

CURRENT AFFAIRS for UPSC

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DreamIAS



INTERNATIONAL

TOWARDS RACIAL JUSTICE

A U.S. judge found Derek Chauvin, a Minneapolis police officer, *guilty of murdering an unarmed African-American man, George Floyd*, an incident last May that ignited a nationwide storm of protest against police brutality and a worldwide outpouring of anger at America's racial injustice. Mr. Chauvin has been convicted of second-degree and third-degree murder, and manslaughter — all three for an encounter that lasted around nine minutes, during which he pinned Mr. Floyd's neck to the roadside with his knee until he stopped breathing. Mr. Floyd's final words, "I can't breathe", became the clarion call of a massive wave of street protests across the U.S. At the time, erstwhile President Donald Trump fanned outrage when he described the protests a result of the "radical left" and threatened to send in the National Guard. President Joe Biden, at the time a presidential race frontrunner, contrarily went to Houston to meet with Mr. Floyd's relatives. He said at the time that he would not "fan the flames of hate", but instead, "seek to heal the racial wounds that have long plagued this country". A few months ahead of one of the most remarkable presidential elections in recent history, his words lent hope to many Americans that should he win, there might be a real possibility for reform in law enforcement and criminal justice that could result in less violence against racial minorities. Yet, it is clear that the road towards achieving a more perfect union is laden with pitfalls that render the task at hand formidable. Literally minutes before the verdict in the Chauvin trial, a teenage girl in Columbus, Ohio, was killed by the police. Her death comes in the wake of others felled in police encounters, including Eric Garner, Michael Brown and Tamir Rice in 2014, and Breonna Taylor in 2020, to name but a few. In most such cases, charges have been rare, and convictions rarer still. Analysis of these cases suggested that most often charges were dropped, or plea bargains and civil settlements agreed. It is only a minority of these instances of what many consider police brutality against people of colour that result in convictions at trial. Four years under Mr. Trump did little to build, across communities, bridges of the sort necessary to bring about a greater measure of empathy and nuance in policing. *Now, Mr. Biden's ambitious police reform bill, which bans chokeholds, offers qualified immunity from lawsuits for law enforcement and creates national standards for policing towards greater accountability, has cleared the House and faces a steep climb at the Senate, where analysts say it is unlikely to pass without the support of at least some Republicans.* If some of these Republicans can eschew unproven allegations about Democrats seeking to "defund the police" that will be a good start.

U.S., CHINA AGREE TO COOPERATE WITH URGENCY ON CLIMATE CRISIS

The U.S. and China, the world's two biggest carbon polluters, agreed to cooperate to curb climate change with urgency, just days before President Joe Biden hosts a virtual summit of world leaders to discuss the issue. The agreement was reached by U.S. special envoy for climate John Kerry and his Chinese counterpart Xie Zhenhua during two days of talks in Shanghai last week, according to a joint statement.

Biggest polluters

China is the world's biggest carbon emitter, followed by the U.S. The two countries pump out nearly half of the fossil fuel fumes that are warming the planet's atmosphere. Their cooperation is key to the

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



success of global efforts to curb climate change. Noting that China is the world's biggest coal user, Mr. Kerry said he and Chinese officials had a lot of discussions on how to accelerate a global energy transition. Mr. Biden has invited 40 world leaders, including Chinese President Xi Jinping, to the April 22-23 summit.

U.S. WILL CUT EMISSIONS BY 52% BY 2030

U.S. President Joe Biden announced that the U.S. would cut its greenhouse gas emissions by 50%-52% by 2030 relative to 2005 levels, in a clean break with the Trump administration policies on climate action. Mr. Biden also announced that the U.S. would double, by 2024, its annual financing commitments to developing countries, including a tripling of its adaptation finance by 2024. The President made the new target announcements at a 'Leaders Summit on Climate', which he is hosting on Thursday and Friday and in which 40 heads of state and government are invited — including Prime Minister Narendra Modi, President Xi Jinping of China and President Vladimir Putin of Russia. The emissions targets — part of the Paris Agreement on climate — are non-binding and the details of how they will be achieved are not available. However, in announcing the targets, the Biden administration is hoping to encourage other countries to increase their commitments. It is also seeking to bring America back into a leadership role on climate action after Mr. Trump had withdrawn the country from the Paris Agreement. Mr. Biden's financing announcements are part of a \$100 billion a year commitment from developed countries to developing countries for the period 2020-25, "an investment that is going to pay significant dividends for all of us", Mr. Biden said. The withdrawal of the U.S. from the Paris Agreement means it has not yet met its financing commitments either. The Obama administration had promised \$3 billion to the Green Climate Fund (to help developing countries), only \$1 billion has been paid.

Jobs and growth

In selling climate action to the American public, which until recently was governed by an administration sceptical of the climate crisis, President Biden and his administration have linked climate action and clean technology to jobs and economic growth. On Thursday, Mr. Biden extended this message to other countries. "And meeting this moment is about more than preserving our planet. It's also about providing a better future for all of us. That's why, when people talk about climate, I think jobs. Within our climate response lies an extraordinary engine of job creation and economic opportunity ready to be fired up," he said.

A LOW-CARBON FUTURE THROUGH SECTOR-LED CHANGE

Global net zero may require some countries reaching net-zero before 2050 in order for others to have some additional time. Since a disproportionate share of the carbon space has been used up by developed countries, it is important that they act boldly at home, to match the vigour of their diplomatic efforts. Nonetheless, as a climate-vulnerable country, India must also up its game to contribute to limiting global temperature rise, ideally below 1.5°C. While doing so, it should not lose sight of the history of global climate negotiations and its own developmental needs. *Though a large country and economy, we are still a very poor country with a significant development deficit — for example, our per-capita carbon emissions are less than half the world average.*



What India must do

So, what is the way forward for India? Saying India will take only modest steps until richer countries do more is not viable in the context of a global climate crisis. Yet, announcing an Indian 2050 net-zero commitment risks taking on a much heavier burden of decarbonisation than many wealthier countries, and could seriously compromise India's development needs. We suggest a third path, focused on concrete, near-term sectoral transformations through aggressive adoption of technologies that are within our reach, and an earnest effort to avoid high carbon lock-ins. This is best accomplished by focusing on sectoral low-carbon development pathways that combine competitiveness, job-creation, distributional justice and low pollution in key areas where India is already changing rapidly. This approach is directionally consistent with India moving towards net-zero, which should be our long-term objective. Over time, India can and should get more specific about future economy-wide net-zero targets and dates. Here, we detail what such an approach would look like, by laying out the contours of an enhanced national pledge for the electricity sector, to illustrate how it can be both ambitious and in India's interest. A similar approach should be adopted for other sectors.

De-carbonise power sector

To achieve net-zero emissions, a key piece of the puzzle is to decarbonise the electricity sector, which is the single largest source (about 40%) of India's greenhouse gas emissions. De-carbonised electricity would also allow India to undertake transformational changes in urbanisation and industrial development, for example by expanding the use of electricity for transport, and by integrating electric systems into urban planning. *So far, our efforts in the electricity sector have focused on expanding renewable electricity capacity, with targets growing by leaps and bounds from 20GW of solar to 175GW of renewable capacity by 2022, further growing to 450GW of renewable capacity by 2030.* While useful as a direction of travel, India now needs to shift gears to a comprehensive re-imagining of electricity and its role in our economy and society. One way to do this is to go beyond expanding renewables to limiting the expansion of coal-based electricity capacity. This will not be easy: *coal provides firm, dispatchable power and accounts for roughly 75% of electricity today; supports the economy of key regions; and is tied to sectors such as banking and railways.* These connections need to be unravelled to truly shift to a decarbonised future.

Ceiling for coal power

A first, bold, step would be to pledge that India will not grow its coal-fired power capacity beyond what is already announced, and reach peak coal electricity capacity by 2030, while striving to make coal-based generation cleaner and more efficient. There is a strong rationale for this: *coal is increasingly uneconomic and phasing it out over time will bring local gains, such as reduced air pollution, aside from climate mitigation.* Such a pledge would give full scope for development of renewable energy and storage, and send a strong signal to investors. A second, necessary step is to create a multi-stakeholder Just Transition Commission representing all levels of government and the affected communities to ensure decent livelihood opportunities beyond coal in India's coal belt. This is necessary because the transition costs of a brighter low-carbon future should not fall on the backs of India's poor. Third, a low-carbon electricity future will not be realised without addressing existing problems of the sector such as the poor finances and management of distribution companies, which requires deep changes and overcoming entrenched interests.



Finally, *India will need to work hard to become a leader in technologies of the future such as electricity storage, smart grids, and technologies that enable the electrification of other sectors such as transportation.* Through careful partnership with the private sector, including tools such as production-linked incentives, India should use the electricity transition to aim for job creation and global competitiveness in these key areas. Thus, an electricity-supply focused component of India's climate pledge could provide the overarching framework to envision and drive transformative change.

Improve energy services

Enhancing the efficiency of electricity use is an important complement to decarbonising electricity supply. Growing urbanisation and uptake of electricity services offer a good opportunity to shape energy consumption within buildings through proactive measures. Cooling needs are expected to increase rapidly with rising incomes and temperatures. *Air conditioners, fans and refrigerators together consume about 60% of the electricity in households. Today, the average fan sold in the market consumes more than twice what an efficient fan does, and an average refrigerator about 35% more. India could set aggressive targets of, say, 80% of air conditioner sales, and 50% of fan and refrigerator sales in 2030, being in the most efficient bracket.* In addition to *reducing green house gas emissions, this would have the benefit of lowering consumer electricity bills.* India can leverage this transition too as an opportunity to become a global leader in production of clean appliances. Such a sector-by-sector approach, which can and should be developed for other sectors, can demonstrate concrete, yet ambitious, domestic action that sets India on the path toward net zero emissions. It empowers India to insist that developed countries complement their distant net-zero targets by enacting concrete near-term measures that are less reliant on unsure offsets. This approach also allows India to nimbly adapt its sectoral transition plans as technologies mature and enable it to ratchet up its pledges periodically as required by the Paris Agreement.

AUSTRALIA ENDS CHINA DEALS ON NATIONAL INTEREST GROUNDS

Australia said on Thursday that it cancelled two accords between Victoria State and China on the Belt and Road Initiative because they were out of line with the federal government's foreign policy, which sees a "free and open Indo-Pacific" as a key goal. A Chinese Foreign Ministry spokesman responded by urging Australia to abandon its "Cold War mentality and ideological bias" and "immediately correct its mistakes and change course". The Chinese Embassy earlier criticised the move by Australian Foreign Minister Marise Payne to veto two agreements signed by Victoria State as "provocative", and said it would further damage ties. Prime Minister Scott Morrison said the accords were cancelled because his federal government did not want other levels of government to enter into agreements that are in conflict with Australia's foreign policy. "We will always act in Australia's national interest to protect Australia, but to also ensure we can advance our national interest in a free and open Indo-Pacific and a world that seeks a balance in favour of freedom," he said. Under a new process, States must consult with the Foreign Minister before signing agreements with other nations. Ms. Payne earlier told local radio the policy was "not aimed at any one country". Wang Wenbin, a spokesman at the Chinese Foreign Ministry, expressed doubt over that claim during a regular news conference in Beijing. He warned Australia against travelling



“further down the wrong path to avoid making the already strained China-Australia relations worse”.

New realities

Speaking to reporters in New Zealand after meeting with her counterpart, Nanaia Mahuta, Ms. Payne said Australia sought a clear-eyed and practical engagement with China, particularly as the world emerged from COVID-19. “We also have to acknowledge that China’s outlook, the nature of China’s external engagement, both in our region and globally, has changed in recent years, and an enduring partnership requires us to adapt to those new realities,” she said.

EU COUNCIL APPROVES CONCLUSIONS ON INDO-PACIFIC STRATEGY

The Council of the European Union on Monday approved conclusions on a European Union strategy for cooperation in the Indo-Pacific to “reinforce its strategic focus, presence and actions” with the aim to contribute to “regional stability, security, prosperity and sustainable development,” at a time of “rising challenges and tensions in the region.” “Current dynamics in the Indo-Pacific have given rise to intense geopolitical competition adding to increasing tensions on trade and supply chains as well as in technological, political and security areas. Human rights are also being challenged. These developments increasingly threaten the stability and security of the region and beyond, directly impacting on the EU’s interests,” a statement from the Council said. “The Council tasked the High Representative and the Commission with putting forward a Joint Communication on cooperation in the Indo-Pacific by September 2021,” it stated.

Long-term focus

The renewed *EU commitment* to the Indo-Pacific will have a long-term focus and will be based on “*upholding democracy, human rights, the rule of law and respect for international law,*” it stated. The EU will aim to promote effective rules-based multilateralism, it said, *reiterating its support for ASEAN (Association of South East Asian Nations) centrality, a point also stressed by India.* The EU will work together in order to mitigate the economic and human effects of the COVID-19 pandemic and work towards ensuring an inclusive and sustainable socio-economic recovery, it said. The EU’s approach and engagement will look to foster a “*rules-based international order, a level playing field, as well as an open and fair environment for trade and investment, reciprocity, the strengthening of resilience, tackling climate change and supporting connectivity with the EU.*” “Free and open maritime supply routes in full compliance with international law remain crucial,” it said.

PROBE CHINA OVER XINJIANG CRIMES

A human rights group appealed to the United Nations on Monday to investigate allegations China’s government is committing crimes against humanity in the Xinjiang region. Human Rights Watch cited reports of the mass detention of Muslims, a crackdown on religious practices and other measures against minorities in the northwestern region. *It said they amount to crimes against humanity as defined by the treaty that established the International Criminal Court. China is not a member of the court and could use its veto power as a permanent UN Security Council member to block action against Chinese officials, Human Rights Watch said in a report.* However, the group said the UN Human Rights Commission should create a body to investigate the charges, identify



those responsible and provide a road map to hold them accountable. *More than 1 million people have been confined to camps in Xinjiang, according to foreign governments and researchers. Authorities there are accused of imposing forced labor and birth controls.* The Chinese government rejects complaints of abuses, saying the camps are for job training to support economic development and combat radicalism. The government is pressing foreign clothing and shoe brands to reverse decisions to stop using cotton from Xinjiang due to reports of possible forced labour there.

RUSSIA STARTS PULLING BACK TROOPS FROM UKRAINE BORDER

Russian troops began pulling back to their permanent bases on Friday after a massive buildup that has caused Ukrainian and Western concerns. *On Thursday, Russian Defence Minister Sergei Shoigu declared the sweeping maneuvers in Crimea and wide swaths of western Russia over, and ordered the military to bring the troops that took part in them back to their permanent bases by May 1. Ukrainian President Volodymyr Zelensky welcomed the announcement. The Russian Defence Ministry said on Friday that its forces that took part in the massive drills in Crimea were moving to board trains, transport aircraft and landing vessels en route to their permanent bases. Ukrainian Foreign Minister Dmytro Kuleba said Kyiv would await intelligence confirmation of the pullback. "We want to see that Russian deeds match Russian words," Mr. Kuleba said. "What was said was not enough, we want to see that this will be implemented and all these forces will be removed from our border." He added that if the pullback is confirmed, "this would mean a real easing of tension." He thanked NATO and the EU countries for offering "very firm and immediate support to Ukraine" While ordering the pullback of military personnel, Mr. Shoigu also ordered to keep heavy weapons in western Russia for a massive exercise later this year.*

IRAN NUCLEAR TALKS ENTER 'DRAFTING STAGE'

High-level talks in Vienna aimed at bringing the U.S. back into the 2015 nuclear deal with Iran are moving ahead with experts working on drafting proposals this week.

U.S. President Joe Biden wants to return Washington to the deal, and Iran has been negotiating with the five remaining powers — Germany, France, Britain, China and Russia — for the past two weeks on how that might take place. *Diplomats from the world powers have been shuttling between the Iranian delegation and an American one, which is also in Vienna but not talking directly with the Iranian side.* Two expert groups have been brainstorming solutions to the two major issues: The rollback of American sanctions on one hand, and Iran's return to compliance on the other.

SAUDI, IRANIAN OFFICIALS HOLD TALKS TO RESET RELATIONS

Saudi and Iranian officials held direct talks this month in a bid to ease tensions between the two foes, a senior Iranian official and two regional sources said, as Washington works to revive a 2015 nuclear pact with Tehran and end the Yemen war. The April 9 meeting in Iraq, first reported by the Financial Times on Sunday, did not lead to any breakthrough, the Iranian official and one of the regional sources familiar with the matter said. The source said the meeting focused on Yemen, where a military coalition led by Saudi Arabia has been battling the Iran-aligned Houthi group since



2015. Iraq's Prime Minister held talks with Saudi Arabia's Crown Prince earlier this month and also visited the United Arab Emirates.

'Lebanon discussed'

The second regional source said the talks also touched on Lebanon, which is facing a political vacuum amid a dire financial crisis. Gulf Arab states are alarmed by the expanding role of Lebanon's Iran-backed Hezbollah movement.

Sunni Gulf power Saudi Arabia cut ties with Shi'ite Iran in January 2016 following the storming of its Embassy in Tehran in a row over Riyadh's execution of a Shi'ite Muslim cleric. A Western diplomat in the region said the U.S. and Britain were informed in advance of the Saudi-Iran talks but had "not seen the outcome".

CUBA AFTER THE CASTROS

The retirement of Raul Castro as the first secretary of Cuba's ruling Communist Party brings to an end the six-decade-long rule of the "historic generation", who, under the leadership of Fidel Castro, captured power in 1959 through an armed revolution. Fidel remained at the helm of affairs in the island, in the face of growing hostility from the U.S. until he fell sick in 2006. Two years later, he handed the party to his younger brother, who had fought alongside him in the guerrilla war against the dictatorship of Fulgencio Batista in the 1950s. Under the younger Castro, Cuba started taking baby steps towards opening up the state-controlled economy. He had also overseen rapid improvement in relations with the U.S., when Barack Obama eased some restrictions on the Cuban economy, travelled to Havana and opened an American Embassy. *In 2018, Mr. Raul stepped down as President, handing government responsibilities to his hand-picked next generation leader, Miguel Díaz-Canel. Now when the 89-year-old leader retires, leaving "a foot in a stirrup ready to defend socialism", Mr. Díaz-Canel, 60, is expected to succeed him as the new party chief.* The Castros built a closed, socialist economy that worked for many for decades. *Cuba's achievements in the fields of education and health care are inimitable.* But many critics of the Cuban model feel that the historic generation was slow to open up the economy, generate growth and create more opportunities — something that China, another communist party-ruled country, did. Mr. Raul took small steps and Mr. Díaz-Canel is continuing them, with a long-promised currency reform having been implemented in January. But the transition comes at a painful time. *When Soviet assistance ceased in the early 1990s, Fidel asked Cubans to tighten their belts for a "special period". Eventually, Cuba came out of those hardships, and the pink tide in Latin America that propelled leftist leaders to power, from Venezuela to Ecuador, helped Havana both politically and economically. But now, the pink tide is in reverse. Venezuela, which offered cheap oil to Cuba, is itself in an economic and political mess. The Obama-era concessions were unmade by Mr. Trump.* The coronavirus pandemic practically shut down Cuba's vital tourism sector, causing an 11% economic contraction last year. The crisis has triggered food shortages, bringing back memories of the early 1990s. There are also calls for more political freedoms. *Unlike in the past when the flow of information was controlled, the expansion of the Internet and social networks is allowing critics of the government, including U.S.-based dissidents, to amplify their voices.* Mr. Raul's successor cannot stay away from addressing these challenges as the revolution ages. The party always bets on continuity. But the contradiction it faces is that continuity is intrinsically linked to reforms.



A VICTOR OF CIRCUMSTANCES

In a turnaround of sorts, Guillermo Lasso became the President-elect of Ecuador following a run-off second round vote in presidential elections in the Latin American country. Mr. Lasso, a former banker who belongs to the centre-right Creating Opportunities (CREO) party, won 52.4% of the vote in the run-offs, defeating his opponent Andres Arauz of the leftist Union of Hope coalition, who secured 47.7% despite leading in the first round with 32.7% over Mr. Lasso's 19.7%. This was Mr. Lasso's first presidential victory in three campaigns since 2013 but it did not come easily. In the first round, not only was his vote share some distance behind Mr. Arauz's, but it was also barely more than that of third place candidate Yaku Perez of the indigenous coalition Pachakutik. Mr. Perez won 19.4% and fell short of second place by just 32,115 votes and went on to challenge the results. Both Mr. Arauz and Mr. Perez's coalitions belong to the left side of the political spectrum as opposed to Mr. Lasso's centre-right and traditionalist platform, but there has been no love lost between the platforms that the former two politicians represent. Mr. Arauz was the hand-picked nominee of popular ex-President Rafael Correa, who continues to exert a significant influence in Ecuador despite being out of power since 2017, living in Belgium. Mr. Correa's coming to power in 2007 heralded the Ecuadorean version of the Latin American pink tide, a current that led to several left-wing parties winning power across the continent. Mr. Correa, a U.S. educated economist, reoriented government policy in Ecuador to effect redistribution and welfare, spending programmes that resulted in significant drops in poverty in the country.

Radical trident

He also formed a radical trident of sorts in alliance with Venezuela's Hugo Chavez and Bolivia's Evo Morales by forming regional coalitions. Initially, Mr. Correa promised the recognition of rights and interests of the indigenous people, but they fell out with the government over issues such as the policies of mineral extraction from protected areas. With Mr. Correa using strong-arm measures to quell protests by indigenous groups during his tenure, a clear contradiction emerged between what some scholars call the politics of "left in power" defined by "Correismo" and "left in resistance" represented by Mr. Perez and other indigenous organisations. Mr. Perez called on his supporters to return invalid ballots instead of voting for either Mr. Arauz or Mr. Lasso and in the second round, nearly 18% of the ballots were indeed rendered invalid. This reduced the threshold for Mr. Lasso to win a majority of the remaining votes. Besides, the fourth-placed candidate, Mr. Xavier Hervas of the "Democratic Left" party, a social democratic outfit that thrived in the old polity before Mr. Correa's coming to power, also endorsed Mr. Lasso. In doing so, Mr. Hervas was privileging his opposition against Correismo — which liberals in Ecuador have identified as a "semi-authoritarian" tendency due to Mr. Correa's run-ins with the judiciary and the media. But these steps by the other contenders do not suffice in explaining Mr. Lasso's victory. Ecuador has been ravaged by COVID-19 with the GDP shrinking by 7.8%. As many as three Health Ministers resigned recently, for being unable to implement a proper vaccine distribution system to stem the effects of the pandemic. More than 17,500 deaths have been registered for a high 5% case fatality rate (among the highest in Latin America). The outgoing President Lenin Moreno was also a handpicked choice of Mr. Correa, but who disavowed his own policy platform after coming to power and undertook severe austerity measures that led to denunciation by Mr. Correa and protests across the country. While Mr. Arauz could manage to delineate a clear difference with Mr. Moreno and promised a revert to the redistributive policies of Mr. Correa, the mixed legacy of



Correismo and the new contradictions within the Ecuadorean Left allowed Mr. Lasso to come up trumps. Mr. Lasso will, however, have a tougher time in the presidency as the CREO only has 12 seats in the 137-member National Assembly with the Union for Hope and Pachakutik controlling 76 seats together. But for now, his win will curtail the pink tide in Ecuador even further.

JAPAN PM SENDS OFFERING TO CONTROVERSIAL SHRINE

Japanese Prime Minister Yoshihide Suga on Wednesday donated a religious offering to a Tokyo shrine viewed by China and both Koreas as a symbol of wartime aggression, though he avoided a visit. Mr. Suga's offering of "masakaki" leaves at Yasukuni Shrine was his second since taking office in September. Victims of Japanese military aggression during the first half of the 20th century, especially the Koreans and China, see the shrine as a symbol of Japanese militarism because it honours convicted Second World War criminals among about 2.5 million war dead. Chief Cabinet Secretary Katsunobu Kato told reporters that Mr. Suga's offering at the shrine was considered "an activity as a private person" and the government was not in a position to comment on it. Mr. Suga's predecessor, Shinzo Abe, known for revisionism concerning Japan's wartime atrocities, visited the shrine on Wednesday. Mr. Abe stayed away from the shrine for seven years after his 2013 visit triggered outrage from China and the Koreans. However, *he has regularly visited since he resigned as Prime Minister last year.*

PROTESTS IN MYANMAR AHEAD OF ASEAN MEET

Protesters marched through downtown Yangon on Friday to demand that regional leaders "stand with Myanmar people", ahead of a weekend ASEAN summit to be attended by junta leader Min Aung Hlaing. The country has been in turmoil since February 1, when the military ousted civilian leader Aung San Suu Kyi in a lightning coup. Using violence and lethal force to quell a nationwide uprising, security forces have killed at least 739 people in near-daily crackdowns, according to a local monitoring group. Coup leader Min Aung Hlaing is set to take part on Saturday in a summit of regional leaders — as part of the 10-country Association of Southeast Asian Nations (ASEAN) — to address Myanmar's mounting crisis. The meeting of ASEAN leaders and Foreign Ministers has drawn widespread criticism from activists, human rights groups and protesters for including the military regime. *In Yangon — where the anti-coup movement had laid low in recent weeks due to fear of crackdowns — protesters returned to the streets on Friday, flashing three-finger salutes of resistance. "Mother Suu and leaders — release them immediately!" they shouted as they marched quickly past the Sule Pagoda in downtown Yangon. "What do we want? Democracy!"* The protesters came from different Yangon townships, some *carrying signs that read "ASEAN please stand with Myanmar people" and "ASEAN do you need more blood... to make the right decision?"* Also angered by the bloc's invitation to Min Aung Hlaing was the so-called National Unity Government (NUG) — a group of ousted Myanmar lawmakers attempting to run a shadow administration.

'Arrest the General'

On Thursday, they called on Interpol to arrest the senior General — the same day Myanmar state media announced the lawmakers in hiding were wanted for high treason. Despite the threat of violence, nationwide demonstrations for a return to democracy persisted on Friday. *Scores of people young and old marched through the southern city of Dawei, holding signs that said, "Please,*



*help (us) to arrest Min Aung Hlaing” as they chanted support for the shadow government. Amnesty International’s Emerlynne Gil called ASEAN’s handling of Myanmar the “biggest test in its history”. “The Indonesian authorities and other ASEAN member states cannot ignore the fact Min Aung Hlaing is suspected of the most serious crimes of concern to the international community as a whole,” she said. The junta has justified the putsch by alleging electoral fraud in November’s elections — which Ms. Suu Kyi’s party had won in a landslide. *The U.S., EU and U.K. have already imposed sanctions on top military brass and some Army-linked businesses.* Before the coup, Gen. Min was already facing international sanctions over his Army’s role in the Rohingya crisis. About 7,50,000 of the Muslim minority group fled Myanmar in 2017 following a brutal military crackdown.*

SRI LANKA MARKS EASTER BOMBING ANNIVERSARY

Sri Lanka on Wednesday marked the second anniversary of the Easter terror bombings that killed more than 250 people on April 21, 2019, amid mounting criticism from the Catholic church and political opposition over the delay in completion of the probe into the incident. On Wednesday morning, hundreds of devotees, including relatives of victims, gathered at the *St. Anthony’s Church in Colombo, which was one of the sites of the serial bombings executed by suicide bombers from an IS-inspired local Islamist radical group. Most gathered at the church were attired in black, as they mourned and prayed for their loved ones. Bombs had simultaneously exploded two years ago at the St. Sebastian’s church in Negombo, 40 km north of Colombo, the Zion Church in the eastern city of Batticaloa, and three luxury hotels in Colombo, gripping the country in shock a decade after its civil war. The head of Sri Lanka’s Roman Catholic Church Cardinal Malcolm Ranjith said he was “deeply saddened” by the lack of progress in the investigation.* “We have to stress that what is happening at the moment is an attitude of ‘don’t care’, where all factors are not properly investigated,” he said, speaking at the commemorative service at St. Anthony’s Church.

More time

Days before the anniversary event, however, the cardinal — who earlier called for an international investigation into the bomb attacks — told a media conference he was willing to give the government some more time as such investigations take time. *President Gotabaya Rajapaksa fought elections in November 2019, six months after the Easter attacks, on the plank of enhanced national security, vowing to bring perpetrators to justice. His victory brought hope to many who were outraged by the security lapses in the former Maithripala Sirisena-Ranil Wickremesinghe administration ahead of the terror attack, despite receiving prior intelligence, including from India.* Making a special statement in Parliament on Wednesday, Prime Minister Mahinda Rajapaksa said all those responsible for the Easter attacks would be brought to justice. His statement came a day after Opposition lawmaker Harin Fernando from the Samagi Jana Balawegaya (SJB, or United People’s Front) made serious accusations in Parliament, linking a senior intelligence official with the Easter terror network. Earlier, Janatha Vimukthi Peramuna (JVP) leader and MP Anura Kumara Dissanayake alleged that the Easter day attacks were “politically motivated”, and the “real mastermind” is yet to be identified. *A Parliament Select Committee, set up under the former government, and a commission appointed by President Maithripala Sirisena, which continued its probe after regime change, submitted detailed reports on the incident. However, neither has conclusively established what or who drove the nine suicide bombers who blew up themselves, killing and injuring hundreds. Although the police have arrested some 200 people since the suicide attacks,*



no one has yet been charged in connection with the bombings. On the eve of the second anniversary, 16 men among them were charged for allegedly desecrating Buddha statues in December 2018, an incident that investigators consider a precursor to the Easter day attack.

HOW RADICAL OUTFIT FORCED PAKISTAN HAND IN MOVE TO EXPEL FRENCH ENVOY

Any hope Pakistan might have had in November 2020 that the death of *Khadim Hussain Rizvi would lead to the disintegration of the Tehreek-e-Labbaik Pakistan (TLP), the extremist outfit he headed, has evaporated.* Pakistan's decision to discuss in Parliament a resolution demanding the expulsion of the French Ambassador to Pakistan is the latest in a long series of surrenders to the group and its radical agenda.

Old demand, new leader

The violence and chaos in Pakistan all of last week around TLP's demand that Pakistan send back the Ambassador has its roots in a protest in November 2020 in response to French President Emmanuel Macron's landmark speech on Islam and the French way. Khadim Rizvi was alive then. He summoned a huge rally to march on Islamabad from Rawalpindi to make the point that Pakistani Muslims were wounded by Macron's defence of the right to caricature the Prophet as integral to freedom of expression and French secularism. As police tried to stop the march with tear gas and lathis, there was rioting. The rallyists sat on a dharna on an arterial road, blocking access to the capital Islamabad, while Khadim gave fiery speeches from Karachi. The government caved in. Interior Minister Ejaz Shah purportedly signed off on a written agreement that Parliament would decide on the expulsion of the French diplomat within three months and on the demand of Pakistan not stationing an Ambassador in Paris. It would release all TLP workers arrested in the clashes, and not register any cases. Although the government did not confirm the written agreement, it did not deny it either. Khadim died hours after declaring victory, likely due to Covid-19. Saad Hussain, his son, was anointed the new leader.

Brewing since January

In January, Saad reminded the government of its agreement, warning that three months would end on February 17. Five days before the deadline, the government reached another agreement, that it would place the matter before Parliament by April 20. In the first few days of April, the government was negotiating with TLP to buy time, but as large crowds started gathering in Rawalpindi, the government arrested Saad. That led to a week of clashes and rioting in Rawalpindi and Lahore. Four policemen were killed; over 800 were injured. *France asked all its citizens to leave Pakistan. On April 15, the government banned the group, including it in its list of proscribed terrorist organisations under its Anti-Terrorism Act.* By the weekend, TLP had taken 11 policemen hostage at Lahore. By Sunday, the government was back to negotiating with TLP for the freedom of the captured policemen. *They were released on Monday, and on Tuesday, a member of the ruling party, Pakistan Tehreek-e-Insaf, moved a private member's Bill for the expulsion of the French envoy to Islamabad. The government has said Parliament will discuss it and arrive at consensus decision. Saad has been released, and so have other TLP cadres. It is unclear if the ban on TLP has been lifted, but that is likely to happen too. TLP has emerged stronger from the standoff, and Saad has cemented his leadership.*



Barelvi and radical

The rise and rise of TLP of has been unique even in Pakistan, whose military-dominated history has been shaped over the last four decades by radical Islamist groups under the enabling gaze of the security establishment. *Birtherd only five years ago, it has managed to come out winning each time it takes to the streets. TLP was founded after the hanging of Mumtaz Qadri. Khadim had been a supporter of Qadri, the police bodyguard who in January 2011 killed Salman Taseer, then the Governor of Punjab province. A government-appointed cleric at a mosque in Lahore, Khadim started Tehreek Rihai Mumtaz Qadri (Movement to free Mumtaz Qadri) after Qadri was jailed for the assassination. Following his execution in February 2016, Rizvi renamed the movement Tehreek-e-Labbaik Ya Rasoolullah in 2016. It morphed into a political party, TLP, which contested the 2018 general elections, and won two seats in the Sindh Assembly. TLP is a Barelvi movement. Most Barelvis are viewed as middle-of-the-road, moderate Sunni Muslims. Half of Pakistan identify as Barelvi, whose practice of Islam is suffused more with Sufi traditions prevalent across South Asia, than with the Saudi Wahabism that reigns over jihadi tanzeems.* Khadim channelled the belief that there can be no forgiveness for blaspheming against the Prophet, and turned it into raw street power. His biggest success was in forcing governments to abandon the idea of reforming the draconian blasphemy laws.

Relations with Pak army

Khadim made it clear that he trusted the Pakistan Army more than politicians. It was only after a deal brokered and underwritten by the army that TLP called off a 2017 siege on the capital, accusing the PML(N) government for trying to dilute anti-Ahmadi clauses in the Constitution. For the government the deal was a surrender. A minister had to apologise and resign. As the rallyists dispersed, an army general handed them envelopes with cash. Prime Minister Imran Khan, who in November had criticised Marcon's speech, on Monday made the case that cutting off ties with France, as TLP was demanding, was suicidal for Pakistan's economy. *It would hurt Pakistan more than France. EU is the largest market for Pakistan's textile exports. It would lead to closure of factories and unemployment in Pakistan, he said. The message did not go down well. It only added to TLP's popularity. And the government has had to eat crow, once again.*

DreamIAS



NATION

INDIA AT 142ND RANK ON PRESS FREEDOM INDEX

The World Press Freedom Index, 2021, produced by Reporters Without Borders (RSF), a French non-governmental organisation, has again ranked India at 142nd out of 180 countries. This is despite the fact that for a year, on directions from Cabinet Secretary Rajiv Gauba, an index monitoring cell worked to improve the rankings, even holding a meeting between the Indian Ambassador to France and the RSF officials to lobby for a change in the ranking. In 2016, India's rank was 133, which has steadily climbed down to 142 in 2020. The RSF report says India is one of the world's most dangerous countries for journalists trying to do their job properly. They are exposed to every kind of attack, even police violence against reporters, ambushes by political activists, and reprisals instigated by criminal groups or corrupt local officials. In February last year, fearing such an adverse assessment, the cell was set up in 18 Ministries to find ways to improve the position on 32 international indices. The Information and Broadcasting Ministry was delegated to look at the freedom of press index. According to the report of this cell, accessed by The Hindu, on April 26 last year, the Additional Director-General, Public Information Bureau, first wrote to RSF chairman Pierre Haski asking for the criteria on the basis of which it compiles the index, for a better understanding of the ranking. This was followed by a meeting between Indian Ambassador Javed Ashraf with the RSF's secretary-general Christophe Deloire and the head of its Asia Pacific desk, Daniel Bastard. The minutes of this September meeting are part of the report of the cell. Mr. Ashraf said the openness of the government to be criticised and questioned with respect to subjects such as economy, international affairs and defence deals such as Rafale were indicators of press freedom.

Internet ban in J&K

The RSF representatives, however, questioned the Internet ban in Jammu and Kashmir from August 5, 2019, which went on for nearly a year. The Ambassador said the shutdown was for the security of the region. "Members of the press could access the Internet through the Internet kiosks set up by the government and there was active reporting in Indian and international media on the situation in Kashmir, which could only have been possible with unhindered access to the Internet and freedom of the press," the minutes say. The minutes also note that on the issue of violence raised by the RSF, Mr. Ashraf said, "many incidents reported as attacks on journalists are often a consequence of the law and order situation in some areas of India. This is often misrepresented as targeted attacks on journalists by the State in western media."

INDIA SHOULD BE A 'COUNTRY OF PARTICULAR CONCERN'

The U.S. Commission on International Religious Freedom (USCIRF), an independent bi-partisan commission, has recommended for the second year in a row that the State Department put India on a list ('Countries of Particular Concern' or CPCs) for the worst violations of religious freedoms in 2020. One of the 10 USCIRF commissioners presented a dissenting view. The USCIRF recommended that the administration impose targeted sanctions on Indian individuals and entities for "severe violations of religious freedom". A second recommendation was for the administration to promote inter-faith dialogue and the rights of all communities at bilateral and multilateral forums "such as the ministerial of the Quadrilateral [the Quad]". Another recommendation — to the U.S.

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Congress — was to raise issues in the U.S.-India bilateral space, such as by hosting hearings, writing letters and constituting Congressional delegations. The USCIRF recommendations are non-binding and the Trump administration had rejected the USCIRF recommendation to designate India a CPC last year, when it released its own determinations in December. The key concerns of the 2021 report include the Citizenship (Amendment) Act. The report says, “Mobs sympathetic to Hindu nationalism operated with impunity,” and used “brutal force” to attack Muslims in Delhi’s riots in February 2020. On the National Register of Citizens (NRC), the report says, “The consequences of exclusion — as exemplified by a large detention camp being built in Assam — are potentially devastating...” Efforts to prohibit interfaith marriage — such as those in Uttar Pradesh and Madhya Pradesh — are also highlighted as a concern. “These efforts targeting and delegitimising interfaith relationships have led to attacks and arrests of non-Hindus and to innuendo, suspicion, and violence toward any interfaith interaction,” the report notes. In an apparent reference to the Tablighi Jamaat Markaz in March 2020, the USCIRF says, “At the beginning of the COVID-19 pandemic, disinformation and hateful rhetoric — including from government officials — often targeted religious minorities, continuing familiar patterns.” Johnnie Moore, an evangelical who is the president of The Congress of Christian Leaders as per his USCIRF bio, included a dissenting note in the text of the report saying India should not be designated a CPC but was at a “crossroads”. India is “diversity personified” and “its religious life has been its greatest historic blessing,” Mr. Moore wrote. “India’s government and people have everything to gain and nothing to lose from preserving social harmony and protecting the rights of everyone,” he said. Last year, three of 10 commissioners — including Mr. Moore — had presented dissenting views.

ABOUT 52% ADULTS NOT CLEAR ON DEFENCES AGAINST CYBERCRIME

About 52% of adults admitted that they do not know how to protect themselves from cybercrime, according to a survey conducted by online security solutions provider NortonLifeLock. The report also said 59% of the adults in India had become victims of cybercrime in the past 12 months. The ‘2021 Norton Cyber Safety Insights Report,’ based on the research conducted online by The Harris Poll among 10,030 adults in 10 countries, including 1,000 adults in India, also found that cybercrime victims collectively spent 1.3 billion hours trying to resolve these issues. “In a year of lockdowns and restrictions, cybercriminals have not been deterred.” said Ritesh Chopra, director, sales and field marketing, India & SAARC countries, NortonLifeLock. “More Indian adults fell victim to identity theft in the past 12 months and most are concerned about data privacy,” he added. He said while the report suggested that many Indian consumers (90%) were taking proactive steps to safeguard their data, 2 in 5 still felt it was impossible to protect their privacy (42%) in this age or say they don’t know how to do so (42%). As per the research 7 in 10 Indian adults (70%) believe that remote work has made it much easier for hackers and cybercriminals to take advantage of people. “Around half (52%) say they do not know how to protect themselves from cybercrime, and even more (68%) say it is difficult for them to determine if the information they see online is from a credible source,” NortonLifeLock mentioned in the report.

INDIA JOINS SEARCH FOR SUBMARINE

The Indian Navy on Thursday dispatched its deep submergence rescue vessel (DSRV) from Visakhapatnam to support the Indonesian Navy in the search and rescue efforts for its submarine KRI Nanggala that went missing on Wednesday with 53 personnel aboard. “Spoke to the Defence

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



Minister of Indonesia, General Prabowo Subianto over the phone and shared my pain over the news of missing submarine Nanggala and its crew members. India is extending its full support to the ongoing Indonesian rescue efforts,” Defence Minister Rajnath Singh said on Twitter. *“I have already directed the Indian Navy to move its DSRV to Indonesia. I have also tasked the Indian Air Force to see the feasibility of induction of the DSRV intervention system by air,”* he added. On April 21, an alert was received by the Navy through the *International Submarine Escape and Rescue Liaison Office (ISMERLO), regarding the missing Indonesian submarine,* the Navy said in a statement. *The submarine was reportedly exercising in a location 25 miles north of Bali,* it stated. The DSRV departed by sea and has to cover a distance of approximately 2,500 nautical miles, a Navy official said. Air Chief Marshal Hadi Tjahjanto, Commander of Indonesian armed forces, said *KRI Nanggala 402 was participating in a torpedo firing exercise when it went missing. The Indonesian Defence Ministry said the submarine lost contact after being granted clearance to dive. The Indonesian Navy launched a massive search and rescue effort for the missing submarine and requested assistance from countries in the region. The 53 personnel onboard are 49 crew members, three gunners and its commander.*

Specialised capability

India is amongst the few countries in the world capable of undertaking search and rescue of a disabled submarine through a DSRV, the Navy said. *“Indian Navy’s DSRV system can locate a submarine up to 1,000-metre depth utilising its state-of-the-art side scan sonar and remotely operated vehicle,”* it stated, adding that after the submarine is successfully located, *another sub module of DSRV — the submarine rescue vehicle (SRV) — links with the submarine to rescue the trapped personnel. The SRV can also be used to provide emergency supplies to the submarine. The Singapore Navy has already pressed its rescue vessel while Australia too has offered assistance.*

THE UNKNOWN SOLDIER

Sometimes, even death isn’t the great equaliser it is touted to be. For over 50,000 soldiers who lost their lives — a majority of them from undivided India — during World War I, their sacrifice was ignored by the British Empire which they fought to defend. *In 2019, the Commonwealth War Graves Commission (CWGC) created a special committee to investigate gaps in those that were commemorated for their sacrifice. Its findings — that thousands of the fallen were ignored — has led to the British government issuing an apology for the prejudice that this implies. It is sometimes easy to forget just how much deep, divisive racism underpinned the entire project of colonialism.* An essential aspect of maintaining this orientation towards inequality has been to invisibilise the massive contributions of the colonies and their people. *Take the myth of “Britain standing alone” for a significant part of World War II, with Winston Churchill standing guard against fascism single-handed. Britain was only “alone” if the significant resources and manpower from the entire empire are ignored. The apology by the British government, however belated, is welcome. The sins of empires past, their bigotries that sought to justify systemic injustice, must be confronted wherever possible.* But the unmarked graves, the forgotten names of soldiers who died for an empire in which they were not equal citizens must be just a first step. *The reckoning with the injustices of history must be a constant, evolving process. And for the countries that emerged from the Raj, and kept many of its governance structures intact, they must do their best to ensure that the ideologies and politics of the day don’t need an apology a century later.*



INDIA AND RUSSIA LOOK FOR A RESET

It was clear from Russian Foreign Minister Sergey Lavrov's 'working visit' to India two weeks ago that India-Russia relations are not quite the flavour of the season. Mr. Lavrov's principal objective was to prepare the ground for the visit of President Vladimir Putin later this year. The break in 2020, after 20 annual summits, had provoked speculation, partly flowing from *Mr. Lavrov's criticism last year of a U.S.-led Indo-Pacific policy, drawing India into "anti-China games" and undermining the India-Russia partnership. A few weeks earlier, Mr. Putin had extolled the vibrancy of Russia-China defence cooperation. These remarks encouraged the advocacy for a shift of India's foreign policy away from a weak and China-tethered Russia and towards the U.S.*

Same narrative

The joint media appearance of Mr. Lavrov and External Affairs Minister S. Jaishankar did not change the narrative. They said their talks were warm, comprehensive and productive; they mentioned the time-tested friendship, energy projects, defence cooperation and Russian support for India's manned space programme. They glossed over their divergent perspectives on Afghanistan. Phrases like "identical or similar views" did not carry much conviction. Much more eloquent than fine words was the fact that, for the first time in all his visits to India, Mr. Lavrov could not meet Prime Minister Narendra Modi. Mr. Jaishankar said he conveyed the Indian perspective on the Indo-Pacific and Mr. Lavrov said they discussed the Asia-Pacific. "Indo-Pacific" continues to stick in Russian throats. India insists that its Indo-Pacific initiatives seek a cooperative order, that the Quad dialogue (of India, Japan, Australia and the U.S.) is not the nucleus of a politico-military alliance, and that it never subscribed to the Trumpian posture (now under review by the Biden administration) of military confrontation with China. A \$1 billion Indian line of credit for projects in the Russian Far East and activation of a Chennai-Vladivostok maritime corridor were announced when Mr. Modi and Mr. Putin met in 2019. The message was that India's effort to restrain Chinese aggression is compatible with Russia's vision of a Eurasian partnership. Russia remains unconvinced, either because it feels India's words do not match its actions or because of its close ties with China. As India-China tensions have grown, so have India's concerns about Russia's China embrace, encompassing close political, economic and defence cooperation (Russia accounted for 77% of China's arms imports in 2016-20). India's apprehensions about their technology- and intelligence-sharing were heightened by Mr. Putin's remark that he would not rule out a future Russia-China military alliance. It is not clear whether he was stating a conviction, reassuring China or warning India and/or the West. Mr. Lavrov said in Delhi that Russia-China relations, though very close, are not "aimed at establishing a military alliance". Mr. Modi would like this confirmation from the ultimate maker of Russian policy, when he meets Mr. Putin. He may also hear why Russia cannot see the logic of India's Indo-Pacific actions. Mr. Lavrov visited Pakistan directly after India — the first time a Russian Minister has done so. He received red-carpet treatment and met the Army Chief and the Prime Minister. He confirmed that Russia would strengthen Pakistan's "counter-terrorism capability" — a euphemism used by the U.S. earlier for its weapons supplies to Pakistan. Russia is now Pakistan's second largest defence supplier, accounting for 6.6% of its arms imports in 2016-20. Their cooperation includes joint "counter-terrorism" drills and sharing perspectives on military tactics and strategic doctrines. At the same time, Russia remains a major supplier of cutting-edge military technologies to India. The Stockholm International Peace Research Institute (SIPRI) records that Russia supplied 49% of



India's arms imports in 2016-20. The proportion has been falling, as India diversifies its imports. Despite this, India's second largest supplier, France, had only an 18% share. SIPRI estimates that recent orders for Russian arms could boost future import figures. This is a reality check. Defence cooperation is not a transactional exchange. Sharing of technologies and strategies is underpinned by a mutual commitment to protection of confidentiality. Sustainable defence cooperation is based on a credible assurance that what is transferred to our adversaries will not blunt the effectiveness of our weapons systems. In this already complex mix, the American sanctions legislation, CAATSA (Countering America's Adversaries Through Sanctions Act), adds an external layer of complexity. The criticality of geography in geopolitics is often underestimated. The Eurasian landmass to India's north is dominated by Russia and China. Strategic and security interests in Central Asia, West Asia and Afghanistan dictate our engagement with the region and the connectivity projects linking it, like the International North-South Transport Corridor through Iran (that was discussed with Mr. Lavrov). India cannot vacate this space to a Russia-China condominium (with Pakistan in tow), without potentially grave security consequences.

The China angle

The Modi-Putin summit will tackle the "irritants" and, as before, will probably announce that perspectives have been reconciled. But such annual assertions do not convince the political, official, business, media and academic circles in the two countries, which have to sustain a major partnership. The relationship has to be located in a broader geopolitical context. The principal element in this is the drive for superpower status of a powerful, assertive China. It is self-evident that the U.S., as the pre-eminent superpower, seeks to retard this process. In a deviation from classical geopolitical strategy, the U.S. is taking on both China and Russia (which is the lesser power, despite its military power and energy dominance), thereby driving the two together and arguably accelerating the move to bipolarity. Even so, the differentials in military, economic and political power across countries may complicate the emergence of two clear poles of the Cold War variety. A let-up in the Western hostility to Russia could add to the complexity, if Mr. Putin's Russia takes the opportunity to loosen the Chinese embrace and position itself as a pole in the multipolar world. India has to explore the space within these processes to maximise its global influence by steering clear of alliances and retaining autonomy of policy. The partnership with Russia will not have the salience of past decades, but will remain important for our continental interests and defence capability. The depth of the relationship will depend on the willingness and capacity of both countries to show mutual sensitivity to core security concerns.

U.S. CURRENCY WATCHLIST AN INTRUSION INTO POLICY

Commerce Secretary Anup Wadhawan on Tuesday questioned the rationale behind the U.S. government's decision to put India on the watchlist for currency manipulators, and said the list constituted an intrusion into the policy space needed by central banks around the world to meet their mandates.

High dollar purchases

The U.S. Treasury Department had recently retained India on a watchlist for currency manipulators submitted to the U.S. Congress, citing higher dollar purchases (close to 5% of the gross domestic product) by the Reserve Bank of India (RBI). Another trigger for the inclusion on the currency



watchlist is a trade surplus of \$20 billion or more. India's trade surplus with the U.S. grew by about \$5 billion to \$23 billion in 2020-21, from around \$18 billion in the previous fiscal year, as imports fell more sharply than exports in the COVID-affected year. In response to a question on the U.S. move, Mr. Wadhawan said the RBI had been taking necessary steps to maintain stability in the financial markets and not accumulating forex reserves like China did in the past. "I think the central bank's activity in the foreign exchange market has been perfectly balanced and completely legitimate within the accepted monetary policy mandate of central banks across the world. This watchlist is a recent phenomenon [and] it is an intrusion into policy space of central banks. I personally don't understand its rationale" he said.

To provide stability

"These are, in my view, very legitimate market-based operations of a central bank. It is a mandate of the central bank to provide stability in the currency as a result of which central banks buy and sell foreign currency. Our overall reserves have been fairly steady at \$500 billion to \$600 billion. We are not accumulating reserves like China, which at one point had reserves of \$4 trillion," he pointed out. India, the Commerce Secretary asserted, had a steady holding pattern of forex reserves "with ups and downs" based on market-based transactions that central banks may undertake.

WHERE ARE HOT SPRINGS AND GOGRA POST? WHAT ARE THEIR STRATEGIC SIGNIFICANCE?

During the 11th round of discussions between the senior military commanders of India and China on April 9, to resolve the over 11-month long standoff in eastern Ladakh, a top source who had been involved in decision-making told *The Indian Express* that *China had refused to vacate two of the four original friction points. China, according to the source, informed India that it should be "happy" with what has been achieved regarding the disengagement in the Pangong Tso area. At two friction points, Patrolling Point 15 (PP15) in Hot Springs, and PP17A near Gogra Post, China still has a platoon-level strength each, along with vehicles.*

What had happened here last year?

In May 2020 when China had diverted its troops who had come to the Tibetan plateau region for their annual exercise, towards the Line of Actual Control (LAC) in eastern Ladakh, creating a *standoff with India, PP15 and PP17A were two of the four points where the soldiers were eyeball-to-eyeball. The other points of friction at that time were PP14 in Galwan Valley and the north bank of Pangong Tso. Chinese troops had crossed the LAC at all these points and positioned themselves across. The maximum ingress was on the north bank of Pangong Tso, where the Chinese troops were at Finger 4, which is 8 km west of Finger 8 where India says the LAC lies.*

What are PP15 and 17A?

Along the Line of Actual Control (LAC) between India in China, Indian Army has been given certain locations that its troops have to access to patrol the area under its control. These points are known as patrolling points, or PPs, and are decided by the China Study Group (CSG). CSG was set-up in 1976, when Indira Gandhi was the prime minister, and is the apex decision-making body on China. Barring certain areas, like Depsang Plains, these patrolling points are on the LAC, and troops



access these points to assert their control over the territory. It is an important exercise since the boundary between India and China is not yet officially demarcated. PP15 and PP17A are two of the 65 patrolling points in Ladakh along the LAC. (Some of these 65 also have an additional Alpha PPs, which are further ahead from the original PPs. So PP17A is different from, but close to, PP17.) PP15 is located in an area known as the Hot Springs, while PP17A is near an area called the Gogra post.

Where are these two areas?

Both of these are close to the Chang Chenmo river in the Galwan sub-sector of the LAC in eastern Ladakh. While Hot Springs is just north of the Chang Chenmo river, Gogra Post is east of the point where the river takes a hairpin bend coming southeast from Galwan Valley and turning southwest. The area is north of the Karakoram Range of mountains, which lies north of the Pangong Tso lake, and south east of Galwan Valley, which became a major flashpoint and a violent faceoff in June 2020 had left 20 Indian and at least four Chinese troops dead.

What is the importance of this region?

The area lies close to Kongka Pass, one of the main passes, which, according to China marks the boundary between India and China. India's claim of the international boundary lies significantly east, as it includes the entire Aksai Chin area as well. During the official negotiations on the boundary between India and China in 1960, Yang Kung-su, who was the Tibet Bureau of Foreign Affairs in the Chinese Foreign Office, had stated that the Western Sector of the boundary "is divided into two portions, with Kongka Pass as the dividing point" and the portion "north of Kongka Pass is the boundary between Sinkiang (now Xinjiang) and Ladakh, and the portion south of it is that between Tibet and Ladakh". Thus, Hot Springs and Gogra Post are close to the boundary between two of the most historically disturbed provinces of China.



How significant are they for the military?

Both PP15 and PP17A are in an area where India and China largely agree on the alignment of the LAC, which comes southeast from Galwan Valley, turns down at Kongka La and moves towards Ann Pass before reaching the north bank of Pangong Tso. China has a major post of the People's Liberation Army a few km east of Kongka La, while Indian posts lie southwest of it. However, according to the official history of the 1962 war between India and China, the region is not identified as a major "launchpad" from where an offensive can be launched by either side. The official history notes that the Chinese had "succeeded in eliminating possible launch pads for any offensive against the Aksai Chin highway by eliminating DBO, Chushul and Demchok positions. It said that it "all the more strengthens the contention that Indians should have attempted to retain at least one jump off point: Chushul". But the history notes that Hot Springs was an important post even during the 1962 conflict. In October 1962 there was a company strength at the Galwan Post, while three other posts—Hot springs, Nala Junction and Patrol Base—had strengths of a platoon. Hot Spring also



served as the Company headquarter, and was shelled by the Chinese on October 21. Chinese troops had wanted to get behind Hot Spring, but were resisted at the Nala Junction.

What is the situation now?

As two of the four initial friction points during the recent standoff, disengagement of troops from PP15 and PP17A had started in June 2020, during the initial rounds of discussion. Both sides had agreed to disengage from PP14 (Galwan Valley), PP15 and PP17A after the third round of meeting of the senior military commanders in June, following the Galwan Valley clashes. *However, though China pulled back its troops from PP14, it did not complete the disengagement from PP15 and PP17A. While earlier there had been a company-sized strength at both these locations, there is still a platoon each there, along with military vehicles.* After the disengagement in the Pangong Tso region, when both India and China had pulled back its troops and armoured columns in February, as per the agreement the senior military commanders were to meet to discuss the other friction points, including these two and Depsang Plains. However, no fresh ground could be broken in the talks, and China has refused to pullback.

SC RAPS LAWYERS FOR 'IMPUTING MOTIVES'

A Special Bench of the Supreme Court led by Chief Justice of India Sharad A. Bobde on Friday objected to senior lawyers *"imputing motives" on the top court for attempting to "stall" proceedings in various High Courts concerning acute oxygen shortage and COVID-19 essentials for patients as deaths rise.* The Bench was reacting to various media reports, in which several senior lawyers voiced their perceptions on the Bench's sudden intervention on Thursday, taking suo motu cognisance of the issue. *According to them, the top court should have neither disturbed the High Court proceedings nor attempted to transfer the cases to itself midway.* In Thursday's order, the Bench had asked the Centre for a 'national plan' to facilitate a uniform supply of COVID-19 essentials. It had issued formal notices to the Centre and States, the Union Territories, and parties who went to various High Courts. *The Bench asked them why the top court should not go ahead and pass "uniform orders" on the supply of oxygen, essential drugs, the method and manner of vaccination, and lockdowns. The order on Thursday triggered anticipation among the legal fraternity and the public that the sudden intervention of the top court would delay much-needed relief from High Courts or derail their ongoing monitoring of oxygen supply by the States and the Centre. Lacklustre responses from authorities had been met with proactive judicial orders and sharp remarks from the High Courts of Delhi, Bombay, Sikkim, Madhya Pradesh, Calcutta, Allahabad and Gujarat.* But Thursday's order somehow presumed that the HCs' orders were only reaching out to a few and did not give uniform relief.

'Even-handed approach'

"Prima facie, we are inclined to take the view that the distribution of these essential services and supplies must be done in an even-handed manner according to the advice of the health authorities," Thursday's order said. On Friday, however, the Bench accused senior advocates such as Vikas Singh and Dushyant Dave, who were vocal against Thursday's order, of "putting pressure on the court". "We never stalled the HCs from passing orders. Mr. Dave, you imputed motives on us without seeing the order... You have to protect this institution," Justice L. Nageswara Rao said. Meanwhile, the court-appointed amicus curiae, Harish Salve, recused from the case, saying that



his decision was in view of the imputations made that he and the CJI were school friends. He said he did not want important issues to be side-tracked by malignant imputations in the media.

THE CHEQUERED LEGACY OF A CHIEF JUSTICE OF INDIA (PRASHANT BHUSHAN - SENIOR PUBLIC INTEREST ADVOCATE PRACTISING AT THE SUPREME COURT OF INDIA)

The Supreme Court of India in the last five years during the tenure of the last four Chief Justices of India (CJIs), has seen an unprecedented fall — *from being an independent custodian of justice, to becoming an instrumentality of the government. After the tenure of former CJI Ranjan Gogoi, who oversaw the Ayodhya and Rafale verdicts, before retiring to join the Rajya Sabha, we thought the worst was behind us.* We hoped that his successor, *CJI S.A. Bobde would lift the Court out of this abyss and at least restore its independence from the executive. But, the nearly 18 months of his tenure has exposed a deep malaise in every aspect of dispensation of justice; from the administration of the Court; in the allocation of cases and benches; to presiding over matters related to the protection of civil liberties, securing the rights and the livelihood of the poor and marginalised; or in ensuring that the unconstitutional actions and policies of the executive are kept in check.*

Momentous months

His tenure began in November 2019 with many important cases before him. *There were over 100 petitions challenging the dilution of Article 370 and the reorganisation of the State of Jammu and Kashmir (J&K) into Union Territories. Soon after he assumed office, the Citizenship (Amendment) Act was passed, which led to another spate of petitions challenging its constitutionality.* The CAA sparked widespread protests. We witnessed police confrontation at the *Jamia University campus and the entry of gangs into Jawaharlal Nehru University who beat up students and teachers under the full gaze of the police.* Thereafter, the *city of Delhi witnessed engineered riots and the subsequent hounding of young students and other activists in the guise of an investigation by the Delhi Police.* *There were also other important cases pending before the Supreme Court, including the validity of electoral bonds, and the protection of Rohingya refugees.* Then, early in 2020, COVID-19 overtook the country, and with it began the lockdown of the Supreme Court and thereafter other courts, and then the entire country — *which led to the largest exodus of migrant labour from the large cities in India. A powerful constitutional court like the Supreme Court of India must rise to these challenges, and it is in such challenging times that its mettle and independence is tested. It is here that the role of the Chief Justice of India — he is the master of the roster deciding the priority accorded to the hearing of cases, their allocation to Benches and setting the tone for the Court by his leadership — becomes critical.* The cases challenging the cataclysmic changes to the status of J&K remained unheard during his entire tenure as did the cases challenging the CAA. The main challenge to the electoral bonds and other changes to electoral funding, which have a fundamental bearing on our democracy, remained unheard. Applications for the stay of bonds being issued before every election, were never listed for hearing, and were eventually dismissed on the ground that the bonds had been around for several years; therefore, there was no need to stay them. Similarly, *the main petition regarding the status of the Rohingya refugees and the protection to be accorded to them, remained unheard. An application to prevent their detention and deportation, was disposed of by Chief Justice Bobde, in complete disregard of constitutional and international law norms, on the basis that their fleeing genocide in Myanmar did not concern the Court.* The Supreme Court, under his stewardship, remained shut for physical hearing much of the time, *resulting in*



fewer than 25% cases being heard in a Court, already reeling under a backlog and pendency of cases. Many habeas corpus petitions of people in detention were not heard for months, and thereafter summarily disposed of without deciding the main issue by relegating the petitioners to the High Courts.

Migrant labour exodus

During the nationwide lockdown last year, the country witnessed unprecedented suffering by migrant labour; there was a mass exodus of them from the big cities, and they suffered a huge loss of livelihood and income. Without any public transport, they were forced to walk hundreds of miles to reach their villages. Their case for relief in terms of food, wages and transport was initially heard by the CJI's Bench. Unfortunately, the pleas on behalf of the migrant workers did not result in any relief to them with the Court saying it could not "supplant" the government's wisdom on providing relief to the lakhs of migrant labourers across the country. The CJI remarked infamously during one of the hearings, "If they are being provided meals, then why do they need money?" It would be no exaggeration to say that the Court's inhumanity and apathy towards the distress of the poor and marginalised reached its nadir during this time. Far from being a custodian of citizens' rights, CJI Bobde, while hearing the Kerala journalist Siddique Kappan's habeas corpus petition (arrested while covering the infamous Hathras rape and murder case in Uttar Pradesh), noted that the Court had been discouraging people from approaching it under Article 32 (<https://bit.ly/3n92Ym1>). Mr. Kappan's petition remained pending with repeated adjournments. In the farmers' protest case, the CJI appointed a committee of people, whose political neutrality was suspect, to examine the issues and commence negotiations with the farmers. These committee members had publicly supported the farm laws in the past.

Administrative role

Apart from his role as the master of the roster, the CJI also plays a pivotal role in judicial appointments. Unfortunately, here too, he failed to carry the collegium with him, leading to no appointments to the Supreme Court during his tenure, and very few appointments even to the High Courts. He did not even order the government to issue notifications for the appointment of judges where the collegium had unanimously reiterated its recommendations, despite the government procrastinating over them for long. The law laid down by the Court says that these are binding on the government. The Chief Justice of India also plays a critical role in dealing with complaints against judges. During his tenure, the CJI received a serious complaint made by a Chief Minister of a State against one of the Court judges, with considerable documentary evidence of questionable land purchases. For over six months, the people in the country were not informed how the complaint had been dealt with, and whether any in-house committee (as per the law) has been appointed to, who the members of the committee were, and what their report was. The same lack of transparency was visible in another case, where he was chairman of a committee examining allegations of harassment made by a woman staffer of the Court against his predecessor. His report, purporting to give a clean chit to his predecessor, was never allowed to see the light of day and not even provided to the complainant.



Green cause

I have tried to search for the redeeming features in the CJI's tenure. But to my dismay, the only positive intervention by CJI Bobde that I have been able to discover was his order in the West Bengal trees case (<https://bit.ly/3na6752>), where he appointed an expert committee to examine the value of trees which are to be felled for any public project. In all other issues, the CJI has only caused disappointment with his silence, letting the executive have its way and even making strong remarks on sensitive issues and subjects. He has kept important matters pending, and has hardly intervened to provide any relief to the most marginalised or the weak in India. *As we bid farewell to Chief Justice of India Bobde, the Supreme Court must examine what has happened to what had once been called the most powerful court in the world and a beacon for many other courts across the world. As the Supreme Court turns the page on his tenure, let us hope that in the coming years, it can rebuild its legacy by asserting its judicial independence from the government and once again reclaiming its constitutional role as a citadel that establishes India's constitutional values, guards its democracy, and protects human rights and dignity.*

COLLABORATIVE EXERCISE

The Supreme Court ruling on Tuesday emphasising the need to appoint ad-hoc judges in high courts as an emergency measure to cope with mounting backlog of cases has signalled an elephantine crisis in the judiciary. *According to the court's own admission, an estimated 57 lakh cases are pending in the 25 high courts across the country at a time when the vacancies for the post of high court judges is constantly over 40 per cent in the last two years.* The restricted functioning of the courts through videoconferencing due to the COVID-19 pandemic has only added to the urgency to resolve this crisis. *The three-judge SC bench headed by Chief Justice SA Bobde has two prescriptions to address the situation — judicially mandating the appointment of ad-hoc judges to high courts when vacancies cross a threshold and fixing timelines for the government to make appointments based on the recommendations of the collegium. The push to appoint ad-hoc judges as per Article 224A of the Constitution is a policy response that could temporarily alleviate the crisis. Although it has no in-principle resistance to appointing ad-hoc judges, the government said the emergency provision must be resorted to after the existing vacancies are filled in. But the court overruled the argument as "self-defeating" even as it called the exercise a "collaborative process between the Executive and the Judiciary."* In giving four weeks to act on the recommendations of the collegium, the SC has essentially altered the Memorandum of Procedure (MoP) that has been renegotiated on the administrative side through a judicial order. *The Centre has pointed that of the 416 vacant HC judge posts, no recommendation had been made by HC collegiums for 220 posts.* Although the court acknowledges that it is "of utmost importance that the flow of recommendations continues" from the high courts for the appointment process to work successfully, it does not mandate any timelines for the judiciary itself. *Except for disruptions due to elevation of a judge to the SC or a transfer, vacancies can be anticipated fairly accurately and planned for by collegiums. Without addressing the lacunae within, unilaterally setting tasks for the government on the judicial side upsets the carefully evolved collaborative process.* With the second wave of the pandemic pushing courts to limited function once again, the crisis is only set to deepen further. It is imperative that the government and the collegium work out a real consensus at the earliest for a functional judiciary.



HIGH COURT DISMISSES FB, WHATSAPP PLEAS

The Delhi High Court on Thursday dismissed plea of instant messaging app WhatsApp challenging a decision of the Competition Commission of India (CCI) calling for an investigation into its controversial new privacy policy. WhatsApp had contended that since the issue of its privacy policy was before the Supreme Court, the CCI did not need to order the probe. Not only WhatsApp, but social media giant Facebook, which owns the instant messaging app, had also filed a similar petition challenging the competition watchdog's March 24 decision. WhatsApp had said the CCI "jumped the gun" and started the probe when this was not a competition issue. It had said the issue with respect to personal data of users, and sharing of personalised data was already before the Supreme Court, hence CCI ought not to have intervened. The High Court, however, noted that CCI's order of investigation could not be quashed merely because it did not await the outcome of the pending cases before the Supreme Court and High Court.

Data access

The CCI, on the other hand, had argued the probe order was made to gauge whether access to data would lead to abuse of dominant position. The commission had said it was dealing with the instant messaging app's new privacy policy that could lead to "excessive data collection" of consumers, the use and sharing of the data in anti-competitive context. The commission had said it was not concerned with the privacy aspect of the issue as the Supreme Court was already seized of it.

WITH DUE RESPECT

The Supreme Court has rightly stayed the Allahabad High Court directive to impose a week-long lockdown in five districts in UP following what it deemed a failure of the system to deal with the spike in COVID-19 cases. A two-judge bench of the Allahabad HC Monday had held that the medical infrastructure in these districts was "virtually incapacitated" and called the measures undertaken by the government as an eyewash. The pandemic situation in UP, no doubt, is grave and all systems have been strained. But a lockdown is a call best left to the political executive since its economic and social implications are far-reaching. Moreover, managing a lockdown is based on inputs from the district level on the spread of the infection, the health infrastructure available and the demographic profile of those hit the hardest. The High Court's anguish is understandable but a fiat from the bench is hardly the best way to go about tackling a pandemic. *The Allahabad HC has been watching closely the actions of UP administration and has been periodically hauling up the government for its omissions and commissions. For instance, the HC has repeatedly read the rulebook back to the administration in cases where the due process was subverted or justice denied. The court's unbending commitment to fairness and the rule of law has been exceptional, especially since other institutions seem to have buckled under pressure but its directive on lockdown borders on overreach. A week ago, the HC had asked the government if a lockdown was necessary to contain the spread of the pandemic. Its concern was fuelled by reports of rising cases and deaths and the failure of the system to cope with it — the court was hearing a PIL on the "inhuman" condition in the quarantine centre and the state of COVID treatment.* The government held that a lockdown could cause destruction of livelihoods and accentuate economic distress and claimed that it had taken a series of measures, including declaring the worst affected areas as containment zones. The measures may not have yielded the expected results and it triggered an angry response from the



HC. There are glaring gaps in the state's health infrastructure. Fixing that is a long haul and will require sustained investment and political focus on public health. That's why the state government may have got relief from the apex court but it will do well to listen carefully to the Allahabad HC's censure. More so, in a year leading to Assembly elections when it's a challenge for any government to blend both governance and politics.

HC ENTRUSTS CIRCUS HIPPOPOTAMUS WITH WELFARE TRUST

"The journey of Chotu – the Hippopotamus has finally been a happy one!" the Delhi High Court said while giving the responsibility of life-long care of Chotu, who was part of the Asiad Circus, to Radhe Krishna Temple Elephant Welfare Trust. 'Chotu', a male hippopotamus, has been at the centre of a three-year-long legal battle fought by the PETA (People for the Ethical Treatment of Animals) India against the Asiad Circus. The hippopotamus was originally part of the Asiad Circus, which went into difficulties due to financial constraints. PETA India, after acquiring knowledge that 'Chotu' could be in danger, approached the Delhi High Court seeking immediate seizure of the hippopotamus.

Illegally retained

PETA India argued that the animal was being illegally retained by the Asiad Circus, despite licence of the circus having been cancelled. It was alleged that the circus was making the animals perform illegally. On January 22 this year, PETA India informed the High Court that despite repeated orders, Asiad Circus had failed to disclose the status and location of the hippopotamus. Following this, the High Court had then directed Society for the Prevention of Cruelty to Animals, Delhi, to immediately take steps for seizure of the hippopotamus from the custody of Asiad Circus. Last week, the court was informed that Radhe Krishna Temple Elephant Welfare Trust has been given the custody of the hippopotamus on October 27, 2019, and since then, he has been living in the facility maintained by the Trust.

Satisfied with care

An inspection done at the facility by the Animal Welfare Board (AWB), including representatives of PETA India, found "complete satisfaction in the manner in which the hippopotamus is being kept in the said facility, in terms of its living condition, food etc". The AWB also confirmed that all the facilities and minimum standards are being completely taken care of. It said the Trust may continue the life-long care of the hippopotamus. The report also concluded that the hippopotamus was found to be healthy, mentally as well as physically. Taking note of the submission, Justice Prathiba M. Singh said, "It is heartening for this court to learn that such a facility with good living conditions and high standards is being run by the Trust".

WHY GOA'S CIVIL CODE IS NOT AS UNIFORM AS IT IS MADE OUT TO BE

Chief Justice of India S A Bobde recently appreciated the uniform civil code (UCC) in Goa, the only state to have one. This brought the spotlight back on the UCC debate, although the Law Commission had concluded in 2018 that a UCC is neither desirable nor feasible. No expert committee on the lines of the Hindu Law Reforms Committee of 1941 has ever been constituted, nor has any blueprint for a UCC been prepared. *A UCC is desirable, but in a piecemeal manner. Each state in the US has a*



separate Constitution and separate criminal laws, and the plurality of laws has not weakened that country. The UCC has no role in maintaining the integrity of the country. The CJI urged intellectuals to seriously study the Goa UCC. Even the Supreme Court, in its judgment on Jose Paulo Coutinho (2019), had referred to Goa as the “shining example of UCC”. Justice Deepak Gupta had preferred applicability of Goa’s Civil Code even in respect of properties situated outside Goa rather than apply the Indian Succession Act, 1925, the general law of the land, which was indeed applied in respect of Christians of Travancore & Kochi in Mary Roy (1986) and C J Simon (2012).

Example of plurality

*Goa’s Portuguese Civil Code, 1867 is basically an alien code given by the Portuguese. Its continuance — and non-enforcement of Hindu Marriage Act, 1955 and Hindu Succession Act, 1956 or Indian Succession Act, 1925 or Shariat (Application) Act, 1937 and Dissolution of the Muslim Marriage Act, 1939 etc. in Goa — is an example of legal pluralism, and negation of the very idea of one nation, one law? Is Goa’s Civil Code really as uniform as is generally made out? Under Article 1 of the Decree of Gentile Hindu Usages and Customs of Goa, 1880, customs of Hindus were preserved and exemptions from the Civil Code were given to gentile Hindus. This decree continued the institution of Hindu joint family, named in Portuguese as sociedade, which technically is closer to a partnership rather than the concept of a Hindu joint family. *The Shariat Act has not been extended to Goa; Muslims are governed by the Code as well as Shastric Hindu law. Those who favour love jihad laws would be surprised to know that under Article 1090 of the Goa Code, marriage cannot be annulled on the ground of religion. Goa’s Civil Code has four parts, dealing with civil capacity, acquisition of rights, right to property, and the breach of rights and remedies. It begins in the name of God and Dom Luis, King of Portugal and Algarves. India’s Constituent Assembly had rejected H V Kamath’s proposal of a similar invocation of God in the Constitution. The Code has survived by virtue of Section 5(1) of the Goa, Daman and Diu Administration Act, 1962 that permitted its continuance. On the contrary, the Jammu & Kashmir Reorganisation Act, 2019 has repealed laws based on local Hindu customs; even Kashmiri Muslims were being governed by such non-Islamic laws and customs.**

Marriage & property

It is not clear whether the CJI wants that like Goa’s Civil Code, the proposed UCC should put national Transfer of Property Act, Contract Act, Civil Procedure Code, Sale of Goods Act, Partnership Act etc in one code along with family law provisions. But then, having all laws in one code does not necessarily guarantee justice and equality. Article 1057 of Goa’s Code provides for the registration of marriages. This lacks uniformity between Catholic and non-Catholic marriages. First, the intent of marriage is recorded by the would-be spouses before the civil registration authorities and after two weeks, a marriage deed is signed. For Catholics, signature in churches are considered sufficient for civil registration. Many women are not aware that the UCC requires a second confirmation through signatures, and so, when a dispute arises, their marriages are found invalid. Many cases of bigamy through such frauds have been reported. Marriages solemnised in churches can be annulled by the church tribunal in cases of non-consummation. Article 1086 says that ecclesiastical courts alone can nullify Catholic marriages. The High Court mechanically approves such annulment, except in extraordinary cases. And yet, non-consummation is not a ground of annulment or divorce for non-Christians. For them, Article 1089 says such a power to annul marriage can be exercised only by the civil courts. Article 1204 permits the husband to get a divorce if adultery is committed by the wife, but the wife can get a separation only if the husband commits adultery with public scandal, and a



divorce if he keeps a mistress in the conjugal home or abandons her. Article 3 of the Decree of Gentile Hindu Usages and Customs of Goa, 1880 provides that a Hindu husband can take a second wife in the absence of an issue, if the wife has attained the age of 25, and also if she has attained age 30 without having a son. The provision is contrary to both the Indian Penal Code and the Hindu Marriage Act. Article 1056 terms marriage a perpetual contract between persons of different sex (same sex marriage is not recognised) rather than sacrament. Is the rest of India ready to deny sacramental nature of Hindu marriage in the UCC? In any case a, with the addition of the provision of divorce, marriage is no more perpetual even in Goa. The Code provides for pre-nuptial contracts; here again, the devil is in the details. There are four types of such contracts — no communion of properties; total separation of assets before and after marriage; Dotal regime under which the bride's share in her father's property is given to the husband; and communion of all assets of husband and wife that are equally divided on divorce or death. It is only the fourth that looks equitable, and yet, even here the management of properties is solely vested in the husband. Under Article 1104, the wife is not entitled to deprive the husband by way of ante-nuptial contracts from the administration of assets. She may, however, reserve for herself the right to receive part of income from her assets for pocket expenses provided it does not exceed one-third of the net income. Of course, there is joint ownership, and the husband cannot sell assets without the wife's consent. Moreover, what is divided are properties, not ownership of rights/interests. Thus, if the husband was an agricultural tenant, she would not get half the tenurial interests. Many pre-nuptial contracts do provide that there would be no right if the marriage is not solemnised or the wife leaves the marital home within a few months, or even on divorce. In cases of parties opting out of joint ownership of properties, the succession order becomes significant. Not only Article 1969 of the Goa Civil Code, but also Goa Succession, Special Notaries Inventory Proceedings Act, 2012 (enacted in 2016) mentions in Section 52 the surviving spouse at number four in the order of preference of legal succession — after descendants, ascendants, and brothers and sisters and their children. Unlike the Hindu Succession Act that gives unlimited testamentary powers, Article 1784 of the Goa Code prohibits disposal of more than 50% of assets through a will. This is called legitime. The Goa Succession, Special Notaries and Inventory Proceedings Act too has retained it. The provision is similar to one in Muslim Personal Law that says a Muslim cannot make a will of more than one-third of his property and two-thirds must go to the heirs. Is the Hindu right prepared to have such a provision in the UCC as and when it is enacted? Are we ready for a provision similar to Article 1876 of the Goa Code that disentitles an heir from inheritance in case of refusal to maintain his or her parents without a good reason or commission of an offence against their person punishable with six months' imprisonment?

States, different laws

In fact, not all Hindus in the country are governed by one law. *Marriage amongst close relatives is prohibited by the Hindu Marriage Act, 1955 but is considered auspicious in the South. The Hindu Code Bill recognises customs of different Hindu communities. Even the Hindu Succession Act, 1955 could not make the daughter a coparcener until 2005. The wife is still not the coparcener. Even today, property devolves first to class-I heirs, and if there are none, then to class-II heirs. While the heirs of sons are moved to class-I, heirs of daughters are not. Even among class-II heirs, preference is given to male lineage. And if a couple is issueless, self-acquired property of both spouses goes to the husband's parents even when they have thrown out the daughter-in-law. The wife's parents do not get anything from the property of their issueless daughter. There is no uniform applicability of personal laws among Muslims and Christians either. The Constitution protects the local customs of*



Nagaland, Meghalaya and Mizoram. Even land laws in a number of states are discriminatory, and daughters do not inherit landed properties in the presence of sons. With a 2006 amendment in UP, only an unmarried daughter gets a share in agricultural property. The distinction between married and unmarried daughters is arbitrary. These laws have been exempted from judicial scrutiny by including them in the Ninth Schedule. Let the secular laws first be made gender-just before the country undertakes reforms in religious laws. Piecemeal reform rather than enactment of the UCC in one go is the only way forward. In fact, a just code is preferable to a uniform code.

THE BATTLES OF A SPACE DREAMER

When S. Nambi Narayanan, a senior ISRO scientist, was arrested on November 30, 1994, on charges of leaking secrets pertaining to the Indian space programme to foreign nationals, little did anyone think it would one day be looked upon as the starting point of one of the most extraordinary battles for justice the country has witnessed. Mr. Narayanan's name was closely linked to two Maldivian nationals, Mariyam Rasheeda and Fousiya Hassan, who were arrested by the police on espionage charges. In May 1996, the Central Bureau of Investigation (CBI), which had taken over the case from the Kerala police, dismissed the charges against Mr. Narayanan and the other accused, terming the case a fabricated one. Two years later, the Supreme Court endorsed the CBI's closure report. But the damage was done. The incident, which grabbed headlines as the ISRO spy scandal, shattered the lives and careers of ISRO scientists Mr. Narayanan and D. Sasikumar. In Kerala, the spy case fuelled a fierce political controversy, eventually leading to the resignation of the then Chief Minister K. Karunakaran. Following his acquittal, Mr. Narayanan was reinstated in ISRO in what he himself describes as a 'desk job' at the Bengaluru headquarters. The scientist, who was instrumental in introducing the liquid propulsion technology in ISRO, had been working on cryogenic propulsion when the spy case broke. In 2001, he retired from service without achieving his goal. But the battle, in another sense, was only beginning for Mr. Narayanan.

Legal fights

He had moved court for compensation and action against the police officers responsible for framing him. It is in this context that the April 15 Supreme Court order directing the CBI to look into the report submitted by Justice D.K. Jain Committee needs to be viewed. In 2018, the Supreme Court awarded Mr. Narayanan ₹50 lakh as compensation, noting that he was "arrested unnecessarily, harassed and subjected to mental cruelty". The apex court also constituted a three-member panel headed by Justice D.K. Jain (Retd.) for finding "ways and means to take appropriate steps against the erring officials". Mr. Narayanan had appeared before the committee in December 2020. The CBI report submitted to the Supreme Court in 1998 had reportedly listed the investigative flaws committed by then Additional Director General of Police Siby Mathews, and SPs S. Vijayan and K.K. Joshua. In April 1999, Mr. Narayanan had also moved the National Human Rights Commission (NHRC) claiming compensation from the Kerala government for the mental agony that he had been forced to undergo. In March 2001, the NHRC had awarded him an interim compensation of ₹10 lakh. The Kerala High Court, in 2012, had directed the State government to pay the sum to Mr. Narayanan. The 79-year-old, who lives in Thiruvananthapuram, views the April 15 Supreme Court decision as an additional step forward in exposing the forces that fabricated the spy scandal. Looking back at the gruelling court battles, Mr. Narayanan said he was forced to fight from a compelling need to defend himself. At one point, his children had encouraged him saying he alone could prove his



innocence. “They were right after all. Now people have a tendency to glorify my fight. But I was forced to fight out of necessity,” he observed on Saturday. Mr. Narayanan also looks fondly back at his days at Princeton University in 1970. Princeton, where he did his Masters, helped him “build the platform for his space dreams”, he recalls. The story of the initial days of the Indian space programme and the gruelling saga of the spy case were later recounted in his biography *Ready to Fire*, which came out in 2017. In 2019, Mr. Narayanan was awarded the Padma Bhushan, which, according to him, had come as a pleasant surprise. The upcoming film, *Rocketry: The Nambi Effect*, directed by Madhavan, also is based on his life. When the landmark verdict of the Supreme Court came out in 2018, Mr. Narayanan had told the media that he planned to do something that he had been forced to put off for almost 25 years — spending time with his family. While commenting on the latest SC decision, Mr. Narayanan says he has succeeded in fulfilling that dream in the past several months.

THE ORDINANCE ROUTE IS BAD, REPROMULGATION WORSE

The central government has repromulgated the ordinance that establishes a commission for air quality management in the National Capital Region, or the *Commission for Air Quality Management in National Capital Region and Adjoining Areas Ordinance, 2020* (<https://bit.ly/3duZmHW>). This raises questions about the practice of issuing ordinances to make law, and that of re-issuing ordinances without getting them ratified by Parliament. *The Constitution permits the central and State governments to make laws when Parliament (or the State Legislature) is not in session. As law making is a legislative function, this power is provided for urgent requirements, and the law thus made has an automatic expiry date. The Constitution states that the ordinance will lapse at the end of six weeks from the time Parliament (or the State Legislature) next meets.* In the Constituent Assembly, while there was a discussion on how long the ordinance could remain valid (with some members asking for it to lapse within four weeks of promulgation as that would be sufficient time to call an urgent session of Parliament), *no one raised the possibility of an ordinance to be repromulgated. Perhaps such an eventuality was beyond their imagination.*

What the data show

Whereas an ordinance was originally conceived as an emergency provision, it was used fairly regularly. In the 1950s, central ordinances were issued at an average of 7.1 per year. The number peaked in the 1990s at 19.6 per year, and declined to 7.9 per year in the 2010s. The last couple of years has seen a spike, 16 in 2019, 15 in 2020, and four till now this year (<https://bit.ly/3go9YKf>). *State governments also used this provision very often.* The issue was brought up in the Supreme Court through a writ petition by D.C. Wadhwa, a professor of economics, who discovered this fact when he was researching land tenures. *He found out that Bihar had issued 256 ordinances between 1967 and 1981, of which 69 were repromulgated several times, including 11 which were kept alive for more than 10 years. A five-judge Constitution Bench of the Supreme Court, in 1986, ruled that repromulgation of ordinances was contrary to the Constitutional scheme. It said, “it would most certainly be a colourable exercise of power for the Government to ignore the Legislature and to repromulgate the Ordinance and thus to continue to regulate the life and liberty of the citizens through Ordinance made by the Executive. Such a stratagem would be repugnant to the constitutional scheme as it would enable the Executive to transgress its constitutional limitation in the matter of law making in an emergent situation and to covertly and indirectly arrogate to itself the law making function of the Legislature* (<https://bit.ly/3mXEaxc>.” Interestingly, the Court



pointed out that there was not a single instance of the President (i.e., the central government) repromulgating an ordinance. *The judgment did not stop the practice. Instead, the Centre also started to follow the lead of Bihar. For example, in 2013 and 2014, the Securities Laws (Amendment) ordinance was promulgated three times. Similarly, an ordinance to amend the Land Acquisition Act was issued in December 2014, and repromulgated twice – in April and May 2015* (<https://bit.ly/32svBkM>).

An unconstitutional practice

The matter came up again in the Supreme Court, and in January 2017, a seven-judge Constitution Bench declared this practice to be unconstitutional. The judgment concluded that, “Re-promulgation of ordinances is a fraud on the Constitution and a subversion of democratic legislative processes.” Even this judgment has been ignored. The Indian Medical Council Amendment Ordinance was issued in September 2018, and reissued in January 2019, as it was passed by only one House of Parliament in the intervening session. *The current case of the Commission for Air Quality Management is even more egregious. While the ordinance of October 2020 was laid in Parliament on the first day of the recent Budget Session, a Bill to replace it was not introduced. However, the ordinance has been repromulgated now* (<https://bit.ly/32uEiuC>). States have also been using the ordinance route to enact laws. For example, in 2020, Kerala issued 81 ordinances, while Karnataka issued 24 and Maharashtra 21. Kerala has also repromulgated ordinances: one ordinance to set up a Kerala University of Digital Sciences, Innovation and Technology has been promulgated five times between January 2020 and February 2021 (<https://bit.ly/2Q6zglJ>).

Onus on legislatures, courts

The legal position is clear, and has been elucidated by constitution Benches of the Supreme Court. Ordinances are to tackle exigencies when the legislature is not in session, and expire at the end of six weeks of the next meeting of the legislature. This time period is given for the legislature to decide whether such a law is warranted. Repromulgation is not permitted as that would be a usurpation of legislative power by the executive. As governments, both at the Centre and States, are violating this principle, the legislatures and the courts should check the practice. That is what separation of powers and the concept of checks and balances means. By not checking this practice, the other two organs are also abdicating their responsibility to the Constitution.

DIRECT BENEFITS

When taxpayer money is used to pay minimum support prices (MSP) for farmers' produce, its benefits should go to them. And when technology for such direct benefit transfers (DBT) exists — thanks to bank accounts linked to every individual's Aadhaar and mobile number — there's no reason why this cannot be ensured. It is, therefore, scandalous that DBT wasn't, till recently, being implemented in Punjab and Haryana, which together contributed paddy and wheat worth Rs 87,690 crore at MSP value to the Central pool in 2020-21. Government agencies were procuring grain from these two states and paying MSP not to farmers. These monies were, instead, credited into the accounts of arhatiyas or commission agents in wholesale mandis, who, in turn, issued cheques to the farmers. The farmers, it was assumed, got the MSP from the arhatiyas. It is only from the current rabi marketing season that the Narendra Modi government has made DBT mandatory: *No grain purchase will happen until the details of all concerned farmers are uploaded on the official*



procurement portal to enable online MSP payments to their accounts. The arhatiyas, who wield enormous political clout in the two granary states, have always opposed the new system. The reason is simple: Guaranteed state buying at MSP serves as an indirect security for the loans they extend to farmers. With DBT, they can no longer collect their dues upfront and pay farmers after making the necessary deductions. But the government's responsibility is to the farmer. The arhatiyas get 2.5 per cent commission for facilitating the entire procurement operations in mandis – from unloading of farmers' grain to its cleaning, weighing, bagging and final loading onto trucks. This commission is on the MSP. The MSP itself can only be paid to the farmer. It isn't the government's job to be a facilitator for loan recovery. Now that DBT has become the rule for MSP payments — the Modi government's enforcing it even amidst the ongoing protests against the Centre's farm laws is striking — the next step should be to cap procurement. In case of fertilisers, the government has imposed an upper limit of 50 bags that any farmer can buy at subsidised rates in a month. It should be similarly possible to restrict MSP procurement to the produce of, say, not more than 10 acres per farmer. The idea here is to extend MSP benefits to the maximum number of, especially, small and marginal farmers — and in states where government procurement is currently insignificant. In the long run, MSP procurement itself should be replaced with per-acre transfers. Farmers are better off with minimum "income" rather than "price" support.

TOO LITTLE

The Election Commission of India's decision to restrict campaigning for the remaining two phases of the West Bengal Assembly election is an instance of wisdom dawning late. Nevertheless, it will help limit the public health damage to what was already caused by an unreasonably extended election cycle in the State during the pandemic. After the Calcutta High Court sought an action taken report on what measures it was adopting in the context of the spreading pandemic, the Election Commission has ordered the cancellation of all rallies and roadshows. Only meetings that are attended by no more than 500 people will be allowed now. In its order, the Election Commission noted "with anguish" that parties and candidates were not adhering to safety protocols. Daily campaign hours had already been cut and campaigning was to stop 72 hours prior to polling, instead of 48 hours, as per an earlier directive. A bit of foresight would have been more helpful. The State is recording high numbers of infection. Bengal's health infrastructure is not robust to deal with a heavy surge. All parties organised rallies amid the pandemic. But parties other than the Bharatiya Janata Party (BJP) have been calling for clubbing the last phases together. In the face of the Election Commission's refusal to do so, the Congress, the Trinamool Congress and the Left had discontinued big rallies. The only party that did not have a problem with the election being spread over eight phases over five weeks has been the BJP. Allegations that this helped the BJP that was dependent on its star campaigners and workers from other States moving from one region to the next carries weight. It is ironic that the BJP that argues for clubbing together all elections across the country has been happy about such a prolonged process in Bengal. Even after it became evident that the new surge was turning out to be severe, the BJP continued with big rallies in the State. Prime Minister Narendra Modi gloated about massive turnouts at his rallies. BJP leaders declared that there was no correlation between rally turnouts and the spread of the pandemic. It is not that India sleepwalked into this disaster; it was dragged in a boisterous procession of triumphalism and hubris by the political leadership. *The unusual and unreasonable schedule of the Bengal election during the pandemic was unwise and avoidable. The Election Commission's corrective measures at the last moment can only be of limited help. The lack of*

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



foresight while drawing up the schedule and monitoring the campaign bordered on complicity in the surge of new infections.

THE ECI CANNOT BE A SUPER GOVERNMENT

Elections bring the Election Commission of India (ECI) into sharp focus as this constitutional body superintends, directs and controls the conduct of elections. It is the constitutional duty of the ECI to ensure that the elections held are free and fair. It is an interesting aspect of the ECI's history that before T.N. Seshan came on the scene as the Chief Election Commissioner, no one in the country ever knew or felt that the ECI had any powers. Seshan discovered the ECI's powers hidden in Article 324 of the Constitution which was then used to discipline recalcitrant political parties which had till then believed that it was their birth right to rig elections. Thus there was a very high level of confidence in the minds of Indian citizens about the ECI's role restoring the purity of the elected legislative bodies in the country. It became rather easier for Seshan to locate the powers of the ECI after the Supreme Court held in Mohinder Singh Gill vs Chief Election Commissioner (AIR 1978 SC 851) that Article 324 contains plenary powers to ensure free and fair elections and these are vested in the ECI which can take all necessary steps to achieve this constitutional object. All subsequent decisions of the Supreme Court reaffirmed Gill's decision and thus the ECI was fortified by these court decisions in taking tough measures.

The model code

The model code of conduct issued by the ECI is a set of guidelines meant for political parties, candidates and governments to adhere to during an election. This code is based on consensus among political parties. Its origin can be traced to a code of conduct for political parties prepared by the Kerala government in 1960 for the Assembly elections. It was adopted and refined and enlarged by the ECI in later years, and was enforced strictly from 1991 onwards. There is absolutely no doubt that elections need to be properly and effectively regulated. The Constitution has clothed the ECI with enough powers to do that. Thus, the code has been issued in exercise of its powers under Article 324. Besides the code, the ECI issues from time to time directions, instructions and clarifications on a host of issues which crop up in the course of an election. The model code is observed by all stakeholders for fear of action by the ECI. However, there exists a considerable amount of confusion about the extent and nature of the powers which are available to the ECI in enforcing the code as well as its other decisions in relation to an election. Since it is a code of conduct framed on the basis of a consensus among political parties, it has not been given any legal backing. Although a committee of Parliament recommended that the code should be made a part of the Representation of the People Act 1951, the ECI did not agree to it on the ground that once it becomes a part of law, all matters connected with the enforcement of the code will be taken to court, which would delay elections.

Unresolved question

The position taken by the ECI is sound from a practical point of view. But then the question about the enforceability of the code remains unresolved. Paragraph 16A of the Election Symbols (Reservation and Allotment) Order, 1968 (<https://bit.ly/3ttbbUI>) says that the commission may suspend or withdraw recognition of a recognised political party if it refuses to observe the model code of conduct. But it is doubtful whether this provision is legally sustainable. The reason is that withdrawal



of the recognition of a party recognised under these orders seriously effects the functioning of political parties. When the code is legally not enforceable, how can the ECI resort to a punitive action such as withdrawal of recognition? There are two crucial issues which need to be examined in the context of the model code and the exercise of powers by the ECI under Article 324.

Transfer of officials

One issue relates to the abrupt transfer of senior officials working under State governments by an order of the commission. It may be that the observers of the ECI report to it about the conduct of certain officials of the States where elections are to be held. The ECI apparently acts on such reports and orders the transfer on the assumption that the presence of those officials will adversely affect the free and fair election in that State. Transfer of an official is within the exclusive jurisdiction of the government. It is actually not clear whether the ECI can transfer a State government official in exercise of the general powers under Article 324 or under the model code. The code does not say what the ECI can do; it contains only guidelines for the candidates, political parties and the governments. Further, Article 324 does not confer untrammelled powers on the ECI to do anything in connection with the elections. If transfer of officials is a power which the ECI can exercise without the concurrence of the State governments, the whole State administration could come to a grinding halt. The ECI may transfer even the Chief Secretary or the head of the police force in the State abruptly. In Mohinder Singh Gill's case (supra), the Court had made it abundantly clear that the ECI can draw power from Article 324 only when no law exists which governs a particular matter. It means that the ECI is bound to act in accordance with the law in force. Transfer of officials, etc is governed by rules made under Article 309 of the Constitution which cannot be bypassed by the ECI under the purported exercise of power conferred by Article 324. Further, to assume that a police officer or a civil servant will be able to swing the election in favour of the ruling party is extremely unrealistic and naive. It reflects in a way the ECI's lack of confidence in the efficacy of politicians' campaigns.

Administrative moves

Another issue relates to the ECI's intervention in the administrative decisions of a State government or even the union government. According to the model code, Ministers cannot announce any financial grants in any form, make any promise of construction of roads, provision of drinking water facilities, etc or make any ad hoc appointments in the government departments or public undertakings. These are the core guidelines relating to the government. But in reality, no government is allowed by the ECI to take any action, administrative or otherwise, if the ECI believes that such actions or decisions will affect free and fair elections. A recent decision of the ECI to stop the Government of Kerala from continuing to supply kits containing rice, pulses, cooking oil, etc is a case in point. The State government has been distributing such free kits for nearly a year to meet the situation arising out of the pandemic, which has helped many a household. The decision to stop the kit distribution was reportedly on a complaint from the Leader of the Opposition in the Assembly. The question is whether the ECI could have taken such a decision either under the model code or Article 324. The model code does not provide any clue. As regards the use of Article 324, the issue boils down to whether distribution of food items to those in need in a pandemic will affect free and fair elections. The Supreme Court had in S. Subramaniam Balaji vs Govt. of T. Nadu & Ors (2013) held that the distribution of colour TVs, computers, cycles, goats, cows, etc, done or promised by the government is in the nature of welfare measures and is in accordance with the directive principles of state policy,



and therefore it is permissible during an election. If colour TVs, computers, etc can be promised or distributed during an election and it does not influence the free choice of the people, how can the distribution of essential food articles which are used to stave off starvation be an electoral malpractice? Further, Section 123 (2)(b) of the Representation of the People Act, 1951 says that declaration of a public policy or the exercise of a legal right will not be regarded as interfering with the free exercise of the electoral right.

Insightful words

There is no doubt that the ECI, through the conduct of free and fair elections in an extremely complex country, has restored the purity of the legislative bodies. However, no constitutional body is vested with unguided and absolute powers. Neither citizens nor the ECI is permitted to assume that the ECI has unlimited and arbitrary powers. It would be useful to remember the insightful words of Justice S.M. Fazalali, in A.C. Jose vs Sivan Pillai (1984): "if the [Election] Commission is armed with such unlimited and arbitrary powers and if it ever happens that the persons manning the commission shares or is wedded to a particular ideology, he could by giving odd directions cause a political havoc or bring about a constitutional crisis, setting at naught the integrity and independence of the electoral process so important and indispensable to the democratic system."

ELECTION WATCH FROM ACROSS THE BENGAL BORDER

As the high-profile contest in India's State elections in West Bengal is under way, Bangladeshis are curious onlookers not only because of the geographic proximity and strong socio-cultural ties between the two Bengals but also on account of the ramifications the electoral outcome may have on India-Bangladesh relations.

Historical bonds

During Bangladesh's liberation war in 1971, West Bengal played an important role by sheltering most of the 10 million refugees. Political leaders were also accommodated with the provincial government of Bangladesh setting up headquarters in Kolkata. On June 15, 1971, the late Pranab Mukherjee suggested in the Rajya Sabha that India should recognise the Bangladesh government in exile. In 2013, Bangladesh conferred the Liberation War Honour on Pranab Mukherjee who endearingly called himself a "son-in-law" of Bangladesh. The late West Bengal Chief Minister Jyoti Basu also played a pivotal role in forging the Ganges water treaty between the two countries in 1996. Given the shared history, language, culture and cuisine between the Bengals, there is interest on both sides to foster good relations through increased trade, improved connectivity, and cultural exchanges. For Bangladeshis, West Bengal is a popular destination for medical treatment and shopping.

Water sharing

The relationship between the Bengals is not without its challenges, one of the main factors being the failure to sign the Teesta water-sharing treaty. More than two crore Bangladeshis are dependent on the river for their livelihood. In the dry seasons, West Bengal diverts water for irrigation in the north which causes a severe water shortage in Bangladesh. During the monsoon, large volumes of water are released from the Teesta Barrage causing large-scale flooding and riverbank erosion in



Bangladesh. West Bengal Chief Minister Mamata Banerjee's flip-flop on this vital issue has had an impact on the relationship between the two Bengals and also at the India-Bangladesh state level. The closest the two countries came to signing a water-sharing treaty for Teesta was in 2011 during the visit of then Prime Minister Manmohan Singh to Bangladesh. Ms. Banerjee was set to be a part of the entourage to sign the water-sharing treaty but her last minute withdrawal led to a stalemate in signing it. Such moves could prove costly to India and even push Bangladesh to China which has agreed to fund the nearly \$1billion "Teesta River Comprehensive Management and Restoration project".

CAA and the NRC

In contrast, Ms. Banerjee's stance regarding the Citizenship (Amendment) Act, or CAA, and the National Register of Citizens (NRC) have been largely appreciated in Bangladesh. In an interview in 2020, Bangladesh Prime Minister Sheikh Hasina said that though the CAA is India's "internal matter", she added, "We don't understand why [the Indian government] did it. It was not necessary." Though India has assured Dhaka that the NRC and the CAA are domestic issues not affecting Bangladesh, Dhaka's concern is natural as Bangladesh is at the heart of the foreign nationals' issue spreading across India from Assam to West Bengal. Certain remarks by India's Home Minister, Amit Shah, about immigrants from Bangladesh, referring to them as "termites", have added to these concerns.

Vote politics across border

The enactment of the CAA and the NRC has widespread support from Matua community leaders in West Bengal who have been demanding citizenship for Matua refugees from Bangladesh. The community, organised under the umbrella of the Matua Mahasangha, is an influential group with a significant voter base spread across several districts in West Bengal. The support from the Matua community yielded large dividends for the Bharatiya Janata Party (BJP) in West Bengal in the 2019 Lok Sabha election. Historically, the Matua community was not a vote bank in the West Bengal elections. In the run-up to the Trinamool Congress's campaigns in the 2000s, Ms. Banerjee reached out to the community to challenge the clout of the Left in Bengal. Now, the BJP is emulating the TMC's success with the Matua community. During Prime Minister Narendra Modi's recent visit to Bangladesh, he visited the community's sacred temple at Orakandi and referred to the elected representative of the community Shantunu Thakur's demand to implement the CAA in West Bengal. Many interpreted it as influencing Matua community voters in West Bengal, with even an allegation by Ms. Banerjee of violating the election code of conduct by involving a foreign country in India's internal matters. India's Home Minister's recent comments about poor Bangladeshis going to India have also drawn sharp reactions from Dhaka. Bangladesh Foreign Minister A.K. Abdul Momen remarked; "There are many wise people in this world [like Amit Shah] who don't want to see even after looking, they don't want to understand even after knowing about it." In the Global Hunger Index 2020, India ranks 94 and Bangladesh 75. In 2019, the population below the poverty line in Bangladesh was 9.2% compared to India's 10.7%. During the pandemic, Bangladesh maintained a GDP growth of 3.8% in 2020 while India had a negative GDP growth. So, do Bangladeshis have a stake in what happens? Ms. Banerjee's claims of having close ties with Bangladesh do not carry much weight given her political whims and opportunism. On the other hand, being a moderate, progressive Muslim majority country, the concern on this side of the border is whether a BJP win will divert the course of history and dilute West Bengal's core identity as an inclusive, tolerant,



and progressive society. Whatever may be the election's outcome, there is no apparent reason to feel either euphoric or optimistic on this side of the border.

JMM FIRST TO DECLARE NAME OF ELECTORAL BONDS DONOR

The Jharkhand Mukti Morcha (JMM) is the first party that has declared the name of the entity which made donations to it through electoral bonds, the Association for Democratic Reforms (ADR), a poll rights group, said. A declaration of a ₹1 crore donation was made in the party's 2019-20 contribution report, it added. According to the contribution report of the ruling party in Jharkhand, the donation was made by aluminium and copper manufacturing company Hindalco. The ADR, in a new report, said the most common source of income for national and regional political parties in 2019-20 were donations through electoral bonds. "Given the anonymity provided to donors by the scheme, electoral bonds have emerged as the most popular channel of donations to parties in the last two years," the ADR report said. "It is to be noted that the JMM party has declared the name of the donor who donated ₹1 crore through electoral bonds in its contribution report for FY [financial year] 2019-20. However, this income through electoral bonds has not been declared by the party in its audit report for FY 2019-20," it said. This raises the question as to whether political parties are aware of the identity of the donors who have made contributions through electoral bonds, the report added. Electoral bonds have been pitched as an alternative to cash donations made to political parties as part of efforts to bring transparency in political funding.

By disclosing source of funds received through electoral bonds, the party has set a welcome precedent. Others must follow suit.

The Jharkhand Mukti Morcha (JMM) deserves praise for disclosing the name of the donor who contributed to the party through the electoral bond scheme. Announced in the 2017 Budget, these bonds, sold in multiples of Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh, and Rs 1 crore, are interest-free bearer instruments used to donate money to political parties. *The instrument does not carry any information about the payee and this anonymity provision has attracted controversy. In the first week of this month, the Supreme Court refused to stay the scheme but flagged an important issue. Hearing a plea by the Association of Democratic Rights, a three-judge bench led by Chief Justice S A Bobde asked the government if it has any control on the end-use of these bonds, and talked about the possibility of the money being used for violent activities.* Transparent political conduct will go a long way in addressing such concerns. The JMM's disclosure sets a welcome precedent in this respect. Political funding is a contentious issue in India. Before 2017, a large chunk of donations received in cash remained unaccounted for. And, *contributions through the banking system carried the possibility of the donor being harassed if the non-receiving party was returned to office. The electoral bond scheme was envisaged as a solution to this predicament. Introducing the scheme in his Budget speech of 2017, the then Finance Ministry Arun Jaitley talked of transparency in political funding, without which "free and fair elections are not possible".* But questions were raised on precisely this ground when the fine print of the scheme was revealed. Through an amendment to the Finance Act 2017, the Centre exempted political parties from disclosing donations received through electoral bonds. *Before the introduction of the bonds, parties had to disclose details of all donors who donated more than Rs 20,000. The secrecy clause, transparency activists allege, goes against the citizens' right to know and makes political parties even more unaccountable. In 2017, the Election Commission had described this clause as a retrograde step and asked the government to annul it.*



The Reserve Bank of India too had expressed concerns about the scheme. Despite a 2013 ruling by the Central Information Commissioner about political parties falling under the RTI Act, most parties have resisted being classified as public authorities under the transparency law. The JMM's assertion, "we have nothing to hide," while disclosing that the party received Rs 1 crore from Hindalco Industries Ltd through an electoral bond, therefore, frames an important moment in the country's politics. Its significance will be enhanced manifold if other parties follow suit.

ARISE AND REJUVENATE THE THIRD LAYER OF GOVERNANCE (KAMAL HAASAN, ACTOR, DIRECTOR AND PADMA BHUSHAN AWARDEE, IS PRESIDENT, MAKKAL NEEDHI MAIAM)

What is progress? When has a government achieved its goals? What is the true indication that a government is not just planning, but also putting into action those plans? *The half-hearted execution of a plan by a government that the people chose is not a sign of achievement. The government must ensure that even the last man sitting in the remote corner of the last row should have access to the benefits of the plan. This is why it is crucial that strong local bodies are formed to enable genuine feasibility and execution. The Cholas were the pioneers in the formation of local bodies as part of a well-organised hierarchy to oversee the implementation of progressive plans.*

The journey of Panchayati raj

"The voice of the people is the voice of god; The voice of the Panchayat is the voice of the people," is the quote attributed to Mohandas Karamchand Gandhi. Panchayati raj ensures that the voices of the people are heard loud and clear. But, drawing up a path for a brilliant organisational structure like the Panchayat raj, and then travelling along the path is not a simple task. Realising that seamless administration is impossible without power sharing, the British, in 1884, passed the Madras Local Boards Act. With this, the British formed unions in both small towns and big cities and began to appoint members to ensure better administration. To a certain extent, this brought about positive changes in basic parameters such as health and hygiene. With the advent of gram panchayat laws in 1920, people over 25 years of age were bestowed with the right to vote and choose their panchayat members. Even though Gandhiji was constantly laying emphasis on the importance of autonomously ruled villages, the idea received constitutional recognition only in 1992. It was only after the 73rd Amendment in the 1990s, that the Panchayati raj law came into force. This was the law that brought about massive turning points such as the initiation of grama sabha, a three-tier Panchayati raj methodology of governance, reservation for the downtrodden and women, consistency in economic development, local body elections once in five years, the formation of the State Election Commission, Finance Commission, and the power to draft the rules and responsibilities of the Panchayat. The regions which were better equipped with basic facilities and which were more developed than the villages were brought under one coordinated body, namely, the municipality. The district capitals were further slotted into a combined parameter, namely, the corporation. Administration was transferred to the people, from the politicians and other officials. The lofty dream of Gandhiji to make each village of the independent India a republic organisation, and to reiterate that the autonomous administration of villages should be made the foundation of the entire country's administration was heard and he lay stress on the active participation of the people in governance.



Ideal platform

For seemingly trivial and easily resolvable issues, the villages did not have to seek the assistance of the State or the Central governments. Grama sabhas could and can be the platform to resolve such issues. According to the rules framed by the Tamil Nadu government, it is mandatory that grama sabhas meet at least four times in a calendar year. Besides, grama sabhas can be convened as and when the necessity arises. Every grama sabha meeting ensures the equal right to highlight the issues that disrupt life. In addition to this, the elected members of the Panchayat are obliged to read out the financial statements and balance sheet to ensure transparency.

The reality

The decisions taken during a grama sabha meeting and the proposed solutions with a feasible deadline are potent and powerful. Unfortunately, the reality today is that grama sabhas have become more like auction houses. In Tamil Nadu, for instance, the present government did not even make an attempt to seek the opinions and the consensus of the people on significant issues such as an eight-lane highway project and even a major hydrocarbon project. Even though the government announced that people's opinions would be considered, it went ahead and conducted meetings, which were marked by poor attendance and poor representation from the people. Even then, the government went ahead with the approval of projects which are impediments to normal life. The truth is that keeping in mind a single goal, of profit, politicians hold 'negotiations' with the officials. Several projects are being implemented for the benefit of private and corporate entities. Sadly, in this age, women do not find themselves in major administrative roles in the local bodies, though, on paper, women are shown to be a considerable force. The Makkal Needhi Maiam has been laying stress on the importance of grama sabhas and has been extending its support in a very transparent manner to rejuvenate the dying system of Panchayati raj.

The Kerala example

The neighbouring State of Kerala has been diligently working toward ensuring the proper use of allotted funds, and ensuring the efficiency of administration and eligible member appointments. *Thus, it stands tall as being exemplary. If Tamil Nadu wants to stand tall too, it needs to take steps to enable the power of administration to Panchayats, as stated in the Constitution. To ensure efficiency, we need to strengthen our grama sabhas, hold area sabhas in cities, form ward committees, hold online Panchayat meetings, ensure decent remuneration to Panchayat chiefs and councillors and also bestow the grama sabha with the power to revoke appointed members and representatives. These steps are what will ensure real growth in the State. The State-appointed corporation commissioner faces mammoth challenges when a member of the Opposition party takes charge as a mayor. The constant and meaningless conflicts between the ruling party and the mayor from the Opposition party make it impossible for the corporation commissioner to execute what was agreed upon in a meeting. The officials kowtow to pressures from the ruling party. The same treatment is meted out to municipal councillors and district councillors.*

In Tamil Nadu

The Constitution is clear in stating that local body elections must be conducted once in five years. *But the ruling party keeps postponing the holding of local body elections, which is a breach of the Constitution. Strangely, this form of disrespect never materialises when it comes to the Assembly*



elections! Local body elections have been held once in five years for the last 25 years, since 1996. But for the first time, the *All India Anna Dravida Munnetra Kazhagam government has travelled on without holding a local body election. This is not only an act of escapism but also a stain on the State's political history.* The recent reconstitution of nine districts in the State is an invalid excuse to postpone the holding of local body elections. The government gives a variety of empty and irrelevant excuses to postpone these elections and to cancel grama sabha meetings. The time has come to stop this act — *of depriving people of their basic rights. The demand for federal rule in the Centre and autonomous rule in the States should resonate along with the need to have autonomous local bodies too.* We must collectively ensure that Panchayati raj should be strengthened. This should be the outcome of a peoples' movement. I wish to end by citing Gandhiji's belief that the voices of people will resolve what violence can never be successful in resolving. Let the peoples' voices be heard. We should also note that every year, April 24 is celebrated as Panchayat raj day.

MAKING EDUCATION ACCESSIBLE

Access and affordability continue to plague teachers and students alike one year after the COVID-19 outbreak. Teachers, administrators and policymakers are all working, but the results are not encouraging. People at both ends of the classroom seem to be going through a mere exercise with precious little to show for their efforts. How much of learning is happening is anyone's guess. Exams have lost their credibility. The cost to health with continuous exposure to screens and the dent on financial resources are significant for both teachers and students. *Online learning seems to be a case of working mindlessly, rather than working smart. With physical classes out of the reckoning, access to education is now almost exclusively online. Internet penetration in India is 50% and that reveals one reason for the less-than-efficient achievement in the online education sector. Every single teacher-educator and student, even in the metros, has experienced poor connectivity. In the rural areas online access remains an aspiration.* What happens to that child in the village government school, eager to learn but with no proper access to the Internet? Even if there is a selfless teacher who is willing to use his/her mobile hotspot, how much can he/she spend? The government has a solution right in its backyard.

Two influential agencies

The Government of India owns the airwaves. Prasar Bharati is India's broadcasting corporation handling both radio and television in India. All India Radio (AIR) is blessed with 470 broadcasting centres which cover 92% of the country's geographical area and 99.19% of our population. Doordarshan (DD) handles television, online and mobile broadcasting across our country and the world with 34 satellite channels, 17 well-equipped studios in State capitals and 49 studio centres in other cities. With such resources, AIR and DD can be used to broadcast lessons, given that education is one of the three functions of the two agencies under the Prasar Bharati Act. These two agencies can be reinvented to cater to the needs of the education sector. Educational broadcasts for classes 10, 11 and 12, to begin with, can be done over AIR and DD in the ratio 4:1 (four hours of radio and one hour of TV). Those courses which need demonstration and where seen/observed physical activity is important can be broadcast on TV. This calls for some training and some effort, but it can be done. There are two benefits from this: one, we will be able to reduce for our teachers and students the strain of having to stare at their screens endlessly; and two, with AIR and DD being free, the heavy drain on financial resources will be drastically reduced. Policymakers should make it a point to



involve teachers in their planning. *Training can be provided by a set of master trainers over a month for teachers who will turn into scriptwriters and programmers. These teachers can also be taught to create appropriate tools for evaluation over radio and TV. The Central and State educational boards should be roped in, to support, monitor and provide feedback to improve the system.* If regular radio is not enough, we also have digital radio spawning FM stations leased out to private players for a fee and several FM stations that are run by NGOs, universities and such agencies. *My suggestion is this: let the AIR devote four hours (per class) to educational broadcasting and let DD undertake educational broadcasting for an hour (per class). With these two public broadcasting services combined in the ratio of 4:1 (per each class), we will be able to serve the entire student population of our country.*

Free hours of Internet

Another suggestion that the government could consider is to ask Internet Service Providers to provide many hours of free Internet usage to teachers and students. This will not be easy but the government should call the shots and take a decision that is in the interest of the people.

ASSESSING STUDENTS AMID A PANDEMIC

Faced with a massive surge in COVID-19 cases, the Central government cancelled the Central Board of Secondary Education's (CBSE) Class X examination and postponed the Class XII examination scheduled to be held from May 4. The decision, which will be reviewed by the Ministry of Education on June 1, was followed by the Indian Certificate of Secondary Education (ICSE or Class X) and Indian School Certificate (ISC or Class XII) examinations also being postponed, with a review scheduled in the first week of June. As of Saturday, the International Baccalaureate and several State Boards had taken similar decisions.

What are the challenges?

Aligning examinations of various Boards is a practical necessity since admission to higher education courses must be done uniformly and entrance examinations have to be conducted for professional courses. While the government has bought itself time to address the wildfire spread of COVID-19 by getting public examinations out of the way, students are left wondering about the nature of formative academic assessment that will be applied to their Class X performance during the year gone by, which was marked by a shift to online classes and TV-based instruction. For many, it was a total lack of access without electricity, connectivity, computers and smartphones. The challenge now is to take up formative assessments where pen-and-pencil annual examinations cannot be held.

What is formative assessment?

The annual high-stakes public school examination is referred to as a summative assessment. It had to be cancelled or deferred this year due to the pandemic, and the academic system had to fall back on continuous evaluation techniques or other metrics. This is known as formative assessment. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the key aspects of this pattern are use of observation, quizzes, assignments and feedback. While summative assessment is described as a 'testing of learning', formative assessment is 'testing for learning,' which



helps teachers assess the strengths and weaknesses of individual students and suggest remedial measures. The CBSE introduced a formative assessment system through a Continuous and Comprehensive Evaluation (CCE) framework in 2009-10, but abandoned it in favour of a compulsory public examination for Class X, eight years later. However, the year 2020-21 stands apart due to the disruption to routine schooling and the use of online and remote instruction. UNESCO says that in such a remote-learning situation, *formative assessment has to rely on Learning Management Solutions and digital tools such as the open-source Moodle, Google Classroom and Schoology, and other tools that facilitate the creation of adaptive instructions for personalised learning. Many teachers in India used video-calling tools to deliver instructional material and to coach and assess students. The Boards must now come up with a formative assessment framework that fixes clear metrics.*

How have schools responded?

After the latest move by the Centre, prominent CBSE schools say they will not face disruption because they conducted periodic internal examinations, practicals, as well as “pre-Board” testing for Class X. This will be useful to evaluate students. However, the switch from a reformist model of formative assessment to the traditional public examination was not seen as a move forward by others. The decision to reintroduce a public examination for Class X in CBSE was defended by the then Human Resource Development Minister, Prakash Javadekar, as the removal of discrimination against 1.93 crore secondary students of State and other Boards who continued to take an exit examination.

Can all schools assess fairly?

The question of schools' capabilities to conduct sound formative assessments has become important because not all have similar facilities. While CBSE schools may be more urbanised, the picture for other Boards is mixed. The Unified District Information System for Education data show that in 2017-18, there were 1,88,742 rural schools and 83,207 urban schools under all managements. Data from the National Sample Survey (NSS) for the same year indicate that only 4% of rural households and 23% of urban households had a computer. Internet access was restricted to 15% of rural and 42% of urban households.

What reforms are needed?

*As COVID-19 cases from the first wave dropped, CBSE launched a competency-based assessment plan for Classes VI to X in March this year, aligned with the National Education Policy (NEP), 2020. It was prepared jointly with the British Council, for science, mathematics and English. **The aim was to strengthen critical thinking and analytical capacity for competency-based learning.** In fact, even the National Policy on Education, 1986, had de-emphasised rote learning and recommended a CCE-like framework. The NEP 2020 emphasises (formative) assessment for learning and critiques existing Board examinations as forcing students “to learn a very narrow band of content/material in a single stream”. Future reforms would, therefore, have to work on two fronts — to ensure access to learning for every student, in classrooms or remotely, and make formative assessment possible through a scientifically designed set of metrics.*



INDIAN ADS FURTHER GENDER STEREOTYPES

An analysis of Indian advertisements on television and YouTube has shown that while they are superior to global benchmarks insofar as girls and women have parity of representation in terms of screen and speaking time, their portrayal is problematic as they further gender stereotypes — they are more likely than male characters to be shown as married, less likely to be shown in paid occupation, and more likely to be depicted as caretakers and parents. These are some of the findings of a study released on Monday by UNICEF and the Geena Davis Institute on Gender in Media (GDI) titled “Gender bias and inclusion in advertising in India”. The research measures over 1,000 television and YouTube advertisements aired across India in 2019. The ads analysed were those that received the most reach. *The study finds that women characters dominate screen time (59.7%) and speaking time (56.3%), but one of the drivers of this is their depiction for selling cleaning supplies and food and beauty products to women consumers. For example, almost all the detergent and food commercials depicted a woman taking care of her family who speaks directly to women viewers about caring for their families.* In comparison, in a separate study by the GDI for setting global benchmarks, it was found that *ads in the U.S. show women with half the screen time (30.6%) and nearly half the speaking time (33.5%). A greater percentage of female characters is depicted as married than male characters (11% compared with 8.8%). Female characters are three times more likely to be depicted as parents than male characters (18.7% compared with 5.9%). While male characters are more likely to be shown making decisions about their future than female characters (7.3% compared with 4.8%), the latter are twice as likely to be shown making household decisions than male characters (4.9% compared with 2.0%). Female characters are more likely to be shown doing the following activities than male characters — shopping (4.1% compared with 2.3%); cleaning (4.8% as against 2.2%); and being involved in the purchase or preparation of meals (5.4% against 3.9%).* For characters where intelligence is part of their character in the ad, *male characters are more likely to be shown as smart than female characters (32.2% compared to 26.2%). Male characters are almost twice as likely to be shown as funny than female characters (19.1% compared to 11.9%). Two-thirds of female characters (66.9%) in Indian ads have light or medium-light skin tones — a higher percentage than male characters (52.1%).* Female characters are nine times more likely to be shown as “stunning/very attractive” than male characters (5.9% compared with 0.6%). *Female characters are also invariably thin, but male characters appear with a variety of body sizes in Indian advertising.* “Misrepresentation and harmful stereotypes of women in advertising *have a significant impact on women — and young girls — and how they view themselves and their value to society.* While we do see female representation dominate in Indian ads, they are still marginalised by *colourism, hypersexualisation, and without careers or aspirations outside of the home,*” said Geena Davis, Academy Award Winning Actor, Founder and Chair of the GDI adding that the stark inequality must be addressed to ensure an equitable society.

U.P. POLICE GET ‘CLEAN CHIT’ IN VIKAS DUBEY CASE

A three-member inquiry commission probing the encounter killings of gangster Vikas Dubey and five of his alleged associates has given a clean chit to Uttar Pradesh Police because of lack of evidence, sources said on Wednesday. The commission is headed by former Supreme Court judge B.S. Chauhan. The other two members are former Allahabad High Court judge Sashi Kant Agrawal and former U.P. Director General of Police K.L. Gupta. The panel submitted its report to the State



government on Monday, eight months after it was set up. On July 3 last year, eight policemen were killed in an ambush in Bikru village in Chaubeypur area of Kanpur when they were going to arrest Vikas Dubey. The police later killed Prem Prakash Pandey, 55 and Atul Dubey, 35 in an encounter in Kanpur on July 3. On July 8, Amar Dubey, 30, who carried a reward of ₹50,000 on him, was killed in an encounter at Maudaha village in Hamirpur district. On July 9, Praveen Dubey, alias Bauwa, 48, and Prabhat, alias Kartikeya, 28, were killed in separate encounters in Etawah and Kanpur districts.

A FRESH PUSH FOR GREEN HYDROGEN

India will soon join 15 other countries in the hydrogen club as it prepares to launch the National Hydrogen Energy Mission (NHEM). The global target is to produce 1.45 million tonnes of green hydrogen by 2023. Currently, India consumes around 5.5 million tonnes of hydrogen, primarily produced from imported fossil fuels. In 2030, according to an analysis by the Council on Energy, Environment and Water (CEEW), green hydrogen demand could be up to 1 million tonnes in India across application in sectors such as ammonia, steel, methanol, transport and energy storage. However, several challenges in scaling up to commercial-scale operations persist. We propose five recommendations.

Key steps

First, decentralised hydrogen production must be promoted through open access of renewable power to an electrolyser (which splits water to form H₂ and O₂ using electricity). Currently, most renewable energy resources that can produce low-cost electricity are situated far from potential demand centres. If hydrogen were to be shipped, it would significantly erode the economics of it. A more viable option would be wheeling electricity directly from the solar plant. For instance, wheeling electricity from a solar plant in Kutch to a refinery in Vadodara could lower the transportation cost by 60%, compared to delivering hydrogen using trucks. However, the electricity tariffs could double when supplying open-access power across State boundaries. Therefore, operationalising open access in letter and spirit, as envisioned in the Electricity Act, 2003, must be an early focus. Second, we need mechanisms to ensure access to round-the-clock renewable power for decentralised hydrogen production. To minimise intermittency associated with renewable energy, for a given level of hydrogen production capacity, a green hydrogen facility will typically oversize the electrolyser, and store hydrogen to ensure continuous hydrogen supply. However, such a configuration would also generate significant amounts of excess electricity. Therefore, as we scale up to the target of having 450 GW of renewable energy by 2030, aligning hydrogen production needs with broader electricity demand in the economy would be critical. Third, we must take steps to blend green hydrogen in existing processes, especially the industrial sector. Improving the reliability of hydrogen supply by augmenting green hydrogen with conventionally produced hydrogen will significantly improve the economics of the fuel. This will also help build a technical understanding of the processes involved in handling hydrogen on a large scale. Fourth, policymakers must facilitate investments in early-stage piloting and the research and development needed to advance the technology for use in India. The growing interest in hydrogen is triggered by the anticipated steep decline in electrolyser costs. India should not be a mere witness to this. Public funding will have to lead the way, but the private sector, too, has significant gains to be made by securing its energy future. Finally, India must learn from the experience of the National Solar Mission and focus on domestic manufacturing.



Establishing an end-to-end electrolyser manufacturing facility would require measures extending beyond the existing performance-linked incentive programme. India needs to secure supplies of raw materials that are needed for this technology. Further, *major institutions like the DRDO, BARC and CSIR laboratories have been developing electrolyser and fuel-cell technologies. There is a need for a manufacturing strategy that can leverage the existing strengths and mitigate threats by integrating with the global value chain.* Even before it has reached any scale, green hydrogen has been anointed the flag-bearer of India's low-carbon transition. Hydrogen may be lighter than air, but it will take some heavy lifting to get the ecosystem in place.

NORMAL IS GOOD

The India Meteorological Department (IMD) has forecast a 'normal' monsoon for this year. In the agency's parlance, normal implies that the country will get 96% to 104% of the 88 cm that it gets from June-September. This quantity, called the Long Period Average (LPA), is a mean of monsoon rainfall from 1961-2010. The IMD, for over 20 years now, follows a two-stage monsoon forecast system. After the prognosis in April, it gives an updated estimate in late May or early June. This includes an estimate of how much rain is likely in: northwest India, northeast India, central India and southern peninsula. Numbers are also given for July and August, which see two-thirds of the monsoon rains and are the most important months for sowing. This year, there will be forecasts for June and September too, to be given in May and August, respectively. Historically, predicting rain for June and September is challenging as it corresponds to the monsoon's entry and exit. There will also be forecasts for what is called the monsoon core zone, which represents most of the rainfed agriculture region in the country. All of these updates are an extension of the IMD's increasing reliance on dynamical monsoon models. Unlike the traditional statistical models, which are based on a fixed set of meteorological variables that have historically been correlated with variations in monsoon rainfall, the dynamical models generate forecasts based on evolving weather patterns. The IMD has been testing such models for many years but it is only in the last few years that it is finding use for practical weather forecasts. *A 'normal' monsoon forecast this year is primarily predicated on 'neutral' surface temperatures in the Central Equatorial Pacific. In 2019 and 2020, the IMD forecast normal rains but India ended up with 110% and 109% of the LPA. This year, a warming El Niño is unlikely, and another ocean parameter closer home, the Indian Ocean Dipole, too is expected to be unfavourable for excess rains and so the IMD seems more confident that its calculations are not going to be as wrong.* However, the models already show a good chance of 'above normal' rain in central and southern India. While forecasts are a critical aspect of India's disaster preparedness, there should also be more focus on incorporating these forecasts down to municipal and block-level planning. The monsoon forecasts were primarily evolved to assist with agriculture and it is only now getting more urban-focused because of the natural disasters that accompany even 'normal' monsoons. Several business and service sector industries need weather products and in terms of science and infrastructure, few have the resources the IMD has. The IMD must continue to aid on all these fronts.

INFERNAL INFERNOS

Maharashtra has been facing the merciless onslaught of COVID-19 cases, but its public health response has also had to combat a second, connected scourge of hospital fires. In recent days, the State has been adding, on average, over 60,000 cases and losing a few hundred lives daily in the

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second wave of the pandemic, straining its infrastructure and institutions. It is also frequently hit by deadly fires, of the kind witnessed on Friday in the ICU of a small hospital in Mumbai's suburb of Virar, where at least 14 patients severely ill with the coronavirus died. With about seven lakh active cases now, many of the patients in the State require oxygen support and hospitals are stretched to the limit. Many are small institutions, while a number of facilities are simply not built for purpose, such as the hospital located in a mall in Mumbai's Bhandup area where several lives were lost in a blaze last month. *Now that many COVID-19 hospital fires have been reported during the first peak of the pandemic last year and later, in Maharashtra, Gujarat and Andhra Pradesh in particular, State authorities should be able to document their learnings and put out a checklist to save patients.* They should clarify whether *fire safety guidelines for hospitals issued by the Centre in September last year, prioritising a strict compliance strategy, third party accreditation on safety, and adoption of a fire response plan were acted upon.* This is particularly important in Maharashtra's context, given that devastating fires have been recurring, and Chief Minister Uddhav Thackeray should lose no time in ordering a comprehensive audit. With no end in sight to serious hospital fires, there may be a case for judicial oversight and systematic inquiries into such mishaps. COVID-19 has turned into a conflagration, and the Supreme Court has taken suo motu cognisance of many aspects of pandemic management, such as availability of oxygen and essential drugs, method and manner of vaccination, and declaration of lockdowns. Nearly 10 High Courts have taken up pressing matters pertaining to COVID-19. It would be logical to add fire safety to such scrutiny, to make accidents rare. Evidently, State bureaucracies can achieve a lot more on their own, if they diligently implement existing regulations. There is a professional knowledge base available with important features. *It calls for ICUs to be equipped with an exhaust system to prevent smoke accumulation in a fire, ventilation cut-outs to stop a blaze from spreading, periodic maintenance of safety equipment and, very importantly, an evacuation plan for the sickest patients, who may be attached to life-saving equipment.* It is undoubtedly complicated to retrofit poorly designed hospitals for high safety standards, especially when it has to be executed on the go, and every bed is precious in the pandemic. But as each successive blaze proves, business as usual may extract a heavy price. Patients should be able to go to a hospital without the fear of fires threatening their lives there.

FIGHT THE PANDEMIC, NOT THE OPPOSITION

There is a famous saying, "bad examples serve as good warning signs". The nation was hoping that after witnessing and experiencing the effects of a shortage of personal protective equipment (PPE) kits, N-95 masks and HAZMAT suits in the harsh, dreaded summer of March-April 2020, the Central government would take corrective steps and not repeat the mistake of ending up with a lack of supply of oxygen, medicines and of prioritising exports over domestic demands in terms of vaccine availability. However, looking now at the heart-rending and urgent appeals for oxygen supplies and vaccines, and the snail's pace of the vaccination drive and reports of vaccine shortages, it is clearly déjà vu in terms of it being sheer mishandling by the event management-obsessed Bharatiya Janata Party (BJP) government. However, amid the bad news of rising COVID-19 deaths and dipping resources, India's young population can heave a sigh of relief that the ruling regime has finally considered the suggestion of the Opposition to look at universal vaccination and woken up to the reality that 80% of the population below 45 years of age, who constitute a large segment of the COVID-19 infected citizenry, needs protection. But, a few questions remain unanswered: why did it take so long to give the green signal for a 'vaccine for all' policy? Why do

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the scales remain tilted in favour of exports over domestic supply? Why did the wise men and women at the helm of affairs not ensure the acquisition and the manufacture of the arsenal of equipment and keep them ready to combat the current catastrophe? Had the government paid heed to saner voices and prepared itself during the last one year for domestic capacity augmentation, may be India would have been in a better position to face the second wave. Now, the bottlenecks in the domestic supply of medicines, oxygen and vaccines have become a major constraint in the fight against COVID-19. In the absence of a steady stream of these key essentials, the 'liberalised' vaccination drive runs the risk of becoming another victim of sketchy implementation by the BJP government.

India versus the world

To avoid this, decision makers must hunker down to give wings to the vaccination drive and ensure maximum factory output to achieve maximum coverage. According to information available in the public domain, India lags behind the world average of doses administered per one lakh population. Out of the population of 136 crore Indians, approximately only one crore have got both doses. *With less than 8% of the population vaccinated so far, India is way behind in terms of vaccination speed and coverage. Israel has vaccinated 61.8% of its population while it is 39.2% in America. Countries such as the Seychelles and Bhutan have vaccinated 67.4% and 62% of their population, respectively. The vaccination percentage in India is behind even Morocco, where 12.6% of the population have been vaccinated.* To make matters worse, several State governments, including worst-hit Maharashtra, are facing shortages; in fact, vaccination has been halted at several centres across the country. This needs to change if India has to come out of the tailspin induced by the COVID-19 storm.

Engage with the U.S.

The vaccine manufacturers, specifically the Serum Institute of India, has already raised a red flag over the shortage of raw materials to produce the vaccine due to export ban imposed by the United States Government invoking the U.S. Defense Production Act, 1950. Last year, India exported more than 50 million hydroxychloroquine tablets to the U.S. Therefore, *the Ministry of External Affairs should not waste any more time in getting the U.S. embargo lifted by encashing the goodwill of medicine diplomacy and showing no hesitancy in seeking a return of the favour. An 'out of stock' vaccine scenario is not only weakening India's fight against COVID-19 but is also leading to the erosion of public confidence in the government's containment strategy.* In addition, for the purposes of ensuring that young India and the less privileged sections of our society are not deprived of vaccination, financial deterrents need to be removed. First, *States are struggling with their finances and lakhs of crores of their Goods and Services Tax dues are pending with the Centre. These dues should be cleared so that direct purchasing from the manufacturers does not have an additional burden. Second, a pricing cap should be imposed considering that unemployment is at a 45-year-high, affecting youth, and free vaccination should be made available to the weaker sections of society.*

Vaccine diplomacy can wait

Another aspect which requires a rethink is India's global commitment to vaccine, medicine diplomacy vis-à-vis our domestic requirements. While it is true that the pandemic of the magnitude of COVID-19 has expanded the role of nation-states to fight the virus at the global level,



the national priorities and lives of their own people demand the highest priority of governments to focus on domestic needs. *As per the Government's reply in the Rajya Sabha (March 17, 2021), a total of 7.06 crore doses of COVID-19 vaccines were supplied to the States and Union Territories; whereas, during the same period, 5.96 crore doses of vaccines were exported to 74 countries. According to the latest figure of the Ministry of External Affairs, 6.60 crore doses of vaccines have been exported out of India, as on April 19, 2021, which includes supplies in the form of 'grants-in-aid', commercial sales and under GAVI's COVAX facility.* Similarly, during the last six months, 11 lakh remdesivir injections were exported without considering the imminent domestic demand at a time when scientists had warned about a severe second wave in India. *Union Health Minister Harsh Vardhan made a statement in Parliament that vaccines are not being exported 'at the expense of Indians' — but the numbers speak for themselves.* Clearly, it is time to balance out the equation. By not addressing the supply issue seriously, euphemistically speaking, the BJP government is locking up the fire brigade stations despite seeing the wildfire spread. Vaccine diplomacy can and should wait till the entire population of India is vaccinated. Last, and most importantly, the government machinery needs to shift gear from fighting the political Opposition to fighting COVID-19. *By ridiculing the constructive suggestions of Opposition leaders such as Dr. Manmohan Singh and Rahul Gandhi and then implementing them the very next day only exposes the BJP's brand of low politics.* For the sake of upholding the spirit of cooperative federalism, the Centre must shed its policy of "credit is mine and crisis is yours" and follow the motto of "we shall fight it together". True "Utsav" will only be witnessed when a majority of Indians stand vaccinated and no patient dies as a result of a shortage of hospital beds, oxygen cylinders and/or unaffordable injections.

MODI RAPS KEJRIWAL FOR LIVE-STREAMING CMS' MEET

Prime Minister Narendra Modi and Delhi Chief Minister Arvind Kejriwal got into a minor fracas during the Union government's videoconference with the Chief Ministers of States with a high COVID-19 burden, after Mr. Kejriwal live-streamed his interventions at the meeting. Mr. Kejriwal, while calling for help from the Centre for fulfilling the rising oxygen requirements of hospitals in Delhi, live-streamed his remarks, which Mr. Modi objected to as it was happening, saying it went against the protocol of such closed-door meetings. Mr. Kejriwal said he would not make the mistake again. Government sources alleged Mr. Kejriwal's actions were aimed at politicising the meeting to give the impression that the Centre was being heavy-handed with the States. "Arvind Kejriwal did much of this for political effect. He spoke of airlifting oxygen tankers, which is already being done, spoke of the Railways providing 'Oxygen Express' trains, which, as the Railway Ministry said, the Delhi government hadn't got in touch with them about, and he basically did not give a single constructive solution, unlike other Chief Ministers who did," alleged a source in the government. Mr. Kejriwal's office provided a statement explaining his version of events. "Today, the Chief Minister's address was shared live because there has never been any instruction, written or verbal, from the Central government that the said interaction could not be shared live. There have been multiple occasions of similar interactions where matters of public importance which had no confidential information were shared live. However, if any inconvenience was caused, we highly regret it," the statement said.



HOW SECOND SURGE IS DIFFERENT

On Friday, close to 1,350 coronavirus-related deaths were reported from across the country, the highest ever. A day later, that number jumped to more than 1,500. The only silver lining in the ongoing second wave — that it was causing fewer deaths compared to last year — is now fast disappearing, with the rapidly-rising infection numbers are leading to more and more deaths. As a percentage of the caseload, the deaths are still lower than last year, but that is hardly a consolation for a population that is heading towards 2,000 deaths a day in a few days' time. There are predictions that India's daily death count could rise to as high as 3,000 a day, which the US used to record during its worst phase. But with no indications yet of any slowdown in the infection rate, the increase in death count is also anyone's guess. In fact, the disease seems to be spreading at faster rate than at any previous time. The positivity rate, which is an indication of disease prevalence in the population, is also at an all-time high, and rising.

No longer the silver lining

The significantly lower mortality rate was the biggest comfort during the second wave which began in the middle of February. Even now, when the daily death count is at record highs, the death rate is much lower than last year. During the previous peak in September, when more than 90,000 cases were being detected every day, India was reporting over 1,200 deaths. Despite the daily count of cases having crossed two lakh, the death numbers were lower than this until two days ago. Maharashtra, which has the highest counts, offers a good example. The state has been reporting more than 60,000 cases a day, but the death count, over 400 now, is still less than during the peak of last year when it was not reporting even 25,000 cases on any day. The state's fatality rate this past week is less than half the overall rate. The weekly case fatality rate (CFR) is calculated by comparing the total number of deaths reported in the past one week, with the number of cases detected in the week that ended 14 days previously. The 14-day period accounts for the fact that deaths usually happen two to three weeks after the infection is detected. The weekly CFR presents a current picture of the mortality situation. The overall CFR, on the other hand, is obtained by comparing the total number of recorded deaths with the total number of confirmed cases as it stood 14 days ago. This offers a more holistic view, and eventually, the deadliness of the epidemic, once it comes to an end, would be judged by its overall CFR. As of now, Maharashtra has a weekly CFR of 0.89%, while its overall CFR is 2.09%. This kind of situation does not prevail in all states. For example, Delhi, Chhattisgarh, Uttar Pradesh or Gujarat, all of which are in the midst of a big surge, have weekly CFRs that are more than twice their overall CFRs, indicating that the current phase of the epidemic in these states is much more deadly. For the first time since July, India's weekly CFR has overtaken the overall CFR. With more than 1.77 lakh deaths, and over 1.4 crore infections, India's overall CFR stands at 1.42%. This is lower, and therefore better, than in many other countries. In the last one week, more than 7,800 deaths have been recorded, while in the week that ended 14 days ago, about 5.13 lakh cases were detected. That gives a weekly CFR of about 1.53%. In the initial weeks of the second wave, a low daily death count was attributed to the circulation of a supposedly milder variant of the virus. However, a more plausible explanation is the fact that over the last one year, there has been a significant improvement in clinical management and critical care infrastructure. However, the last couple of weeks have seen this infrastructure crumble under the weight of cases. Several deaths have happened because of lack of hospital beds or access to critical care facilities.



Faster spread

Over 26.6 crore diagnostic tests have been conducted in India so far. Of these, over 1.47 crore tests, or about 5.5%, have been positive. In the last one week, however, this has increased to over 13.5%. The seven-day moving average of positivity rate has never been higher. The current high positivity rate reinforces the possibility that the virus has spread at a much faster rate during the last couple of months, and infected many more people compared to last year. During the first wave, the positivity rate had peaked last July, and then steadily declined even when the positive cases continued to rise in August and September. At that time, the higher number of cases were a direct result of increased tests. Until most of July, India was carrying out less than five lakh tests a day. It was only towards the end of the month that testing numbers began to rise rapidly and climbed to more than ten lakh a day by the third week of August. Right now, India has been detecting almost 2.5 times as many cases as it was during the September peak. But it is not because of any increase in testing. Testing numbers are roughly at the same level as in September and October last year. But many more people are returning positive. Maharashtra has had a very high positivity rate, over 15%, for most of the epidemic, but several other states, including Chhattisgarh and Uttar Pradesh, that had relatively lower positivity rates last year — lower than the national average — are now closing the gap. In fact, the weekly positivity rate of Chhattisgarh is currently higher than even Maharashtra's. The high rate could be because of increased contact between people or due to the circulation of a faster-transmitting variant. There is evidence that both these things have played a role. A new variant, which has emerged locally and was first noticed in the Vidarbha region of Maharashtra, has two crucial mutations that make it transmit faster and possibly also evade the immune response. More than 60% of the virus samples from Maharashtra collected for gene sequencing show this double mutant strain. This mutant has most likely spread to other states as well.

NEED TO ADDRESS

In his address to the nation Wednesday, Prime Minister Narendra Modi sought to assure citizens that in the war against the relentless second wave, all efforts should be attuned to ensure that there is only a minimum impact on the livelihoods of people. That everything would be done to “save the country” from a lockdown and states should use it as a “last resort”. The message has gone through — already several states have rolled out their versions of a lockdown: Night-time curfew, curbs on weekend, limits on movement during the day. How effective that is against a steadily climbing wave and whether harsher curbs are needed will only be known in the days to come. What is staring in all faces, however, is how the second wave has exposed the glaring inadequacy of health infrastructure in the country. Not only in remote rural pockets but in the heart of the national capital, New Delhi, and financial capital Mumbai. From shortage of medicines and beds to oxygen supplies and testing facilities — all basic Covid-care necessities that were flagged by the empowered groups set up more than one year ago. A just-in-time approach to replenishing oxygen supplies at hospitals will endanger lives. If transporting oxygen across state lines is proving to be a logistical challenge, then governments must quickly work out the modalities involved. The vicious cycle of supply-demand mismatches, panic and hoarding needs to be broken. India Inc, which stepped up to the plate in the first phase, needs to pitch in again, aggressively. On the vaccine front, the opening up has raised several new challenges. The bizarre dual pricing of a public good — Covishield at Rs 150 for the Centre and Rs 400 for the states — is



set to sharpen conflict between the states and the Centre. The lack of clarity on vaccine procurement days before the May 1 ramp-up needs to be addressed. Cash-strapped state governments are worried how they would compete with open-market players in sourcing the vaccines. The impact of the measures recently announced to boost domestic production, which should ideally have come months ago, will show up with a lag. To what extent imports can bridge the gap in the interim is debatable. This continuing health uncertainty will have grave consequences for the economy. Production will be hit as restrictions are imposed, and both consumption and investment decisions by households and firms will be postponed. Analysts have already begun paring down their forecasts for growth this year. Because for all the talk of a no-lockdown, no demand or economic activity will revive if the Covid curve doesn't begin to bend.

INDIA'S NEW COVID-19 VACCINE POLICY

In the first three phases, when healthcare workers, frontline workers, and those above the age of 45 were vaccinated, the Centre procured the entire quantity of vaccines from the manufacturers, Serum Institute of India (Covishield) and Bharat Biotech (Covaxin), and distributed it to states. The states distributed the stock to government vaccination centres, which administered the vaccine free of cost, and to private hospitals that charged recipients ₹250 per dose. From May 1, the supply will be divided into two baskets: *50 per cent for the Centre, and 50 per cent for the open market. Through the second — non-Government of India — channel, state governments, private hospitals, and industries that have facilities to administer the vaccine, will be able to procure doses directly from manufacturers.*

What changes in distribution?

First, the 50 per cent basket of vaccine doses earmarked for states and private hospitals in the open market will be used to vaccinate those above the age of 18 years. Second, free vaccination would be available at all vaccination centres that receive doses from the Government of India — with those doses, healthcare workers, frontline workers, and those above 45 will be vaccinated.

Will private vaccination centres still administer the vaccine at Rs 250?

No. Since no doses will be made available to the private sector, private hospitals will have their own rates.

So, what will be the cost of a shot at a private centre?

In the first three phases, out of the Rs 250 charged for vaccination, private hospitals received Rs 100 for administering the jab. Since they will now be procuring the vaccine at a higher price, the cost of a jab is expected to be much higher than in the first three phases. The Centre on Monday said the prices charged by private hospitals would be monitored. A mechanism will be put in place, and vaccine stocks and prices will be captured on the Co-win platform.

States will receive doses from the Centre and also make additional procurement from the open market — so how will they plan vaccination sessions?

This is not final yet. However, the Centre has said that it will be able to allot vaccines for 15 days — which means that states will know in advance that for the next 15 days, they will receive a



specific number of doses. They will, therefore, have both a big as well as a granular picture of availability on date and for the coming fortnight.

How will the Centre decide which state gets how many doses?

The Centre will allocate its 50 per cent share to states based on the extent of infection (active cases) and performance (speed of administration). Currently, states receive vaccine doses according to demand (number of registrations and walk-in vaccinations). Now, low wastage will be incentivised.

Will imported vaccines also be divided among the Centre, states, and private hospitals?

No. The Centre will allow the imported, fully ready-to-use vaccines to be entirely utilised in the other-than-Government of India channel. Thus, if and when a foreign pharma giant brings its vaccine to India, it will be free to directly sell the entire stock in the open market at a competitive price.

Will those who have received the first dose — and whose second dose is due — be prioritised?

Yes. The Centre said that the second dose of all existing priority groups, “wherever it has become due, would be given priority, for which a specific and focused strategy would be communicated to all stakeholders”.

Which other countries in the world have allowed open-market sale of vaccines?

None so far. The main reason is that the vaccines that are being used around the world have received only Emergency Use Authorisation (EUA) — none of them have presented enough evidence yet on their safety and effectiveness to receive full regulatory authorisation. Under normal circumstances, it might take 8-10 years to develop, test, and receive approval for a vaccine. But in this extraordinary pandemic scenario, the development, clinical trials, and approvals have been fast-tracked to ensure that people have a chance at escaping severe disease or death. *“No other country is doing this (open market sale) as yet, because all these vaccines are still under restricted or emergency use permissions and have not yet been fully licensed in their countries of origin, except, perhaps, in Russia,”* vaccine expert and Christian Medical College professor Dr Gagandeep Kang said. Given the public health priority of vaccinating a large segment of their populations, *several countries, including the US, UK, Japan, France, and China, are providing vaccines for free to citizens.*

Once an estimated 600 million new recipients become eligible on May 1, when and from where will the required stocks of vaccines be procured?

Some 130 million shots have been administered in India so far, and over 111 million people are yet to receive their second dose. Depending on how many people in the priority groups are still left to receive their second shot by the time May 1 comes around, the country could need over 1.2 billion doses of vaccines. Given the country’s current production capacity and the delay in bringing in foreign vaccines, supply will almost certainly fall short of demand. SII is going to prioritise doses of Covishield for India “at least” for the next two months, which means a potential supply of around 120 million to 140 million doses will be available for the country between May and June. However, the company is expecting to begin to deliver for the open market only from the third or fourth week of May. Sputnik V is expected to begin arriving in the country by the end of May. Dr Reddy’s Laboratories has an agreement to distribute 250 million doses of the Russian vaccine, but



it is unclear how many of these doses may become available to India. The company is still in discussions with the government over the price and number of doses required. It is unclear whether Bharat Biotech will be able to supply for the open market from May 1. If it does, the company could potentially supply an estimated 29 million doses across states over the whole month. The company has announced an expanded capacity of around 700 million doses per annum (around 58 million doses a month). It is also unclear how many doses J&J, which is planning to conduct bridging studies in the country, can supply to India. This process in itself may take a few months. Pfizer has said that it plans to only supply to the government, but it is not known when an agreement may be reached, and how many doses it can provide.

(COVID)TACKLING VACCINE HESITANCY

Vaccines are one of the most important public health tools we have to mitigate the impact of infectious diseases. While some vaccines prevent infections from gaining a foothold in our body, others reduce the severity of illnesses. Currently available COVID-19 vaccines belong to the second category: they are *disease modifying vaccines*. It's important to understand that *a vaccinated individual can contract SARS-CoV-2, and without getting noticeably ill, can pass it on to other susceptible individuals. That is why face masks should be worn even after one receives the COVID-19 vaccine.* While at individual and community levels, COVID-19 vaccines can save lives, replacement of non-COVID-19 healthcare services at government and private facilities due to rising demand for COVID-19 care can also be avoided through rapid vaccination drives. Yet, despite such direct and indirect benefits of COVID-19 vaccines, many are still hesitant to accept these life-saving scientific interventions. This phenomenon, *vaccine hesitancy, is defined by the World Health Organization as a reluctance or refusal to be vaccinated and is one of the top threats to global health.* It is a complex phenomenon for which there are no easy answers — hesitancy is often extremely localised to region and sociocultural contexts. This is not new. Reluctance to vaccinate has had detrimental impacts on public health in the past. *Hesitancy was observed in Britain around vaccination against whooping cough in the 1970s and 1980s, and against measles in 1990. Hesitancy around the HPV vaccine in Japan and tetanus toxoid in Kenya has also been recorded. In India, too, there was hesitancy during the polio vaccination campaign. But mothers of the polio-affected children acted as agents for social change and paved the way for India reaching polio-free status.* But today's digital age has given vaccine hesitancy new momentum. In this age of *surplus information, outbreaks of misinformation, spread through social and digital media channels,* have the potential to significantly impact public health. *India is particularly vulnerable to this challenge because we are increasingly moving towards consumption of news and information online and through social channels.* This kind of misinformation, when directed towards public health programmes such as immunisation, can adversely impact public trust, especially through an 'echo chamber' effect.

Some solutions

There cannot be a one-size-fits-all approach to vaccine hesitancy, but some things have worked in the past. Key among them is *building public trust through clear and transparent communication.* We need to equip ourselves as well as healthcare professionals and frontline workers with the information needed to counter misinformation. The messenger is also as important as the message. *Garnering the support of trusted local and community voices can build credibility and*



address region- and community-specific needs and remove hesitancy. Seeding positive messages proactively in the community and on social platforms and demonstrating positive behaviour change, instead of countering rumours once they circulate, have also been shown to combat hesitancy. Above all, we need to understand and address our community's concerns with empathy, because this is not just about the COVID-19 pandemic; it is about public trust in vaccines as a whole. Only when we as a community trust that vaccines work can we mobilise, protect those who cannot be vaccinated and take a giant step towards a healthier world.

SHARING THE BURDEN OF CARE

The resilience of national health services is characterised by their ability to respond appropriately to epidemics, pandemics and disasters. There has been a consistent failure in India to prevent the spread of the COVID-19 pandemic, which has resulted in the second wave. It is the responsibility of the state to first prevent the spread of a pandemic, failing which it needs to be extra vigilant in order to prevent every death from the disease. *It is unfortunate that people are dying not because of inadequate solutions (technology and knowledge) for dealing with the virus but due to inadequate access (economic, physical and others) to that knowledge and technology. This is serious injustice. A nation will face several challenges if it wants to improve an otherwise ailing health system: poor infrastructure, inadequate staff, and so on. How can we turn even the worst crisis into a sustainable opportunity?*

Two approaches

There are two possibilities that exist in strengthening curative care for COVID-19. The first is a reactive approach, which is what is carried out by most of the State governments. *This is done by transforming a few of the well-performing facilities at the tertiary level into state-of-the art COVID-19 hospitals. However, this comes at a cost: people are not be able to get their routine hospital services from these tertiary facilities. At the primary level, most of the facilities created were temporary structures. They were created by hiring buildings and open spaces as COVID-19 treatment centres providing only beds. This approach of providing beds without adequate infrastructure was extensively critiqued for its inability to cater to the needs of patients in real-time situations.* A slightly modified approach was to create first line treatment centres. Most of these facilities were a failure due to their inability to build trust among people as COVID-19 treatment centres. *Most of them were shut down when the cases went down. The second possibility, less tried out, is to equip the functional facilities of government health services at the secondary level and convert them into exclusive COVID-19 care centres. These could be used to treat those patients who don't need ICU support.* As the three-tier structure of health services in India envisages, a community health centre (CHC) can potentially become a fulcrum on which the entire health system can bank on, especially during a crisis. A CHC is supposed to cover a population of 80,000-1,00,000 in rural areas. A CHC is supposed to have 30 beds with at least four specialty services and is expected to function as a first referral unit for curative care services referred from primary health centres (PHCs). Sadly, several States have failed to develop this facility. Many CHCs are grossly underdeveloped. Over 5,000 CHCs exist in rural areas, and can they can add 50,000-75,000 beds if 10-15 beds are added in each. This facility can be strengthened to address COVID-19-specific treatment needs (primary and secondary) of the rural population, especially in States with an increasing case load and poor health infrastructure like Bihar, Uttar Pradesh and Chhattisgarh.



Feasible and sustainable solution

This can be a more feasible solution as specialists for this facility can be directed from district hospitals or medical colleges and the numbers can be managed for four-six CHCs under each district. *This can be a sustainable solution as already there is a certain level of trust and functionality built into these centres as treatment centres. They have the potential to become centres for sample collection and vaccine delivery too.* These CHCs can also easily be converted into independent standalone centres for COVID-19 treatment. *After the pandemic ends, they can be converted into normal secondary-level facilities that cater to other needs. This can substantially reduce the overload faced by tertiary facilities as more than the severity of the disease, it is inadequate access to timely treatment that results in several deaths. It is always possible to strengthen the PHCs nearby to cater to the needs of people for other curative care services.* For urban areas too, there is a need to develop peripheral hospitals at the secondary level within the government sector (100-150 bedded facility for every 3 lakh population), which can cater to the needs of the population during COVID-19 times. *Instead of placing 500 and 1,000 beds in playgrounds and parking lots, it is important to expand beds which are effectively integrated into the existing health services. Only then will infrastructure facilities be good enough to provide effective care. This can build trust among people and contribute to strengthening health services in the long term.*

EMERGENCY USE NOD FOR VIRAFIN

The Drug Controller General of India (DCGI) on Friday granted emergency use approval for pharma major Zydus Cadila's antiviral drug 'Virafin' to treat moderate COVID-19 in adults, company press release said. "A single dose subcutaneous regimen of the antiviral Virafin [a pegylated interferon alpha-2b (PegIFN)] will make the treatment more convenient for the patients. When administered early on during COVID, Virafin will help patients recover faster and avoid much of the complications. Virafin will be available on the prescription of a medical specialist for use in hospital/institutional setup," the release added.

Safety profile

The drug's safety profile is already well known as it is used in treating people with chronic hepatitis B and C. The drug has been repurposed for treating moderate COVID-19 disease. According to Dr. Sharvil Patel, Managing Director, Cadila Healthcare Limited, the therapy "significantly reduces viral load when given early on and can help in better disease management". In a multi-centre trial in 20-25 centres across India, the company found the drug reduced the need for supplemental oxygen. This clearly "indicates that the antiviral was able to control respiratory distress and failure which has been one of the major challenges in treating COVID-19", the company said. In the phase-3 trials, the drug was able to achieve "better clinical improvement in the patients suffering from COVID-19". A "higher proportion (91.15%) of patients administered the drug were RT-PCR negative by day seven as it ensures faster viral clearance". According to an April 5 company press release, the drug reduced the duration for supplemental oxygen to 56 hours from 84 hours in moderate COVID-19 patients.



CALLS GROW FOR U.S. TO HELP INDIA WITH SPARE VACCINES

As a second wave of the COVID-19 pandemic rages in India, calls are growing in the United States to send spare vaccine doses to New Delhi. White House Press Secretary Jen Psaki said Indian and U.S. officials were in touch about possible U.S. help to India at this time, but did not comment on whether the U.S. would send vaccines from its stockpiles. “Let me first say that the United States offers our deepest sympathy to the people of India who are clearly suffering during this global pandemic and we are working closely with Indian officials at both political and experts level to identify ways to help address the crisis,” Ms. Psaki said on Friday in response to a question on whether there are plans for the U.S. to send vaccines, such as from its AstraZeneca stockpile, to India. “So there are ongoing discussions. I don’t have anything more to preview but we are in touch with at a range of levels about how we can help them get through this period of time,” Ms. Psaki said. On the question of whether the U.S. was helping India with its oxygen shortage, Ms. Psaki said the U.S. had provided a “huge, significant” amount of health funding to India over time towards a range of supplies. “...But I will check if oxygen is specifically a part of how we can help at this point of time. There are ongoing discussions so maybe that’s part of the discussions now,” she said. Several lawmakers and health experts remarked on the current wave of the pandemic in India, asking for the U.S. to donate spare vaccines. *“India is reporting the world’s highest ever single-day COVID case rise. Earth Day is about the health of the planet and everyone and everything on it.* The U.S. has more than enough vaccine for every American, but we are denying countries like India desperately needed support,” U.S. Senator Ed Markey from Massachusetts tweeted on Thursday. *In March, the U.S. announced plans to release 4 million doses of the AstraZeneca vaccine to Canada and Mexico. A group of Senators, including former Democratic primary progressive candidates Bernie Sanders and Elizabeth Warren have written to President Joe Biden, asking the U.S. to support a request by India and South Africa for a temporary waiver of intellectual property rights at the World Trade Organization to facilitate the production of vaccines and therapeutics globally. On Thursday, State Department spokesperson Ned Price referred questions on export controls to the Office of the United States Trade Representative (USTR).* “You asked about intellectual property and certain controls. That was — is within the purview of USTR. What I will say broadly is that the United States first and foremost is engaged in an ambitious and effective and, so far, successful effort to vaccinate the American people,” he said.

CENTRE ALLOTS 5 KG OF GRAINS FREE TO POOR

The Union government on Friday announced that 5 kg of foodgrains would be provided to 80 crore beneficiaries under the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) in May and June as many States were undergoing curfews and the high rates of COVID-19 infections had led to a slowdown in economic activity. The announcement came as Prime Minister Narendra Modi held a meeting with the Chief Ministers, especially of the States with a high case burden. The outlay for the free grain programme has been pegged at ₹26,000 crore. Mr. Modi assured the States that all resources, including those of the Railways and the Indian Air Force, were being deployed to reach oxygen to different corners of the country. *He asked the States to strictly crack down on hoarding and black marketing of essential drugs and injections. He added that the Centre would be providing COVID-19 vaccines acquired by it to the States free, as earlier.*



Coordination teams

The meeting with the Chief Ministers, followed by Mr. Modi's meeting with oxygen manufacturers, the fourth such review of oxygen availability in the past week, assumes significance with daily newcases nearing the 3.5 lakh mark. According to a statement released after the meeting with the Chief Ministers, Mr. Modi called for a unified approach in dealing with resource scarcities, which he said were being addressed. He stated that it was through such an approach that India could tackle the first wave of COVID-19. The Prime Minister said the IAF was flying in empty tankers for oxygen to reduce turnaround time on supplies. The Railways had been roped in to run Oxygen Express trains. He urged the States fighting for scarce oxygen to set up coordination teams to allow free movement of tankers across the State borders. Tier 2 and tier 3 cities, which are now facing a rapid rise in cases, were highlighted as an area of concern. Mr. Modi also expressed grief at the accidents that had taken place in hospitals, adding that the staff had to be more aware of safety protocols. West Bengal Chief Minister Mamata Banerjee, going head-to-head with the BJP in the Assembly election, did not attend the meeting.

Same rates for jabs

Chhattisgarh Chief Minister Bhupesh Baghel made a strong demand that vaccines be provided at the same rates for both the Centre and the States. The Serum Institute of India has announced that it would be providing the Covishield vaccine, which it currently sells at ₹150-₹200 a dose to the Centre, at ₹400 per dose to the State governments and ₹600 a dose to private entities. "Please provide an action plan for vaccine availability to the States for running vaccination drive for those above 18 years of age from May 1," Mr. Baghel said at the meeting.

DreamIAS



BUSINESS & ECONOMICS

WHY INDIA'S OIL AND GAS PRODUCTION IS FALLING

India's crude oil production fell by 5.2 per cent and natural gas production by 8.1 per cent in the FY21 as producers extracted 30,491.7 Thousand Metric Tonnes (TMT) of crude oil and 28670.6 Million Metric Standard Cubic Metres (MMSCM) of natural gas in the fiscal. While Covid-19 related delays are among the key reasons cited by producers behind lower production, India's crude oil and natural gas production have been falling consistently since 2011-12.

Why is India's crude oil and natural gas production falling?

Experts have noted that most of India's crude oil and natural gas production comes from ageing wells that have become less productive over time. An industry source, who did not wish to be named, noted that "there was no more easy oil and gas" available in India and that producers would have to invest in extracting oil and gas using technologically intensive means from more difficult fields such as ultra-deepwater fields. *Crude oil production in India is dominated by two major state-owned exploration and production companies, ONGC and Oil India.* These companies are the key bidders for hydrocarbon blocks in auctions and *were the only successful bidders in the fifth and latest round of auctions under the Open Acreage Licensing Policy (OALP) regime with ONGC bagging seven of the eleven oil and gas blocks on offer and Oil India acquiring rights for the other four.* Experts noted that interest from foreign payers in oil and gas exploration in India had been low. The government has asked ONGC to boost its investments in explorations and increase tie-ups with foreign players to provide technological support in extracting oil and gas from difficult oil and gas fields, a senior government official told The Indian Express.

Why is there a lack of private participation?

One of the key reasons cited by experts for low private participation in India's upstream oil and gas sector are delays in the operationalisation of hydrocarbon blocks due to delays in major clearances including environmental clearances and approval by the regulator of field development plans. The government official quoted above said the government was reaching out to major foreign players to convey that the current system of auction and regulation was much more "open and transparent" than before. Oil Secretary Tarun Kapur had recently noted that the government may consider providing fiscal incentives to attract foreign players to India's upstream sector. Industry players have been calling for a reduction in the cess on domestically produced crude oil to 10 per cent from the current 20 per cent. A government official noted that *internal maximum production levels set by oil and gas majors to address climate change had also lowered interest by oil majors to expand operations in India.*

What is the impact of low oil and gas production?

Low domestic production of crude oil and natural gas makes India more reliant on imports. *The share of imports as a proportion of overall crude oil consumption in India has risen from 81.8 per cent in FY2012 to 87.6 per cent in FY2020. Boosting oil and gas production has also been a key part of the government's Aatmanirbhar Bharat initiative and its goal to boost the use of natural gas in India's primary energy mix from the current 6.2 per cent to 15 per cent by 2030.*



EXIT WINDOW LIKELY FOR CRYPTO HOLDERS, OLD TRANSACTIONS TO BE UNDER SCANNER

The proposed legislation on cryptocurrencies which is likely to ban digital currencies — except the one being mooted by the Reserve Bank of India (RBI) — is expected to provide an exit window to the existing crypto holders of private entities. According to an official source, the proposed law will be prospective, even though declarations of holdings and transactions may be sought retrospectively. “The government is expected to provide an exit window to existing crypto holders in the event of an outright ban,” said a government official. Indians are believed to hold around US \$ 1.5 billion (around Rs 10,000 crore) in cryptocurrencies, according to unofficial estimates. *An option to provide an exit period to 3-6 months prior to banning the trading, mining and issuing of cryptos has been discussed in inter-ministerial discussions.* A final draft of the bill is yet to be taken to Cabinet,” a source said. On the other hand, the RBI has indicated that it’s “very much in the game” and is getting ready to launch its own digital currency. “Central bank digital currency is a work in progress. The RBI team is working on it, technology side and procedural side... how it will be launched and rolled out,” RBI Governor Shaktikanta Das had said recently. The proposed legislation on cryptocurrencies has been held up as the government continues discussions and tries to weave in stakeholders’ views in the future law.

Sources indicated that the government is open to back a central bank-backed digital currency, an idea mooted by the Reserve Bank of India. The government and the RBI also seem to be in consensus on the issue that private cryptocurrencies may do more harm than good to the financial system and the currency holders. “A fiat currency cannot have the kind of volatility and fluctuations you seen in Bitcoins and other cryptocurrencies. But at the same time, we have an open mind. We are very open to a digital currency, the RBI is working on that,” the official said. *The Cryptocurrency and Regulation of Official Digital Currency Bill, 2021, which aims to prohibit all private cryptocurrencies and lays the regulatory framework for the launch of an “official digital currency” was set to be introduced in Parliament during the Budget session, but was not taken up.* A high-powered inter-ministerial committee has also previously recommended the banning of all private cryptocurrencies. *According to new company rules notified in March, corporates should disclose any profit or loss on transactions involving cryptocurrency, cryptocurrency holdings, and any deposits or advances received from anyone for the purpose of investing in cryptocurrencies in statutory filings to the Registrar of Companies. In April 2018, the RBI banned banks and other regulated entities from supporting crypto transactions after digital currencies were used for frauds. In March 2020, the Supreme Court struck down the RBI’s ban on crypto, terming its circular unconstitutional. One of the SC’s reasons for overturning the ban is that cryptocurrencies are unregulated but not illegal in India.* The RBI had said *central banks are not only exploring DLT (Distributed Ledger Technology) for its application in improving financial market infrastructure but also considering it as a potential technological solution in implementing central bank digital currency (CBDC).* Results from a recent survey of central banks conducted by Bank for International Settlements, concluded that some 80 per cent of the 66 responding central banks have started projects to explore the use of central bank-issued digital currency (CBDC) in some form. These central banks are contemplating and studying the potential benefits and implications of CBDC in the economy. The People’s Bank of China (PBoC) established the Digital Currency Research Institute to study and undertake research in digital currency and explore technologies through which a central bank digital currency could be implemented. *DLT and blockchain have*

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been explored extensively by the PBoC as a possible technology for launching CBDC. Apart from CBDC, PBoC is supporting research on using blockchain for trade finance, especially after the support from the President of China for the blockchain technology, as an important breakthrough for innovations.

Monark Modi, founder and CEO of Bitex, a digital asset and cryptocurrency exchange, said, "Since mid-February, Bitcoin has witnessed a phase of drops and consolidation and crossed an all-time high of \$61K, reflecting a larger trend with Bitcoin's price rising more than 10-fold over the last year. While the current price rise can be attributed to the increased institutional exposure to Bitcoin and global progress in fostering a friendlier legislative environment for cryptocurrencies, it is also the net effect of a large supply reduction coupled with increasing demand. If we closely watch the indicators, Bitcoin has the potential to hit \$100K by the year's end." "I really hope that the speculations around a ban on cryptocurrency in India will soon be over and that the government will take notice of the growing demand for Bitcoins among investors closer home," Modi said. *Currently, there are more than 2,000 cryptocurrencies listed on major cryptocurrency exchanges, and numerous start-ups on blockchain across the world.* Blockchain gained its popularity from Bitcoin, a cryptocurrency. Since it was infringing the domain of the central bank, which is the sole issuer of currency in an economy, by offering an alternative form of private currency, central banks across the world began to monitor the risks posed by cryptocurrencies. However, while monitoring these developments, central banks exhibited an optimism and interest in blockchain-based applications apart from cryptocurrencies. Following Bitcoin, there have been various start-ups dealing with cryptocurrency in India such as Unocoin in 2013 and Zebpay in 2014 (Tracxn, 2019). However, the volatility in Bitcoin prices and the instances of frauds have brought to the fore regulatory concerns over the risks of cryptocurrencies, the RBI says. *Both the Government and the RBI have indicated that they have not authorised or issued regulation for any entity to deal with cryptocurrencies and, hence, individuals have no legal protection in dealing with cryptocurrencies and would bear all the risks associated with it.* In fact, the RBI issued several press releases (Dec 24, 2013, Feb 01, 2017, Dec 05, 2017) warning against dealing in cryptocurrencies. Sumit Gupta, co-founder and CEO, CoinDCX, said: "The plunge in the world's biggest cryptocurrency comes after some *unsubstantiated rumours that the US Treasury may crackdown against money laundering taking place through digital assets*, however we believe this is a temporary phase and prices will recover soon as the Treasury has already refuted the rumours." "Another probable reason could also be the *massive power outage in China's Xinjiang region*, which is one of the largest mining pools which may have prompted the sell-off. However what needs to be noticed is that despite the sudden sell-off Bitcoin has still accounted for a trading volume of \$101.27 bn in the past 24 hours with the market cap still above \$1.06 trillion which clearly showcases investor confidence and Bitcoin's mainstream acceptance as an asset class," he said.

FUNDRAISING VIA BONDS JUMPED 14% IN FY21

Listed firms mopped up ₹7.72 lakh crore through issuance of bonds on private placement basis in 2020-21, an increase of 14% from the preceding fiscal, supported by low interest rate and surplus liquidity in the system. This also marks the highest level of fund raising through such a route in a financial year. Going forward, sustainability of growth trend mainly depends on the trajectory of cost of funds and incremental liquidity in the system, Binod Modi, head-strategy, Reliance Securities, said. *According to data available with markets regulator SEBI, companies listed on the BSE and NSE garnered a total of ₹7.72 lakh crore through issuance of bonds in the just concluded financial year, much higher than ₹6.75 lakh crore raised in 2019-20.* However, Mr. Modi is of the

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



view that cost of funds is unlikely to remain as low as witnessed in the last two years and therefore, any noticeable growth in fund raising through debt private placement does not look to be on the cards in FY22.

SBI TRIMS GDP OUTLOOK ON COVID WAVE

State Bank of India has trimmed its projection for the economy's performance in 2021-22 to 10.4% real GDP growth and 14.3% nominal GDP growth, from 11% and 15%, respectively, citing the second wave of COVID-19 and the spate of ongoing partial and weekend lockdowns in almost all States.

Economists at the country's largest bank expect the second wave to peak in the third week of May, and pointed out that in the first wave Uttar Pradesh and Maharashtra had peaked before the country as a whole did. "Now new cases in Maharashtra seem to be stabilising but share of cases in total of various other States such as Chhattisgarh, Madhya Pradesh, Gujarat has increased and these are showing increase in daily new cases," the bank's research team observed. "So if other States also implement strict actions to control their spread, the national peak may come within two weeks after the Maharashtra peak," the SBI research team estimated. April's lockdowns had already cost this year's GDP by 0.7%, SBI reckoned, with total losses estimated at ₹1.5 lakh crore as economic activity hit a five-month low as per the bank's estimates. Maharashtra, Madhya Pradesh and Rajasthan account for 80% of these losses, with the worst-affected western State alone accounting for 54% of the economic cost.

'Most industrialised'

Calling for a sharp ramp up in vaccinations in order to thwart any further waves, SBI's economics research team said in a report on Friday that Maharashtra had suffered an estimated ₹82,000 crore loss already which would 'definitely increase if restrictions are further tightened'. "Being the economically biggest and most industrialised State in India, this lockdown will have huge impact on growth," the researchers said, adding that reverse migration of labour was continuing unabated. "For the first 12 days of April, almost 4.32 lakh people returned to U.P., West Bengal, Bihar, Assam and Odisha from Maharashtra," SBI's group chief economic advisor Soumya Kanti Ghosh wrote, citing data from the Western Railways. Another 4.7 lakh workers were estimated to have left for northern and eastern States, taking total migration out of Maharashtra in the period to more than 9 lakh. "SBI business activity index shows a decline in activity with a latest reading of 86.3 for the week ending April 19. This is the lowest in 5 months," the team wrote.

PLI SCHEME FOR ACS, LED LIGHTS TO EXCLUDE 'MERE ASSEMBLY'

The department for promotion of industry and internal trade (DPIIT) has notified the PLI scheme for ACs and LED lights and said that selection of companies to avail the incentives would be done to support manufacturing of components which are not made in India presently. It said that mere assembly of finished goods would not be incentivised and companies investing in basic/core components would get a higher priority. Earlier this month, the government approved a production linked incentive (PLI) scheme for white goods — Air Conditioners (ACs) and LED lights — with an outlay of ₹6,238 crore. It will be implemented over 2021-22 to 2028-29. According to the notification, the Empowered Group of Secretaries chaired by Cabinet Secretary will monitor the PLI scheme, undertake periodic review of the outgo under the scheme, ensure uniformity of all



PLIs and take appropriate action to ensure that the expenditure is within the prescribed outlay. DPIIT said that *the incentive per beneficiary will be applicable on incremental sales (net of taxes) of manufactured goods (as distinct from traded goods) over the base year (2019-20) subject to ceilings.*

RBI EXTENDS STATES' WAYS AND MEANS CREDIT TO SEPT.

The Reserve Bank of India (RBI) decided to continue with the existing interim Ways and Means Advances (WMA) scheme limit of ₹51,560 crore for all States/ UTs shall for six months i.e., up to September 30, given the prevalence of COVID-19. Based on the recommendations of the Advisory Committee on WMA to State Governments, 2021 (chaired by Sudhir Shrivastava) the RBI had revised the WMA Scheme of States and Union Territories (UTs), it said. The WMA limit arrived at by the Committee based on total expenditure of States/ UTs, works out to ₹47,010 crore. The RBI said it would review the WMA limit thereafter, depending on the course of the pandemic and its impact on the economy. The Special Drawing Facility availed by State Governments/ UTs shall continue to be linked to the quantum of their investments in marketable securities issued by the Government of India, including the Auction Treasury Bills, it said.

RBI SETS UP COMMITTEE TO REVIEW WORKING OF ARCS

The RBI on Monday set up a committee to undertake a comprehensive review of the working of asset reconstruction companies (ARCs) in the financial sector ecosystem and recommend suitable measures for enabling them to meet the growing requirements. The six-member committee will be headed by Sudarshan Sen, former executive director, Reserve Bank of India (RBI). As per the terms of reference of the committee, the panel will review the existing legal and regulatory framework applicable to ARCs and recommend measures to improve efficacy of ARCs. It will also review the role of ARCs in the resolution of stressed assets, including under the Insolvency and Bankruptcy Code (IBC), and give suggestions for improving liquidity in and trading of security receipts. Besides, it has also been asked to review the business models of ARCs. "The committee will submit its report within three months from the date of its first meeting," the central bank said in a statement.

IRDAI ASKS INSURERS TO REPORT ERRANT HOSPITALS

The Insurance Regulatory and Development Authority of India (IRDAI) has advised insurers to report hospitals levying excess charges or denying cashless facility to the State governments for appropriate action. Citing reports, including those of some hospitals charging differential rates, the regulator on Friday asked health insurance providers to ensure policyholders are charged as per rates agreed upon by the network providers (hospitals). They should also ensure hospitals do not levy any additional charges for the same treatment other than that agreed upon. "Charging differential rates, demanding advance deposits and denying cashless treatment is not only detrimental to the interest of policyholders, but may also [be] violative of the service level agreement (SLA) between the service provider hospitals and the insurance companies," the regulator said in a press release. The latest advisory follows a similar note issued by the industry regulator on Thursday after Union Finance Minister Nirmala Sitharaman tweeted that she had spoken to the IRDAI chairman following reports of some hospitals denying cashless insurance.



LIFE & SCIENCE

NASA MARS HELICOPTER MAKES FIRST FLIGHT ON ANOTHER PLANET

NASA successfully flew its tiny helicopter Ingenuity on Mars early on Monday, the first powered flight on another planet and a feat a top engineer called "our Wright brothers' moment." At 3:34 a.m. Eastern Time (0734 GMT), the 1.8 kg rotorcraft lifted off, hovered 10 feet above the Martian surface, then came back to rest after 39.1 seconds. Data and images from the autonomous flight were transmitted 278 million km back to Earth where they were received by NASA's array of ground antennas and processed more than three hours later. Engineers were tensely watching their screens at the *Jet Propulsion Laboratory in California*, where the mission had been designed and planned for the past six years. They broke into applause as one of them read off a checklist of tasks *Ingenuity* had achieved and concluded: *"Ingenuity has performed its first flight — the first flight of a powered aircraft on another planet."* Ingenuity quickly sent back a black-and-white image from *its downward pointing navigation camera, showing its bug-like shadow cast on the surface. Then came a choppy colour video from the Perseverance rover showing Ingenuity on the ground, in flight.* "We've been talking so long about our Wright brothers' moment on Mars, and here it is," said lead engineer MiMi Aung. *The first powered flight on Earth was achieved by the Wright brothers in 1903 in North Carolina. A piece of fabric from that plane has been tucked inside Ingenuity in honour of that feat. NASA had originally planned the flight for April 11 but postponed it over a software issue that was identified during a planned high-speed test of the aircraft's rotors. The issue was resolved with a software update and tweak in coding.*

Like the first flight of an airplane by Wilbur and Orville Wright in 1903, the flight did not go far or last long, but it showed what could be done. Flying in the thin atmosphere of Mars was a particularly tricky technical endeavor, on the edge of impossible because there is almost no air to push against. *NASA engineers employed ultralight materials, fast-spinning blades and high-powered computer processing to get Ingenuity off the ground and keep it from veering off and crashing.* And just as the Wright plane led to a transformation in how people and goods zip around Earth, Ingenuity offers a new mode of transportation that NASA can now use as it studies the solar system's mysteries. Future robotic explorers, with this technology under the agency's belt may take new, unconventional shapes. "What the ingenuity team has done," said Michael Watkins, the director of NASA's Jet Propulsion Laboratory where the helicopter was built, during a news conference, *"is given us the third dimension. They freed us from the surface now and forever in planetary exploration."* Ingenuity was also something different for NASA — a high-risk, high-reward project with a modest price tag where failure was an acceptable outcome. That approach is more similar to that of nimble space companies like SpaceX than large traditional development programs that work through every possible contingency to build a full-scale machine that has to work the first time. Ingenuity was thus a small experiment tacked onto NASA's Mars rover, Perseverance but it has the potential for a paradigm-breaking advance. *Perhaps a more advanced helicopter could serve as a scout for a future rover, identifying intriguing locations for closer study and safe routes for the rover to drive there.* Or swarms of helicopters could zip up and down cliff faces to examine layers of rock that are too far away or out of view of current spacecraft. There are no current plans to put a second helicopter on Mars. But Bob Balaram, the chief engineer of Ingenuity, said he and colleagues had begun sketching out designs for a larger Mars helicopter



with about 10 times the mass and capable of carrying some 10 pounds of science equipment. “That would be, I think, the good sweet spot for the next-generation design,” Dr. Balaram said. On Sunday, *mission controllers at NASA’s Jet Propulsion Laboratory in California radioed the commands for the test to Perseverance, which landed on Mars in February. Perseverance in turn relayed the commands to Ingenuity, which was sitting 200 feet away on flat terrain that was chosen to serve as the airstrip for a series of five test flights. At 3:34 a.m. Eastern time — it was the middle of the Martian day, half an hour past noon, the helicopter spun up its rotors as it had been commanded and rose above Jezero crater, into the Martian sky. At the surface of Mars, the atmosphere is just 1/100th as dense as Earth’s, not much for helicopter blades to push against.* Thus, to generate enough lift for the four-pound Ingenuity to rise up, *its two rotors, each about four feet wide, had to spin in opposite directions at more than 2,500 revolutions a minute.* It hovered at a height of some 10 feet for about 30 seconds. Then it descended back to the surface. But at that moment, no one on Earth — including people at NASA — knew what was actually happening. The two spacecraft were not in communication with Earth during the test, and Ingenuity had to perform all of its actions autonomously. *It was only three hours later that one of NASA’s other Mars spacecraft, the Mars Reconnaissance Orbiter, passed overhead, and Perseverance could relay the test data back to Earth. Minutes later, engineers analysed the results that showed a successful flight.* Havard Grip, the engineer who serves as NASA’s chief pilot for Ingenuity, announced as the data arrived that the helicopter had completed “the first powered flight of a powered aircraft on another planet.” *NASA officials said they have named the airstrip where Ingenuity took off and landed Wright Brothers Field. A small piece of fabric from the original Wright airplane was glued to Ingenuity and sent to Mars.* Ms. Aung told her team to celebrate the moment, “and then after that, let’s get back to work and more flights,” she said. *With the first trip’s success, up to four more flights could be attempted. The first three, including Monday’s, are designed to test basic abilities of the helicopter. The second, which could occur as soon as Thursday, is to rise to an altitude of 16 feet and then travel horizontally about 50 feet before returning to its original location. The third flight could fly a distance of 160 feet and then return. Mr. Grip said the team had not decided on plans for the final two flights.* “What we’re talking about here is going higher, going further, going faster, stretching the capabilities of the helicopter in those ways,” he said. Ms. Aung said she thought Ingenuity would squeeze in the remaining four flights over the next two weeks. She also wanted to push Ingenuity to its limits and for the last flight to travel 600 or 700 meters — or up to 2,300 feet. “I’m being more cautious here,” Dr. Grip responded, a bit hesitantly. *NASA plans to wrap up the tests within 30 Martian days of when Ingenuity was dropped off on April 3 so that Perseverance can commence the main portion of its \$2.7 billion mission.* Ingenuity was an \$85 million nice-to-have, add-on project, but not a core requirement for the success of Perseverance. The looser requirements of a technology demonstration allowed the engineers to use an almost off-the-shelf Qualcomm processor that was originally developed for cellphones with more computing power than all previous interplanetary spacecraft combined. The processor, which was not adapted for the harsh conditions of space, was more susceptible to disruptions of radiation, but the helicopter needed all of that number-crunching speed to maintain steady flight. The little machine, which travelled to Mars tucked on the underside of Perseverance, has also captured the imaginations of many.

Once the demonstrations are over, Perseverance will leave the helicopter behind and head toward a river delta along the rim of Jezero crater where sediments, and perhaps chemical hints of ancient life, are preserved. Scientists and engineers are getting their instruments on Perseverance ready to start collecting data. That includes a laser that has begun vaporizing nearby rocks and soil to



analyze their chemical composition and an experiment that is designed to break apart carbon dioxide to generate oxygen. *That technology will be key for providing astronauts air to breathe when they eventually step foot on Mars.* In addition to Perseverance, two other new visitors also arrived at the red planet from Earth this year. *China's Tianwen-1 probe entered orbit in February. As early as late May, it will release a lander and rover that will try to reach the surface of the red planet. If it succeeds, it will be China's first successful touchdown on another planet — it has landed on the moon three times already. The United Arab Emirates's Hope probe also arrived at Mars two months ago. After a firing of its thrusters on March 29, it has entered into an orbit where it can begin a close study of the planet's atmosphere and weather.* That phase of scientific research was scheduled to begin last Wednesday.

Tech demonstration

Ingenuity travelled to Mars attached to the underside of Perseverance, which touched down on the planet on February 18 on a mission to search for signs of extraterrestrial life. Ingenuity's goal, by contrast, is to demonstrate its technology works, and it won't contribute to Perseverance's science goals.

RUSSIA SAYS IT WILL LAUNCH OWN SPACE STATION IN 2025

Russia's space agency said on Tuesday it hoped to launch its own orbital station in 2025 as Moscow considers withdrawing from the International Space Station programme to go it alone. Roscosmos chief Dmitry Rogozin said work had begun on the first module of a new station, after officials warned that Russia was considering pulling out of the ISS, one of the few successful examples of cooperation with the West. The announcement came with tensions soaring with the West. Launched in 1998 and involving Russia, the United States, Canada, Japan, and the European Space Agency, the ISS is one of the most ambitious international collaborations in human history. Russia's Deputy Prime Minister Yury Borisov said in recent days that Moscow was considering whether to leave the ISS programme from 2025 because of the station's age. Roscosmos said on Monday that a decision on quitting the ISS had not yet been made. Russia lost its monopoly for manned flights to the ISS last year after the first successful mission of U.S. company Space X. Despite its much-lauded history — Russia this month marked the 60th anniversary of Yuri Gagarin becoming the first person in orbit — the country's space programme has struggled in recent years. Analysts say Mr. Putin is more interested in military technology than space exploration.

ARIES FACILITY WILL HOST THE SUPPORT CENTRE FOR ADITYA-L1

The Indian programme to study the Sun and the region between the Sun and the Earth from space – Aditya-L1 – is due to be launched next year. It will carry seven payloads which have been developed by various institutions across the country. Once the mission is launched, there will be a need for a ground support centre to monitor and coordinate the work on its various payloads. *This role will be played by the ARIES facility (short for Aryabhata Research Institute for observational Sciences) which is situated near Nainital.* In January 2021, an agreement was signed to this effect based on the proposal submitted by the ARIES team, led by Dipankar Banerjee, Director of ARIES, who is a solar physicist and co-chair of the science working group of the Aditya-L1 mission. *With about*



four to five personnel, this centre will come up at Haldawani, where ARIES is setting up a data centre also.

Guest users

Researchers who may not even be associated with core Aditya-L1 team will be able to book a specific payload to conduct observations for a particular time. Any PhD student or postdoctoral fellow in a research institution can submit observing proposals through the online proposal submission system. “The main aim of this centre is to let every researcher in India perform analysis over scientific data obtained from Aditya-L1. The total number of guest users will be from a few tens to a few hundreds,” says Prof. Banerjee. A time allocation committee comprising senior and expert scientists will evaluate proposals based on their merit and feasibility to decide the priority. “We are open to users outside India by giving hand-outs of data analysis during international meetings and online training in the later phase of the mission,” he adds.

Studying lower corona

The Aditya-L1 Support Centre (ASC) will provide training through regular workshops for the guest users. Apart from this, it will provide ready-to-use Python and Java apps for the satellite data and demos and handouts to facilitate the guest users. *An ARIES team has recently developed an algorithm to study the accelerating solar eruptions in the lower corona called CMEs Identification in Inner Solar Corona (in short, CIISCO), where CME stands for coronal mass ejection. Prof. Banerjee explains how this will be put to use: “The centre will also provide source code for advanced data analysis. For example, it will provide the source code for CIISCO that we have developed in ARIES to detect accelerating CMEs in the solar atmosphere.” The group has also developed several advanced image processing algorithms to detect fine-scale structures in the solar atmosphere. Such techniques are important to capture dynamics at different spatial and temporal scales.*

“This centre will expand the visibility of Aditya-L1 beyond India at the international level. Also, it will expand its reach within India. It will allow every interested individual to be able to perform scientific analysis of the data,”

SAVE AS PDF

Charles Geschke, co-founder of Adobe who has died at 81. Yet, like other pioneers of the tech age, his work has had so profound an impact that it has altered the global lexicon. Today, as governments — including those in India — usher in “digital revolutions”, they owe a debt of gratitude to Geschke, and the others who are responsible for *tech innovations like the PDF format.* Almost every “true copy” for a less cumbersome passport renewal experience, every contract completed online relies on the format. Court verdicts and government notifications are freely available because text — readable but not easily editable — is no longer behind a web of bureaucracy. And computers and apps can bring a leader’s voice — bias and all — to even the most basic smartphone thanks to the Flash player. Essentially, *a PDF allowed a printout without paper, documents — even images — that can be shared as they are. Like most things that work well, PDFs and the Flash player have now seamlessly integrated into digital interactions.* The PDF — Portable Document Format — in particular is so ubiquitous that its meaning is in the abbreviation. As with the printing press before it, the democratisation of data, even knowledge, has facilitated



plagiarism, piracy and copyright infringement. But these are the failings of human beings, and there is no encryption sophisticated enough to guard against that. Meanwhile, every time a CV is shared, a .doc “saved as” PDF, Geschke can know he was part of writing the dictionary of the world we now inhabit.

COPYRIGHT WAR

On April 5, the U.S. Supreme Court ruled in favour of Alphabet Inc.'s Google in a case where it was accused by Oracle of violating the country's copyright law. The case, dubbed “the copyright case of the century”, began with Oracle's charge in the San Francisco federal district court in 2010 that Google's Android platform infringed upon its copyright in a platform called Java SE. In the process of finally being decided by the U.S. Supreme Court in a 6-2 verdict, this case made its journey through a federal district court and an appellate court twice.

What is the background of the case?

Oracle's lawsuit came shortly after it acquired Sun Microsystems, which had developed the Java language. Consequently, it came to own the copyright in Java SE (standard edition), a platform that programmers use to build programs that work on any personal computer. Oracle's charge was that Google copied a part of this platform's program while developing the Android platform for programmers.

What did the courts find?

The courts found that Google did negotiate with Sun Microsystems, prior to it being bought by Oracle, to license the use of the Java platform in Android. But negotiations fell through. Eventually, as the Supreme Court noted, it created the Android platform software using the services of about 100 engineers who worked for more than three years. But Google also wanted the millions of Java programmers around the world to be able to work with Android seamlessly. As Justice Stephen Breyer wrote in the majority opinion, “It also copied roughly 11,500 lines of code from the Java SE program.”

What were the legal questions that the Supreme Court had to weigh in on?

*Prior to Google bringing the case to the Supreme Court, the Federal Circuit, an appeals court, had ruled in Oracle's favour. The lower courts had focused on two major questions, something that the Supreme Court had to review. The first was whether Oracle could copyright the part of the code that Google copied, and the second was whether the copying constituted fair use, if the answer to the first was in the affirmative. In ruling in Oracle's favour, the Federal Circuit had held that the portion of the copied code is copyrightable and that Google's act did not constitute fair use. The Supreme Court decided to sidestep the first question, saying, “In reviewing that decision, we assume, for argument's sake, that the material was copyrightable.” The question of the copyrightability of the code remains significant also because the lower courts gave different judgments on it. But the Supreme Court decided the second question in Google's favour, saying that *its copying of a part of the code constituted fair use, and therefore it did not violate the copyright law.**



What is fair use?

According to the U.S. Copyright Office, “Fair use is a legal doctrine that promotes freedom of expression by *permitting the unlicensed use of copyright-protected works in certain circumstances.*” So, activities such as “*criticism, comment, news reporting, teaching, scholarship, and research*” may qualify under fair use. In other words, these activities can be exempt from copyright infringement charges.

How did the court decide that Google’s action came under the ambit of fair use?

Section 107 of the U.S. copyright law provides a framework to judge fair use. It contains four factors, in the following order — *the purpose of the use, the nature of the copyrighted work, the substantiality of the portion used in relation to the whole work, and the effect of the usage upon the potential market.* The court decided to start with the second factor, the nature of the copyrighted work. What worked in Google’s favour was that the court made a distinction between a code “that actually instructs a computer to execute a task” and the code that Google copied, which were the lines of an API (application programming interface), which “allows programmers to call upon prewritten computing tasks for use in their own programs”.

The Supreme Court said Google’s copying was transformative, as it “copied only what was needed to allow programmers to work in a different computing environment” (which is Android) using a familiar programming language (Java).

What is the implication of this ruling?

There is a view that the software industry is *relieved that the Supreme Court differentiated between the type of code Google copied, i.e., software interface, and other creative codes.* Digital rights group Electronic Frontier Foundation said, “This decision *gives more legal certainty to software developers’ common practice of using, re-using, and re-implementing software interfaces written by others, a custom that underlies most of the internet and personal computing technologies we use every day.*”

BAT WITH STICKY DISCS FOUND IN MEGHALAYA

Meghalaya has yielded India’s first bamboo-dwelling bat with sticky discs, taking the species count of the flying mammal in the country to 130. The disc-footed bat (Eudiscopus denticulus) was recorded in the northeastern State’s Lailad area near the Nongkhylllem Wildlife Sanctuary, about 1,000 km west of its nearest known habitat in Myanmar. A team of scientists from the Zoological Survey of India (ZSI) and a few European natural history museums stumbled upon this “very specialised” small bat with “disc-like pads in the thumb and bright orange colouration” while sampling in a bamboo patch almost a year ago.

The newly recorded bat was presumed to be a bamboo-dwelling species, but its flattened skull and adhesive pads helped in identifying it as the disc-footed known from specific localities in southern China, Vietnam, Thailand and Myanmar. Dr. Saikia and his colleagues found that the flattened skull and sticky pads enabled the bats to roost inside cramped spaces, clinging to smooth surfaces such as bamboo internodes. The disc-footed bat was also found to be genetically very different from all other known bats bearing disc-like pads. Scientists analysed the very high



frequency echolocation calls of the disc-footed bat, which was suitable for orientation in a cluttered environment such as inside bamboo groves. *The disc-footed bat has raised Meghalaya's bat count to 66, the most for any State in India.* It has also helped add a genus and species to the bat fauna of India, the ZSI scientists said.

THE STORY OF 220-MILLION-YEAR-OLD RAT-LIKE CREATURES VIA MICROFOSSILS

The Tiki Formation in Madhya Pradesh, a treasure trove of vertebrate fossils, has now yielded a new species and two genera of cynodonts, small rat-like animals that lived about 220 million years ago. The researchers from the Indian Institute of Technology Kharagpur, used scanning electron microscopy to study about 10 teeth samples collected from the *village of Tihki in Shahdol District, Madhya Pradesh.*

Teeth trail

The teeth were studied for size, crown shape, structure of the cusps and compared with previously reported cynodonts. The results showed that they had found a new species, and they named it *Rewaconodon indicus*, indicating India, the country it was discovered from. The team also identified two new genera from the area. The first was named *Inditherium floris*, after India and the Latin word therium meaning beast. As the teeth had a flower-shaped crown, it earned the species name floris. The second was named *Tikiodon cromptoni*, after Tiki Formation and Greek word odon meaning tooth. The species name is after paleontologist A.W. Crompton.

WARMTH AND CHANGE

Bearded dragon embryos can use two different sets of genes to become a female lizard — one activated by the sex chromosomes and the other activated by high temperatures during development (PLOS Genetics). This so-called *temperature-dependent sex determination was discovered in the 1960s. Now, for the first time the molecular details of how it happens have been found by scientists from the University of Canberra.* It is known that *male bearded dragons have ZZ sex chromosomes, while females have ZW sex chromosomes.* However, hot temperatures can override the ZZ sex chromosomes, causing a male lizard to develop as a female. The researchers discovered that, initially, different sets of developmental genes are active in the two types of females, but that ultimately the pathways converge to produce ovaries, according to a release. The findings support recent research proposing that ancient signalling processes inside the cell help translate high temperatures into a sex reversal. *This study is the first to show there are two ways to produce an ovary in the bearded dragon, revealing partially how temperature determines sex.*

CAN NITRIC OXIDE FIGHT CORONAVIRUS? A NASAL SPRAY, AND EVIDENCE SO FAR

Till date, there is still no specific drug for controlling Covid-19. While scientists worldwide are working on effective antiviral drugs against SARS-CoV2, some are looking beyond drugs. For example, *a multinational collaboration has recently announced results of phase 2 clinical trials indicating that a nitric oxide nasal spray can be an effective viral treatment.* It is not, however, the first time nitric oxide has been studied as a therapy for infection or other illnesses.



What is this therapy?

Nitric oxide is known to have a broad antimicrobial effect against bacteria, fungi, helminths, protozoa and viruses. To assess the potential of NO as a treatment for SARS-CoV-2 infection, researchers evaluated its vitro antiviral effect on SARS-CoV-2 replication and published their findings in September 2020. Prof Ake Lundkvist of Uppsala University, Sweden, one of the authors of the paper, has said, "To our knowledge, nitric oxide is the only substance shown so far to have a direct effect on SARS-CoV-2".

And what is this spray?

It has been developed by a Vancouver-based biotech firm, SaNOTize Research and Development Corporations, along with St Peter's hospitals, NHS Foundation Trust in Surrey, and Berkshire and Surrey Pathology Services. "The spray releases a small, topical amount of nitric oxide that is well known to kill viruses including SARS-CoV-2. *It is non-specific and thus kills any virus,*" said Dr Gilly Regev, CEO and co-founder of SaNOTize.

What were the trial results?

It was a randomised, double-blinded, placebo-controlled phase 2 trial. It evaluated 79 confirmed cases of Covid-19. According to the announced results, *early treatment helped reduce the level of SARS-CoV2. Patients treated with the spray saw an average reduction of around 95% in viral load in the first 24 hours, and more than 99% within 72 hours.* No side effects or adverse events were observed. A majority of the patients had been infected with the variant first detected in the UK, Dr Stephen Winchester, consultant medical virologist and chief investigator of NHS clinical trials, told The Indian Express by email.

With the virus airborne, how long does the effect of the spray last?

"It is a 'post-exposure' prevention — just like the hand sanitiser is," said Dr Chris Miller, Chief Science Officer at SaNotize. The self-administered nasal spray releases a small topical amount of nitric oxide and *aims to kill the virus in the upper airways, preventing it from incubating and making its way to the lungs.* Dr Miller said: "If you are outside, around people, and could be infected, you could use the spray and reduce the number of viruses in the nose, before it is becoming a full-blown infection. *We have shown that even when people have a very high load of virus, the spray can significantly reduce the viral load.*"

Has it got any kind of clearance?

The World Health Organization has yet to give an emergency use authorisation (EUA). According to Dr Regev, Israel and Bahrain have given EUA to the spray, as a medical device. The developers have also applied for EUA in the UK, Dr Winchester said. *A phase 3 trial is being planned, although it would be for regulators to decide if it was needed,* Dr Winchester said. According to Dr Regev, the developers are in discussions with some pharmaceutical companies in India.

How do scientists in India view this?

Prof Ram Vishwakarma, Advisor, Council of Scientific and Industrial Research (CSIR), said that as a scientist he was open to these developments. And Indian companies too are working on similar



ideas. “We are discussing several new developments daily. *Scientifically it is an interesting idea and they have interesting phase 2 clinical trial results but not yet published in peer-reviewed journals to my knowledge.* We are all waiting for the regulator to take a call — several Indian companies have started working on similar ideas,” said Prof Vishwakarma, who is the Chairman of the Covid strategy group of CSIR. “There is no unequivocal data on antiviral activity of nitric oxide per se — I have seen the report and results. They are not the first company and several trials are underway worldwide,” he said.

What are these trials looking at?

Several molecules are in clinical trials, and at CSIR, too, there are 15 molecules in the preclinical stage of development. One or two may go into clinical trials in a few months, Prof Vishwakarma said. “We will need therapeutics for this virus and also develop more monoclonal antibodies. This RNA virus is different and it is too short a time for people to develop new drugs. Hence several drugs have been repurposed,” he said. *“Regarding the nasal spray, this is a formulation where NO can be slowly released... There are clinical trials happening where doctors are testing if the tiny amounts of NO gas can be given to the patient so he/she can breathe better. It relaxes blood vessels.”*

FLUSHING A PUBLIC TOILET AND COVID-19 RISK

Flushing a toilet generates aerosols that could linger in the air for hours, possibly days. Given that aerosols are now widely accepted as the primary mode of transmission of SARS-CoV-2, the virus that causes Covid-19, is there a risk of getting infected with Covid-19 — or any other respiratory disease — from aerosols generated by a toilet flush? A new study has found that public restrooms can indeed be hotbeds for transmission of airborne diseases.

But does the coronavirus spread through faecal content or urine droplets?

*The evidence so far is limited. Studies have found traces of coronavirus in the gastro-intestinal tract of Covid-19 patients, and in sewage, but there is no conclusive evidence of infection taking place through from faeces, according to the World Health Organization (WHO). “There is some evidence that Covid-19 infection may lead to intestinal infection and be present in faeces... *There have been no reports of faecal-oral transmission of the Covid-19 virus to date,*” the WHO said in a scientific brief in March last year.*

So, has the new study found evidence?

Published in the journal Physics of Fluids, the study did not look at virus content. It measured the quantity of aerosols generated by flushing a toilet. The authors agree that *the likelihood of infection for respiratory illnesses via bioaerosols is low, but write that it presents a viable transmission route, especially in public restrooms which often experience heavy foot-traffic within a relatively confined area.* A variety of pathogens are usually found in stagnant water as well as in urine, faeces and vomit. “I would say that the chances of getting Covid-19 from flush-generated droplets are small. It is much more likely that *the respiratory aerosols being exhaled by an infected person breathing within a poorly ventilated restroom pose a much greater threat,*” co-author Siddhartha Verma from the Florida Atlantic University said by email. “Furthermore,” he said, “studies by other groups



(cited in our paper) have discussed evidence that flush-generated droplets do pose a notable risk for the transmission of certain gastro-intestinal illnesses.”

A MOLECULE THAT CAN HELP VIRUS EVADE ANTIBODIES

A new study has found that a natural molecule can effectively block *the binding of a subset of human antibodies to SARS-CoV-2. The discovery may help explain why some Covid-19 patients can become severely ill despite having high levels of antibodies against the virus, researchers said.* They published their research in the journal Science Advances on Thursday. Researchers from the Francis Crick Institute, in collaboration with researchers at Imperial College London, Kings College London and UCL (University College London), found that *biliverdin and bilirubin — natural molecules present in the body — can suppress the binding of antibodies to the coronavirus spike protein.* As more and more coronavirus vaccines are rolled out, it is critically important to understand immunity to SARS-CoV-2 and also how the virus evades antibodies. However, there are still many unknowns. The ability of the immune system to control the infection, and the quality of the antibody response, are highly variable between individuals. *The researchers discovered that the SARS-CoV-2 spike protein strongly binds to biliverdin, a molecule which was giving these proteins an unusual green colouration. On the other hand, they found, the same natural molecule reduced antibody binding to the spike.* They used blood sera and antibodies from people who were previously infected with SARS-CoV-2 and found that *biliverdin could suppress the binding of human antibodies to the spike by as much as 30-50%, with some antibodies becoming ineffective at neutralising the virus.* To find out the mechanism at work, the team used *cryo-Em and X-ray crystallography* to look in detail at the interactions between the spike, the antibodies and biliverdin. They found that *biliverdin attaches to the spike N-terminal domain and stabilises it, so that the spike is not able to open up and expose parts of its structure. This means that some antibodies are not able to access their target sites and so cannot bind to and neutralise the virus.* The Crick Institute quoted first author Annachiara Rosa as saying: *“When SARS-CoV-2 infects a patient’s lungs it damages blood vessels and causes a rise in the number immune cells. Both of these effects may contribute to increasing the levels of biliverdin and bilirubin in the surrounding tissues. And with more of these molecules available, the virus has more opportunity to hide from certain antibodies. This is a really striking process, as the virus may be benefiting from a side-effect of the damage it has already caused.”*

ARE MEN MORE VULNERABLE TO COVID? IT’S NOT SO SIMPLE WHEN RACE IS FACTORED IN

Since the early stages of the pandemic, it has been clear that men are more vulnerable to Covid-19: they have fallen ill more frequently than women, and their death rates too have been higher. But a new study has found that societal backgrounds play a greater role in disease outcomes than gender does. The study, carried out on men and women in two US states, has been published in the Journal of General Internal Medicine. *Like several previous studies, this one too found that men are more susceptible to Covid-19 than women — but within the same racial group.* For example, *Black women were found to be up to 4 times more likely to die of Covid-19 than white men are. Black women are also three times more likely to die of Covid-19 than Asian American men are. Yet Black women were less susceptible than Black men, White women less than White men, and Asian women less than Asian American men.* The study looked at both genders for three racial groups — white, Black, and

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



Asian/Pacific Islander. Across the six groups defined by both race and sex, *Black men were found to have the highest Covid-19 mortality rates — up to six times higher than the rates among white men.* These findings, the researchers said, strongly suggest that *structural inequities* in society are a principal factor in driving disparities in Covid-19 health outcomes across and between social groups. The researchers used statistics through late September 2020 from Georgia and Michigan, the only two US states that collected data tabulating age, race, and gender for all individual Covid-19 patients.

HOW & WHY OF OXYGEN THERAPY

The ongoing second surge in Covid-19 cases has seen a huge rise in the demand for supplemental oxygen. What makes the gas so vital in Covid-19 management?

When does a Covid-19 patient need oxygen support?

A small proportion of Covid-19 patients need oxygen support, when shortness of breath progresses to a more acute condition. Most patients with Covid-19 have a respiratory tract infection, and in the most severe cases their symptoms can include shortness of breath. In a small proportion of such cases, this can progress to a more severe and systemic disease characterised by Acute Respiratory Distress Syndrome (ARDS).

How does Covid-19 trigger shortness of breath?

Shortness of breath occurs because of the way Covid-19 affects the patient's respiratory system. The lungs enable the body to absorb oxygen from the air and expel carbon dioxide. When a person inhales, the tiny air sacs in the lungs — alveoli — expand to capture this oxygen, which is then transferred to blood vessels and transported through the rest of the body. *Respiratory epithelial cells line the respiratory tract. Their primary function is to protect the airway tract from pathogens and infections, and also facilitate gas exchange. And the SARS-CoV-2 coronavirus can infect these epithelial cells. To fight such infection, the body's immune system releases cells that trigger inflammation. When this inflammatory immune response continues, it impedes the regular transfer of oxygen in the lungs. Simultaneously, fluids too build up. Both these factors combined make it difficult to breathe. Low levels of oxygen triggered by Covid-19 are inflammatory markers, which include elevated white blood cell counts and neutrophil counts.*

Is India witnessing more patients with shortness of breath?

Yes. Data with the National Clinical Registry for Covid-19 shows a new emerging trend during the second wave: shortness of breath is the most common clinical feature among symptomatic hospitalised patients at 47.5%, compared to 41.7% during the first wave. Simultaneously, other symptoms have dropped significantly compared to the first wave: dry cough (5.6% vs 1.5%); loss of smell (7.7% vs 2.2%); fatigue (24.2% vs 11.5%); sore throat (16% vs 7.5%); muscle ache (14.8% vs 6.3%).

How many symptomatic people now require oxygen?

In India, as of Tuesday, *1.75% of the patients were in ICU beds, 0.40% were on ventilator, and 4.03% were occupying oxygen beds.* Since the total active cases have now risen to 20,31,977, the number



of patients requiring oxygen beds is significant. On Monday, members of the national Covid-19 task force said hospital data shows that *a significant 54.5% of hospital admissions during the second wave required supplemental oxygen during treatment*. This was a 13.4-percentage-point increase compared to the previous wave between September and November, the data from 40 centres across the country shows. However, requirement of mechanical ventilation dropped during the second wave: to 27.8% of admitted patients from 37.3% during the first wave. Dr Balram Bhargava, DG, Indian Council of Medical Research (ICMR), said there is limited data on why more patients are requiring oxygen, and this needs to be further studied. "This (more patients requiring oxygen) could be explained by the fact that due to the sudden surge of cases there is a panic, people wanted to get admitted to hospitals, therefore oxygen requirement suddenly shot up. But there is limited data from hospital settings and more will have to be looked at. However, oxygen [remains] an important tool in the management of Covid-19 disease, particularly when oxygen saturation has fallen," Bhargava said.

In what conditions is oxygen used in Covid-19 clinical management?

According to the clinical management protocol, a person is suffering from moderate disease when he or she is diagnosed with pneumonia with no signs of severe disease; with the presence of clinical features of dyspnea (shortness of breath) and/or hypoxia (when the body is deprived of adequate oxygen supply at the tissue level); fever, cough, including SpO₂ (oxygen saturation level) less than 94% (range 90-94%) in room air. In moderate cases, oxygen therapy is the primary form of treatment: the target is to achieve 92-96% SpO₂, or 88-92% in patients with chronic obstructive pulmonary disease. The devices for administering oxygen in moderate disease are nasal prongs, masks, or masks with breathing/non-rebreathing reservoir bags, depending on requirement. The protocol also recommends *awake proning* (having patients lie on their stomachs) as a rescue therapy to increase oxygenation. Severe cases are defined in three categories: severe pneumonia, acute respiratory distress syndrome, and sepsis.

In silent hypoxia, patients have extremely low blood oxygen levels, yet do not show signs of breathlessness. "In patients with silent hypoxia, the amount of oxygen carried in our blood, otherwise known as blood oxygen level, is lower than expected compared to the other vital signs. Silent hypoxia is not usually an early symptom to occur in Covid-19 patients. They frequently arrive at the emergency room for other reasons, such as muscle aches, fatigue, fever and cough. *Typically, when a patient begins to demonstrate silent hypoxia, they already have other Covid-19 symptoms and may be in critical condition,*" the American Lung Association says. It recommends that instead of solely relying on a pulse oximeter, the patient should monitor for gastrointestinal symptoms, muscle soreness, fatigue, and changes in taste and smell as well as the more common initial symptoms such as fever, cough, and shortness of breath.

THOSE WHO HAD COVID-19 MAY NEED ONLY ONE VACCINE DOSE

People who have recovered from Covid-19 had a robust antibody response after the first mRNA vaccine dose, but little immune benefit after the second dose, according to new research from the Penn Institute of Immunology. The study has been published in Science Immunology. *The researchers said their findings suggest that only a single vaccine dose may be needed to produce a sufficient antibody response.* The team found that those who did not have Covid-19 did not have a full immune response until after receiving their second vaccine dose, reinforcing the importance

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



of completing the two recommended doses for achieving strong levels of immunity. The study provides more insight on the underlying immunobiology of mRNA vaccines, which could help shape future vaccine strategies.

The human immune response to vaccines and infections results in two major outcomes — the production of antibodies that provide rapid immunity, and the creation of memory B cells that assist in long-term immunity. This study investigated how memory B cell responses differ after vaccination in people who previously experienced infection, compared to those who have not had Covid-19. “Previous Covid-19 mRNA vaccine studies on vaccinated individuals have focused on antibodies more than memory B cells. Memory B cells are a strong predictor of future antibody responses, which is why it’s vital to measure B cell responses to these vaccines. This effort to examine memory B cells is important for understanding long-term protection and the ability to respond to variants,” Wherry said.

VACCINE THAT TARGETS MULTIPLE CORONAVIRUSES

Using a new platform, *scientists have developed a Covid-19 vaccine that they say could offer protection against not only existing and future strains of the SARS-CoV-2 coronavirus, but also other coronaviruses.* The vaccine is cheap, at \$1 a dose, and has shown promising results in early animal testing, the researchers have reported in the journal PNAS.

How it’s different

The new vaccine-production platform was invented by Dr Steven L Zeichner of the University of Virginia Health System (UVA). *It involves synthesising DNA that directs the production of a piece of the virus.* This can instruct the immune system how to mount an immune response against the virus. The vaccine, created by Zeichner and Virginia Tech’s Dr Xiang-Jin Meng, *targets a part of the virus’s spike protein called the fusion peptide. This compound is essentially universal among coronaviruses, and has not been observed to differ at all in the many genetic sequences of SARS-CoV-2 obtained from around the world,* the researchers said. “Other Covid-19 vaccines do not appear to be specifically targeting the fusion peptide, to my knowledge,” Zeichner said, in response to an emailed question. *“Most vaccines in development target either the entire spike protein, or just the receptor binding domain (RBD).” While antibodies against the RBD can provide good neutralising activity, there can be mutations in the RBD that decrease somewhat the effectiveness of the antibodies, he said.* “I think that making a vaccine that essentially recapitulates almost exactly the antigens made by the virus may be mistaken. The virus has evolved to be able to continue to live even in the presence of an immune response. In a sense, making a vaccine that elicits an immune response against an immunodominant antigen may be ‘falling for’ the ‘tricks’ that the virus has laid out for us,” he said.

How it works

There are other vaccines that instruct the creation of a part of the virus. For example, mRNA vaccines such as those developed by Pfizer-BioNTech and Moderna, both in use in the US, deliver *mRNA (messenger RNA) carrying instructions for creating the spike protein of the coronavirus.* The idea is that when the real virus attacks, the immune system will recognise the spike and mount a response. How similar, then, is the new DNA-based platform that delivers instructions encoding



for the fusion peptide? It is quite different from mRNA, Zeichner said. *In the new platform, once DNA encoding for the fusion peptide has been synthesised, it is inserted into another small circle of DNA, called a plasmid, which can reproduce within bacteria. The DNA plasmid is introduced into bacteria; this technique uses the bacteria E coli.* “To make our vaccine, we grow the E coli, then inactivate it with formalin,” Zeichner said. “... Growing bacteria and inactivating them is a well-developed process, and the factories that can do this already exist in many countries around the world. The killed whole-cell cholera vaccines can be made for <US\$1/dose, which can serve as a kind of benchmark. *Growing bacteria and inactivating them is easier and much less expensive than making large quantities of mRNA.*”

Tests & results

Meng and Zeichner made two vaccines, one designed to protect against Covid-19, and another designed to protect against porcine epidemic diarrhoea virus (PEDV). The latter, which infects pigs, is also a coronavirus. When PEDV first appeared in pig herds in the US, it killed almost 10% of pigs in the country. Both vaccines were found to protect the pigs against illness caused by PEDV. The vaccines did not prevent infection, but protected the pigs from developing severe symptoms.

What next

The researchers acknowledged that additional testing — including human trials — would be required before their Covid-19 vaccine could be approved by regulatory agencies around the world for use in people. But what if the fusion peptide of SARS-CoV-2, too, mutates? “I suppose anything is possible, but to date this has not been observed. All the SARS-CoV-2 sequenced to date share the same core fusion peptide sequence exactly, and *every sequenced coronavirus has an identical 6 amino acid fusion peptide core,*” Zeichner said. PEDV and SARS-CoV-2 are related, but distantly. “Yet, even these very distantly related coronaviruses share the same 13 amino acid fusion peptide core sequence,” Zeichner said.

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