be liable to fine". The petitioners questioned how the state can make a penal law "in such a manner which may create discrimination and same act may be punishable for someone but for others enjoyable". The plea has been filed by Kashika Sharma from Himachal Pradesh, Usha Sinha from Bihar, Kiran Singh, Suvid Praveen Kanchan and Parul Khera from Uttar Pradesh and the Lucknow based Jan Udghosh Sansthan.

THE SO-CALLED 'LOVE JIHAD'

The Governor of Uttar Pradesh has recently promulgated an ordinance to prohibit "unlawful conversion" from one religion to another. *The Uttar Pradesh Prohibition of Unlawful Conversion of Religion Ordinance, 2020*, as it is called, seeks to prevent "love jihad" in the state by criminalising, among other things, marriages carried out solely for the purpose of religious conversion. However, the ordinance, as it is presently drafted, dangerously imperils the freedom of conscience and the right to profess, practise and propagate religion under Article 25 of the Constitution. The ordinance makes it a criminal offence for a person to convert another by coercion, misrepresentation, fraud etc, which is unobjectionable. A marriage solemnised for the "sole



purpose” of unlawfully converting the bride or the groom is required to be declared void by the competent court. A person who wishes to convert to another religion (including to Hinduism) now has to follow a somewhat cumbersome process — issuing a declaration to the district magistrate, both before and after the conversion, and subjecting oneself to an enquiry by the district magistrate. However, *there are several provisions in the ordinance which could plausibly be identified as unconstitutional*. For instance, the ordinance makes it a criminal offence to convert a person by offering her an “allurement”. The term “allurement” is defined very broadly, to include even providing a gift to the person who is sought to be converted. This means that if a person offers a copy of the Bhagavad Gita to a non-Hindu, and the non-Hindu decides to convert to Hinduism after reading it, the conversion could be said to have taken place by “allurement” since it occurred after a gift was given to the convert. Under the ordinance, “allurement” can also mean telling the person sought to be converted that she will have a “better lifestyle” if she converts, or that she will incur “divine displeasure or otherwise” if she does not. *The use of the words “or otherwise” in the definition of allurement is puzzling*. Is it sought to be thereby conveyed that if a preacher simply encourages her listeners to convert to another religion by arguing that her religion has more persuasive tenets than theirs— this amounts to illegal “allurement” under the ordinance? *The essential prerequisite of a criminal law is that it has to be precise*. A person cannot be put behind bars for doing something that a penal law does not clearly and unequivocally prohibit. On this touch stone, the definition of “allurement” leaves much to be desired. *There can be no quarrel with the ordinance’s premise that converting somebody by fraud or misrepresentation is wrong. After all, no person should be forced to convert to another religion against her will. In fact, though the members of the Constituent Assembly included the right to “propagate” one’s religion in the chapter on fundamental rights, they considered it a “rather obvious doctrine” that this would not include forcible conversions. “Forcible conversion is no conversion”, Sardar Vallabh bhai Patel had said in one of the sub-committees of the assembly, adding, “we won’t recognise it.”* However, the UP ordinance goes beyond this principle and does something quite strange. *It says that “reconversion” to a person’s previous religion is not illegal, even if it is vitiated by fraud, force, allurement, misrepresentation and so on. In other words, if a person converts from Religion A to Religion B of her own volition, and is then forced to reconvert back to Religion A against her will, this will not constitute “conversion” under the ordinance at all, and falls completely outside the ambit of the law.* Through this peculiar provision, the law seems to send an unmistakable signal to its target audience: ***Prohibit illegal conversion to other religions, but look the other way if a convert is forced to reconvert back to ours.*** Illegal conversion under the ordinance attracts a punishment of 1-5 years in prison. However, *if the victim of the illegal conversion is a minor, a member of the Scheduled Castes or Scheduled Tribes or, strangely, a woman, the punishment is doubled—at 2- 10 years behind bars. In other words, it does not matter who the woman is. She may be a highly educated CEO of a multinational company. Yet, if somebody converts her against her will, the punishment can go up to 10 years in prison, as against somebody who illegally converts her male subordinates, who will get five years in prison at the most.* The ordinance unfairly paints all women with the same brush — assuming that all women, and not merely women from historically marginalised or economically weak groups, are gullible, vulnerable and especially susceptible to illegal conversion. Perhaps the most striking provision of the ordinance is the one which deals with the *burden of proof*. Ordinarily, when someone makes an allegation that something has happened, it is up to her to prove it. *The burden of proof in criminal cases is on the prosecution, and the presumption is that a person accused of committing an offence is innocent until proven guilty. The Uttar Pradesh ordinance turns this rule on its head. Every religious conversion is presumed to be illegal.* The burden is on the person carrying out the conversion to prove that it is not illegal. *The*



offence of illegal conversion is also “cognisable” and “non-bailable”, meaning that a police officer can arrest an accused without a warrant, and the accused may or may not be released on bail, at the discretion of the court. All this puts an incredible chilling effect on the freedom of conscience. In *Rev Stainislaus v State of Madhya Pradesh (1977)*, a bench of five judges of the Supreme Court held that the fundamental right to “propagate” religion does not include the right to convert a person to another religion. In that case, the court had upheld anti-conversion statutes enacted by the states of Orissa and Madhya Pradesh, which imposed somewhat similar (even if slightly less extreme) restraints on the freedom of conscience and the right to propagate religion. In view of the recent ordinance, perhaps it is now time to revisit that judgment. The freedom of conscience means nothing if every act of religious conversion is going to be presumed illegal unless proven otherwise. The UP ordinance’s failure to prohibit forcible reconversion is also deeply disturbing.

The Allahabad High Court held that “neither any individual nor a family nor even the state can have an objection to the relationship of two major individuals who out of their own free will are living together”. In doing so, the High Court has upheld the right of a person to live with a person of his/her choice irrespective of religion professed by them as something which is intrinsic to the right to life and personal liberty, guaranteed to every person under Article 21.

Aiding social change

Historically, intermarriages — be it inter-caste or inter-faith — have been advocated as an effective tool to break social barriers and repair societal divisions. *Babasaheb Ambedkar and Periyar E.V. Ramasamy* placed a premium on intermarriage as much as they did on inter-dining. In *Annihilation of Caste*, *B.R. Ambedkar* argues that inter-dining had not been successful in killing the spirit of caste and that the “real remedy is intermarriage”. Similarly, in his book, *Women Enslaved (translated by G. Aloysius)*, *Periyar* traverses further to say that “no third person has any right to constrain or decide” the coming together of two people. Periyar sought to provide and protect the agency of women in making life choices as a pathway to achieve a liberal society. The Self Respect Conference held in Chengalpet, Tamil Nadu, in 1929 passed resolutions allowing women to file for divorce and to remarry. Periyar recast marriage as “life partnership agreements” wherein the two partners would come together on equal terms, and conducted thousands of self-respect marriages. In 1967, the Government of Tamil Nadu amended the marriage laws to allow self respect marriages within the Hindu Marriage Act. The most reliable statistical data shows that *less than 5% of Indians have intercaste marriages and less than 3% have interfaith marriages*. In spite of being a rare phenomenon in society, interfaith relationships have attracted a disproportionate amount of attention of the right-wing political class. Lawmakers in the Bharatiya Janata Party have actively spearheaded communal campaigns and stoked fear on this issue across the country. The bogey of “love jihad” plays right into hands of those with communal and patriarchal mindsets. It is no less crime to stop an inter-faith marriage than it is to abet an “honour killing”.

Various sections of the ordinance are in outright violation of the Constitution of India. For instance, Section 12 of the ordinance flips the burden of proof onto the person who has converted or caused conversion of religion to establish and prove that there was no force, fraud, misrepresentation, undue influence, coercion or allurements involved. Any conversion for the purpose of marriage can be declared void under Section 6 of the ordinance. Under Section 3 of the ordinance, the scope of which the aggrieved person may lodge a complaint against any conversion of religion is expansive to include parents, brother, sister, or any other person who is related to him by blood, marriage or adoption. Read cumulatively, this ordinance invades privacy, deepens communal divides,



advances patriarchy and eliminates agency. As such, the ordinance is a manifestation of an exclusionary and regressive agenda, which presents a new low in governance for the government of Uttar Pradesh and therefore, must be allowed to be part of the modern political discourse. Not only does the ordinance violate fundamental rights guaranteed by the Constitution, but it is also in conflict with existing personal laws. While playing to the 'Hindu Rashtra' gallery, the government of Uttar Pradesh has abandoned all semblance of secularism and constitutionalism.

HOW NRIS COULD VOTE BY POST

The Election Commission (EC) approached the Law Ministry to permit NRIs to cast their votes from overseas through postal ballots. The EC told the government it had received representations from the Indian diaspora about facilitating voting through postal votes since travelling to India only for this purpose is a "costly affair"... Otherwise, too they cannot leave the country of their residence owing to specific compulsions of employment, education or other engagements," states the EC's letter addressed to the Law Secretary. The Commission informed the government that it is "technically and administratively ready "to extend the Electronically Transmitted Postal Ballot System (ETPBS) to voters abroad for elections next year in Assam, West Bengal, Kerala, Tamil Nadu and Puducherry.

What is the current process of voting for Indian citizens living abroad?

An NRI can vote in the constituency in which her place of residence, as mentioned in the passport, is located. She can only vote in person and will have to produce her passport in original at the polling station for establishing identity. Voting rights for NRIs were introduced only in 2011, through an amendment to the Representation of the People Act 1950.

What is current of strength of NRI voters?

According to a UN report of 2015, India's diaspora population is the largest in the world at 16 million people. Registration of NRI voters, in comparison, has been very low: a little over one lakh overseas Indians registered as voters in India, according to the EC. In last year's Lok Sabha elections, roughly 25,000 of them flew to India to vote.

If approved, how will voting by postal ballots work for NRIs?

According to the EC proposal, any NRI interested in voting through the postal ballot in an election will have to inform the Returning Officer (RO) not later than five days after the notification of the election. On receiving such information, the RO will dispatch the ballot paper electronically. The NRI voters will download the ballot paper, mark their preference on the printout and send it back along with a declaration attested by an officer appointed by the diplomatic or consular representative of India in the country where the NRI is resident. It's not clear, at this moment, if the voter will return the ballot paper herself through ordinary post or drop it off at the Indian Embassy, which may then segregate the envelopes constituency-wise and send them to the Chief Electoral Officer of the state concerned for forwarding to the RO.

How and when did the proposal originate?

The EC began to look for options to enable NRIs to vote from overseas after it received several requests, including one from former Rajya Sabha MP and industrialist Naveen Jindal and the Ministry of Overseas Affairs, and three writ petitions were filed by NRIs in the Supreme Court in



2013 and 2014. A 12-member committee was set up after the 2014 Lok Sabha elections to study mainly three options — voting by post, voting at an Indian mission abroad and online voting. The committee ruled out online polling as it felt this could compromise “secrecy of voting”. It also shot down the proposal to vote at Indian missions abroad as they do not have adequate resources. *In 2015, the panel finally recommended that NRIs should be given the “additional alternative options of e-postal ballot and proxy voting”, apart from voting in person. Under proxy voting, a registered elector can delegate his voting power to a representative. The Law Ministry accepted the recommendation on proxy voting.*

Do all political parties support postal ballot voting for overseas electors?

The 12-member committee appointed by the EC had consulted national political parties and the Ministry of External Affairs (MEA) on the options being considered for NRIs to cast their vote abroad. Among parties, only the NCP has expressed complete support to the EC for postal voting for NRIs. According to the BSP, BJP and CPI, postal ballots were not a viable option due to time constraint. The Congress was not in favour of sending the postal ballot paper electronically. Interestingly, the MEA expressed strong reservations over attesting the declaration that NRI voters will have to send along with their marked ballot papers. The MEA had said “diplomatic missions do not have the logistical wherewithal to handle attestation for a large number of overseas electors” and that they would have to seek the permission of the host country for organising such activity, which may be difficult in non-democratic countries.

What happened to the proposal to grant proxy voting rights to overseas electors?

The Union Cabinet passed the proposal on proxy voting rights for NRIs in 2017. The government then brought a Bill amending the Representation of the People Act 1950. The Bill was passed by Lok Sabha and was awaiting Rajya Sabha’s approval when it lapsed with the dissolution of the 16th Lok Sabha. This proposal hasn’t been revived yet. In its letter last week, the EC pushed only for postal voting rights for NRIs, not proxy voting. To extend the postal voting facility to overseas voters, the government only needs to amend the Conduct of Election Rules 1961. It doesn’t require Parliament’s nod.

Can expatriates of other countries vote in elections in their home countries?

Many countries allow expatriates to vote, but the eligibility criteria and the voting procedure differ from one nation to another. For instance, a British citizen living abroad can register as an overseas voter for upto 15 years after leaving the UK, as long as he is a British or Irish citizen and was a registered voter in the UK in the last 15 years. Those who were minors at the time of leaving the country can also vote as long as their parent or guardian was registered to vote in the UK. Overseas electors can either travel back to the UK to vote in person or vote by post or nominate a proxy to do so. American expatriates enjoy voting rights in the US irrespective of how long they have been living abroad. They can vote for federal office candidates in the primary and general elections. Adults can exercise absentee voting by submitting a completed Federal Post Card Application or FPCA to their local election officials. Once registered, an overseas American voter will receive a ballot paper by email, fax, or internet download, depending on the state they are eligible to vote in. The ballot paper has to be sent back the same way before a designated deadline.



MAHARASHTRA COUNCIL POLLS, IN PERSPECTIVE

Maharashtra's ruling Maha Vikas Aghadi (MVA), an alliance of the Shiv Sena, NCP, and Congress, has won four of the six Maharashtra Legislative Council seats for which voting took place on December 1. Elections were held for three graduate seats of Nagpur, Pune, and Aurangabad; two teachers' seats of Pune and Amravati; and one local body seat from Dhule-Nandurbar. This was the first state-level election after the MVA formed the government, keeping the BJP, the single largest party in the Legislative Assembly, out of power. The MVA's victories are important also because each of these Council seats represents electors in a large geographical area of the state.

Seats and electors

The Upper House of Maharashtra legislature has 78 members, 66 of whom are elected, and the rest nominated. Members are elected for a six-year term. Of the 66 elected members in the Council, 30 are elected by members of the Legislative Assembly; 22 are elected by local bodies from 21 divisions; and seven members each are elected from among graduates and teachers of the seven revenue divisions of the state — Mumbai, Amravati, Nashik, Aurangabad, Konkan, Nagpur, and Pune.

Graduate constituencies

Only those who have a Bachelor's degree from a recognised university are eligible to participate in the elections for the graduate seats. Voters are enrolled afresh before each election, and applicants have to submit proof of education with a Bachelor's degree for enrolment as an elector. The elected member is expected to raise the issues of the educated class in the Upper House. Of the seven graduate constituencies in the Council, the BJP, NCP, and Congress now have two members each, and the Shiv Sena has one.

Teachers constituencies

For teachers constituencies, professional teachers, employed either in the government or the private sector, are eligible to register themselves as voters. The teacher electors choose one among themselves to raise their issues in the Legislative Council. The Sena, NCP, Congress, BJP, Lok Bharati (LB), Peasants and Workers' Party (PWP) of India and an Independent candidate now have a seat each in the teachers constituencies in the Council.

KERALA PUTS NEW LIBEL LAW ON HOLD

Kerala has sought to make amends by keeping in abeyance its obnoxious proposal to abridge free speech by *conferring unbridled powers on the police to arrest any one expressing or disseminating any matter deemed threatening, abusive, humiliating or defamatory to a person or a class of persons in any manner.* But Chief Minister Pinarayi Vijayan should take heed of criticism and drop the measure altogether. It is worrying that such a draconian and ill-conceived ordinance was even promulgated. *It is incredible that a State government crafted a law with elements declared unconstitutional by the Supreme Court, ignoring a major apex court verdict on the law of defamation, and which is repugnant to the provisions of the IPC, a central law, in two ways, besides going against one provision in the Cr.P.C. His defence that the amendment only targeted defamatory social media posts and would not curb reportage, political satire or expression of opinion is quite hollow, when seen in the light of the absence of any such narrow definition of the offence introduced by Section 118A in the Kerala Police Act. In Shreya Singhal vs. Union of India (2015), the top court struck down*



Section 66A of the IT Act. The section had criminalised the sending of any message through a computer resource that was grossly offensive, menacing, or caused annoyance, inconvenience, danger, insult, injury and intimidation. The Court found the offence was ‘overbroad’, that is, it was defined so widely that both innocent and offensive messaging could be brought under its ambit. The failure to define the offence narrowly fell foul of the constitutional protection for free speech and expression. The same judgment, for the same reason, also struck down Section 118(d) of the Kerala Police Act, which made causing annoyance in an indecent manner through verbal comments or on telephone an offence.

The new offence is also vaguely defined, and is made cognisable, whereas criminal defamation under the IPC is non-cognisable. Moreover, while upholding the validity of criminal defamation, the Court made it clear that no police officer can register an FIR for the offence; it can only be prosecuted as a private complaint, for Sec.199 Cr.P.C. says no court shall take cognisance of defamation unless the aggrieved party files a complaint. Further, Section 118A lays down a three-year prison term; it is two years under the IPC. By making defamatory utterances cognisable and raising the prison term, the Kerala ordinance effectively amends the IPC and Cr.P.C., a move for which the Centre’s assent is mandatory, as it is in conflict with central laws. The ordinance itself required prior presidential assent. It is regrettable that the State sought to arm itself with extraordinary powers to deal with a problem that can be dealt with through other provisions relating to stalking, harassment, criminal intimidation and verbal abuse.

NOW, DIAL M.P. INFORMATION COMMISSION HELPLINE FOR RTI

The Madhya Pradesh Information Commission has set up a grievance redressal forum in a bid to bring greater transparency to its functioning and spread awareness on the Right to Information (RTI) Act, 2005, arguably the country’s first such initiative. Applicants would be able to know about the status of their appeals and cases through the forum, said Rahul Singh, Information Commissioner for the Rewa Division who set it up on Constitution day. “They can call or WhatsApp a helpline requesting to know the status,” he said. *A team of handlers will relay back the information requested for on the helpline, operational round-the-clock, within 24 hours. Information such as registration details, the next date of hearing, proceedings of previous hearings and copies of orders or directions can be sought by applicants both in Hindi and English.* Further, the helpline will admit queries regarding applications under the Act, including requests for guidance on drafting applications or the appeal process, sections of the Act and functions of different bodies set up under it. “The forum will bolster our efforts in expanding the Commission outreach to people, initiate a discourse on the RTI and help in boosting applications,” said Mr. Singh. *In addition to the live streaming of hearings, he added, the forum would enable equitable access to the Commission. Applicants and prospective applicants can call up the forum on 94250-14008 from 10 a.m. to 5 p.m. on working days or drop messages any time.*

WHY THE PROTESTS AGAINST BRU RESETTLEMENT IN TRIPURA HAVE FLARED UP NOW

The situation in Tripura’s Kanchanpur and Panisagar areas remains tense after protests against the planned resettlement of thousands of Bru migrants permanently at Kanchanpur sub-division of North Tripura turned violent on Saturday. At least one person was killed in police firing, while there were 15 police personnel among the 23 other injured. A Fire Service personnel, who sustained severe head injuries, later died in an Agartala hospital.



Why have there been violent protests in North Tripura?

Twenty-three years after ethnic clashes in Mizoram forced 37,000 people of the Bru (or Reang) community to flee their homes to neighbouring Tripura, an agreement was signed in January this year to allow 32,000 of them remaining in the camps to permanently settle in the state. The news, however, was not welcomed by the Bengali and Mizo communities in Tripura, who claim settling thousands of migrants permanently at Kanchanpur sub-division of North Tripura would lead to a demographic imbalance, exert pressure on local resources and potentially lead to law and order problems.

What is the JMC protesting against?

Joint Movement Committee convener Sushanta Baruah said the agitation was started to save 'ancestral lands' from Bru migrants as the government was planning to settle 5,000 migrant families at Kanchanpur instead of 1,500 as assured by the local administration a month back. Baruah also alleged that 650 Bengali families from around Kanchanpur and 81 Mizo families from Jampui Hill range who fled due to 'atrocities' perpetrated by Brus were yet to be resettled two decades on.

Mizoram Bru Displaced Peoples Forum (MBDPF) general secretary Bruno Msha said the JMC agitation has left migrants in fear and uncertainty in the camps.

What is the original resettlement plan?

According to the four-corner agreement for resettling them in Tripura, the central government announced a special development project with funding of Rs 600 crore. Each resettled family is estimated get 0.03 acre (1.5 ganda) of land for building a home, Rs 1.5 lakh as housing assistance, and Rs 4 lakh as a one-time cash benefit for sustenance, monthly allowance of Rs 5,000 and free rations for two years from the date of resettlement.

Who are the Brus?

The Bru or Reang are a community indigenous to Northeast India, living mostly in Tripura, Mizoram, and Assam. In Tripura, they are recognised as a Particularly Vulnerable Tribal Group (PVTG). Over two decades ago, they were targeted by the Young Mizo Association (YMA), Mizo Zirwlai Pawl (MZP), and a few ethnic social organisations of Mizoram who demanded that the Bru be excluded from electoral rolls in the state. In October 1997, following ethnic clashes, nearly 37,000 Bru fled Mizoram's Mamit, Kolasib, and Lunglei districts to Tripura, where they were sheltered in relief camps. Since then, over 5,000 have returned to Mizoram in nine phases of repatriation, while 32,000 people still live in six relief camps in North Tripura.

WHY PREFIXING '0' WILL BE MANDATORY FOR LANDLINE TO MOBILE CALLS FROM JAN 15?

The Department of Telecommunications (DoT) has mandated prefixing "0" for all calls being made from fixed-line or landline phones to mobile phones with effect from January 15. This follows recommendations from the sector regulator TRAI, which had arrived to this conclusion after studying the issue of adequate numbering resources for fixed line and mobile services.



What has been the change?

All calls made from landline to mobile phones will be dialled with the prefix “0” from January 15. Those dialling a mobile number from a fixed line phone without the prefix will hear an announcement. Dialling “0” before the mobile phone number was a practice followed for outstation mobile numbers before the government allowed inter-circle mobile number portability, which effectively meant that *there was no trunk dialling when it came to mobile numbers and all numbers were considered local*. However, even from January 15, the dialling procedure for mobile phones to mobile phones will not change.

What was the need to re-introduce the “0” prefix?

Given that India has 10-digit mobile numbering plans, and that series for numbers starting with “0” and “1” are reserved for special purposes, theoretically 800 crore numbers are possible. Till now, mobile numbers were traditionally registered to series starting from “9”, and some combinations starting with “8”, “7” and “6”. Currently, with these combinations a total of 115 crore mobile numbers are available. Even though the “9” series—meaning mobile numbers starting with “9” has been fully used, those starting with other numbers overlap with certain numbering plans issued to landline phones. Therefore, to create sufficient numbering combinations, the prefix “0” has been re-introduced. *In addition to subscription of mobile numbers by consumers, SIM cards are also being used for machine-to-machine communication purposes. These include use-cases such as smart meters, for which the government has already allocated a 13-digit numbering system. TRAI had also recommended that all the SIM-based M2M connections using 10-digit mobile numbering series should be shifted to the 13-digit numbering series allocated by DoT for M2M communication; at the earliest.*

What is the impact of this?

As of August 31, 2020 there were already 114.79 crore wireless subscribers in the country. On the one hand wireless subscriptions are gradually increasing, on the other landline subscriptions are recording a decrease in user base. Several series have so far been exclusively allocated to landline operators. For example, “2” has been allocated to landline numbers of BSNL and MTNL, “4” has been allocated to Airtel, “35” and “796” has been allocated to RelianceJio. The decision to add the prefix will not only clear the overlap between landline and mobile phone numbers carrying the same series but will also free up numbering resources for mobile phones in the future. In the near term itself, *the exercise will result in generation of 253.9 crore numbers.*

NEW GUIDELINES FOR CAB AGGREGATORS: WHAT THEY MEAN FOR DRIVERS AND RIDERS

The Ministry of Road Transport and Highways has issued the Motor Vehicle Aggregator Guidelines, meant to regulate the hitherto unregulated *cab aggregator segment*, mainly controlled by two players—the *US-based Uber and Bengaluru-based Ola Cabs*. In the guidelines, the Centre has laid down various procedures pertaining to conditions for grant of licence to an aggregator, compliance with regard to vehicles, regulation of fares, etc.



Why have these guidelines been issued?

As part of the Motor Vehicles (Amendment) Act, 2019, the government provided that an aggregator will need to be issued a licence to operate by the respective state government and that the states will follow the guidelines issued by the Centre.

What changes for drivers?

The aggregator has been asked to ensure that *every driver is provided with a health insurance integrated with the aggregator for an amount not less than ₹5 lakh with base year 2020-21 and increased by 5 per cent each year.* Additionally, a term insurance of ₹10 lakh must be given to each driver. The aggregator will also need to conduct refresher training programme for the driver each year. *A compulsory 5-day training of drivers* will include topics such as efficient use of the app, provisions of the Motor Vehicles Act, 1988, on-road safety and first responder training, terms and conditions of the contract with aggregator, gender sensitisation, etc.

What changes for aggregators in terms of the app?

The aggregator will need to make its app accessible in *English and Hindi as primary languages* for riders, along with *one official language of the relevant state*, where official language is not Hindi. Additionally, the app will have to be accessible in a language understandable to the driver. In terms of data generated on the app, aggregators will have to *store such data on a server in India* and it will need *to be stored for a minimum of three months and maximum of 24 months* from the date on which such data was generated. This data *will also have to be made available to the state government, as per due process of law* but the norms stipulate that *any data related to customers shall not be disclosed without their written consent.*

What changes for customers?

The aggregators have been allowed to provide pooling facilities to customers, whose details and KYC information is available. Further, for women passengers seeking to avail ride-pooling, the aggregators will need to provide the option to pool only with other women passengers. In cases of non-transport vehicles being aggregated for ride-pooling, a limit of four ride-sharing intra-city trips on a calendar day and two ride sharing inter-city trips per week for each vehicle with the driver has been stipulated.

What changes in terms of fare?

The guidelines stipulate that the city taxi fare indexed by WPI for the current year shall be the base fare chargeable to customers availing aggregator service. In states where a city taxi fare has not been determined, an amount of ₹25/30 will be the basefare. The base minimum fare chargeable to customers will be for a minimum of 3 km to compensate for dead mileage and distance travelled and fuel utilised for picking up the customers. Aggregators have been allowed to charge a fare 50 percent lower than basefare and impose a maximum surge pricing of 1.5 times the basefare. *Additionally, the norms say that the driver of a vehicle shall receive at least 80 percent of the fare applicable on each ride, thereby capping the commission charged by the aggregators at 20 percent. Currently, the commission rates range between 25-35 percent and differs from city to city.* On cancellation of rides without valid reason, by either a driver or a rider, a penalty of 10 percent of total fare not exceeding ₹100 shall be put. The penalty imposed on rider will be divided between the driver and the aggregator in the proportion of the decided commission rate.



SURGERY AS PART OF AYURVEDA

On November 20, the Central Council of Indian Medicine, a statutory body set up under the AYUSH Ministry to regulate Indian systems of medicine, issued a gazette notification allowing postgraduate (PG) Ayurvedic practitioners to receive formal training for a variety of general surgery, ENT, ophthalmology and dental procedures. The decision follows the amendment to the Indian Medicine Central Council (Post Graduate Ayurveda Education) Regulations, 2016, to allow PG students of Ayurveda to practise general surgery.

The notification has invited sharp criticism from the Indian Medical Association, which questioned the competence of Ayurveda practitioners to carry out these procedures, and called the notification *an attempt at "mixopathy"*. The IMA has planned nation wide protests on December 8 against this notification, and has threatened to withdraw all non-essential and non-Covid services on December 11.

The passing of the National Medical Commission Act in 2019 allowed for the formalisation of proposals to induct mid-level care providers — Community Health Providers — in primary healthcare in India, who would serve at health and wellness centres across the country, and focus on primary healthcare provision, with a limited range of medicines allowed for them to use for treatment of patients. This move had also attracted strong opposition from modern medicine practitioners, who branded this as a form of quackery through half-baked doctors. Several countries have been using mid-level care providers, such as nurse practitioners, to enhance the access to healthcare, though with strict safeguards around training, certification, and standards.

How far is surgery part of Ayurveda?

It is not that Ayurveda practitioners are not trained in surgeries, or do not perform them. In fact, they take pride in the fact that *their methods and practices trace their origins to Sushruta, an ancient Indian sage and physician, whose comprehensive medical treatise Sushruta Samhita has, apart from descriptions of illnesses and cures, also detailed accounts of surgical procedures and instruments. There are detailed descriptions in the Sushruta Samhita, the ancient Sanskrit text on medicine and surgery, of procedures such as rhinoplasty where the nose is reconstructed with tissue from the cheek. It was thousands of years later that modern plastic surgeons described this procedure.* P Hemantha Kumar, professor and head of the department of general surgery at the government-run National Institute of Ayurveda in Jaipur, claims that at least 1,000 major surgeries are performed every year at his hospital. "There would be many more minor surgeries being done," he said. *There are two branches of surgery in Ayurveda — Shalya Tantra, which refers to general surgery, and Shalakya Tantra which pertains to surgeries related to the eyes, ears, nose, throat and teeth.* All post graduate students of Ayurveda have to study these courses, and some go on to specialise in these, and become Ayurveda surgeons. Nand kishore Borse, head of the department of surgery at Tilak Ayurveda College and Tarachand Hospital, a semi-government facility in Pune, said for several surgeries Ayurvedic procedures almost exactly match those of modern medicine about how or where to make a cut or incision, and how to perform the operation. There are significant divergences in post-operative care, however. "The only thing that we do not do is super-speciality surgeries, like neurosurgery. For most other needs, there are surgical procedures in Ayurveda. It is not very different from allopathic medicine," Hemantha Kumar said.



Before the notification, what were the regulations for postgraduate students?

Postgraduate education in Ayurveda is guided by the Indian Medical Central Council (Post Graduate Education) Regulations framed from time to time. Currently, the regulations formulated in 2016 are in force. The latest notification of November 19 is an amendment to the 2016 regulations. The 2016 regulations allow postgraduate students to specialise in Shalya Tantra, Shalakya Tantra, and Prasuti evam Stree Roga (Obstetrics and Gynaecology), the three disciplines involving major surgical interventions. Students of these three disciplines are granted MS (Master in Surgery in Ayurveda) degrees. Ayurveda practitioners point out that students enrolling in Ayurveda courses have to pass the same NEET (National Eligibility-cum-Entrance Test). Their course runs for four-and-a-half years, followed by one year of internship, six months of which are spent at an Ayurveda hospital, and the remaining six months at a civil or general hospital, or a primary healthcare centre. Postgraduate courses require another three years of study. They also have to undergo clinical postings in the outpatient and In-patient departments at hospitals apart from getting hands-on training in Ayurvedic treatment procedures. Medico-legal issues, surgical ethics and informed consent is also part of the course apart from teaching Sushruta's surgical principles and practices, said Dr Vinayak Temburnekar, National President of National Integrated Medical Association (NIMA).

So, what is new?

Ayurveda practitioners say the latest notification just brings clarity to the skills that an Ayurveda practitioner possesses. "The surgeries that have been mentioned in the notification are all that are already part of the Ayurveda course. But there is little awareness about these. A patient is usually not clear whether an Ayurvedic practitioner has the necessary skill to perform one of these operations. Now, they know exactly what an Ayurveda doctor is capable of. The skill sets have been defined. This will remove question marks on the ability of an Ayurveda practitioner," Hemantha Kumar of the Jaipur-based National Institute of Ayurveda said. *The notification mentions 58 surgical procedures that postgraduate students must train themselves in, and acquire skills to perform independently. These include procedures in general surgery, urology, surgical gastro enterology, and ophthalmology.*

What are the IMA's objections?

IMA doctors insist that they are not opposed to the practitioners of the ancient system of medicine. But they say the new notification somehow gives the impression that the skills or training of the Ayurveda doctor in performing modern surgeries are the same as those practising modern medicine. This, they say, is misleading, and an "encroachment into the jurisdiction and competencies of modern medicine". The fact that Ayurveda institutions prescribe text books from modern medicine, or that they carry out surgeries with the help of practitioners of modern medicine, is not reason enough to allow this encroachment, said KM Abul Hasan, chairman of the IMA Junior Doctors' Network. A statement from the IMA said it condemned the "predatory poaching on modern medicine and its surgical disciplines" by CCIM (Central Council of Indian Medicine, which functions under the Ministry of Ayush). "This is another step to legitimise mixopathy," it said. Avinash Bhondwe, president of the Maharashtra chapter of IMA, said the CCIM had claimed that all these modern surgeries are actually Ayurvedic procedures, and have Sanskrit names. "All the common procedures in all the surgical specialities have been included in the notification. They have notified these as Ayurveda procedures. They should also explain, with proof, how each of these procedures mentioned in Ayurveda literature is equivalent to the modern surgical procedures," Bhondwe said. *The IMA is also upset with the recent decision of NITI Aayog to set up four committees for*



integrating the various systems of medicine in medical education, practice, public health, and administration, as well as research. It says such an integration would lead to the death of the modern system of medicine. *The IMA has demanded that the notification as well as the NITI Aayog move towards 'One Nation One System' be withdrawn.* "If the government does not accept our demands, IMA will file a petition in the Supreme Court," said R V Asokan, Secretary General of IMA.

Can short-term training equip them to conduct surgeries and will this dilute the medicine standards in India?

As such, the postgraduate Ayurvedic surgical training is not short-term but a formal three-year course. Whether the surgeries conducted in Ayurvedic medical colleges and hospitals have the same standards and outcomes as allopathic institutions requires explication and detailed formal enquiry, in the interest of patient safety.

The revival of Indian medicine fits well into a certain narrative. Be that as it may, the IMA in its opposition to such moves needs to be precise and constructive. Currently, its response is like faux chest thumping of a guild of insecure professionals. A former office-bearer of the IMA has been active on social media during the COVID-19 pandemic invoking Rahu Ketu in the war against the novel coronavirus. If the IMA is defending science, it needs to publicly oppose such opportunism also. Pseudoscience is not a preserve of Indian medicine. If the noise is a turf war between an overambitious Ayurveda establishment on the one hand and modern medicine with a siege mentality on the other, it is a superfluous distraction which will hopefully die down. But if it is a pointer to an urgently needed and serious discussion about utilising India's large workforce of non-MBBS doctors to improve access to decent health care for our ordinary citizens, then it is well worth our time.

GENEPATH DIAGNOSTICS WINS ₹2.5 CRORE GRANT

The city-based GenePath Diagnostics, a next-generation diagnostics company, has won the prestigious United States-India Science and Technology Endowment Fund (USISTEF) grant of ₹2.5 crore to develop a cost-effective and highly sensitive mass-scale processing platform for the detection of HPV (Human Papilloma Virus), which is said to be the chief cause of cervical cancer. GenePath will develop the product over the next two years, said a statement released by the firm. *The objective of the platform is to help detect pathogenic HPV strains from self-collected samples in low-resource, rural areas to help bring down mortality rates while reducing the burden on the country's healthcare infrastructure.* Dr. Nikhil Phadke, founder and chief scientific officer of GenePath Diagnostics, said, *"Cervical cancer is the second leading cause of cancer among Indian women, and one of the most common causes of cancer-related deaths in developing countries.* The detection of HPV is widely accepted as a cervical cancer screening tool but strategies to implement it as a large-scale screening platform are limited by cost, social and healthcare barriers. To enable the widespread detection of HPV and typing for cervical cancer screening, it is necessary to have a point-of-care approach that can enhance the applicability, acceptance, and convenience of cervical cancer screening amongst the masses."

The governments of the United States (through the State Department) and India (through the Department of Science & Technology) had jointly established the USISTEF for the promotion of activities that lead to innovation and entrepreneurship through the application of science and technology. The aim of the fund is to support and foster joint applied R&D to generate public good



through the commercialisation of technology developed through sustained partnerships between U.S. and Indian researchers and entrepreneurs.

INTERNATIONAL DAY OF PERSONS WITH DISABILITIES

Today, December 3, is the annual International Day of Persons with Disabilities, established by the United Nations in 1992 to “promote the rights and well-being of persons with disabilities in all spheres of society and development, and to increase awareness of the situation of persons with disabilities in every aspect of political, social, economic and cultural life”.

There has been much outrage expressed over the denial of a sipper and straw to Father Stan Swamy. Father Swamy, the 83-year-old activist who suffers from Parkinson’s disease, was arrested by the National Investigation Agency (NIA) in October for his alleged involvement in the 2018 Bhima Koregaon violence and charged under the draconian Unlawful Activities (Prevention) Act, 1967. Lodged in Mumbai’s Taloja prison, Father Swamy reportedly made an application to be provided with a sipper and straw, as he was unable to hold a glass, a request which was inexplicably deferred for 20 days, only for the NIA to inform the court that it did not have a straw and sipper to give to the incarcerated octogenarian. The court has now posted the matter on December 4, seeking a report from the jail authorities on allowing Father Swamy to receive a straw and sipper at his own cost. However, there are subsequent reports that have emerged that Father Swamy has been provided with a sipper and straw by the jail authorities. Nevertheless, given Father Swamy’s allegations, a fuller examination is merited by the court. If Father Swamy’s allegations are true, the above events, apart from demonstrating the insensitivity of legal procedure, outline another fundamental issue — that of the rights of prisoners with disabilities. While incarceration itself is not easy, it is significantly more difficult for persons with disabilities. Given the nature of overcrowded and underfunded prison environments, the difficulties persons with disabilities face in society are exacerbated in prison. It is precisely for this reason that both international and domestic laws recognise and protect the rights of disabled prisoners.

Rights upheld by laws

Under international law, the UN Convention on the Rights of Persons with Disabilities (CRPD), which applies to all persons with disabilities including detainees and prisoners (<https://bit.ly/3fVuNdY>), and to which India is a signatory (<https://bit.ly/37ln5pH>), imposes a positive obligation on authorities, including prison staff, to ensure that prisoners with disabilities are on an “equal basis with others, entitled to guarantees in accordance with international human rights law” and are “treated in compliance with the objectives and principles of the convention, including by provision of reasonable accommodation”. The obligation encompasses the provision of auxiliary aids relevant to the disability to secure the inherent dignity of the prisoner to enable them to live independently and participate in all aspects of their daily lives. In cases where such provision is not made by prison authorities, it may amount to a breach of a state’s obligation to “prevent persons with disabilities... from being subjected to torture, cruel or inhuman degrading treatment or punishment”. These obligations under the CRPD are complemented by the provision of Article 10 of the International Covenant on Civil and Political Rights, or ICCPR (<https://bit.ly/33yQDyR>). The Nelson Mandela Rules (<https://bit.ly/37mZUex>), approved by the UN General Assembly through a resolution in 2015, on the standard minimum rules for the treatment of prisoners, also requires that the prison administration “make all reasonable accommodation and adjustments to ensure that prisoners with physical, mental or other



disabilities have full and effective access to prison life on equitable basis” (<https://bit.ly/3qrqMmu>). Apart from the constitutional guarantees under Articles 14 and 21 of the Constitution available to persons with disabilities, there is specific Indian legislation on the subject. The Rights of Persons with Disabilities Act, 2016 (<https://bit.ly/3muVI2S>) enacted with the object of giving effect to the CRPD, also requires that persons with disabilities enjoy the right to equality, life with dignity and respect for integrity equally with others; they are not to be discriminated against on the ground of disability, unless to achieve a legitimate aim. The Rights of Persons with Disabilities Act also enjoins the state to take necessary steps to protect persons with disabilities from being subjected to torture, cruel, inhuman or degrading treatment; and take necessary steps to ensure reasonable accommodation for persons with disabilities. While the Rights of Persons with Disabilities Act does not specifically provide for persons with disabilities who are incarcerated, given the object of the legislation to give effect to the CRPD, it would even encompass prisoners. It is important to note that the Rights of Persons with Disabilities Act explicitly recognises Parkinson’s disease as specified disability in its Schedule.

Forgotten ideal

In his excellent memoir, [Just Mercy: A Story of Justice and Redemption](#), Bryan Stevenson writes that the true measure of a society’s commitment to justice, the rule of law, fairness and equality, cannot be measured by how it treats the rich, the powerful, the privileged and the respected. But that the true measure of a society’s character is how it treats the poor, the disfavoured, the accused, the incarcerated and the condemned. It is time for the Indian justice system to stand up to this ideal.

WHAT IS REGIONAL NAVIGATION SATELLITE SYSTEM OR IRNSS THAT INDIA IS 4TH NATION TO HAVE

On November 11, India became the fourth country in the world to have its independent regional navigation satellite system recognised by the International Maritime Organisation (IMO) as a part of the World Wide Radio Navigation System (WWRNS). The navigation system can now replace GPS in the Indian Ocean waters upto 1500 km from the Indian boundary. The process of getting the recognition for the Indian Regional Navigation Satellite System based on satellites of the Indian Space Research Organisation took about two years. Merchant vessels in Indian waters can now use the “modern and more accurate” system as an alternative navigation module, said Director General of Shipping, Amitabh Kumar.

What is the Indian Regional Navigation Satellite System?

The IRNSS is an independent regional navigation satellite system developed by India. It is designed to provide accurate position information service to assist in the navigation of ships in the Indian Ocean waters. It could replace the US-owned Global Positioning System (GPS) in the Indian Ocean extending up to approximately 1500 km from the Indian boundary.

What does the International Maritime Organisation’s (IMO) recognition of the IRNSS mean?

The IMO is the United Nations’ specialised agency responsible for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships. The Maritime Safety Committee (MSC) of the IMO recognised the IRNSS as a component of the World-wide Radio Navigation System (WWRNS) during its 102nd session held virtually from November 4 to November 11. With the recognition as a component of the of the WWRNS, the Indian navigation system is similarly placed



as GPS, most commonly used by marine shipping vessels across the world or the Russian Global Navigation Satellite System (*GLONASS*). After the US, Russia and China that have their own navigation systems, India has *become the fourth country* to have its independent regional navigation system. *Unlike GPS, however, IRNSS is a regional and not a global navigation system.* According to the Directorate General of Shipping under the Union Ministry of Ports, Shipping and Waterways, this is also a “significant achievement” towards the ‘Atmanirbhar Bharat’ initiative.

Who can make use of the IRNSS?

While the system will be open to all including security agencies, officials of the Directorate General of Shipping said as of now, all merchant vessels including small fishing vessels are authorised to use the system. Vessels that have transponders installed in them will be tracked by satellite navigation showing accurate position in the Indian Ocean region. According to Director General of Shipping Amitabh Kumar, *at any given time, there are at least 2,500 merchant vessels in Indian waters that can all use the IRNSS.* The IRNSS, he said, is a modern and more accurate system of navigation. The system is based on the Indian Space Research Organisation’s (ISRO) satellites that are used for navigation.

Why was it necessary for India to have its own navigation system?

Kumar said an overdependence on one system (GPS) cannot be safe. The IMO, he said, had encouraged countries to design their own navigation systems. The recognition accorded to IRNSS was in the process for two years. Details of the tests carried out on merchant ships with regard to the accuracy of the system were included in the report prepared by ISRO which was submitted to IMO for consideration. After a detailed analysis, the sub-committee on Navigation, Communications and Search and Rescue (NCSR) of the IMO, during its 7th session held in January 2020, recommended to the MSC of IMO that it accepts the IRNSS as a component of the WWRNS. The recognition was accorded earlier this month. The IMO issued a circular on November 11 announcing the recognition of the IRNSS to its member states.

INDIA'S PUSH FOR GENDER EQUITY IN SCIENCE

One of the focuses of the new Science, Technology and Innovation Policy, currently being drafted by the Department of Science and Technology (DST), will be to increase the participation of women in science. To this end, the DST will incorporate a system of grading institutes depending on the enrolment of women and the advancement of the careers of women faculty and scientists. The concept borrows from a programme started by the UK in 2005 called the Athena SWAN (Scientific Women's Academic Network), which is now being adopted by many countries. The DST will soon launch a pilot, which the British Council has helped it develop.

What is Athena SWAN?

The Athena SWAN Charter is an evaluation and accreditation programme in the UK enhancing gender equity in science, technology engineering, mathematics and medicine (STEMM). Participating research organisations and academic institutions are required to analyse data on gender equity and develop action plans for improvement. The programme recognises such efforts with bronze, silver or gold accreditation. Institutions that sign up commit to addressing unequal gender representation; tackling the gender pay gap; removing the obstacles faced by women in



career development and progression; discriminatory treatment often experienced by trans people; gender balance of committees and zero tolerance for bullying and sexual harassment.

Why does India need such a programme?

In India, it will be called GATI (Gender Advancement through Transforming Institutions). India is ranked 108 out of 149 countries in the 2018 Global Gender Gap report. According to DST figures, in 2015-16, the share of women involved in scientific research and development was 14.71% - after it had actually increased from 13 in 2000- 2001 to 29% in 2014-15. The DST has also found that women are either not promoted or very often drop out mid-career to attend to their families.

What is the pilot being launched?

For the pilot, 25 institutes will be shortlisted to carry out self-assessment on gender equity in their departments. The British Council is assisting the DSI and will facilitate collaboration between selected institutions under GATI with Athena SWAN accredited institutions in the UK, with each institute here having a partner institute in the UK for guidance.

HOW KALA-AZAR WAS ELIMINATED FROM A HIGHLY ENDEMIC DISTRICT IN BIHAR

Kala-azar or visceral leishmaniasis (VL) is a tropical disease characterised by *irregular fever, weight loss, anaemia and swelling of the spleen and liver*. It is caused by *a protozoan Leishmania parasite* and is transmitted to humans by the *bite of infected female sandflies*. According to the World Health Organisation (WHO), globally, about 7 to 10 lakh new cases occur annually.

WHO initiative

India accounts for about two-thirds of the total global cases, and the disease is endemic to Bihar, Jharkhand, Uttar Pradesh and West Bengal. An initiative was launched by WHO to eliminate VL as a public health problem from the South East Asia region by 2020. The deadline has now been extended to 2023. In a recent paper published in PLOS Neglected Tropical Diseases a team from Rajendra Memorial Research Institute of Medical Sciences (ICMR), tells the success story of how they eliminated the disease from Vaishali, a district in Bihar where the disease is highly endemic. With an area of 2,036 square kilometres, Vaishali has a population of over 35 lakh and about 22% in the district get affected by VL each year. Their integrated control strategy helped reduce the number of cases from 664 in 2014 to 163 in 2016. *"We call a disease eliminated when the annual incidence is reduced to less than 1 case per 10,000 people at the sub-district or block level. Eradication would mean there are zero cases. We were able to achieve the target in all 16 blocks of the District,"* explains Pradeep Das, Director of the Institute and corresponding author of the paper. "We then implemented this strategy in other districts where the disease is highly endemic, namely Saran and Siwan, and we found about 48% reduction in cases within a year."

Campaigns, measures

Their programme included mapping of the case distribution, early case detection and chemical-based vector control. "We also carried out community awareness campaigns. Hospital staff and medical doctors in these regions were trained," adds Dr. Das. "Once a person is diagnosed with VL, indoor residual spraying was done at his house and at the neighbouring houses within 500 metres. *Though the disease is not contagious, the infected sand fly may be present in the area and the*



chemical spray will help kill them.” Nearly 2,500 ASHA workers and 1,000 field workers were also trained.

Monitoring disease

Rakesh Mandal, one of the authors of the work in an email to The Hindu adds: “A strong supervision and monitoring system is required. GIS-based mapping, and case data management and spatial visualisation system are required for the proper implementation of control strategies.” He writes that *routine monitoring is needed to identify if the Kala-azar vector has developed resistance to insecticides.* “Also frequent monitoring of active cases – track, test, and treat strategy – in the hotspot region is very important at the current stage.”

HONEY, THE SWEETENER ON YOUR PLATE MAY BE SUGAR SYRUP

Honey marketed by prominent Indian brands failed a key test of purity, the Centre for Science and Environment (CSE) has claimed, citing an investigation it conducted. Current regulations specify around 18 parameters that honey must comply with for producers to label it ‘pure honey’. CSE food researchers selected 13 brands of raw and processed honey, including Dabur, Patanjali, Baidyanath and Zandu, and subjected them to tests that are required under national food regulatory laws to be labelled as honey. Most brands passed muster but *when subjected to one test, called Nuclear Magnetic Resonance (NMR, that can ascertain the composition of a product at the molecular level) that was done at a lab in Germany, only three brands (spanning six samples) passed: Saffola, Markfed Sohna and Nature’s Nectar (one sample of two).* There were often multiple samples tested for each brand. The NMR test is not required by Indian law for honey that is being marketed locally but is needed for export. “What we found was shocking,” said Amit Khurana, programme director of CSE’s Food Safety and Toxins team. *“We found that sugar syrups are so designed that they can go undetected,”* he said. Dabur Honey, in a statement, denied that its honey was adulterated with sugar syrup. The company furnished a July 20 report from a German company, Bruker, listed as a manufacturer of NMR imaging product, and performed a test of Dabur’s honey composition profile. That report, which The Hindu perused, says there was no evidence of sugar syrup. “Dabur is the only company in India to have NMR testing equipment in our own laboratory, and the same is used to regularly test our honey being sold in the Indian market. This is to ensure that Dabur Honey is 100% pure without any adulteration,” the statement noted. The CSE investigation also said *some Indian companies were importing synthetic sugar syrups from China to adulterate honey.*

WHAT ARE DESALINATION PLANTS AND WHAT IS THEIR FEASIBILITY?

What are desalination plants?

A desalination plant turns salt water into water that is fit to drink. The most commonly used technology used for the process is reverse osmosis where an external pressure is applied to push solvents from an area of high-solute concentration to an area of low-solute concentration through a membrane. The microscopic pores in the membranes allow water molecules through but leave salt and most other impurities behind, releasing clean water from the other side. These plants are mostly set up in areas that have access to sea water.



How widely is this technology used in India?

Desalination has largely been limited to affluent countries in the Middle East and has recently started making inroads in parts of the United States and Australia. In India, Tamil Nadu has been the pioneer in using this technology, setting up two desalination plants near Chennai in 2010 and then 2013. The two plants supply 100 million litres a day (MLD) each to Chennai. Two more plants are expected to be set up in Chennai. The other states that have proposed these plants are Gujarat, which has announced to set up a 100 MLD RO plant at the Jodiya coast in Jamnagar district. There are also proposals to set up desalination plants in Dwarka, Kutch, Dahej, Somnath, Bhavnagar and Pipavav, which are all coastal areas in Gujarat. Andhra Pradesh, too, has plans of setting up a plant.

What is the need to set up a desalination plant in Mumbai?

According to the BMC's projection, the population of Mumbai is anticipated to touch 1.72 crore by 2041 and accordingly, the projected water demand would be 6424 MLD by then. Currently, BMC supplies 3850 MLD as against the requirement of 4200 MLD each day. In 2007, a state government-appointed high-level committee had suggested setting up desalination plants in Mumbai, however, over the years the authorities have avoided building the project claiming that the cost is prohibitive. However, with the city's water problems on the rise owing to burgeoning population, Maharashtra Chief Minister Uddhav Thackeray Monday has given the Brihanmumbai Municipal Corporation the go-ahead for the project. The project is proposed to be set up on 25 to 30 acres of land at Manori and will have a capacity of 200 MLD. It will take about two and a half to three years to complete and is expected to cost around Rs 1,600 crore. The BMC will be floating tenders for building the project.

Is it ecologically safe?

The high cost of setting up and running a desalination plant is one reason why the Maharashtra government has over the last decade been hesitant in building such a plant. Desalination is an expensive way of generating drinking water as it requires a high amount of energy. The other problem is the disposal of the by-product — highly concentrated brine — of the desalination process. While in most places brine is pumped back into the sea, there have been rising complaints that it ends up severely damaging the local ecology around the plant.

WHY HAS THE NORTHEAST MONSOON REMAINED SUBDUED THIS YEAR?

What is the Northeast monsoon, and why is it important?

India receives rainfall during two seasons. About 75 per cent of the country's annual rainfall is received from the Southwest monsoon between June and September. The Northeast monsoon, on the other hand, occurs during October to December, and is a comparatively small-scale monsoon, which is confined to the Southern peninsula. Also called the winter monsoon, the rainfall associated with the Northeast monsoon is important for Tamil Nadu, Puducherry, Karaikal, Yanam, coastal Andhra Pradesh, Kerala, north interior Karnataka, Mahe and Lakshadweep. Some South Asian countries such as Maldives, Sri Lanka and Myanmar, too, record rainfall during October to December. Tamil Nadu records about 48 per cent (447.4 mm) of its annual rainfall (943.7 mm) during these months, making it the key factor for undertaking agricultural activities and reservoir management in the state. After the complete withdrawal of the Southwest monsoon from the country takes place by mid-October, the wind pattern rapidly changes from the south-westerly to the north-easterly direction.



The period after the Southwest monsoon season, from October to December, is the peak time for cyclonic activity in the North Indian Ocean region — covering the Arabian Sea and the Bay of Bengal. The winds associated with the formation of low pressure systems, depressions, or cyclones influence this monsoon, and therefore, the rainfall. Timely information on cyclones thus become vital for governments and disaster management teams to plan contingency.

How has the Northeast monsoon season been so far this year?

The India Meteorological Department (IMD) had forecast below normal rainfall over Tamil Nadu and normal rainfall over the southern peninsula for the current season. *This year, the Southwest monsoon withdrew completely from the country on October 28, with a delay of a fortnight. On the same day, the IMD declared the onset of the Northeast monsoon over peninsular India.* However, rainfall thereafter remained largely subdued and remained below normal till around November 10. IMD's data records between October 1 and November 23 show significantly below-normal rain over Lakshadweep (minus 42 per cent), Puducherry (minus 39 per cent), Tamil Nadu (minus 25 per cent) and Kerala (minus 30 per cent). The majority of districts in Tamil Nadu remain highly rain-deficient as on November 23.

What is the reason for the deficiency of rainfall this season?

*Officials at IMD have linked it to the prevailing La Niña conditions in the Pacific Ocean. While **El Niño** (Spanish for 'little boy'), the expression heard more commonly in India, is the abnormal surface warming observed along the eastern and central regions of the Pacific Ocean (region between Peru and Papua New Guinea), **La Niña** (Spanish for 'little girl') is an abnormal cooling of these surface waters. Together, the El Niño and La Niña phenomena are termed as El Niño Southern Oscillation (ENSO). These are large-scale ocean phenomena which influence the global weather — winds, temperature and rainfall. They have the ability to trigger extreme weather events like droughts, floods, hot and cold conditions, globally. Each cycle can last anywhere between 9 to 12 months, at times extendable to 18 months — and re-occur after every three to five years. Meteorologists record the sea surface temperatures for four different regions, known as Niño regions, along this equatorial belt. Depending on the temperatures, they forecast either as an El Niño, an ENSO neutral phase, or a La Niña.*

But how is La Niña linked with the Northeast monsoon?

While La Niña conditions enhance the rainfall associated with the Southwest monsoon, it has a negative impact on rainfall associated with the Northeast monsoon. Dr D Sivananda Pai, head of Climate Research and Services at IMD, Pune, said that during La Niña years, the synoptic systems — low pressure or cyclones — formed in the Bay of Bengal remain significantly to the north of their normal position. "Besides, instead of moving westwards, these systems recurve. As they lie to the north of their normal position, not much rainfall occurs over southern regions like Tamil Nadu," Dr Pai said. In this season, Sri Lanka, too, has experienced subdued rain so far. The current position of the Inter Tropical Convective Zone (ITCZ) has also contributed to the poor rainfall during the ongoing monsoon season. The ITCZ is a low-pressure belt, whose northward and southward movements along the equator determine the precipitation in the tropics. Currently, the ITCZ is located to the north of its normal position.



And what is the rainfall forecast for the rest of the Northeast monsoon season?

Since November 10, the rainfall over the Southern peninsula has picked up; however, overall rainfall remains deficient. La Niña conditions are expected to prevail until early 2021, with some weather models forecasting it to last even till March. As a result, there are high chances that the southern peninsular region may end up with deficient rainfall by the end of the Northeast monsoon season in December.

STORM NIVAR

Cyclone Nivar raised fears of another epic disaster for millions of coastal residents in the south, but its passage overland near Puducherry early on November 26 was less destructive than anticipated. The reported loss of at least three lives is a relatively low toll for such a large-scale weather system, although property and agriculture have suffered considerable damage from the fierce winds and massive volume of rain it dumped in Tamil Nadu and Puducherry. Citizens and the government were fearful of a deluge that could be a repeat of the 2015 flood — which killed a few hundred people — and they overcame COVID-19 fatigue to prepare for the worst. There was also a welcome emphasis on periodic alerts and warnings. *The IMD has been getting better at forecasting slow-moving, linear tropical cyclones in the Bay of Bengal, and multiple satellites now provide cyclone data. The deployment of over two dozen NDRF teams and disaster management equipment along the coast reassured civic agencies.* Not everyone escaped Nivar with a minor penalty, however, and for suburban Chennai, the peak one-day rainfall of 31 cm in Tambaram wrought destruction mirroring what happened five years ago; smaller inland towns have also suffered inundation and severe losses. The aftermath now presents an opportunity to make a full assessment not just for distribution of relief but also to understand the impacts of extreme monsoon weather.

SPARKLING STONE SPARKS FRENZY IN NAGALAND

A farmer's accidental discovery of a sparkling stone has triggered a 'diamond' rush in Nagaland's Mon district. A resident of the district's Wanching village found the stone while farming on November 25.

More stones found

Word spread that he had discovered a diamond and people from neighbouring areas started pouring into the village. "People started digging all over as four-five more such stones were found. Although coal is found in the area, the chances of these stones being diamond are remote since the stones were found too close to the surface," said the district's Deputy Commissioner Thavaseelan K. He added that a team from the State's Geology and Mining Department would visit the site next week to conduct an investigation. Tongyei Angh, chairman of Wanching village, said the crystal-like stones, found in the partly private and partly community-owned land, were unlikely to be diamonds. "The farmer who found the stone sparked off an excitement among the villagers when he told the tale of his discovery. That it may not be a diamond became apparent when used a hammer and it broke into pieces easily," said Mr. Angh.



'SEA SPARKLE' HAS AFFECTED MARINE FOOD CHAIN: CMFRI

The bloom of Noctiluca Scintillans, commonly known as "sea sparkle" that the Karnataka coast has been witnessing since about a month, has displaced microscopic algae called diatoms, which form the basis of the marine food chain. This has deprived food for the planktivorous fish, scientists from the Central Marine Fisheries Research Institute (CMFRI), Mangaluru, have said. The bioluminescent Noctiluca Scintillans also brightened the sea water during night. The toxic blooms of N. Scintillans were linked to massive fish and marine invertebrate kills. Though the species does not produce a toxin, it was found to accumulate toxic levels of ammonia, which is then excreted into the surrounding waters, possibly acting as the killing agent in blooms. The ammonia makes N. Scintillans unpalatable for most creatures. Only jellyfish and salps were known to prey on it. N. Scintillans grazes on other micro-organisms such as larvae, fish eggs, and diatoms. But the unicellular phytoplankton that live inside it can photosynthesise, turning sunlight into energy. They help their host cell survive even when food was scarce. Thus, N. Scintillans acts as both a plant and an animal. She said field studies by the CMFRI in the Arabian Sea off the Karnataka coast since a decade showed widespread blooms of the green dinoflagellate, N. Scintillans. Blooms were witnessed on September 8 this year while in September 2018 too such bioluminescence was witnessed along the Someshwara beach in Dakshina Kannada and Mattu in Udupi. This year, however, the intensity and vastness of the bloom close to the shore was observed by many.

Plankton bloom

Dr. Rohit said plankton bloom was reported when the density of plankton would be more than 1,00,000 cells per m³. *Bioluminescence was the production and emission of light by a living organism and occurs due to a chemical reaction, involving a light-emitting molecule and an enzyme, called luciferin and luciferase.*

MDH'S ASLI SACH: THE MAHASHAY OF SPICES WITH A TASTE FOR LIFE

In 1947, a young man migrated from Pakistan's Sialkot to Delhi, with ₹1,500 in his pocket, scars of the Partition, and the recipe of a special spice his family sold. To make a living in this new city, the young man operated a tonga in KarolBagh for "doana" per ride before setting up a humble spice store in a 14 ft X 9 ft shop in the area in 1947 — one that would grow to become MDH Spices, a business empire which reported revenues of Rs1,062 crore in 2018. The founder of MDH Spices, *Mahashay Dharampal Gulati*— the grand old man of spices—suffered a cardiac arrest and died at a Delhi hospital at the age of 98. Apart from being one of the most successful CEOs in India, Gulati was also a pop culture icon, who was rarely seen without his red turban, twirled moustache, and a string of pearls around his neck. The brand's catchy jingle "Asli masale sach-sach, MDH-MDH" for its ads too is a cultural phenomenon, with the masala packed in colourful packs with Gulati's photo finding a home in kitchens across the country. Back in 1984, when MDH released its first TV ad, featuring actors Shafi Inamdar and Neena Gupta, Gulati made an appearance as a guest at a wedding. He would go on to do a cameo in every ad of the brand after that, in his signature style. *In 2017, in an interview to author Mallika Ahluwalia, who profiled him for her book Divided by Partition, United by Resilience, Gulati spoke at length about a care free childhood in Sialkot, with his two brothers, five sisters, and seven cousins under the same roof; quitting school; and his father's and uncle's joint business of spices called "Mahashian di Hatti".* On August 20, 1947, as violence spread following Partition, the family moved to a refugee camp, before leaving for Amritsar in India on September 7. By September 28, Gulati was in Delhi. Karthik Srinivasan, a branding and



communications strategy consultant pointed out that while a lot of entrepreneurs have been their own product or service's brand ambassadors, "Gulati was one of the early Indian entrepreneurs to have his own face on the products he sold... So it becomes pretty difficult to miss him, to ignore him."

THE JOURNEY OF AN ANNAPURNA IDOL, FROM VARANASI TO CANADA AND BACK

In the November 29 episode of Mann Ki Baat, Prime Minister Narendra Modi announced that an ancient idol of the goddess Annapurna, stolen from India about a century ago, is being brought back from Canada. This idol was stolen from a temple of Varanasi [Modi's Lok Sabha constituency] and smuggled out of the country around 100 years ago somewhere around 1913.

How it reached Canada

Annapurna, also spelt Annapoorna, is the goddess of food. The 18th-century idol, carved in the Benares style, is part of the University of Regina, Canada's collection at the MacKenzie Art Gallery. Last year, when Winnipeg-based artist Divya Mehra was invited to stage an exhibition at the gallery, she began to research the collection, which was built around a bequest from lawyer Norman MacKenzie in 1936. One sculpture thought to represent Lord Vishnu struck her as female; it was holding a bowl of rice. Looking into records, she found that the same sculpture had been stolen from an active temple in 1913 and acquired by MacKenzie. Siddhartha V Shah, Curator of Indian and South Asian Art at Peabody Essex Museum, US, was called upon to identify the statue. He confirmed it was indeed of the goddess Annapurna. She holds a bowl of kheer in one hand and a spoon in the other. These are items associated with the goddess of food, who is also the deity of the city of Varanasi. Mehra's research showed that MacKenzie had noticed the statue during a trip to India in 1913. A stranger had overheard MacKenzie's desire to have the statue, and stole it for him from a temple on stone steps on the riverbank in Varanasi.

Other objects returned

A few weeks ago, Union Culture Minister Prahlad Patel handed over 13th century bronze idols of Lord Rama, Lakshmana and goddess Sita, which were repatriated from the UK recently, to the TamilNadu government. During the handover, Patel put the onus on the respective state governments to keep antiquities in safe custody so that such situations of theft and legal battles don't arise in the future. Between 2014 and 2020, the government has been able to retrieve 40 antiquities from various countries; between 1976 and 2014, as per ASI records, 13 antique pieces had been repatriated to India. Patel had said the return of another 75-80 stolen antique pieces is in the pipeline, but the legal process takes a long time.



BUSINESS & ECONOMICS

PMI SIGNALS

The recovery in the Indian services sector was sustained in November as new work orders supported business activity growth and the first rise in employment in nine months, a monthly survey showed.

The seasonally adjusted India Services Business Activity Index posted above the **critical 50 mark** that separates growth from contraction for the second month in a row. Despite easing to 53.7 in November, from 54.1 in October, the latest reading was still indicative of a solid pace of expansion.

The Purchasing Managers' Index (PMI) for India's manufacturing touched 56.3 in November, signalling that even as an improvement in wider industrial activity continued, the sector's expansion as well as the pace of new orders slowed down while employment declined further as business optimism faded during the month. After hitting 58.9 in October, the highest in over a decade, November's manufacturing PMI marked a three-month low, **IHS Markit, which compiles the index**, said on Tuesday. Though aggregate new orders rose at the slowest pace in three months, their growth was "stronger than any seen for eight years prior to September", IHS Markit noted and said export orders had also picked up last month, as per the purchasing managers of 400 manufacturers it had surveyed. "Employment... decreased again as companies observed social distancing guidelines. The rate of job shedding was solid and little-changed from October," the firm pointed out.

CHHATTISGARH PICKS CENTRE'S BORROWING PROPOSAL; 27 STATES, 3 UNION TERRITORIES ON BOARD

With the exception of Jharkhand, 27 states and 3 Union Territories have now accepted option-1 of the borrowing scheme meant to raise money for compensating states for the shortfall in protected Goods and Services Tax (GST) revenue, the government said after Chhattisgarh came on board. The borrowing scheme under a special window was operationalised on October 23 and the Central government has so far borrowed ₹30,000 crore in five instalments. This has been passed on to states as back-to-back loans. **The total borrowing under the scheme is fixed at ₹1.1 lakh crore, which is the shortfall attributed to GST implementation issues.** Option-1 of the scheme also allows states unconditional permission to borrow the final instalment of 0.5 percent of gross state domestic product out of the 2 percent additional borrowings permitted by the Centre. This amounts to a little over ₹1.05 lakh crore in the current fiscal for all states, and is over and above the special window of ₹1.1 lakh crore. Initially, about 10 states had been opposed to the scheme on the grounds that they should be compensated fully for shortfall pegged at ₹1.82 lakh crore, instead of only a portion (₹1.1 lakh crore) that is purely due to GST implementation issue without factoring in the impact of the Covid-19 pandemic. **The GST Council had earlier amended the law to extend the tenure of the compensation fund which was to lapse in 2022— five years since launch of GST. This collection in the fund beyond 2022 will be used to pay the interest and principal of the loan first, after which the proceeds will go to the states for covering up the unmet shortfall of the current year. The Centre has estimated ₹1.1 lakh crore as the GST shortfall for states this fiscal from the level of protected revenue guaranteed to them under the law.** States are assured of a 14 percent year-on-year growth in GST revenue which is met by their own revenue and any resultant shortfall is made up from cess funds.



CHOPPY TIDINGS

Revenues from the GST crossed the ₹1-lakh crore mark for the second month in a row in November. The healthiest indirect tax collection streak since the national lockdown to combat COVID-19 in March, it is an encouraging sign for the economy that contracted less-than-expected in the second quarter. GST revenues in a month are a reflection of transactions from the previous month. The uptick in October's GST collections can be partly explained by the speedier unlocking of the economy in September as public transport restrictions were lifted in most parts of India. Some compliance-related relaxations for GST-paying businesses also pushed up collections significantly. There is no such compliance caveat attached to November's GST kitty — even though it is about ₹200 crore lower than the ₹1,05,155 crore from October. This suggests that the first month of the third quarter did see a genuine improvement in activity, whether it was driven by pent-up or festive demand, or a bit of both. This also ties in with other indicators from October, be it auto sales or the Purchasing Managers' Index (PMI) for manufacturing, which hit a 12-year high that month. With Deepavali falling in November this year (it was in October last year), some festive spending effect may be expected to come through in December's GST collections as well. The question is whether the improved demand trend will hold after the festival exuberance fades.

There are some early signs that the fervour and pace of economic activity already began to moderate in November. For instance, e-way bills generated by GST-covered entities fell nearly 14% to 55.3 million in November from 64.1 million in October, while the latest PMI indicates slower growth in orders and a further decline in employment as businesses are wary of the pandemic's lingering uncertainties. While India's infections have declined since September, some parts, including Delhi, Rajasthan and Gujarat, are seeing sharper spikes, prompting fresh travel curbs from there to the commercial capital Mumbai. In November, only Andhra Pradesh, Gujarat and Tamil Nadu saw double-digit growth in GST collections among major States, while Delhi's inflows fell 15% and Maharashtra's by 6% year-on-year. Thus, economic activity that has resumed remains fragile while the recovery seen so far has been uneven across States, thanks to the virus's unpredictable spread. The government has been conservative so far in its stimulus and support measures, despite which its fiscal math for 2020-21 will go awry. More direct and specific measures to help employment-intensive sectors, particularly those in distress such as travel and tourism or retail, are needed to ensure that further job losses today do not translate into tomorrow's demand slump.

INDIAN ECONOMY IN RECESSION

After an unprecedented decline of 23.9 percent in the first quarter of the current financial year, the Indian economy fared better than most expected, with the pace of contraction easing to 7.5 percent in the second quarter. The performance, better than what economists at the RBI had predicted, reflects in part, a steady improvement in activity levels with the easing of lockdown restrictions during this period, and the ramping up of production to satiate the pent-up and festival season-led demand. In the weeks thereafter, the continuing sequential improvement in leading economic indicators has led to optimism that the economy is likely to rebound stronger than expected in the second half of the year. However, one must advise caution, as the durability of the sharper-than-expected rebound remains a matter of concern. In part, the *continuing healthy performance of the farm sector* helped ease the extent of contraction of the economy. Excluding agriculture, value added by rest of the economy contracted by 8.3 percent in the second quarter. The *manufacturing*



sector grew by 0.6 percent in the second quarter, after contracting by a staggering 39.3 percent in the previous one. While *volume indicators like the index of industrial production continued to contract during this period, even though the extent of contraction had eased greatly, presumably, value added by the sector has risen on the back of aggressive expenditure pruning as indicated by corporate results.* Similarly, the *construction sector* witnessed a significant uptick with the contraction in activities easing to 8.6 percent in the second quarter, down from 50.3 percent in the first quarter. This despite construction activities being muted during the monsoon season. On the *services side*, while a similar improvement was observed in the trade, hotels, transport and communication sector, surprisingly, the pace of contraction actually worsened in *financial, real estate and professional services sector* during this period. While *private consumption* fared better, as household spending perked up with restrictions on economic activities and movements gradually lifted, *government spending rather than being counter-cyclical, continued to be pro-cyclical, falling in the second quarter as well*, despite the announcement of massive relief packages. Investment activity also improved during this period, presumably on account of work beginning on projects that had been stalled due to the lockdown restrictions, as did the change in stocks, indicating higher inventory accumulation. The stronger than expected uptick in economic indicators in October, while raise optimism over the state of the economy, must be treated with caution as data for some of these indicators for November signals some moderation in activities, justifying concerns over the sustainability of this upswing. Further, the possibility of the imposition of localised restrictions on activities due to rising COVID-19 cases adversely impacting economic activities going forward also cannot be ruled out.

FISCAL DEFICIT REACHES 120% OF ANNUAL TARGET

The Union Government's fiscal deficit further widened to ₹9.53 lakh crore, or close to 120% of the annual budget estimate, at the end of October of the current fiscal, according to official data released. The deficit widened mainly due to poor revenue realisation. The lockdown imposed to curb spreading of coronavirus infections had significantly impacted business activities and in turn contributed to sluggish revenue realisation. The fiscal deficit at the end of September 2020 was about 114.8% of the annual budget estimate. In absolute terms, the fiscal deficit stood at ₹9,53,154 crore at October-end, which is 119.7% of the annual budget estimates, as per the data released by the Controller General of Accounts. The fiscal deficit or gap between the expenditure and revenue had breached the annual target in July this year. In the first 7 months of the previous fiscal, the deficit was at 102.4% of the annual target.

RBI HOLDS RATES, SEES FY GDP CONTRACTION AT 7.5%

The Monetary Policy Committee (MPC) of the Reserve Bank of India (RBI) on Friday left benchmark interest rates unchanged and retained an 'accommodative' stance as it prioritised support for the economy over 'sticky' inflation amid the COVID-19 pandemic. The MPC kept the RBI's key lending rate, the repo rate, steady at 4%. The central bank has slashed the repo rate by 115 basis points since late March to cushion the economy from the fallout of the COVID-19 crisis, including the lockdowns to check the spread of the coronavirus. The RBI also brightened its outlook for the economy, projecting that the GDP contraction would narrow to 7.5% for the financial year ending in March 2021, a full 2 percentage points shallower than the 9.5% it had forecast in October. Citing the improvement in activity in the second quarter, it projected that GDP would return to growth of 0.1% in Q3, and expand 0.7% in Q4. The risks to its estimates were "broadly balanced", the RBI



added. Governor Shaktikanta Das, while announcing the policy, however, reiterated that inflation still remains a concern for policymakers. “Cost-push pressures continue to impinge on core inflation, which has remained sticky and could firm up as economic activity normalises and demand picks up,” he said. Mr. Das projected retail inflation to average 6.8% in Q3, before moderating to 5.8% in Q4 and 5.2% to 4.6% in the first half of the next fiscal year, with risks broadly balanced.

RBI TIGHTENS OVERSIGHT OF NBFCS, UCBS

The Reserve Bank of India (RBI) on Friday announced the introduction of risk-based internal audit norms for large urban cooperative banks (UCBs) and non-banking financial companies (NBFCs), as part of measures aimed at improving governance and assurance functions at supervised entities. The RBI also moved to harmonise the guidelines on appointment of statutory auditors for commercial banks, UCBs and NBFCs in order to improve the quality of financial reporting. Observing that the growing significance of NBFCs and their interlinkages with different parts of the financial system had made it imperative to enhance the sector’s resilience, RBI Governor Shaktikanta Das said, it had been decided to put in place transparent criteria for the declaration of dividends by different categories of NBFCs.

RBI HALTS HDFC BANK FROM ISSUING NEW CREDIT CARDS

HDFC Bank said the Reserve Bank of India (RBI) had issued an order asking the bank to temporarily stop all new digital banking initiatives and sourcing of new credit card customers. The order, issued on Wednesday, comes after certain incidents of outages in the Internet banking / mobile banking / payment utilities of the bank over the past two years, the latest of which occurred on November 21 due to a power failure in the primary data centre, HDFC Bank said. “In addition, the order states that the bank’s Board [must] examine the lapses and fix accountability. The above measures shall be considered for lifting upon satisfactory compliance with the major critical observations as identified by the RBI,” it said in a regulatory filing. India’s largest private sector bank said that over the past two years it had taken several measures to fortify its IT systems and would continue to ‘work swiftly to close out the balance and would continue to engage with the banking regulator in this regard’. It added these measures would not materially impact its overall business. The stock fell 2.13% on the BSE to ₹1,377.05 and was the biggest loser on the Bankex.

CORPORATES AS BANKS: WHAT LED TO THIS RECOMMENDATION, AND WHY HAS IT COME IN FOR CRITICISM?

A recent report by an Internal Working Group of the Reserve Bank of India has attracted a lot of attention as well as criticism. The IWG was constituted to “review extant ownership guidelines and corporate structure for Indian private sector banks” and submitted its report last week. The IWG submitted several recommendations, but one, in particular, has raised a lot of concern. This had to do with allowing large corporate/industrial houses to be promoters of private banks. In a joint write-up published on LinkedIn, former RBI Governor Raghuram Rajan and former RBI Deputy Governor Viral Acharya severely criticised the suggestion by the IWG, describing it a “bombshell”. “It would be ‘penny wise pound foolish’ to replace the poor governance under the present structure of these (public sector/government-owned) banks with a highly conflicted structure of ownership by industrial houses,” Rajan and Acharya wrote.



Why was the IWG constituted and what were its recommendations?

The banking system in any country is of critical importance for sustaining economic growth. *India's banking system has changed a lot since Independence when banks were owned by the private sector, resulting in a "large concentration of resources in the hands of a few business families".* To achieve "a wider spread of bank credit, prevent its misuse, direct a larger volume of credit flow to priority sectors and to make it an effective instrument of economic development", the government resorted to the *nationalisation of banks in 1969 (14 banks) and again in 1980 (6 banks)*. With economic liberalisation in the early 1990s, the economy's credit needs grew and private banks re-entered the picture. This had a salutary impact on credit growth. However, even after three decades of rapid growth, "the total balance sheet of banks in India still constitutes less than 70 per cent of the GDP, which is much less compared to global peers" such as China, where this ratio is closer to 175%. Moreover, domestic bank credit to the private sector is just 50% of GDP when in economies such as China, Japan, the US and Korea it is upwards of 150 per cent. In other words, India's banking system has been struggling to meet the credit demands of a growing economy. *There is only one Indian bank in the top 100 banks globally by size.* Further, Indian banks are also one of the least cost-efficient. Clearly, India needs to bolster its banking system if it wants to grow at a fast clip. In this regard, it is crucial to note that public sector banks have been steadily losing ground to private banks. *Private banks are not only more efficient and profitable but also have more risk appetite. It is in this background that the IWG was asked to suggest changes that not only boost private sector banking but also make it safer.* For the most part, the IWG's recommendations are unexceptionable in that they bolster prudential norms so that the interests of the depositors are secure and banks and their promoters are not able to game the system.

First, the idea

The idea of allowing corporate houses into banking is by no means novel. *In February 2013, the RBI had issued guidelines that permitted corporate and industrial houses to apply for a banking licence. Some houses applied, although a few withdrew their applications subsequently. No corporate was ultimately given a bank licence.* Only two entities qualified for a licence, IDFC and Bandhan Financial Services. The RBI maintained that it was open to letting in corporates. However, none of the applicants had met 'fit and proper' criteria. The IWG report quotes the official RBI position on the subject at the time. *In 2014, the RBI restored the long-standing prohibition on the entry of corporate houses into banking. The RBI Governor then was Raghuram G. Rajan. Mr. Rajan had headed the Committee on Financial Sector Reforms (2008). The Committee had set its face against the entry of corporate houses into banking.* It had observed, "The Committee also believes it is premature to allow industrial houses to own banks. This prohibition on the 'banking and commerce' combine still exists in the United States today, and is certainly necessary in India till private governance and regulatory capacity improve." The RBI's position on the subject has remained unchanged since 2014.

Why is the recommendation to allow large corporates to float their own banks being criticised?

Historically, RBI has been of the view that the ideal ownership status of banks should promote a balance between *efficiency, equity and financial stability*. A greater play of private banks is not without its risks. The global financial crisis of 2008 was a case in point. *A predominantly government-owned banking system tends to be more financially stable because of the trust in government as an institution.* Moreover, even in *private bank ownership, past regulators have preferred it to be well-diversified — that is, no single owner has too much stake.* More specifically,



the main concern in *allowing large corporates — that is, business houses having total assets of ₹5,000 crore or more, where the non-financial business of the group accounts for more than 40% in terms of total assets or gross income — to open their own banks is a basic conflict of interest, or more technically, “connected lending”.*

What is connected lending?

Simply put, *connected lending refers to a situation where the promoter of a bank is also a borrower and, as such, it is possible for a promoter to channel the depositors’ money into their own ventures. Connected lending has been happening for a long time and the RBI has been always behind the curve in spotting it. The recent episodes in ICICI Bank, Yes Bank, DHFL etc. were all examples of connected lending.* The so-called *ever-greening of loans (where one loan after another is extended to enable the borrower to pay back the previous one) is often the starting point of such lending. Unlike a non-bank finance company or NBFC (many of which are backed by large corporates), a bank accepts deposits from common Indians and that is what makes this riskier.* Simply put, *it is prudent to keep the class of borrowers (big companies) apart from the class of lenders (banks).* Past examples of such mingling — such as Japan’s Keiretsu and Korea’s Chaebol — came unstuck during the 1998 crisis with disastrous consequences for the broader economy.

Corporate houses will bring capital and expertise to banking. Moreover, not many jurisdictions worldwide bar corporate houses from banking. It is the downside risks that are worrying in the extreme. As the report notes, the main concerns are *interconnected lending, concentration of economic power and exposure of the safety net provided to banks (through guarantee of deposits) to commercial sectors of the economy.* It is worth elaborating on these risks. *Corporate houses can easily turn banks into a source of funds for their own businesses.* In addition, they can ensure that funds are directed to their cronies. *They can use banks to provide finance to customers and suppliers of their businesses.* Adding a bank to a corporate house thus *means an increase in concentration of economic power.* Just as politicians have used banks to further their political interests, so also will corporate houses be tempted to use banks set up by them to enhance their clout. Not least, *banks owned by corporate houses will be exposed to the risks of the non-bank entities of the group. If the non-bank entities get into trouble, sentiment about the bank owned by the corporate house is bound to be impacted. Depositors may have to be rescued through the use of the public safety net.* The Internal Working Group believes that before corporate houses are allowed to enter banking, the RBI must be equipped with a legal framework to deal with interconnected lending and a mechanism to effectively supervise conglomerates that venture into banking. It is naive to suppose that any legal framework and supervisory mechanism will be adequate to deal with the risks of interconnected lending in the Indian context. *Corporate houses are adept at routing funds through a maze of entities in India and abroad.* Tracing interconnected lending will be a challenge. Monitoring of transactions of corporate houses will require the cooperation of various law enforcement agencies. Corporate houses can use their political clout to thwart such cooperation. Second, *the RBI can only react to interconnected lending ex-post*, that is, after substantial exposure to the entities of the corporate house has happened. It is unlikely to be able to prevent such exposure. Third, suppose the RBI does latch on to interconnected lending. How is the RBI to react? *Any action that the RBI may take in response could cause a flight of deposits from the bank concerned and precipitate its failure.* The challenges posed by interconnected lending are truly formidable.



Regulator credibility at stake

Fourth, pitting the regulator against powerful corporate houses could end up damaging the regulator. *The regulator would be under enormous pressure to compromise on regulation.* Its credibility would be dented in the process. This would indeed be a tragedy given the stature the RBI enjoys today. What we have discussed so far is the entry of corporate houses that do not have interests in the financial sector. There are corporate houses that are already present in banking-related activities through ownership of Non-Banking Financial Companies (NBFCs). Under the present policy, NBFCs with a successful track record of 10 years are allowed to convert themselves into banks. The Internal Working Group believes that NBFCs owned by corporate houses should be eligible for such conversion. This promises to be an easier route for the entry of corporate houses into banking. The Internal Working Group argues that corporate-owned NBFCs have been regulated for a while. The RBI understands them well. Hence, some of the concerns regarding the entry of these corporates into banking may get mitigated. This is being disingenuous. There is a world of difference between a corporate house owning an NBFC and one owning a bank. *Bank ownership provides access to a public safety net whereas NBFC ownership does not. The reach and clout that bank ownership provides are vastly superior to that of an NBFC. The objections that apply to a corporate house with no presence in bank-like activities are equally applicable to corporate houses that own NBFCs.*

It points to privatisation

There is another aspect to the proposal that cannot be ignored. *Corporate houses are unlikely to be enthused merely by the idea of growing a bank on their own. The real attraction will be the possibility of acquiring public sector banks, whose valuations have been battered in recent years. Public sector banks need capital that the government is unable to provide. The entry of corporate houses, if it happens at all, is thus likely to be a prelude to privatisation.* Given what we know of governance in the Indian corporate world, any sale of public sector banks to corporate houses would raise serious concerns about financial stability. India's banking sector needs reform but corporate houses owning banks hardly qualifies as one. If the record of over-leveraging in the corporate world in recent years is anything to go by, the entry of corporate houses into banking is the road to perdition.

Then why recommend it?

The Indian economy, especially the private sector, needs money (credit) to grow. Far from being able to extend credit, the government-owned banks are struggling to contain their non-performing assets. Government finances were already strained before the Covid crisis. With growth faltering, revenues have plummeted and the government has limited ability to push for growth through the public sector banks. *Large corporates, with deep pockets, are the ones with the financial resources to fund India's future growth. Of course, choosing this option is not without serious risks.*

MORATORIUM ON BANKS

On November 17, the Centre, acting on the recommendation of the Reserve Bank of India (RBI), imposed a moratorium on Lakshmi Vilas Bank (LVB) for a period of 30 days. The 94-year-old bank, based in Karur, Tamil Nadu, has been struggling with losses for three years. As its financial position deteriorated, the regulator placed it under the *Prompt Corrective Action (PCA) framework*, which restricts certain operations depending on the severity of financial stress. *After allowing time for*



the bank to find investors to shore up its capital, the RBI has appointed an administrator for the bank and mooted a merger with the Indian subsidiary of the Singapore-based DBS Bank. Similar moratoria were placed in the recent past on other lenders too, including Yes Bank and Punjab and Maharashtra Co-operative Bank.

What is a moratorium?

*The RBI, the regulatory body overseeing the country's financial system, has the power to ask the government to have a moratorium placed on a bank's operations for a specified period of time. Under such a moratorium, depositors will not be able to withdraw funds at will. Usually, there is a ceiling that limits the amount of money that can be withdrawn by the bank's customers. In the case of LVB, depositors cannot withdraw more than ₹25,000 during the one-month moratorium period. In most cases, the regulator allows for funds of a larger quantum to be withdrawn in case of an urgent requirement, such as medical emergencies, but only after the depositor provides the required proof. Often, the moratorium is lifted even before the originally stipulated deadline is reached. For instance, Yes Bank, which went into a spiral while unsuccessfully trying to find an investor, was placed on a one-month moratorium starting March 5, with a cap of ₹50,000 on withdrawals. **With investors led by State Bank of India (SBI) infusing ₹10,000 crore into Yes Bank, the moratorium was lifted on March 18.***

When does it come into play?

Usually, the RBI steps in if it judges that a bank's net worth is fast eroding and it may reach a state where it may not be able to repay its depositors. When a bank's assets (mainly the value of loans given to borrowers) decline below the level of liabilities (deposits), it is in danger of failing to meet its obligations to depositors. *After banks were nationalised in 1969, the RBI sought to always intervene to protect depositors' interests and prevent commercial banks from failing. In 2004, it nudged State-owned Oriental Bank of Commerce(OBC) to take over the troubled private lender Global Trust Bank (GTB).* As in the case of LVB, GTB was given time to find a suitor for a merger. When it failed to come up with any names, but proposed infusion of foreign capital, the RBI refused permission and instead insisted on the merger with OBC.

How does a moratorium prevent a 'run' on the bank?

A moratorium primarily helps prevent what is known as a 'run' on a bank, by clamping down on rapid outflow of funds by wary depositors, who seek to take their money out in fear of the bank's imminent collapse. Temporarily, it does affect depositors who may have placed, for example, their retirement with the bank, or creditors who are owed funds by the bank but are struggling with the collection. A moratorium gives both the regulator and the acquirer time to first take stock of the actual financial situation at the troubled bank. It allows for a realistic estimation of assets and liabilities, and for the regulator to facilitate capital infusion, should it find that necessary. *Singapore's DBS bank has promised to infuse ₹2,500 crore into the merged entity, once it takes over LVB.* A key objective of a moratorium is to protect the interests of depositors. Even if they are temporarily handicapped by facing restricted access to their funds, there is a high probability that the bank would soon return to normal functioning once a bailout is arranged.



Is the safety of funds assured?

It depends on whether the struggling bank or the regulator is able to find acquirers or investors to save the day. In the case of Yes Bank, the RBI was able to bring in investors who infused adequate funds. With Lakshmi Vilas Bank, the regulator had a ready acquirer with a sound capital base in DBS Bank India. *In the case of Punjab and Maharashtra Co-operative Bank, which is headquartered in Mumbai, the moratorium — despite being gradually relaxed for depositors — is still in force, over a year after it was imposed, and there is still no sign of a buyer.*

WHAT IS THE CASE AGAINST KARVY AND WHAT NEXT FOR ITS CLIENTS?

The National Stock Exchange Monday declared Karvy Stock Broking Limited (KSBL) as a defaulter for non-compliance with various regulatory provisions of the bourse and also expelled it from the membership of the exchange. Exactly, a year ago on November 22, the Securities and Exchange Board of India (Sebi) had banned KSBL from taking fresh business for allegedly misappropriating money and securities belonging to its investors in order to fund its real estate arm, Karvy Realty. While Sebi had initially estimated that Karvy had transferred Rs 1,096 crore to its real estate business, last week the National Stock Exchange said that funds and securities worth Rs 2,300 crore belonging to about 2.35 lakh investors of KSBL have been settled so far. NSE also said that in coordination with other market infrastructure institutions and under the guidance of Sebi, it transferred securities to respective clients, invoked bank guarantees deposited with clearing corporations and liquidated securities held by Karvy Group companies.

What is the case?

The case pertains to Karvy unauthorisedly transferring securities of clients into one of its Demat accounts by misusing the PoAs (Power of Attorney) given by its clients. In November 2019, when the case came to light, Sebi moved against Karvy for violating norms, including transferring client shares to itself and pledging client shares to raise money, which it diverted to its real estate arm. Many of Karvy's over 2.40 lakh clients had complained to the regulator about money and securities not coming to their trading accounts. *Karvy allegedly misused client accounts without informing them, or reporting to the depository or the stock exchange. Securities lying in Depository Participant (DP) accounts belong to clients and can only be pledged to meet the obligations of the respective clients and KSBL had no legal right to create any pledge on those securities.* In its report submitted to Sebi, the NSE had then said that KSBL misused the power of attorney given by its clients to clandestinely sell client securities through entities controlled by it, and used the funds for its own purposes. To hide this, KSBL did not report the DP account (No. 11458979) in its submissions to the NSE from January to August 2019 and this was detected only during inspection, the NSE said.

How much money was involved?

The Sebi order in 2019 said that a net amount of Rs 1,096 crore was transferred by Karvy Stock Broking to Karvy Realty. However, as per the latest figure released by NSE last week, the exchange had settled that funds and securities worth Rs 2,300 crore belonging to about 2.35 lakh investors of KSBL. Sources say some amount may still be there to be settled because of disputes but majority of the amount has been settled. While customers were looking at the stock exchanges for the money and securities allegedly siphoned off by Karvy from their accounts, *Sebi started investigating similar diversions of funds from clients accounts by other broking houses.*



What happens to the clients?

As NSE has now expelled KSBL from the membership of the exchange and Sebi had banned the firm from taking fresh business, the exiting clients can't trade through KSBL. Stock exchange officials say all the existing clients of KSBL would have either got their securities back and got it transferred to another brokerage firm or would have received the value of their securities into their bank accounts.

COMPETITION BILL: OPTIONS FOR FASTER CASE DISPOSAL, CCI TO NAME PROBE ARM CHIEF

The central government is set to introduce the *Competition Amendment Bill* before Parliament during the Winter session, according to government officials. Key changes in the Bill include *vesting the power of the appointment of the head of the investigative arm of the Competition Commission of India (CCI) with the regulator itself*, as well as a new *"settlement" and "commitment" mechanisms to allow for quicker disposal of cases*. The head of the investigative arm of the CCI, the *Director-General (DG), is currently appointed by the Centre*. Industry bodies and experts had opposed the proposal to give this authority to the competition watchdog, noting that *such a move may compromise the independence of the DG*. *"We are hopeful that we will be able to place the Bill before Parliament in the winter session," said a government official. The official added that the amendment to transfer the power to appoint the DG would be retained in the final Bill, noting that the investigative arm of competition regulators in other jurisdictions was also over seen by the regulator*. Experts noted that their primary concern was the maintenance of the functional autonomy of the DG. *"As the power of appointments currently with the central government, this gives the DG functional autonomy. An expert, who requested to remain anonymous, said that the comparison of the CCI with other jurisdictions was not appropriate as while the investigative arms of jurisdictions such as the European Union do operate under the regulator, they have been seen to be "fiercely independent" which is not the case with the DG of CCI. "It seems that even now the investigations by the DG are influenced by the prima facie view taken by the CCI" said the expert, adding that an investigative arm like the DG should be separate from an adjudicatory arm such as the Competition Commission. The Internet and Mobile Association of India (IAMAI) had also said in comments on the draft Bill that "the suggested power for the Competition Commission of India to appoint the Director General under the proposed Bill risks undermining the set rules ensuring fair and independent investigation under the Competition Act,2002"*.

Another key amendment in the proposed Bill is the inclusion of the settlement and commitment mechanism for quicker disposal of cases. *The settlement mechanism would allow a firm which may have engaged in anticompetitive conduct to reach an agreement with the CCI to dispose of a case after the DG submits a report indicating competition law violations*. The company would be required to cease anti-competitive conduct and may be required to pay a fine decided by the CCI. *Under the commitment mechanism, parties accused of anti-competitive conduct may seek to settle a case before the DG of the CCI begins investigation by committing to cease anti-competitive conduct and paying a fine decided by the CCI*. The moves expected to speed up the disposal of cases. *Notably, cases resolved under these mechanisms will not be open to appeals. The CCI may, however, revoke orders of settlement or commitment if it concludes that parties have not made adequate disclosures at the time of the agreement or if there are material changes to the facts of the case.*



INSIDER TRADING CASE: SEBI BARS NDTV PROMOTERS, OTHERS; ROYS TO FILE APPEAL

The Securities and Exchange Board of India (Sebi) has barred the promoters of New Delhi Television Ltd (NDTV) — Prannoy Roy and Radhika Roy— from the securities market for two years and also directed them to disgorge “illegal gains of more than Rs 16.97 crore” for alleged “insider trading” over 12 years ago. The market regulator also barred seven other individuals and entities for insider trading in the Shares of the media company for a period varying from one to two years. Some of them have been asked to disgorge illegal gains made from trading in the shares when they were in possession of *Unpublished Price Sensitive Information (UPSI)*. The directions follow a probe conducted by Sebi between September 2006 and June 2008. According to NDTV, Prannoy Roy and Radhika Roy have informed the company that their lawyers, led by Fereshte Sethna, senior partner at DMD Advocates, hold that the Sebi order is based on an inaccurate assessment of facts and will not withstand scrutiny in appeal. “The appeal will be filed immediately,” it said. The Sebi order said the amount has to be paid jointly or severally by them along with 6 per cent interest from April 17, 2008, till the date of actual payment. All the entities have violated Prohibition of Insider Trading (PIT) Regulations, Sebi said in three separate orders passed late on Friday. The Sebi order noted that Prannoy Roy and Radhika Roy together made a gain of Rs 16.97 crore while indulging in insider trading in the shares of NDTV while in possession of UPSI relating to the proposed reorganisation of the company. Prannoy Roy was the chairman and whole-time director and Radhika Roy was the managing director during the period under investigation and were part of the decision-making chain that led to the crystallisation of the UPSI. *It said discussions pertaining to reorganisation of the company started on September 7, 2007, and the disclosure was made on April 16, 2008. Hence, September 7, 2007 to April 16, 2008 was the UPSI period. Prannoy Roy and Radhika Roy sold shares on April 17, 2008, when the trading window for them was closed and made a profit of Rs 16.97 crore Sebi’s order said. As per Sebi, by doing so, they violated PIT norms and also acted in contravention of NDTV’s code of conduct for prevention of insider trading which prohibited them from trading at least till 24 hours after the information was disclosed to the stock exchanges.* The promoters have been restrained from accessing the securities market for two years and directed to disgorge illegal gains along with 6 per cent interest per annum. Sebi said Vikramaditya Chandra, who was the group CEO and executive director during the relevant period, made a profit of Rs 6.67 lakh, Ishwari Prasad Bajpai, who was senior advisor editorial and projects, made an illegal gain of Rs 8.82 lakh while director-finance and group CFO Saurav Banerjee incurred a loss of Rs 47,000 while trading in NDTV’s scrip during the UPSI period.



LIFE & SCIENCE

WHAT IS THE SENTINEL-6 SATELLITE AND WHY IS IT IMPORTANT?

The Copernicus Sentinel-6 Michael Freilich satellite, designed to monitor oceans, was launched from the Vandenberg Air Force base in California aboard a SpaceX Falcon 9 rocket on November 21. This is a part of the next mission dedicated to measuring changes in the global sea level. Other satellites that have been launched since 1992 to track changes in the oceans on a global scale include the TOPEX/Poseidon, Jason-1 and OSTN/Jason-2, among others. The Sentinel-6 Michael Freilich satellite has been named after Dr. Michael Freilich, who was the Director of NASA's Earth Science Division from 2006-2019 and passed away in August this year.

What is the mission?

The mission, called the Jason Continuity of Service (Jason-CS) mission, is designed to measure the height of the ocean, which is a key component in understanding how the Earth's climate is changing. The spacecraft consists of two satellites, one of them launched on Saturday, and the other, called Sentinel-6B, to be launched in 2025. It has been developed jointly by the European Space Agency (ESA), NASA, European Organisation for the Exploitation of Meteorological Satellites (Eumetsat), the USA's National Oceanic and Atmospheric Administration (NOAA) and the EU, with contributions from France's National Centre for Space Studies (CNES).

What will the satellite do?

According to NASA, the satellite will ensure the continuity of sea-level observations into the fourth decade and will provide measurements of global sea-level rise. Since 1992, high-precision satellite altimeters have helped scientists understand how the ocean stores and distributes heat, water and carbon in the climate system. Essentially, the satellite will send pulses to the Earth's surface and measure how long they take to return to it, which will help scientists measure the sea surface height. It will also measure water vapour along this path and find its position using GPS and ground-based lasers. Further, the data it collects will support operational oceanography, by providing improved forecasts of ocean currents, wind and wave conditions. This data will allow improvements in both short-term forecasting for weather predictions in the two-to-four-week range (hurricane intensity predictions), and long-term forecasting, for instance for seasonal conditions like El Niño and La Niña.

Why is it important to measure the height of the ocean?

As per NASA, it is possible to observe the height of the oceans on a global scale and monitor critical changes in ocean currents and heat storage only from space. Data from satellites such as Sentinel-6 help scientists foresee the effects of the changing oceans on the climate. Further, in order to measure and track changes in the oceanic heat budget, scientists need to know the ocean currents and heat storage of the oceans, which can be determined from the height of the sea surface.

WHAT IS CHINA'S CHANG'E-5 PROBE TO THE MOON ABOUT?

On November 24, China's Chang'e-5 lunar mission will become the first probe in over four decades to bring back samples of lunar rock from a previously unexplored portion of the Moon. Early in 2019,



China's Chang'e-4 probe successfully transmitted images from the far side of the Moon, also referred to as the dark side. This was the first probe to land in this portion of the Moon.

What is the Chang'e-5 mission?

Chang'e-5 probe, which is named after the *Chinese Moon goddess* who is traditionally accompanied by a white or jade rabbit, is the Chinese National Space Administration's (CNSA) lunar sample return mission that is set to launch on November 24 from the Wenchang Space Launch Center on Hainan Island in China. *The goal of the mission is to land in the Mons Rumker region of the moon, where it will operate for one lunar day, which is two weeks long and return a 2 kg sample of the lunar rock possibly by digging about 2 metres deep into the surface of the Moon. The mission comprises a lunar orbiter, a lander and an ascent probe that will lift the lunar samples back into orbit and return them back to Earth.* Chang'e-5 comprises a robotic arm, a coring drill, a sample chamber and is also equipped with a camera, penetrating radar and a spectrometer.

What do lunar samples tell us?

The first samples of rocks from the Moon were collected during the Apollo 11 mission. In a document from 1984, NASA noted that *lunar samples can help to unravel some important questions in lunar science and astronomy, including the Moon's age, the formation of the Moon, the similarities and differences between the Earth and the Moon's geologic features and history and to see if the Moon can give scientists information about the solar system itself.* For instance, the *shape, size, arrangement and composition of individual grains and crystals in a rock can tell scientists about its history, while the radioactive clock can tell them the rock's age.* Further, *tiny cracks in rocks can tell them about the radiation history of the Sun in the last 100,000 years.* As per the Lunar and Planetary Institute, rocks found on the Moon are older than any that have been found on Earth and therefore they are valuable in providing information about the Earth and the Moon's shared history. In 1970, the Soviet Union's Luna 16 probe returned a sample weighing about 101 grams and taken from the Mare Fecunditatis area of the Moon. This was followed by the Luna 16 probe that returned over 55 grams of soil from the Apollonius highlands region. Both these probes collected their soil samples from a few tens of centimetres below the lunar surface. In 1976, Luna 24 collected a sample weighing over 170 grams from 2 metres deep into the lunar soil.

THE "GREAT CONJUNCTION"

After nearly 400 years, Saturn and Jupiter – the two largest planets in our solar system – will be brought closest in the night sky by an astronomical event called the "great conjunction" and popularly referred to as the "Christmas Star". On December 21, almost all the viewers across the world will be able to see the two gas giants very close to each other, while they will still be hundreds of millions of miles apart in space.

The event will coincide with the winter solstice (shortest day of the year in terms of hours of sunlight received) in the Northern Hemisphere and summer solstice in the Southern Hemisphere.

A conjunction is not unique to Saturn and Jupiter however, it is the name given to any event where planets or asteroids appear to be very close together in the sky when viewed from the Earth. In June 2005 for instance, as a result of the "spectacular" conjunction, Mercury, Venus and Saturn appeared so close together in the sky that the patch of sky where the three planets were could be



covered by a thumb. *Astronomers use the word “great” for the conjunction of Jupiter and Saturn because of the planets’ sizes.*

The “Great Conjunction” happens once in about 20 years because of the time each of the planets take to orbit around the Sun. *Jupiter takes roughly 12 years to complete one lap around the Sun and Saturn takes 30 years (Saturn has a larger orbit and moves more slowly because it is not as strongly influenced by the Sun’s gravitational force as planets that are closer to the Sun).*

As the two planets move along their orbits, every two decades, Jupiter catches up with Saturn resulting in what astronomers call the great conjunction.

In a NASA Science Live episode, astronomer Henry Throop likened the planets’ respective orbits to runners on a race track. Therefore, every two decades Jupiter—which can be thought of as a fast runner on the inside track of a racecourse—will overtake Saturn.

This overtaking is what viewers on Earth will witness on the night of December 21, when the planets will appear aligned in the sky, while they will still be millions of miles apart in space.

Why makes the conjunction rare this year?

While Jupiter and Saturn have been moving along on their orbits all throughout this year, since the beginning of December Jupiter has been moving closer to Saturn and on December 21, it will take over Saturn as it orbits around the Sun.

Jupiter and Saturn are bright planets and can be typically seen with the naked eye even from cities. But during a conjunction, they appear to be close to each other, which is what makes the event noteworthy.

This year, however, the event is rare because the planets will come the closest to each other in nearly four centuries, in what astronomer Henry Throop described is a result of a “rare alignment” of the planets.

He said that typically, every 20 years, when Jupiter overtakes Saturn, it passes it about a degree apart in the sky as a result of which they can be seen separated in the sky. But this year, because of the alignment between them, the planets will appear to be especially close to each other in the sky to viewers on Earth at about a tenth of a degree.

Further, this year, the alignment of Saturn and Jupiter will occur at night, which has not happened in over 800 years. It is because of the timing of this alignment that viewers from nearly all over the world can expect to see this event.

How can viewers spot the great conjunction?

Viewers across the world, except those in Antarctica where it is sunny all day at this time and those in areas where the sky is overcast, should be able to see the conjunction with the naked eye all month long. But on the night of December 21, the planets will be the closest and a tenth of a degree apart, which means the patch of the sky where the planets are can be covered with a pinkie finger at arm’s length.

NASA recommends that viewers should find a spot with an unobstructed view of the sky, such as a field or a park. Then, about 45 minutes to an hour after sunset, viewers should look towards the



southwestern sky, where Jupiter will appear like a bright star and Saturn will be slightly fainter and will appear above Jupiter, to its left. After Jupiter overtakes Saturn, the planets will reverse their position.

As per NASA, the planets will either look like an elongated star, while some astronomers say that they will form a double planet.

CHINA TURNS ON 'ARTIFICIAL SUN'

China successfully powered up its "artificial sun" nuclear fusion reactor for the first time, state media reported, marking a great advance in the country's nuclear power research capabilities. The HL-2M Tokamak reactor is China's largest and most advanced nuclear fusion experimental research device, and scientists hope that the device can potentially unlock a powerful clean energy source. It uses a powerful magnetic field to fuse hot plasma and can reach temperatures of over 150 million degrees Celsius, according to the People's Daily -- approximately ten times hotter than the core of the sun. Located in Sichuan province and completed late last year, the reactor is often called an "artificial sun" on account of the enormous heat and power it produces. Chinese scientists have been working on developing smaller versions of the nuclear fusion reactor since 2006.

THE GMRT SELECTED AS A 'MILESTONE' FACILITY BY IEEE

The GMRT (Giant Microwave Radio Telescope) has been selected as a 'Milestone' facility by the U.S.-based Institute of Electrical and Electronics Engineers (IEEE), which is the world's largest technical professional organisation dedicated to advancing technology in all areas related to electrical and electronics engineering. The IEEE Milestones programme honours significant technical achievements which have global or regional impact. This is only the third such IEEE 'Milestone' recognition for an Indian contribution. The previous two Indian IEEE Milestones were for the pioneering work done by Sir J.C. Bose to demonstrate the generation and reception of radio waves in 1895 (recognised in 2012), and for the Nobel Prize-winning (in 1930) 'scattering of light' phenomenon observed by Sir C.V. Raman in 1928.

REMAINS OF TWO VESUVIUS VOLCANO VICTIMS FOUND: WHAT WAS THE ERUPTION OF 79 AD?

The Italian Culture Ministry announced on November 21 the discovery of well-preserved remains of two men, who perished during the volcanic eruption of Mount Vesuvius in 79 AD. The eruption was a catastrophic event that destroyed the ancient Roman city of Pompeii and killed around 16,000 people. The unearthed bodies, which appear as if frozen in time, are believed to be the remains of a man of high status aged between 30 and 40, and of an enslaved person aged 18 to 23, a Reuters report said. Archaeologists have preserved their teeth and bones, and the void left by their decomposed soft tissues has been filled by plaster using a well-perfected casting method by which it is possible to see the outline of their bodies.

Mount Vesuvius

Located in southern Italy near the coastal city of Naples, the 4,203-ft (1,281 metres) tall Vesuvius is the only active volcano in mainland Europe. Vesuvius has been classified as a complex volcano (also called a compound volcano), one that consists of a complex of two or more vents. According to



livescience.com, *Vesuvius typically has explosive eruptions and pyroclastic flows -- defined as a high-density mix of hot lava blocks, pumice, ash and volcanic gas. It has erupted more than 50 times, and is considered among the most dangerous volcanoes in the world due to its proximity to Naples and surrounding towns. Its last serious eruption, lasting two weeks, was in 1944 during World War II, which left 26 Italian civilians dead and around 12,000 displaced.*

Archaeological excavations

Pompeii was largely forgotten for the next 16 centuries, until explorations began around 1750 on the orders of King Charles III of Bourbon. Since then, large parts of the city have been unearthed, and several artefacts and other items of interest have been discovered: all well-preserved thanks to the layers of ashes that covered these ruins. Over a hundred effigies, like the ones whose discovery was announced on Saturday, have been found and preserved, which offer details about the living conditions in the Roman city 2 millennia ago.

TWICE HIT BY CLIMATE CHANGE

Most people know that land-dwelling dinosaurs were wiped out some 66 million years ago when a huge asteroid crashed into Earth. If not this, the plunge in global temperature on a planet with little or no ice, caused by a blanket of heat-shielding debris in the atmosphere, would have killed them. New research says, more than 100 million years earlier, another climate change cataclysm – a global warming – devastated a different set of dinosaur species, with many going extinct. Scientists have found evidence of this traumatic event some 179 million years ago in plant fossils in Argentine Patagonia.

Dinosaur discovered

*They also discovered a previously unknown dinosaur, named *Bagualia alba*. This is in the family of massive, long-necked sauropods, the largest animals to walk the Earth. Before the global warming event, sauropods were only one branch of the *Sauropodomorpha* lineage. Other dinosaurs in the same group were smaller and lightly built, with some no bigger than a goat, according to a study published in the *Proceedings of the Royal Society B*. But a series of volcanic eruptions over several million years released huge amounts of CO₂ and methane in the atmosphere, warming the planet and transforming the vegetation dinosaurs fed on.* The climate went from a temperate, warm and humid with a diverse lush vegetation to a strongly seasonal, hot-and-dry regime. *Smaller *Sauropodomorpha* dinosaurs were unable to cope with the change, but larger sauropods – like *Bagualia alba* – thrived.* “Sauropods are massive, four-legged animals with long necks,” which meant they could reach the tops of trees, palaeontologist and lead author Diego Pol told Agence France-Presse. “Their very robust mandibles and spoon-shaped teeth were adapted to feed on all kinds of plants such as conifer trees.”

Distinct diet

Conifers in the early Jurassic had tough and leathery leaves that would be a challenge for any herbivore. But that gave *B. alba* an advantage over other *Sauropodomorpha* dinosaurs, said Pol, head of the science department at the Egidio Feruglio palaeontology museum in Patagonia. Sauropods' new diet saw them expanded in size from 10 metres to 40 metres in length, as large digestion chambers were needed to cope. They became the dominant group of herbivores and eventually the largest animals to ever walk the Earth.



'WORLD'S LONELIEST ELEPHANT' KAAVAN STARTS TRIP TO CAMBODIA

KAAVAN, dubbed the "world's loneliest elephant" after languishing alone for years in a Pakistani zoo, was readied Sunday for his flight to a sanctuary in Cambodia and the much-needed company of other elephants. The mammoth task of getting him into an elephant-sized metal box for transport took several hours, and was perhaps the most crucial step in rescuing him from the dire conditions he's lived in for 35 years. The global animal welfare group has led the charge to save Kaavan since 2016. Iconic American singer and actress Cher also arrived in Islamabad last week, the culmination of her long standing efforts to raise awareness about rescuing Kaavan from the zoo. Conditions there were so bad that a court in the Pakistani capital ordered the zoo closed in August. Dr Amir Khalil, a veterinarian with Four Paws who's been treating Kaavan's many wounds and ailments over the past three months, said he was hopeful about the next chapter of the elephant's life. "In the sanctuary in Cambodia... waiting for him is three ladies, three Asian female elephants," he said. "Now Kaavan might have a new partner, and share a new life with a partner." Khalil described how on Sunday he slowly and gently cajoled Kaavan to walk backwards into a steel crate, as nearly a dozen men carefully guided him inside using chains around his tree-trunk sized legs. Kaavan is set to leave aboard a Russian cargo plane for the 25,000-acre sanctuary early Monday morning. *The plight of the male Asian elephant, who's been alone since the death of his partner Saheli in 2012, has captured worldwide attention. Cher's animal welfare group Free the Wild has worked with Four Paws and the American syndicated columnist and philanthropist, Eric Margolis, to relocate Kaavan—a mission that's cost about \$400,000.* She's also making a documentary film about the process. Kaavan was diagnosed earlier this year as being dangerously overweight, owing to his unsuitable diet of around 250 kilogrammes of sugar cane each day. With Khalil's help, Kaavan lost 450 kg over the past three months, and was down to a slimmer, more agile 4,000 kg when he left the zoo Sunday. Kaavan's wounds are emotional as well as physical. He would spend his days throwing his head from side to side, a stereotypical sign of boredom and misery in an elephant, Bauer said, and something the Four Paws team has been working to treat. *The loss of his mate Saheli in 2012 took a toll on Kaavan's mental health. Elephants are social animals that thrive on the company of other elephants, Bauer explained.* For Kaavan, the last eight years have been akin to living in quarantine — something the world has come to understand all too well amid the coronavirus pandemic, he said.

NEW SPECIES OF GECKO FOUND IN THE EASTERN GHATS

A new species of lizard, the smallest known Indian gekkonid, has been discovered in the Eastern Ghats. Studies show that the species belonged to the genus *Cnemaspis*. In India, 45 diverse species of *Cnemaspis* have been found, of which 34 are from the Western Ghats. The newly discovered dwarf gecko - *Cnemaspis avasabinae* is the twelfth species to be discovered outside the Western Ghats and also the first species reported from the Velikonda Range in Andhra Pradesh. This discovery suggests that the genus may be even more widely distributed than previously thought.

Femoral spores

The most interesting find was that the males of the species lacked femoral pores. Generally, most variants of lizards have femoral pores in both the sexes, and the secretions from these pores play a role in communication. Prof. Bauer explains: "Lacking femoral pores doesn't mean that a male gecko is not adequately supplied with chemical means of communication. It may also be possible that *geckos are able to release pheromones to attract or communicate with possible mates, even if*



there are no pores. Pores may be especially useful for lizards that maintain a home range or territory and use them to mark this – to keep away other males even more than to attract females. Cnemaspis also have good vision, so visual signalling may play a part in mate attraction in these geckos.”

IN UK, EXAMINING WORLD’S FIRST ‘FOUL AIR DEATH’

An important inquest is underway in London to determine whether air pollution caused or contributed to the death in February 2013 of a nine-year-old child, Ella Adoo Kissi-Debrah, who lived with her mother near a busy road in London. Ella’s death could become possibly the first in the world to be legally certified as having been caused by “air pollution”.

Illness and death

For three years before she died, Ella Adoo Kissi-Debrah had suffered seizures, and had made 27 visits to hospital after having problems breathing. She lived less than 30 metres from the South Circular, a busy and congested arterial road in Lewisham in southeast London. In 2014, an inquest focused on medical care provided to the child found she died of acute respiratory failure as a result of a severe asthma attack. In December 2019, her family was successful in their application to the High Court to reopen the inquest in the light of new evidence regarding air pollution levels.

The second inquest

The full inquest that began will continue for approximately 10 days, and will consider whether air pollution caused or contributed to Ella’s death, and how pollution levels were monitored at the time. Issues such as steps taken to reduce air pollution, and information provided to the public about the levels, the dangers, and ways to reduce exposure, will also be taken up. A report by the acclaimed expert Prof Stephen Holgate had said that air pollution levels near Ella’s home “consistently” exceeded lawful EU limits over the three years prior to her death. The inquest will look at potential failings by the authorities to take adequate steps to reduce pollution and provide the public with information about the risks of air pollution, and the extent to which they contributed to Ella’s death.

Significance of case

If the campaign by the family is successful — Ella’s mother Rosamund, an important voice in the clean air movement, has set up The Ella Roberta Family Foundation to help improve the lives of children suffering from asthma—*Ella will become the first person in the United Kingdom, and possibly in the world, to have air pollution recorded as the cause of death. Apart from setting this legal precedent, the hearing could also determine whether Article 2 of the European Convention on Human Rights is engaged— in terms of arguable failures by the UK authorities — such that Ella should have been afforded a ‘right to life’.* Prof(Dr) Arvind Kumar, Founder Trustee of Lung Care Foundation (India), told The Indian Express that the inquest in Ella’s death could ultimately end up saving the lives of millions of children around the world, including in India. “By confirming that the air pollution in Ella’s London neighbourhood caused the asthma attacks that killed her, this inquest would make clear that a government’s obligation to protect our right to life includes ensuring our right to breathe clean air. Toxic air causes 7 million premature deaths every year worldwide, and kills 500,000 children under 5 years old. Clean air is a human right, and it’s time governments did something about it,” Prof Kumar said. Dr Sundeep Salvi, founder of Pulmocare



Research and Education Foundation, said the ongoing proceedings in the UK could have far reaching implications for Indian courts, as the levels of air pollution in India are several times higher than what is found in the UK.

Killer air pollution

According to the World Health Organisation (WHO), ambient air pollution causes 4.2 million deaths every year globally. Another 3.8 million deaths are caused by household exposure to dirty cookstoves and fuels. Ninety-one percent of the world's population lives in places where the air quality is worse than is recommended by WHO guidelines. Dr Maria Neira, Director of WHO's Department of Environment, Climate Change and Health, said in a statement: "Air pollution is a silent killer, and more than 90% of the world's children breathe toxic air every day. This inquiry into the premature death of Ella Kissi-Debrah at 9 years old shines the spotlight on the unhealthy levels of pollution that most of our young ones are exposed to. The inquest could create an important legal precedent, and strengthen the case that everyone has the human right to breathe clean air."

THE PARIS AGREEMENT IS NO PANACEA

Nothing that U.S. President Donald Trump touched turned into gold, except perhaps his business empire, but ironically, he was the alchemist who turned the Paris Agreement, once considered the product of a conspiracy hatched by the U.S. and China to change the course of negotiations away from the Rio Declaration (1992) and the Kyoto Protocol (1997), into a holy grail worth pursuing. Many developing countries, including India, which hesitated to sign the Agreement because it had exempted developed countries from their mandatory obligations to reduce greenhouse gas emissions, turned into its devout supporters the moment *Mr. Trump denounced it as a hoax and announced his decision to withdraw from it.* Today, the Paris Agreement is deemed as the panacea for all environmental ills when the truth is that it is a repudiation of the principles of 'common but differentiated responsibilities' and 'the polluter must pay'. Mr. Trump was not the only one who called the Paris Agreement a hoax. Many scientists and environmentalists expressed deep disappointment when it was adopted, as *the national and international actions envisaged under it were far below the optimum levels.* They did not add up to limiting the rise of global temperature to below 2°C, the minimum necessary to save the globe from disastrous consequences. It merely opened a new path to protect the lifestyles of industrialised nations by denying the developing countries their right to development.

Efforts over the years

The most hopeful time for global cooperation in protection of the planet was between the time of the Stockholm Conference (1972) and the time of the Rio Conference (1992). That was when mounting scientific evidence about the role of anthropogenic emissions in global warming led to political initiatives to harmonise development and environment. *Former Prime Minister Indira Gandhi's resounding address at Stockholm declaring poverty as the worst polluter reverberated in many conference halls.* The historic consensus in Rio led to the adoption of the UN Framework Convention on Climate Change (UNFCCC), which was a model global instrument balancing the right to development of the developing countries and the obligations of the developed countries. A distinction was made between the "luxury emissions" of the developed countries, which were reduced mandatorily, and the survival emissions of the developed countries, which were allowed to increase. *Moreover, a huge financial package was approved to develop environment-friendly technologies in*



developing countries. But by the time the Conference of the Parties was held in Berlin in 1995, the developed countries had backed off from their commitments. They made a determined effort to impose mandatory cuts on developing countries. Though the G-77 was split, we managed to maintain the Rio principles with the assistance of the Chairperson, Angela Merkel. The Kyoto Protocol enshrined the Rio principles. It fixed emission targets for developed countries and a complex set of provisions was included to satisfy their interests. But it was never ratified by the U.S. Congress and the U.S. withdrew its support in 2001. The end of the Kyoto Protocol and the abandonment of the spirit of the Rio principles were reflected in the Copenhagen Accord (2009), engineered by the U.S. and China and sold to some key countries including India on the argument that a global climate action plan would be possible only if all reductions of the greenhouse gases were made voluntary. The basic terms of the Copenhagen Accord were brokered directly by a handful of key country leaders including the U.S., China, India and Brazil on the final day of the conference. It took another full day of tense negotiations to arrive at a procedural compromise allowing the deal to be formalised over the bitter objections of a few governments. There was a virtual revolt by the developing countries, but the Paris Agreement was virtually born in Copenhagen, and adopted later in 2015.

A fundamental change

The Paris Agreement marked a fundamental change in the principles of Rio and for the first time brought all nations into a common cause to undertake ambitious efforts to combat climate change. It requires all parties to put forward their best efforts through *nationally determined contributions (NDCs)* and to strengthen these efforts in the years ahead. This includes all parties to report regularly on their emissions and on their implementation efforts. *The Paris Agreement moved away from the principle of common but differentiated responsibilities and all countries were placed on an equal footing by making reduction of greenhouse gas emissions voluntary.* The NDCs so far submitted will not result in the desired objective of limiting increase of global warming to below 2°C. The Paris Agreement requires that all countries — rich, poor, developed, and developing — slash greenhouse gas emissions. But no language is included on the commitments the countries should make. *Nations can voluntarily set their emissions targets and incur no penalties for falling short of their targets.* It sets forth a requirement for countries to announce their next round of targets every five years, but does not include a specific requirement to achieve them. *The scientific community has already rejected the Paris Agreement as a solution. Further temperature rise, even of 1.5°C, may result in catastrophic and irreversible changes. At 1.5°C, 70%-90% of coral reefs across the world would die. At 2°C, none would be left. Even a 1°C hotter planet is not a steady state, says a report of the Intergovernmental Panel on Climate Change (IPCC).* The techno-optimism that the wonders of technology will be able to find answers to the dilemma we face without our having to alter our patterns of living is a delusion. The IPCC report acknowledges that “the pathways to avoiding an even hotter world would require a swift and complete transformation not just of the global economy but of society too”. This will only be possible if the world rejects nationalism and parochialism and adopts collaborative responses to the crisis. The Paris Agreement falls short of that imperative. *U.S. President-elect Joe Biden has declared that the U.S. will have the most progressive position on climate change in the nation’s history. He has already laid out a clean energy and infrastructure plan, a commitment to return to the Paris Agreement, and a goal of net-zero emissions by 2050. The appointment of former Secretary of State John Kerry as Climate Change Envoy is a clear indication of the importance that Mr. Biden attaches to addressing global warming issues. Having been one of the architects of the Paris Agreement, Mr. Kerry must be aware of its merits and deficiencies.* It is hoped that he will also be aware of the development imperatives of the developing nations. If Mr. Kerry and Mr. Biden insist on matching cuts by the developing countries



as a conditionality to return to the Paris Agreement, the whole debate of equity and climate justice will emerge, with India and the U.S. on opposing sides.

LAB-GROWN MEAT: CLEARED IN SINGAPORE, EMERGING ALTERNATIVE WORLDWIDE

The Singapore Food Agency (SFA) approved this week the sale of a lab-grown meat product. This is the first time cultured meat has been cleared for sale anywhere in the world. The product approved by the SFA is cultured chicken, produced by US-based East Just. The company has announced the product will be manufactured with local partners under its new brand GOOD Meat.

Why is this big deal?

In its June 2020 Food Outlook Report, the UN Food and Agriculture Organisation (FAO) stated that world *meat output was set to contract row to 333 million tonnes, 1.7% less than in 2019.* The disruption has been caused mainly by Covid-19, but it has added to already widespread *fears about zoonotic diseases, especially African swine fever and highly pathogenic avian influenza.* This provides an opportunity to the alternative meat industry. According to a Nielsen report from May this year, the sale of plant-based meats, which have been available in retail outlets and restaurants since 2018, grew by 264% in the US over a nine-week period that ended May 2. The market for alternative proteins was growing even before the pandemic: in a 2019 report, Barclays predicted that alternative meat could capture 10% of the \$1.4-trillion global meat market over the next decade. But while plant-based meats were finding more and more favour, commercial availability of lab-grown meat (or cultured meat) was still many years in the future. This is why the approval by Singapore to cultured chicken is seen as significant.

How is lab-grown or cultured meat different from plant-based meat?

The latter is made from plant sources such as soy or pea protein, while cultured meat is grown directly from cells in a laboratory. Both have the same objective: to offer alternatives to traditional meat products that could feed a lot more people, reduce the threat of zoonotic diseases, and mitigate the environmental impact of meat consumption. *In terms of cellular structure, cultured or cultivated meat is the same as conventional meat — except that cultured meat does not come directly from animals.* According to the Good Food Institute (GFI)'s 2019 State of the Industry Report on cultivated meats, *compared to conventional beef, cultivated beef could reduce land use by more than 95%, climate change emissions by 74-87% and nutrient pollution by 94%.* The report adds that since cultivated meat is created in clean facilities, *the risk of contamination by pathogens such as salmonella and E coli, which may be present in traditional slaughter houses and meat packing factories, is significantly reduced. It does not require antibiotics either, unlike animals raised for meat, thereby reducing the threat posed to public health by growing antibiotic resistance.*

Who else is making cultured meat?

According to the GFI report, by the end of 2019, 55 companies were focused on cultivated meat products, including Future Meat Technologies (chicken, lamb, beef) in Israel, Biftek (beef) in Turkey, Cubiq Foods (chicken fat) in Spain, Netherlands-based Meatable (pork, beef), French company Gourmet (foie gras) and US-based Memphis Meats (beef, chicken, duck). Also among these is Delhi-based Clear Meat, which is developing cultured chicken.



How soon will cultured meat be widely available to consumers?

There are still significant hurdles to be overcome before cultured meat is widely available. Apart from ensuring that the products are affordable — currently still a challenge—and dealing with consumer mistrust, producers of alternative meats will face resistance from traditional meat producers. *The world's largest meat companies, such as Nestlé, Tyson Foods and Perdue Farms, have already jumped on the fast moving plant-based meat bandwagon. But production of cultured meat is difficult to scale up at present.* Conventional meat still dominates the market, and *industry lobbies have been fighting to hold on to their market, not least by challenging the very idea of alternative meats. The application of meat-related terms, such as burger and sausage, to plant based products has been challenged in the EU (where the bid failed) and the US (where it has had some success) on the ground that these mislead consumers. The charge against lab-grown meat, led by agriculture and husbandry bodies, is that it simply isn't meat if it didn't come from an animal.* The US Cattlemen's Association, for example, *successfully lobbied Missouri to pass a Bill ruling that plant-based and lab grown meats cannot be called meats.* The Cattle Council of Australia has been putting similar pressure on the country's government since 2018.

WHY IS A US ANTI-DOPING ACT WITH A RUSSIAN NAME BEING SEEN AS CONTROVERSIAL?

The *Rodchenkov Act* was passed by the Senate and will become a law once the US president signs it. It allows the USA to initiate legal proceedings against those involved in running doping rings, including coaches, officials, managers or suppliers even if they are not residents of the United States or if the act of doping took place outside the United States.

The main objective of the Rodchenkov Act is to bring to book facilitators who otherwise got away when athletes who tested positive for performance-enhancing substances were banned under the World Anti-Doping Agency (WADA) code.

What does the Act cover?

The Act will cover any 'major international competition' where one or more athletes from the United States participates and three or more from other countries are present. The Act also covers events where the competition organiser or sanctioned body has received sponsorship or funding from an organisation doing business in the United States, and the broadcaster has bought the rights to telecast in the United States.

So can someone in India be charged under the act?

Yes, it appears so. A hypothetical example would be if it is proven that an Indian coach, who is part of a doping syndicate, provided performance-enhancing substances to athletes who won medals at an international competition and this resulted in American athletes missing out on podium places. It may be difficult to extradite the person to the United States, but once charged a citizen of another country will have to be wary of travelling outside her/his country, especially for competitions at venues where investigators could conduct questioning and try and piece together evidence to make their case stronger.

Why does the bill have a Russian-sounding name?

The bill is named after Grigory Rodchenkov, a former director of Russia's anti-doping lab. Rodchenkov had moved to the USA and turned whistleblower after the 2014 Sochi Winter Games.



Rodchenkov was part of the system which helped Russia athletes dope without getting caught. One of the ways was to allow swapping of urine samples with stored clean ones.

What followed Rodchenkov's revelations?

Rodchenkov's testimony and an independent report by professor Richard McLaren, which concluded that *at least 1,000 Russian athletes benefitted from doping, resulted in the nation being banned from the 2018 Winter Olympics in South Korea.* Manipulation of data by the Russian Anti-Doping Agency lab resulted in the World Anti-Doping Agency (Wada) in December handing a four-year ban to Russia. The ban is being challenged in the Court of Arbitration for Sport.

Why is the World Anti-Doping Agency unhappy?

The World Anti-Doping Agency already has a code in place which is used to sanction athletes, including life bans. This is what WADA said in a statement: "It is likely to overlap laws in different jurisdictions that will compromise having a single set of anti-doping rules for all sports and all anti-doping organisations under the WADA code." WADA has also expressed concern that future whistleblowers could be wary of spilling the beans because of the two sets of rules, the WADA code and the Rodchenkov Act, under which they could be potentially prosecuted. WADA also questioned why professional athletes and college athletes in the USA, who were included in the original draft, were not covered now.

Does India have a similar law?

The National Anti-Doping Bill had sought to criminalise doping in India with an imprisonment of four years and a fine of Rs 10 lakh. The bill had proposed to cover athletes and coaches but further amendments have been made. Athletes who test positive are unlikely to face criminal charges under the revised bill and will face sanction as per the WADA Code, sources said. WADA, in the past, has been opposed to making doping a criminal offence for athletes. However the German parliament in 2015 had passed an anti-doping law which includes jail term and fines for coaches, athletes and managers who use or possess performance-enhancing drugs.

PILOT STUDY FINDS POTENTIAL SIGNAL INDICATIVE OF LOSS OF TONE IN BLOOD VESSELS AFTER CARDIAC SURGERY

Vasoplegia, where "vaso" refers to blood vessels and "plegia" stands for paralysis, is a condition where the patient exhibits a low blood pressure, even in the presence of normal or increased output of blood from the heart. When this occurs as a complication of cardiopulmonary bypass surgery, there is a chance that it can lead to multiple organ failure and even death. Now, a diverse group of researchers including clinicians, computational biologists and biotechnologists have come together to study how this may be predicted early on based on clinical observations, so that effective treatment may be given.

Progenitor cells

In a pilot study involving 19 patients who underwent elective cardiac surgery, *the researchers measured the circulating counts of endothelial progenitor cells and hematopoietic stem cells at different points in time starting from when the patient was being anaesthetised to until 24 hours after the surgery.* They find that in a statistically significant number of people in the group that



showed clinically significant vasoplegia, *there was a blunting of the endothelial progenitor cell response*. Also, in the group that did not show clinically significant vasoplegia, they observed that there was no such blunting. *Hematopoietic and endothelial progenitor cells play an important role in repair of damaged tissues and inner lining of the blood vessels called the endothelium, respectively. "Usually, these cells reside in the bone marrow; however, in response to injury to a tissue or a blood vessel, they come out into the circulation from the bone marrow and home into the site of injury for tissue repair,".*

WHY INFLUENZA MAKES PEOPLE VULNERABLE TO BACTERIAL INFECTION

Influenza is caused by a virus, but the most common cause of death in influenza patients is secondary pneumonia caused by bacteria, rather than the influenza virus itself. While this is well known, what is largely unknown is why influenza infections lead to an increased risk of bacterial pneumonia. Now, researchers at Sweden's Karolinska Institute have described findings leading to so-called "super infections". The study is published in the journal PNAS. It can also contribute to research on Covid-19, the scientists suggest. The researchers cite the example of the *Spanish flu, which was an influenza pandemic that swept across the world in 1918–20. Unlike many other pandemics, the Spanish flu disproportionately hit young healthy adults. And one important reason for this was "super infections" caused by bacteria, in particular pneumococci. Pneumococcal infections are the most common cause of community acquired pneumonia and a leading global cause of death. A prior influenza virus infection is often followed by a pneumococcal infection.* In the new study, researchers looked at mechanisms behind this increased susceptibility: influenza induces changes in the lower airways that affect the growth of pneumococci in the lungs.

The mechanism

The researchers used an animal model for their studies. They found that *different nutrients and anti oxidants, such as vitamin C, leak from the blood. This creates an environment in the lungs that favours growth of the bacteria. The bacteria adapt to the inflammatory environment by increasing the production of an enzyme called HtrA. The presence of HtrA weakens the immune system and promotes bacterial growth in the influenza-infected airways.* "The ability of pneumococcus to grow in the lower airways during an influenza infection seems to depend on the nutrient-rich environment with its higher levels of antioxidants that occurs during a viral infection, as well as on the bacteria's ability to adapt to the environment and protect itself from being eradicated by the immune system.

Possible treatments

The researchers suggest the results could be used to find new therapies for double infections between the influenza virus and pneumococcal bacteria. "A possible strategy can therefore be use of protease inhibitors to prevent pneumococcal growth in the lungs," lead author Vicky Sender said in the statement. The researchers note that it is still not known if Covid-19 patients are also sensitive to such secondary bacterial infections.



A LOOMING HEALTH CRISIS (ATUL BAGAI - HEAD, UN ENVIRONMENT PROGRAMME, COUNTRY OFFICE, INDIA)

While the COVID-19 pandemic continues to wreak havoc on our daily lives, a silent pandemic has been brewing in the background for decades. Governments need to factor in new research and bring in businesses and consumers as active stakeholders before it is too late. *Antimicrobial resistance (AMR)* is growing at an alarming rate.

- Globally, about 35% of common human infections have become resistant to available medicines.
- About 700,000 people die every year because available antimicrobial drugs — antibiotics, antivirals, antiparasitic and antifungals — have become less effective at combating pathogens.
- Resistance to second- and third-line antibiotics — the last lines of defence against some common diseases — are projected to almost double between 2005 and 2030.

In India, the largest consumer of antibiotics in the world, this is a serious problem. According to a study published in The Lancet, an estimated 58,000 new-born children die annually from sepsis in India alone because antibiotics can no longer treat certain bacterial infections. We have long known that microorganisms develop resistance to antimicrobial agents as a natural defence mechanism. We have also known for some time that human activity has significantly accelerated the process. *The misuse and overuse of antimicrobials for humans, livestock and agriculture is probably the biggest reason for this, but other factors also contribute.* Research points to the role of environment and pollution in AMR. *Once consumed, up to 80% of antibiotic drugs are excreted un-metabolised, along with resistant bacteria. Their release in effluents from households and health and pharmaceutical facilities, and agricultural run-off, is propagating resistant microorganisms. Wastewater treatment facilities are unable to remove all antibiotics and resistant bacteria.* In India, *there is capacity to treat only about 37% of the sewage generated annually. The rest is discharged into natural water bodies without treatment.* An analysis of single wastewater discharge from a treatment facility in India catering to drug manufacturers found concentrations of antibiotics high enough to treat 40,000 people daily. *Water, then, may be a major mode for the spread of AMR, especially in places with inadequate water supply, sanitation and hygiene. Wildlife that comes into contact with discharge containing antimicrobials can also become colonised with drug-resistant organisms.*

Key initiatives

This issue has been on the radar of scientists for several years. *The United Nations Environment Programme (UNEP) identified antimicrobial resistance as one of six emerging issues of environmental concern in its 2017 Frontiers Report.* In that same year, the UN Environment Assembly pressed the need to further understand the role of environmental pollution in spreading AMR. *UN agencies are working together to develop the One Health AMR Global Action Plan (GAP) that addresses the issue in human, animal, and plant health and food and environment sectors.* The Centre and State governments in India can strengthen the environmental dimensions of their plans to tackle antimicrobial resistance. It is particularly important to promote measures that address known hotspots such as *hospitals and manufacturing and waste treatment facilities.* This



has started to an extent. Early in 2020, the Ministry of Environment, Forest and Climate Change (MoEF&CC) issued draft standards which set limits for residues of 121 antibiotics in treated effluents from drug production units. *These standards await finalisation. And in July this year, the Ministry of Health and Family Welfare and MoEF&CC constituted the inter-ministerial Steering Committee on Environment and Health, with representation from WHO and UNEP.* We saw how quickly a pandemic can spread if we are not ready. This is an opportunity to get ahead of the next one.

(Another article on same topic)

The advent of antibiotics ignited the hope of elimination of infectious diseases in humans and animals. However, this did not happen because of two reasons: the ingenuity and survival instinct of germs and the irrational use of antibiotics in humans and animals. Most of the germs have acquired the capacity to resist the action of affordable antibiotics. This phenomenon is known as antimicrobial resistance (AMR). The inability of antibiotics to treat patients and animals is wreaking havoc on human health, nutrition safety and economies. The long-term impact of AMR is almost comparable to that of the COVID-19 pandemic. AMR is estimated to cause 10 million deaths annually by 2050, unless concerted actions are initiated now. It will result in 7.5 % reduction in livestock production and negatively impact the global GDP by 3.5%.

Tackling the AMR challenge

There are two major possible solutions to combat the AMR menace: discovery of new drugs, before the emergence of resistance in germs; and prudent use of available antibiotics. The first is an expensive and unpredictable process. Since 1984, no new class of antibiotics has been developed. The estimated cost for developing a new antibiotic exceeds \$1 billion. With rapid development of resistance, the life of new antibiotics becomes limited and the return on investment on new molecules gets diminished. This discourages the pharmaceutical industry to invest in these initiatives. The world is left with only one option: to use the available antibiotics carefully to ensure their efficacy for as long as possible. *The World Health Organization Global Action Plan on AMR (2015) provides a road map for tackling this challenge.* This plan has been endorsed by the UN General Assembly. Almost 80 countries have developed their respective national action plans in alignment with this Plan. *The rational use of antibiotics in humans, animals, and agriculture warrants coordinated action in all sectors. These multi-sectoral, multidisciplinary and multi-institutional actions constitute the 'One Health' approach. This has gained currency across the world as an efficient and cost-effective response to AMR and several other challenges, especially endemic zoonoses (diseases transmitted between animals and humans) and pandemics.* It is reinforced by the fact that all the epidemics in the current millennium (SARS, MERS, bird flu and COVID-19) have originated from animals because of unwanted excursion of humans into animal domains. The COVID-19 pandemic has emphasised the urgency of implementing One Health. India's National Action Plan on AMR is an excellent example of the One Health approach and can be used as a guiding document to develop a workable road map for the country to respond to other similar public health challenges.

One platform for experts

One Health should not be construed as a standalone or new programme that has to be built de novo. This endeavour utilises existing expertise and infrastructure in various sectors with a focus on inter-sectoral coordination, collaboration, and communication. *The purpose of One Health is to provide a formal platform for experts to plan and work together towards shared objectives.*



Implementation of One Health warrants a strong and continuous national narrative on zoonoses. It advocates a multi-sectoral response to public health problems, particularly pandemics, as also to address issues related to AMR. *The approach supports focussed actions on the human-animal-environment interface for the prevention, detection and response to the public health events that influence global health and food security.* AMR is one of the biggest challenges to human and animal health. There is a need to optimally utilise emerging technologies to improve human health and development. One Health has been acknowledged as the optimum approach to counter the impact of AMR and future pandemics and must be adopted expeditiously.

FROM DOLPHINS AND WHALES, NEW INSIGHTS ON COVID-19

When infected by the novel coronavirus SARS-CoV-2, people experience a drop in oxygen levels in their blood. This makes them vulnerable to damage in a large range of tissues. Compare this with marine mammals such as dolphins and whales, which spend their lifetime switching between environments of high and low oxygen levels, but tolerate both—because their bodies have adapted that way. In a review article published in *Comparative Biochemistry and Physiology*, ecologist and evolutionary biologist Terrie Williams of the University of California–Santa Cruz and marine biologist Randall Davis of Texas A&M University co-authored a paper that explores how the diving physiology of marine mammals can help us understand the effects of Covid-19. Williams has spent decades studying the physiology of marine mammals and their extraordinary ability to perform strenuous activities while holding their breath for long periods underwater. Davis has co-authored the paper with her. Marine mammals have ways to protect themselves and allow their organs to keep functioning while holding their breath for hours at a time. But to be able to do that, they have had to undergo a whole suite of biological adaptations. The fact that humans lack these adaptations makes it important for people to protect themselves from infection with this virus. “Damage to oxygen-deprived tissues happens fast and can be irreversible, which may account for the long-term effects we are beginning to see in people after coronavirus infections,” Williams said in a statement on her research. The heart and brain are especially sensitive to oxygen deprivation, and marine mammals have multiple mechanisms to protect these and other critical organs

- Marine mammals have a capacity for carrying much more oxygen than humans.
- Some marine mammals contract their spleen during dives, which releases oxygen-rich blood cells into the circulation.
- To avoid blood clots resulting from such high concentrations of red blood cells, many marine mammal species lack a clotting mechanism found in other mammals.
- Marine mammals have greatly increased concentrations of oxygen carrying proteins such as myoglobin in heart and skeletal muscles, and neuroglobin and cytoglobin in the brain.
- Numerous safety factors enable tissues in marine mammals to withstand low oxygen and the subsequent reperfusion of tissues with oxygenated blood.

In humans, reperfusion after a heart attack or stroke often leads to additional tissue damage. According to Williams, the solutions that marine mammals have evolved provide a natural template for understanding the potential for damage to oxygen-deprived tissues in humans. “There are so many ramifications of shutting down the oxygen pathway, and I think that’s what we’re seeing in these Covid patients,” she said. “Our heart and brain cells are meant to last a



lifetime, and we cannot replace them once they are damaged,” she added. “Dolphins and whales have natural protections that humans lack, so we are highly vulnerable to hypoxia.”

CORONAVIRUS MUTATIONS DO NOT INCREASE ITS TRANSMISSIBILITY

A new analysis of coronavirus genomes from over 15,000 Covid-19 patients from 75 countries has found that none of the new mutations appears to be transmitted at a higher rate. The study, which is published today as a pre-print and has not yet been peer-reviewed, builds on another recent, peer-reviewed study published in the journal *Infection, Genetics and Evolution*. The previous study characterised patterns of diversity emerging in the genome of SARS-CoV-2. “We employed a novel technique to determine whether viruses with the new mutation are actually transmitted at a higher rate, and found that none of the candidate mutations appear to be benefiting the virus,” lead author Professor Francois Balloux (University College London Genetics Institute) said in a statement. Corona viruses can develop mutations in three different ways: by mistake from copying errors during viral replication; through interactions with other viruses infecting the same cell; or as a result of the immune response of the host. *Most mutations are neutral, while others are advantageous or detrimental to the virus.* The research team from multiple institutions has so far identified 6,822 mutations in SARS-CoV-2 across the global data set. Of those, the researchers honed in on 31 mutations which have occurred at least 10 times independently during the course of the pandemic. The researchers modelled the virus’s evolutionary tree, and analysed whether a particular mutation was becoming increasingly common within a given branch of the evolutionary tree. The researchers found no evidence that any of the common mutations are increasing the virus’s transmissibility. Instead, they found some common mutations are neutral, but most are mildly detrimental to the virus. The mutations analysed included one in the virus spike protein called D614G, which has been widely reported as being a common mutation which may make the virus more transmissible. *The researchers said the new evidence suggests this mutation is, in fact, not associated with increased transmission. The researchers found most of the common mutations appear to have been induced by the human immune system, rather than being the result of the virus adapting to its novel human host.*

WHAT’S EMERGENCY USE APPROVAL

US drugmaker Moderna said it was applying for emergency use authorisation for its Covid-19 vaccine. A few days earlier, Pfizer applied for emergency use authorisation for the vaccine it has developed in collaboration with BioNTech. In India, Serum Institute of India, which is trialling a version of the AstraZeneca-Oxford vaccine, has said it expects to seek emergency use authorisation within the next two weeks.

What is emergency use authorisation?

Vaccines and medicines, and even diagnostic tests and medical devices, require the approval of a regulatory authority before they can be administered. In India, the regulatory authority is the *Central Drugs Standard Control Organisation (CDSCO)*. For vaccines and medicines, *approval is granted after an assessment of their safety and effectiveness, based on data from trials.* In fact, approval from the regulator is required at every stage of these trials. This is a long process, designed to ensure that a medicine or vaccine is absolutely safe and effective. *The fastest approval for any vaccine until now—the mumps vaccine in the 1960s—took about four-and-a-half years after it was developed. In emergency situations, like the current one, regulatory authorities around the*



world have developed mechanisms to grant interim approvals if there is sufficient evidence to suggest a medical product is safe and effective. Final approval is granted only after completion of the trials and analysis of full data; until then, emergency use authorisation (EUA) allows the medicine or the vaccine to be used on the public.

When can EUA be granted?

In the US, the Food and Drug Administration (FDA) grants an EUA only after it has been determined that the “known and potential benefits outweigh the known and potential risks of the vaccine” (or medicine). This means that an EUA application can be considered only after sufficient efficacy data from phase 3 trials had been generated. An EUA can not be granted solely on the basis of data from phase 1 or phase 2 trials, although these too need to show the product is safe. *For Covid-19 vaccines, the FDA has specified that it would consider an application for EUA only if phase 3 data showed it was at least 50% effective in preventing the disease. This data needed to be generated from “wellover” 3,000 trial participants, “representing a high proportion of participants” enrolled. These participants needed to be followed up for any serious adverse effects for at least one month after all dosages had been given.*

What is the process of getting an emergency use authorisation in India?

Experts and activists say *India’s drug regulations do not have provisions for an EUA, and the process for receiving one is not clearly defined or consistent. Despite this, CDSCO has been granting emergency or restricted emergency approvals to Covid-19 drugs during this pandemic — for remdesivir and favipiravir in June, and itolizumab in July.* “We still don’t know the story behind these approvals — we haven’t seen the clinical trial data published anywhere and we haven’t seen the protocols that were followed for each drug,” said Murali Neelakantan, lawyer and former global general counsel for Cipla and Glenmark Pharmaceuticals. “The US FDA regulations are clear about the conditions and process for receiving an EUA. In India, *I’ve gone through the entire legislation trying to find any clause that has a remote chance of being used for either emergency or restricted use and still haven’t found any provision that allows it here,*” he said. He also observed that some of the drugs that have received restricted emergency approvals in India, like itolizumab, were not subsequently included in the country’s Covid-19 Clinical Management Guidelines.: So, what was the basis for the ‘approval’ and why is that not good enough for it to be included in the treatment protocol?” he said.

How will a Covid-19 vaccine get an EUA in India, then?

That remains to be clearly spelt out. A senior government official earlier told The Indian Express that any company seeking to launch a vaccine approved elsewhere would have to conduct local trials to prove it is safe and effective on the Indian population. In the case of the Astra Zeneca-Oxford candidate (AZD1222), Serum Institute of India is conducting trials of its version, Covishield, on around 1,600 participants in India. Bharat Biotech is currently conducting phase 3 trials of its vaccine, Covaxin, and has said it will not be approaching CDSCO for an EUA. Dr Reddy’s Laboratories (DRL) is hoping to start phase 2/3 trials of the Russian Sputnik V vaccine; it is unclear whether it plans to seek an EUA. SIICEO Adar Poonawalla has said the company plans to apply for EUA in two weeks, but has not specified the process. He had earlier hinted at SII approaching CDSCO for such approval only after AZD1222 received EUA in countries like the UK. In the last two weeks, AstraZeneca and Oxford University have published interim findings of their vaccine’s efficacy, adding it will be put these together for a scientific journal and approach regulators



around the world for EUAs or permission to conduct additional trials. It is possible that SII will push for an EUA to market the vaccine in India sooner, on the basis of the results of its small-scale trials in India, as well as the larger data set from the global trials.

How often has EUA been granted?

EUA is a relatively recent phenomenon. According to Joshua Sharfstein, vice dean for Public Health Practice and Community Engagement at the Johns Hopkins Bloomberg School of Public Health, the *FDA granted its first EUA for the civilian population in 2009*. In an interview published on the school website in October, Sharfstein said *the first EUA allowed the use of Tamiflu drug for infants and young children for the treatment of H1N1 infection*. Since then, EUAs have been granted for several medicines, diagnostics, and equipment like ventilators or even PPEs, but never for a vaccine. *An EUA can be granted only in a declared public health emergency; previous EUAs came during the spread of the Ebola virus, Zika virus and MERS coronavirus. Remdesivir or faviparir, which received EUA for treatment of Covid-19, including in India, are existing drugs approved for other ailments*. They could not be administered to Covid-19 patients without extensive trials, but because they showed promise in limited testing, in specified conditions, they were therefore “repurposed” for Covid-19 patients through EUAs.

Is there a risk in using a product that has only been granted an EUA?

According to the USFDA, the public has to be informed that a product has only been granted an EUA and not full approval. In the case of a Covid-19 vaccine, for example, people have to be informed about the known and potential benefits and risks, and the “extent to which such benefits or risks are unknown”, and that they have a right to refuse the vaccine. There has been an ongoing debate over whether people have the option of refusing to take the vaccine. Incidentally, no country has made vaccination compulsory for its people. Initially, all vaccines are likely to be deployed on emergency use authorisations only. Final approval from respective authorities may take several months, or years.

UK VACCINATION

Next week, when the UK inoculates the first lot of its citizens against COVID-19, humanity could be taking the first steps towards piercing the pall of the pandemic, exceeding the most optimistic of expectations at the start of the outbreak. China and Russia have reportedly also administered anti-COVID vaccines at a mass level, but questions overhang their trial protocols. The UK regulator’s approval, in contrast, came after the vaccine developed by the American pharma giant Pfizer and the German firm BioNTech reported 95 per cent efficiency in the final phase of trials. *The 10-month period taken by the vaccine to journey from concept to reality is a record of sorts in human kind’s battles against mysterious contagions*. The UK’s Health Secretary Matt Hancock has said that the first 8,00,000 doses will be available from next week. It’s not just speedy production schedules and regulatory alacrity that make the Pfizer BioNTech project remarkable. The vaccine uses a novel approach in preparing the human immune system for a corona virus attack. *Since the late 18th century, when the British physician Edward Jenner observed that large numbers of dairy farmers remained immune to smallpox because they contracted a benign version of the dreaded pathogen, the endeavour to control viruses has, by and large, centred on inactivated or weakened germs*. The Pfizer-BioNTech breakthrough, in contrast, is based on genetic material — the messenger RNA, *or mRNA*. The jab is administered on the upper arm. The mRNA then works like



a set of instructions—an often-used analogy is that of a recipe—to enable the arm's muscle cells to make the spike protein, the coronavirus's life-force. The body then uses its capacity to recognise foreign objects and prepares an army of antibodies against the interloper. In the process, the immune system gets trained to react when confronted with the actual pathogen. *The mRNA technology has been in the works for about 25 years. It's been experimented with in vaccines against the zika virus and in the latest versions of the rabies preventive. Enabling the human body to produce replicas of a pathogen is easier and safer than creating weakened viruses in laboratories.* However, *the mRNA is an unstable molecule—unless cocooned in sub-zero temperatures, it breaks down.* The Pfizer-BioNTech vaccine needs to be stored at below minus 70 degrees Celsius. Only a limited number of pharmacy distribution centres, even in the developed world, have such refrigeration facilities. Work is on to overcome this obstacle. In fact, another frontrunner vaccine candidate, developed by the pharma major Moderna, that also takes the mRNA approach, can be kept at a much-less demanding minus 20 degrees Celsius. Even then, given that countries will require a bouquet of vaccines against the novel coronavirus, there is no time to lose in improving cold chain logistics, especially in countries challenged on that front, including India.

THE PURPOSE OF A VACCINE (MATHEW GEORGE - PROFESSOR AT THE CENTRE FOR PUBLIC HEALTH, SCHOOL OF HEALTH SYSTEMS STUDIES, TATA INSTITUTE OF SOCIAL SCIENCES, MUMBAI)

While the whole world waits for a COVID-19 vaccine as the last resort to control the pandemic, it is important to examine the challenges it poses to qualify as a 'public health' intervention in India. Vaccinations have a dual purpose. First is the ability to develop immunity by producing antibodies among those individuals who have taken a vaccine shot. In the midst of a pandemic, the popular perception for vaccination is that which safeguards oneself from the disease. It is this individualistic need that generates a huge demand for vaccines in the market, which, in the absence of government intervention, will be affordable only for those who can pay for them. The second and more crucial purpose of vaccination is to achieve herd immunity in a population by ensuring a threshold coverage — the proportion of population that needs to be covered so that the entire population is protected. The threshold coverage for any disease in a given population is based on the vaccine efficacy in a population, the rate of spread of infection through it, also known as infectivity rate, and the natural immunity that already exists in the population due to prior exposure to the same disease or through cross infections. The threshold coverage is estimated to be around 60% for COVID-19 vaccine to achieve population-level immunity, which should ideally vary, depending on different stages of the pandemic. While deciding on whether vaccines need to be introduced amid a pandemic, there can be individual as well as population-level considerations. The concerns raised in the context of individual prevention include vaccine efficacy, which is generally defined as the probability that an individual, if vaccinated, can prevent the onset of infection. Equally important is the probability of adverse reactions that can arise among individuals. Both these parameters must be considered even to qualify vaccines as potential candidates for a public health intervention. However, there are several other complex economic, social, ethical and systemic factors that need to be looked into. Already, there are concerns raised about the economic resources needed to make the vaccine available for a large population: will it be provided free at the point of delivery or will it be charged? How will an already weakened health system be able to take on the vaccination drive that is expected to cover the entire population? What is the cost of ensuring necessary support services, including cold chains and human resources required for effective vaccine delivery? The most difficult ethical question posed



is about who should be prioritised and what the basis is for such prioritisation. Equally relevant is the projected proportion of the population that may face adverse reactions and the ability of the health system to respond to those. Another aspect specific to the COVID-19 vaccine is the duration of protection provided.

Unclear objectives

These are all important questions, but they will arise only when the most important public health purpose of vaccination — as an immunisation programme — is convincingly answered. In the Indian context, it is not clear what outcome is expected of a population-based vaccination programme for COVID-19. The most dominant argument is that health workers need to be covered on a priority basis, and then the elderly. One of the arguments posed for targeting health workers is that it will protect the health system from collapsing due to COVID-19. If this is so, how can we think of the health system as comprising only health workers, when a majority of stakeholders, even in terms of mere numbers, are always the patients and their caregivers. Second — and more crucial — is the goal of population-level immunity, which is the expected outcome of any population-level vaccination drive. Its very purpose will be defeated if only a specific population group is targeted, when the pandemic can infect all groups similarly. In New Zealand, preparations are on for a countrywide immunisation programme with a goal of covering the whole population with a threshold coverage. Like other public health programmes, it is safe to demonstrate the success of vaccination as a public health intervention in a small population, like a block or a district, before scaling it up for the national level. If population-level immunity is not the focus, then the key purpose of COVID-19 vaccines will be to ensure individual immunity, which might operate within the logic of the market. We should not forget that it took us more than 13 years to declare eradication and achieve population-level immunity for a disease like polio, which targeted only children.

FIVE REASONS THE OXFORD-ASTRAZENECA VACCINE IS BETTER NEWS THAN THE PFIZER, MODERNA SHOTS

The 70% overall efficacy readout notwithstanding, the Covid-19 vaccine AZD1222 developed by Swedish-British pharma major AstraZeneca and the University of Oxford could come as better news than that of the vaccines developed by Pfizer-BioNTech and Moderna, despite both of them having earlier reported much higher protection of up to 95 per cent. Here are five reasons why the AZD1222 preliminary results hold more promise, both in medical terms and for markets such as India.

The half dose boost

The analysis issued by Oxford-AZ on Monday showed a striking difference in efficacy, depending on the amount of vaccine delivered to a participant — *a regimen comprising two full doses given a month apart looked to be just 62 per cent effective while, intriguingly, participants who received a lower amount of the vaccine in a first dose and then the full amount in the second dose were found to be 90 per cent less likely to develop Covid, compared with participants in the placebo group.* While the reasons for this are still being examined, the half dose giving higher protection is really good news — as the manufacturers will have more doses available to vaccinate people, thereby making it possible to cover more of the population, especially in the initial months when supply will be constrained. *A possible explanation for the half dose doing better is that this regimen probably mimics the body's natural response to an infection: a fightback against an infection being led by the*



first set of antibodies — phagocytes, interferons and cytokines — before a more tailored attack is mounted by the specialised neutralising antibodies — the B-cells and the T-cells. Also, the overall results of 70.4 per cent efficacy for the Oxford-AZ vaccine is still higher than most flu jabs, which offer protection of 40-60 per cent.

The Oxford-AZ vaccine, from the preliminary results, shows that it works across all age groups — including the elderly.

A lot easier to store and distribute

Unlike the Moderna and Pfizer-BioNTech vaccines, which must be stored/transported at negative 20-80 degrees Celsius, the Oxford-AZ candidate can be stored up closer to normal fridge temperatures, which means it can be distributed and administered cheaper and faster to people. The vaccine can be transported under normal refrigerated temperatures of 2 to 8 degrees Celsius, AZ said Monday. By comparison, Pfizer has to distribute its vaccine using specially designed “thermal shippers” that use dry ice to maintain temperatures of minus-80 degrees Celsius. For the Oxford-AZ vaccine, the normal supply chain for vaccines that are currently in use across countries such as India, can be used for supplying this vaccine, especially to the rural areas where cold chain logistics are weak.

It will also be much cheaper

The Oxford-AstraZeneca vaccine is markedly cheaper. AZ, which has pledged it won't make a profit on the vaccine during the pandemic, has reached agreements with governments and international health organisations such as Gavi that pegs its cost at about \$2.50 a dose. In contrast, Pfizer's vaccine costs about \$20 a dose, while Moderna's is upwards of \$25. There is a theoretical possibility that the Oxford-AZ vaccine could get even cheaper, given the finding that a smaller initial dose is more effective than a larger one.

It's being produced in India, and could be first to reach Indians

*Serum Institute of India's Covishield, which the Pune-based company has been producing “at risk”, is a variant of AZD1222 and is currently undergoing late-stage human trials in India on 1,600 participants. As things stack up, this could be among the first vaccines that could be used to inoculate Indians once the bridging study being conducted here is cleared by the Indian drug regulator. Plus, *the results of the Oxford-AZ vaccine could be extremely positive news for Russia's Sputnik V vaccine, which uses a technology similar to AZD1222 — the non-replicating viral vector method. The Russian vaccine is also under trials in India, with the involvement of Hyderabad-based Dr Reddy's Labs. India doesn't really have any firm tie-ups for either the Pfizer-BioNTech or Moderna vaccines — both of which use the novel mRNA technology — at present.**

REIN IN THE VACCINE NATIONALISM, THE PROFITEERING (DR. K.R. ANTONY - PUBLIC HEALTH CONSULTANT AT KOCHI AND AN INDEPENDENT MONITOR FOR THE NATIONAL HEALTH MISSION)

It is illegal to hoard, for black marketing, essential goods in drought-affected areas. Overcharging of commodities and services during any natural disaster is always a scandal. It is a crime against humanity to make a profit during any human tragedy.



We cannot allow the rich and the strong to grab everything first. The advance purchase agreements that some countries have negotiated with pharmaceutical companies exemplify such adverse trends. Such vaccine nationalism undermines equitable access to vaccines. There has to be prioritisation for high-risk groups in all countries, especially in the least developed, low- and middle-income nations. That framework has to be accepted by the global community without dispute. In this, *the COVAX partnership is a mechanism for ensuring that. GAVI, or the Global Alliance for Vaccine Initiative, was in existence during the pre-COVID-19 period to ensure the pooled procurement and equitable supply of life-saving vaccines to low- and middle-income countries.* It has been roped in for the COVID-19 vaccine too. Dr. Tedros Adhanom Ghebreyesus, the World Health Organization Director General, on June 13, exhorted member countries to treat COVID-19 technologies as a “public good”. Obviously it fell on deaf ears as far as pharmaceutical companies were concerned. WHO’s idea of a “voluntary pool to collect patent rights, regulatory test data, and other information that could be shared for developing COVID-19 therapies, vaccines, and diagnostics” was met with criticism. The CEO of Pfizer even qualified this as, “... I think it’s nonsense, and... it’s also dangerous.”

Governments have a part

A public good is a common property of the nation and such goods are not excludable or there should not be any rivalries in dealing with it. If it is a public good, governments must step in to regulate its development, innovation, manufacture, sale, and supply ultimately to the public. If there is public financing for technology development, there is no scope for grant of patent protection. A public good cannot be submitted to the vagaries of market fluctuations of pricing dependent on demand-supply dynamics. Governments should be the custodian of public goods. If such an idealistic outcome does not materialise based on basic human rights for availability of accessible and affordable health care, then some regulation mandated by the UN General Assembly must be thought of. *The World Trade Organisation (WTO) had raised concern over public health with regard to the non-availability of patented drugs in sufficient quantity, and at affordable prices. Through the Paris Convention for the Protection of Industrial Property, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the Doha Ministerial Conference declaration 2001, the WTO made provisions for compulsory licensing. This is a provision where the government intervenes when patent clauses regarding availability, reasonable pricing, local production and technology transfer are not met by the patent holder. Compulsory licensing is an “involuntary contract” issued by the national government between a “willing buyer” or local manufacturer and an “unwilling seller” or patent holder foreign company. Thailand and Brazil have done this. India utilised this provision for the first time on March 9, 2012 to grant licence to Natco Pharma Hyderabad against the will of patent owner Bayer, Germany, to manufacture Sorafenib tosylate, a life- saving anti-cancer drug for kidney and liver tumours, with 97% cost reduction (<https://bit.ly/368EW3S>). It is sold by Bayer under the brand name, Nexavar. This is an extreme step available with India if rich countries go for advance purchase and hoarding of a COVID-19 vaccine produced in India by multinational pharma companies and deny India’s supply needs.* COVID-19 vaccine candidates are still in Phase 3 trials; regulatory approval and patent are still awaited. So, failure to comply with patent regulations as a reason for the issue of compulsory licence cannot be applied. Coercion to issue “voluntary licensing” to subsidiary companies in many developing countries such as India, Egypt, Thailand and Brazil by the patent holder is another option.

A chance to act



Seizing the opportunity of the WTO itself mapping out key trade issues arising out of COVID-19 vaccine and fostering dialogue, India and South Africa jointly sent out a communication, on October 2, 2020 to the IPR Council of the WTO for a waiver of the protection of copyright, design, trademarks and patent on COVID-19 related technologies including vaccines. It is claimed that India's submission has the support of 43 members of the African group and 36 members of Least Developed countries group apart from South Asian Association for Regional Cooperation countries, Indonesia, Venezuela and Nicaragua. If this is decided favourably as a special case considering the unprecedented impact of the pandemic, it will set a precedent. A UN organisation such as the WTO can wield influence on member-nations to forgo trade profits for a humanitarian cause. Global campaigns through the media and civil society organisations can garner enough momentum to exert pressure on TRIPS. This is a pragmatic step for the time being. But having nothing less than vaccines and life-saving medicines being treated as a public good must definitely be the long-term goal.

BEING ACTIVE COULD PREVENT 5 MN DEATHS YEARLY:WHO

Up to 5 million could be avoided each year if all adults, including people living with chronic conditions or disability, devote at least 150 to 300 minutes every week to moderate to vigorous aerobic activity, new guidelines issued by the World Health (WHO) say. For children and adolescents (5- 17 years), the *WHO has recommended an average of 60 minutes of moderate to vigorous, mostly aerobic, physical activity per day all week long. Vigorous-intensity aerobic activities, as well as those that strengthen muscles and bones, should be incorporated at least 3 days a week.* The guidelines on physical activity and sedentary behaviour emphasise that everyone, of all ages and abilities, can be physically active and that every type of movement counts. The guidelines come at a time when the novel coronavirus pandemic has forced millions around the world to stay at home, and curtailed many everyday activities. *Statistics from the WHO show one in four adults (27.5%) and four out of five adolescents (81%) globally do not meet the 2010 WHO recommendations on physical activity.* The direct health care cost is estimated at \$54 billion; the lost productivity is estimated to cost another \$14 billion. *Almost no improvements have been seen in physical activity levels over the past decade.*

RT-LAMP: A NEW TECHNOLOGY FOR DETECTING COVID-19 (D.M. VASUDEVAN - HEAD OF POSTGRADUATE PROGRAMMES AND RESEARCH AT AMRITA INSTITUTE OF MEDICAL SCIENCES, KOCHI)

This superior technique is now in India in the form of RT-LAMP (Reverse Transcriptase loop-mediated isothermal amplification) technology. This is a one-step nucleic acid amplification method to multiply specific sequences of RNA of the coronavirus. Here, *the RNA is first made into cDNA (copy DNA) by the usual reverse transcription. Then, the DNA is amplified by the LAMP technique. Although the LAMP technique has been used in western countries for the past five years or more, the technique is new to the Indian IVD industry. The LAMP technology has many advantages over RT-PCR technology. The RT-PCR test needs different temperatures in one cycle. The temperature of the solution has to be changed from 92 degrees C to 56 degrees C and again to 72 degrees C every two minutes, and this cycle has to be repeated.* Thus, the PCR test needs expensive thermal cyclers as well as the real time PCR machines. On the other hand, *the new RT-LAMP technology is done at 65 degrees C, where the DNA amplification is done at a constant temperature (isothermal), so that expensive thermal cyclers are not required.* Moreover, *the quantity of DNA amplified in the LAMP*



technology is hundred thousand times more than that is taking place in PCR. Therefore the final assay is possible with a simple colour reaction, removing the need for very costly real time PCR machines. An equally important advantage of the LAMP technology is that *the assay is so fast that results can be obtained within 30 minutes and positive samples are amplified as early as 10 minutes.* This may be compared with the PCR technique which needs 8–10 hours for completion. This means that COVID-19 testing centres can report with accuracy in substantially lower turnover time. Yet another advantage of *LAMP is that the reagents are to be stored at 4 degree C (ordinary fridge), whereas the PCR-based reagents are to be stored and transported at -20 degrees C,* which needs deep freezers that escalate the cost. The LAMP technology does not need laborious preparation as in the case of RT-PCR. LAMP is cost effective and does not need complex expensive equipment. Assays can be performed with minimum skill and minimum infrastructure.

Recently validated

The LAMP technology has been recently validated by the Indian Council of Medical Research with sensitivity 98.7% and specificity 100%. Thus the LAMP technology is superior to the PCR technology-based COVID-19 kits where specificity is around 95% only. Thus, in the case of LAMP-based kits, the Positive predictive value is 100% and Negative predictive value is 98.8% with accuracy of 99.38%.

User-friendly

A confirmatory, accurate, rapid, low-cost, and user-friendly molecular diagnostic method is the prerequisite to address COVID-19 pandemic. The RT-LAMP technology is ideal for Indian conditions. There is an urgent need to build the national testing capacity above what is achievable with currently available test kits. This is possible with RT-LAMP technology which shows great promise as a detection tool. The procedure's speed, simplicity and cost-effectiveness allow it to be the ideal method for diagnosing the infection. *Agappe Diagnostics have recently developed the LAMP technology indigenously, and their kit has been validated and approved by the ICMR for marketing. It is named LUME Screen nCoV.*

SIMILAR SYMPTOMS IN COVID, LUNG INJURY CAUSED BY VAPING

Lung injuries caused by Covid-19 and its manifestations are similar to those caused by e-cigarettes and vaping, a new study has underlined, Published in SAGE Open Medical Case Reports, the study presents a case series of three teenagers who presented with breathing problems at University of California-Davis (UC Davis) Health during the pandemic. Eventually they turned out to be Covid-negative, but each had a history of vaping. *Medical professionals use the acronym EVALI to describe e-cigarette, or vaping, product use-associated lung injury.* The study authors underlined that EVALI and Covid-19 share many symptoms but have very different treatment plans. They stressed that healthcare providers caring for paediatric patients with unexplained respiratory failure should also consider EVALI and ask for relevant smoking/vaping history. *Common symptoms between EVALI and Covid-19 include fever, cough, nausea, abdominal pain and diarrhoea. With the pandemic, it is easy to miss EVALI diagnosis, the researchers said.* In the case series described in the study, the patients showed up with fever, nausea and cough. They had fast heart rate, rapid breathing and low oxygen levels in their blood. Their test results pointed to inflammation commonly seen in Covid-19, but their SARS-COV-2 testing returned negative. When the patients



shared information about recent vaping, doctors could diagnose EVALI and treat them successfully with corticosteroids.

3D PRINTED SWABS NOW IN USE WORLDWIDE: DEVELOPERS

In September, researchers published the results of clinical trials on an innovation: 3D printed nasal swabs as an alternative to commercial swabs to test for Covid-19 (reported in The Indian Express on September 28). Since then, hospitals worldwide have used the original files to print swabs in tens of millions. Next week, the results of the trial, first published in the journal Clinical Infectious Diseases, will now be presented at the annual meeting of the Radiological Society of North America (RSNA) next week. Researchers at University of South Florida (USF) Health designed, tested and produced the 3D printed nasal swab prototype. The large-scale clinical trial began in late March at three sites: Tampa General Health (Florida), Northwell Health (NY), and Thomas Jefferson University Hospital (Philadelphia). Other sites joined later. The swabs were found to work as well and as safely as the standard commercial nasal swabs. The only adverse reaction was a few instances of slight nasal bleeding. *The cost of materials per 3D-printed nasal swab ranges from 26 to 46 cents; commercial swabs cost about \$1 each, the authors said then.*

SCIENTISTS PROBE CELL MEMBRANE DEFENCE AGAINST CORONAVIRUS

To infect a human cell, the novel coronavirus needs to first bind to the cell membrane using its spike protein. The cell membrane is thus the cell's outermost line of defence against the coronavirus. Researchers are now investigating what treatments could make the membrane more resistant to virus entry. Cell membranes serve as a barrier between the cell's interior and its surrounding environment. In themselves, they host many activities necessary for cell function. They are just a few nanometres thick. Researchers from Virginia Institute of Technology and the US Department of Energy's Oak Ridge National Laboratory (ORNL) are using neutron scattering to investigate how the cell membrane and the virus impact each other. *By determining how the coronavirus penetrates the cell membrane, scientists can develop treatments that hinder this process.* Many researchers are exploring ways to combat the virus by targeting its spike proteins, but fewer are paying attention to the site where the infection process begins: the cell membrane. *The new research looks to establish a molecular understanding of the membrane properties that allow viral entry, how membranes change when in contact with the virus, and what membrane modifications could inhibit the infection process.* The team is using ORNL's liquids reflectometer (LIQREF) to examine the conformation of membranes and viral spike proteins, as well as the effects of certain therapeutic candidates. With the instrument, scientists can measure the trajectories of neutrons as they interact with different biological materials. They then use this information to determine how a sample is organised at the molecular level. The researchers performed their experiments with a membrane model that closely mirrors the shape and composition of cell membranes within human lungs. They measured how the membrane's properties change when exposed to either melatonin or azithromycin — commonly available products that are currently being investigated as possible treatments for mitigating Covid-19 symptoms.



DreamIAS