



21st to 27th February, 2021

CURRENT AFFAIRS FOR UPSC

DreamIAS





INTERNATIONAL

THE BIDEN TOUCH TO SOBER, YET SUBSTANTIVE TIES

One year since former United States President Donald Trump spoke about the India-U.S. relationship, and his own relationship with his “true friend” Prime Minister Narendra Modi in glowing terms at the Sardar Patel Stadium in Ahmedabad, much has changed for both countries. The U.S. has changed its leadership, growth prospects for both India and the U.S. — the two countries which have the highest number of coronavirus cases in the world — have dimmed considerably, and even the name of the stadium has changed. *The new U.S. President, Joseph Biden, has spent much of his first month in office changing Mr. Trump’s policies, including reversing the U.S.’s withdrawal from the Paris Climate Agreement, the World Health Organization, the UN Human Rights Council, and cancelling the “Muslim” ban and other immigration policies, among a slew of other domestic measures through executive orders.*

The connect this time

It would seem, however, that Mr. Biden is not at present planning to change the course Mr. Trump chose in building closer ties with India, including the push for the Quadrilateral and Indo-Pacific policy. *Mr. Biden called Mr. Modi right after he had called all treaty alliance partners, but before he spoke to Israeli Prime Minister Benjamin Netanyahu or King Salman of Saudi Arabia. There have been calls between the U.S. Defence Secretary and National Security Adviser with their Indian counterparts. There were also two calls between the U.S. Secretary of State, Anthony J. Blinken, and the External Affairs Minister, S. Jaishankar, in addition to a virtual Quad Ministerial meeting that included the Foreign Ministers of Japan and Australia. Mr. Biden’s Climate Change Envoy John Kerry also appeared on a discussion with Mr. Jaishankar, where he praised India’s efforts on renewable energy and emissions, and charted an ambitious course ahead of the U.S.’s “Earth Day Summit” on April 22 (<https://bit.ly/3pZOLHM>). The State Department spokesperson also revealed plans for an “an overarching memorandum of understanding (MoU) to enhance health cooperation” which will deal with COVID-19 testing, vaccination and critical drug supplies. Meanwhile, Mr. Biden’s decision to lift restrictions and caps on a number of visas and green cards has no doubt relieved the Modi government of one of the constant sources of worry that India has had with the U.S. Given the list of “Priorities” for the administration listed by the White House on its website (<https://bit.ly/3kq3tXk>), it is safe to say that on a majority of issues, including COVID-19, climate, health care, immigration and restoring America’s global standing, New Delhi and Washington are already engaging each other, and are on the same page.*

China on the horizon

Where then, if at all, might trouble lie? While these are still early days to hazard anything, certain preliminary indicators could provide a clue. To begin with, there is China. There is no doubt that China’s aggression at the Line of Actual Control (LAC) in early 2020 brought India and the U.S. closer, galvanised greater military cooperation, intelligence sharing, and what former Trump National Security Council Director Lisa Curtis called America’s “moral and material support”. *Events at the LAC also made New Delhi give up years of hesitation over holding Malabar Exercises for the Quad, and hold two Quad ministerial meetings in the past year. The difference this year is that*



the Biden administration takes charge as India and China have disengaged from their heights in the Pangong Tso area, and are discussing what could be a long-drawn disengagement and de-induction of troops. As a result, the Modi government may have to be more reticent with the Biden administration as it seeks to take on China strategically. For the Biden administration too, which is walking a fine line with statements on the challenge from China as a competitor in areas such as defence, trade and technology, but also the need for cooperation in certain areas such as climate change and where it is in the U.S.'s "interests to do so" (<https://bit.ly/3uyJL0q>), the messaging is likely to be more mixed than before. Meanwhile, there will be areas where India may become collateral damage: in his latest executive order on securing America's supply chains, for example, *Mr. Biden has sought action in areas such as pharmaceuticals where India is a major producer and could be hit if the U.S. insists on localising production* (<https://bit.ly/3koJhoZ>). The order is especially significant given that *India-Japan-Australia are already working on a trilateral Supply Chain Resilience Initiative (SCRI) to counter their dependence on Chinese goods, that the U.S. is not a part of.*

Getting it right on rights

Human rights is the next area where India and the U.S. could be at odds both on the bilateral front and in the region, given Mr. Biden's commitment to put human rights "at the centre of Foreign Policy". The U.S. readout of his call with Mr. Modi held that a "*shared commitment to democratic values is the bedrock for the U.S.-India relationship*", and *Mr. Biden and U.S. Vice-President Kamala Harris are expected to be more vocal on these issues which the Modi government has been prickly about.* After four years of what former diplomat Ashley Tellis called Mr. Trump's "values holiday", the U.S. is back to *commenting on issues that India considers its internal affairs and what it calls "crackdowns on freedom of speech".* In the past month, the *U.S. administration has weighed in on India's lifting of the Internet ban in Jammu and Kashmir, farmers' protests and the government's face-off with Twitter.* It is unlikely that the *Biden administration will brush away the Modi government's actions to shut down international agencies — Amnesty, Greenpeace, Compassion International — in the same way as the previous administration did.* Further afield, *the U.S. will want India to partner in ensuring human rights in South Asia, particularly given its current term in the UN Security Council.* Practically every call between the respective capitals has mentioned concerns over *the coup by the Army in Myanmar (Burma).* However, *while Washington has stepped up sanctions and called for the Suu Kyi-NLD government to be reinstated, New Delhi has spoken only for the "rule of law" and democratic processes to be upheld, and the Ministry of External Affairs has laid emphasis on India's interests in the region.* A similar situation could arise over Sri Lanka which faces a country-specific resolution at the *Human Rights Council for alleged wartime excesses in 2009 operations against the LTTE, and India's support for its neighbour would place it closer to Beijing's position than to Washington's.*

Russia bonds, trade concerns

Other areas of possible discord outlooked (flagged) by experts will be over *India's ties with Russia, in particular the arrival of the S-400 missile systems which will attract sanctions under the U.S.'s Countering America's Adversaries Through Sanctions Act, a law that the Democrats in Congress pushed through during the Trump administration.* Mr. Biden's administration will seek to implement the law more stringently, calling it a "*powerful tool*" in its dealings with *Turkey on the S-400 purchase and the Nord Stream2 pipeline project from Russia.* Trade is an ongoing concern



from the Trump era, and *India is still hopeful of reversing the U.S. decision to cancel its GSP status for exports. Meanwhile, the mega Indian investment plan announced during the “Howdy Modi” visit — Petronet India’s \$2.5 billion stake in U.S. company Tellurian’s Driftwood LNG project — has ended abruptly after the MoU signed in September 2019 lapsed.*

Afghanistan and Pakistan

On Afghanistan, *New Delhi has charted an independent course from the U.S., standing firmly with the Ashraf Ghani government and resolutely refusing to engage the Taliban. This is pragmatic, but it also means the U.S. will continue to see India as “not part of the problem, not part of the solution”, and seek more support from Pakistan to facilitate its exit. In particular, the U.S.’s pre-Trump formulations that conflate peace in Kashmir in order to help its desired outcomes in Afghanistan, as its recent statement on the India-Pakistan LoC ceasefire shows, will become a sore point for New Delhi. Above all, the shift from a year ago is likely to be evidenced by the stark contrast in Mr. Biden’s personal style from that of his predecessor. While South Block mandarins no longer wake up in the morning dreading the damage control required for the latest tweet from the U.S. President, it is clear that Mr. Biden is not as big on pushing the personal connection with Mr. Modi as Mr. Trump or even President Barack Obama was. The difference will make for a more sober, but perhaps more substantive bilateral relationship in the four years ahead.*

U.S. WILL SEEK TO REJOIN UNHRC: BLINKEN

The U.S. will seek re-election to the United Nations Human Rights Council (UNHRC), Secretary of State Antony Blinken announced on Tuesday, as he “humbly” asked for the support of UN member states. This is the latest in a series of moves by the Biden administration to reverse a pattern of retreat from multilateralism that was characteristic of the Trump regime. Former President Donald Trump had taken the U.S. out of the Council in 2018, saying it was biased against Israel and had members who were human rights abusers. While acknowledging that American democracy was “imperfect” and often fell short of its ideals, Mr. Blinken, in a video message to the 47-member Council which is currently in session, said the U.S. was placing human rights at the centre of its foreign policy and therefore seeking to rejoin the Council. “ ... I’m pleased to announce the United States will seek election to the human rights council for the 2022 to 2024 term. We humbly ask for the support of all UN member States in our bid to return to a seat in this body,” Mr. Blinken said. Mr. Blinken also alleged that the Council was biased against Israel — a position shared by Democrats and Republicans. The Secretary also referred to the Council’s membership. While he praised the Council for bringing attention to the coup d’etat in Myanmar, he said those with the “worst human rights record” should not be part of the Council. “We must work together to improve the work and membership of the council.” The Secretary spoke of challenges to racial justice in the U.S. and said the fight for racial justice should be on top of the global human rights agenda. Mr. Blinken also said there was no moral equivalence between the actions of the United States and authoritarian regimes. “The United States does not claim to be perfect, but we strive every day to improve, to hold ourselves accountable, to become a more perfect union,” he said.

‘No moral equivalence’

“There’s no moral equivalence between the actions of the United States, which are subject to robust, impartial, and transparent accountability mechanisms, and those of authoritarian regimes, which



violate and abuse human rights with impunity. together, we must push back against blatant attempts to subvert the values upon which the United nations was founded..." Mr. Blinken said those who use economic development as a reason to undermine human rights will be held accountable. "Those who hide under the mantle of promoting economic development while seeking to undermine human rights will be held to account, including for their own human rights violations," he said. The Secretary called for Russia to unconditionally release dissident Alexei Navalny and others wrongfully detained. Other countries that were mentioned by name included China and Sri Lanka. "We'll speak out for universal values when atrocities are committed in Xinjiang, or when fundamental freedoms are undermined in Hong Kong," Mr. Blinken said. He also called on the Council to adopt resolutions in this session, including one on Sri Lanka. "We encourage the Council to support resolutions in the session, addressing issues of concern around the world, including ongoing human rights violations in Syria, North Korea, the lack of accountability for past atrocities in Sri Lanka and the need for further investigation into the situation in South Sudan," Mr. Blinken said. The U.K. and other countries have circulated a draft resolution asking for accountability for war crimes in Sri Lanka's 26 year civil war.

CHANGING CLIMATE

Among Joe Biden's first decisions after assuming office as the 46th President of the US was to recommit his country to the Paris Climate Change Pact and affirm Washington's ties with the World Health Organisation (WHO). His predecessor, Donald Trump, had withdrawn the US from the landmark pact, calling it a *"disaster" for America*. And, amidst the raging COVID pandemic, he had halted US funding to the global health organisation, accusing it of being "under the total control of China". In a welcome departure from his predecessor's "America First" approach, Biden said on his inauguration that on *"climate and a range of other issues, the US will engage with the world once again"*. *The US's withdrawal from the WHO, scheduled to take effect in July, would have drastically affected the finances of the global health body — nearly 16 per cent of its budget is financed by Washington. Likewise, the secession of the world's second-largest GHG emitter would have jeopardised the Paris Pact's objective to keep temperature rise in this century under 2 degrees Celsius, compared to pre-industrial levels. Biden has not yet revealed the details of his administration's climate ambitions, but if his campaign is any indication, America is likely to recommit itself to the voluntary emission reduction targets that constitute the Paris Pact's bedrock. His \$2 trillion clean-energy proposal envisages an emissions-free electric grid by 2035 and aims to make the US a net zero carbon economy by 2050.* After his election, Biden renewed this pledge and assured that his plan to *"Build Back Greener"* will have special focus on communities of colour, *"who have suffered disproportionately from fossil fuel pollution"*. *The new President's decisions on health and environment are first steps towards plugging the rift between the top global power and the rest of the world.* They are also a recognition that national silos are ill-equipped to deal with almost all the crises confronting the planet today, *whether they be melting glaciers, warming temperatures or notoriously infectious pathogens. Even as several global leaders, including the former US president, pandered to insular tendencies, the pandemic underlined that there is no escape from the global village. Borders did have to be sealed as an emergency response to the virus. Shortages in vital medical provisions, drugs, personal protection equipment and ventilators — now vaccines — however, meant that no country could deal with the crisis on its own.* At the same, the questions raised of globalisation — including those by Trumpism and its variants — cannot be put off by the change in the White House. It's too early to say if Biden's presidency augurs a course correction.

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



But the emphasis on “humility” in the early statements of his newly appointed climate diplomat, former secretary of state John Kerry, does send positive signals — as do the President’s initial decisions on climate and health.

TRUMP’S ‘POLITICAL HACK’

Mitch is a dour, sullen, and unsmiling political hack, and if Republican Senators are going to stay with him, they will not win again, former President Donald Trump said in a 600-word statement released on Tuesday attacking Senate Minority Leader Mitch McConnell. “He will never do what needs to be done, or what is right for our Country. Where necessary and appropriate, I will back primary rivals who espouse Making America Great Again and our policy of America First,” he said. Mr. McConnell has been in the news of late, having provoked the ire of both Democrats and Republicans. The Democrats criticised him for his apparent expediency and his inconsistent positions on the Trump impeachment trial and his view on Mr. Trump’s role in the Capitol attack of January 6. Mr. Trump attacked him for the same thing. Mr. McConnell, who had voted on February 13 to acquit the former President for inciting an insurrection, told the Senate that very same Saturday afternoon that there was “no question” that Mr. Trump was “practically and morally responsible” for provoking the Capitol attack. In a Sunday op-ed in the Wall Street Journal, he said the mob was incited by Mr. Trump’s “unhinged falsehoods”. House Speaker Nancy Pelosi criticised Mr. McConnell, saying he could have scheduled the trial after the House impeached Mr. Trump and before the former President had demitted office on January 20. She called him out for voting to acquit Mr. Trump and then saying he was to blame for the violence of January 6. Mr. McConnell, however, argued in his op-ed that he could not have scheduled a trial between January 14 and 20 as it would not have been “remotely fair or regular” — that even pre-trial briefing period ended up taking more than a week. He reiterated that it was unconstitutional to impeach someone not currently in office. In his Tuesday statement, Mr. Trump went all out — almost (he reportedly left out an unflattering reference to Mr. McConnell’s “chins” on being advised to do so). He nevertheless took credit for the party’s recent electoral gains in the House, while blaming Mr. McConnell for the GOP’s Senate losses — specifically for countering the Democrats’ and his preference for \$2,000 coronavirus relief cheques with \$600 cheques. (A section of the party had blamed Mr. Trump’s rhetoric for the GOP debacle in Georgia, where the former President attempted to delegitimise the elections and cried fraud, potentially demotivating voters from going to the polls).

Passing shot

Mr. Trump also took a passing shot at the McConnell family — alleging that their business holdings in China meant Mr. McConnell had no credibility on China policy. Mr. McConnell is married to Taiwanese American Elaine Chao, whose family owns a global shipping business, the Foremost Group. Ms. Chao was also Transport Secretary in the Trump administration. Her family’s connections to China have been scrutinised since at least 2001, when Ms. Chao was George W. Bush’s Labor Secretary. In 2017, Ms. Chao and the company (neither Elaine Chao nor Mr. McConnell have a stake in it) were again in the news for blurring the lines between official government work and the Chao family business. Things have not always been this bad between Mr. Trump and Mr. McConnell. In fact, the two have been allied for most of Mr. Trump’s time in the White House. Mr. McConnell, who led the Senate then, was instrumental in getting Trump appointees — Neil Gorsuch, Brett Kavanaugh and Amy Coney Barrett — confirmed to the Supreme



Court. He helped get the Trump tax cuts through the Senate and “made short work of the 2020 impeachment” as the New York Times put it. So the current rift has Republicans worried. “I’m more worried about 2022 than I’ve ever been. I don’t want to eat our own,” Senator Lindsey Graham, a Trump ally, told Fox News last week. However, with seven Senate election victories under his belt, Mr. McConnell may know a thing or two about political survival. *For now, he is the most powerful Republican in Washington and is focused on Republicans reclaiming their Senate majority in 2022.* “My goal is, in every way possible, to have nominees representing the Republican Party who can win in November,” Mr. McConnell told Politico last weekend.

WHAT IS THE US-TALIBAN DEAL THAT THE JOE BIDEN ADMINISTRATION IS EXPECTED TO REVIEW

This week, the Biden administration has said that it will review the *US-Taliban deal to see if the Taliban are able to keep their end of the bargain. The deal was signed last year in February and is meant for “Bringing Peace to Afghanistan” enabling the US and NATO to withdraw their troops, which has been a longstanding demand of the Taliban.*

So what is this agreement?

The four-page pact was signed between *Zalmay Khalilzad, US Special Representative for Afghanistan Reconciliation, and Mullah Abdul Ghani Baradar, political head of the Taliban on February 29, 2020. The agreement said “[a] permanent and comprehensive ceasefire will be an item on the agenda of the intra-Afghan dialogue and negotiations.* The participants of intra-Afghan negotiations will discuss the date and modalities of a *permanent and comprehensive ceasefire, including joint implementation mechanisms, which will be announced along with the completion and agreement over the future political roadmap of Afghanistan”. Separately, a three-page joint declaration between the Afghan government (Islamic Republic of Afghanistan) and the US was issued in Kabul at the time.*

What is the significance of this deal?

Some of the important elements of the deal include the withdrawal of US troops along with *bringing down NATO or coalition troop numbers within 14 months from when the deal was signed.* The main counter-terrorism commitment by the Taliban is that *“Taliban will not allow any of its members, other individuals or groups, including al-Qaeda, to use the soil of Afghanistan to threaten the security of the United States and its allies”.* Other elements include removal of sanctions on *Taliban leaders, releasing prisoners held by both sides and ceasefire. The joint declaration is a symbolic commitment to the Afghanistan government that the US is not abandoning it. The Taliban were able to negotiate some of the elements they wanted such as troops withdrawal, removal of sanctions and release of prisoners. This has also strengthened Pakistan, the Taliban’s benefactor, and the Pakistan Army and the ISI’s influence appears to be on the rise. However, the Afghan government was completely sidelined during the talks between the US and the Taliban.* Therefore, the future for the *people of Afghanistan is uncertain and will depend on how the Taliban honours its commitments.* What the *Taliban want out of a political settlement is unclear. In the past, they have denounced democracy as a western imposition on their vision of Afghanistan. They have dropped several hints of a return to the Taliban-run Islamic Emirate of Afghanistan of 1996-2001.* But they have signaled they may accept some of the democratic gains Afghanistan has made in the last two decades. Much



will depend on whether the US and the Taliban are able to keep their ends of the bargain, and every step forward will be negotiated, and how the Afghan government and the political spectrum are involved.

GHANA FIRST COUNTRY TO RECEIVE COVAX VACCINES

Ghana received the world's first delivery of coronavirus vaccines from the United Nations-backed COVAX initiative on Wednesday — the long-awaited start for a program that has thus far fallen short of hopes that it would ensure shots were given quickly to the *world's most vulnerable people*.

600,000 doses

The arrival of 600,000 doses of the AstraZeneca vaccine in the West African country marks the beginning of the largest vaccine procurement and supply operation in history, according to the World Health Organization and UNICEF. It is a linchpin of efforts to bring the pandemic to an end and has been hailed as the first time the world has delivered a highly sought-after vaccine to poor countries during an ongoing outbreak. "Today marks the historic moment for which we have been planning and working so hard. With the first shipment of doses, we can make good on the promise of the COVAX facility to ensure people from less wealthy countries are not left behind in the race for life-saving vaccines," said Henrietta Fore, executive director of UNICEF, which delivered the vaccines. However, the initiative has been hampered by the severely limited global supply of doses and logistical problems. Although it aims to deliver 2 billion shots this year, it currently has agreements only for several hundred million shots.

WHAT ARE THE AMENDMENTS IN THAILAND'S ABORTION LAW?

Thailand's Parliament voted to make abortion during the first 12 weeks of pregnancy legal. Before this, abortion was illegal in the country, regardless of the duration of the pregnancy and was allowed only in limited circumstances governed by the country's medical council. This week, another country made an announcement dealing with abortion laws. On Wednesday, *the right-wing Polish government said it will publish a court ruling that proposed a near-total ban on abortion in its journal. This ruling banned termination of pregnancies including of fetuses with defects. The government's sudden announcement has sparked countrywide protests in the country, where abortion laws were already very strict. In India, the Union Cabinet cleared changes to the Medical Termination of Pregnancy Act, 1971 early last year. These changes raised the legally permissible limit for an abortion to 24 weeks from the previously legal 20 weeks.* The change also accepted the failure of contraception as a valid reason for abortion, not just in married but in unmarried women as well.

Opposition to abortion in Thailand

The opposition to abortion comes mainly from Thailand's majority of conservative Theravada Buddhists who believe that abortion goes against the teachings of Buddhism. This week, *a Buddhist monk Phra Shine Waradhammo who is known for his support for LGBT+ rights sparked outrage among some conservatives after he supported decriminalisation of abortion,* according to a Reuters report. Even so, illegal abortions are not uncommon in Thailand before this. For instance, *in 2010 dozens of white plastic bags were found on the grounds of a Buddhist temple. Each of these bags*



contained the remains of a fetus. At the time, Thai authorities found over 2000 remains in the temple's mortuary, where the remains had been hidden for over a year. The country's prime minister at the time, Abhisit Vejjajiva was opposed to legalising abortions and maintained that more should be done to stop illegal abortions. In the book titled, "Abortion, Sin and the State in Thailand", author Andrea Wittaker says that over 300,000 illegal abortions are performed in the country each year. In the same year, the arrest of a 17-year-old girl after she attempted to perform an abortion on herself with drugs obtained over the internet reignited the debate on abortion in the country.

So, what changes for women in Thailand now?

In February last year, Thailand's constitutional court called the provision dealing with abortion, which is under the country's criminal code, unconstitutional. As per this provision, women who got an abortion could be imprisoned for up to three years and those who performed them could be imprisoned for up to five years. Following this, the court gave the Thai government 360 days to change the laws dealing with abortion. As per the new amendments, women can get an abortion if the age of the fetus is up to 12 weeks. But if a woman gets an abortion after 12 weeks, she can face being imprisoned for up to 6 months and will be liable to pay a fine of 10,000 baht or face both. Significantly, abortions can be carried out after the completion of the first trimester, but only if they are in line with the criteria established by the Medical Council of Thailand (MCT). As per these criteria, a pregnancy can be terminated beyond the permitted period of time if it poses a threat to the mother's physical or emotional health, if the fetus is known to have abnormalities or if the pregnancy is the result of a sexual assault.

How are these amendments being interpreted in Thailand?

While the amendments signal some progress, pro-choice activists in Thailand are still not convinced and continue to demand the complete decriminalisation of abortion. Human Rights Watch has also called for complete decriminalisation of abortion so that women can fully exercise their reproductive rights. One of the faces of the pro-choice movement in Thailand is the gender equality and LGBT rights activist Chumaporn "Waddao" Taengkliang, who is the co-founder of a group called Women for Freedom and Democracy. She also joined the pro-democracy or anti-government protests last year that demanded that the monarchy be reformed and Prime Minister, Prayuth Chan-ocha resign. The protests were some of the biggest seen in recent times and while they were broadly against the monarchy, other groups joined them with demands including expanding LGBT and women's rights, reforms in education and the military, and improvements in the economy. Taengkliang told The New York Times last year that "The male supremacy society has been growing since the coup". Taengkliang was referring to the way Chan-ocha came to power in 2014, which was through a coup. He is endorsed by the king and is alleged to have meddled with electoral laws during the 2019 elections, which has enabled him to remain in power. Thailand is a Buddhist-majority country of about 70 million and converted from an absolute monarchy to a constitutional monarchy in 1932. Following a coup in 1947, Thailand has been ruled by the military for the most part. During the pro-democracy protests last year, many young women, many of whom were students dominated the protests. These women called for gender equality and endorsed issues specific to women, including abortion, taxes on menstrual products and school rules that "force girls to conform to an outdated version of femininity" a report in The New York Times said.



SUU KYI'S MANY DILEMMAS (THE AUTHOR IS A FORMER CHIEF ELECTION COMMISSIONER OF INDIA)

Myanmar's army generals overreached themselves by declaring last November's general election null and void and arresting Nobel Peace Prize laureate Aung San Suu Kyi, whose party, the National League for Democracy (NLD), had swept the 2020 election with an overwhelming majority. The story of Ms. Suu Kyi's life, with the many odds and lengthy periods of incarceration she has faced, has been told often. More recently, her act of defending Myanmar against the Rohingya genocide charges triggered massive condemnation from the international community. But though she won the November 2020 election, she is now under detention, yet again. Perhaps her admirers-turned-critics can now begin to understand that her silence on the Rohingya crisis was a difficult choice among her very limited options. Myanmar's Constitution was amended in 2008 to ensure that 25% of seats in the country's Parliament are reserved for the military. The Constitution excluded anyone married to a foreign citizen (or whose children are foreign citizens) from contesting. In 2010, the NLD chose to boycott the election; in 2015, Ms. Suu Kyi joined the electoral process and the party swept the polls. Although she was constitutionally barred from the office of President, in an internationally brokered accommodation with the junta, she accepted the post of State Counsellor and became the virtual Prime Minister. The November 2020 election to both Houses of Parliament and the State legislatures (excluding seats reserved for the military), saw her party trounce the Union Solidarity and Development Party by a sufficiently large margin. The military-backed opposition alleged that the election was riddled with irregularities. The international observers for the Myanmar poll included Asian Network for Free Elections (ANFREL), the Carter Center, the European Union and International IDEA, amongst other reputed bodies. There was some criticism of the NLD's extensive use of state media and the Election Commission's exclusion of the Rohingya from the voting process. But ultimately, the Carter Center commended the Commission's efforts, and a coalition of 12 domestic observers declared the election results credible while also pointing out the weaknesses in the electoral legal framework post the 2008 Constitution. On February 1 this year, the Tatmadaw overturned the election in its entirety, thereby bringing a decade's worth of democracy to an abrupt end. A one-year Emergency has been declared and fresh elections are promised. In a pre-dawn raid on Ms. Suu Kyi's house, the army claimed that it found imported walkie-talkie sets and invoked infringement of customs regulations. The police arrested her. Hundreds of thousands of protesters have taken to the streets in Yangon, Mandalay and other cities since the coup. While the NLD called for a nationwide strike, the army clamped down on social media networks and ordered a curfew. In turn, thousands began to bang pots and pans as an act of protest. While the protests are still largely peaceful, the press has reported police firing and a few deaths. In an unprecedented move, the generals have detained Election Commission officials, with the purported aim of having the poll body admit to electoral fraud. The overturning of the election has been widely condemned by the international community. U.S. President Joe Biden was among the first to denounce the coup. He effectively froze U.S. funding and called for the release of political leaders and party members who had been detained. The United Nations passed a resolution calling for Ms. Suu Kyi's immediate release.

A full circle

Until recently, Ms. Suu Kyi was being attacked for her silence on the plight of the Rohingya. But by arresting her yet again, the generals may have succeeded in partially restoring the halo that had



slipped. *The world may once again be reminded that she was the daughter of the country's hero General Aung San, and that she has already spent a large part of her life deprived of freedom. What are the options for her now? In 2015, she had reached an understanding with the military junta that enabled over five years of a civilian government. As in a game of snakes and ladders, she has now slipped back to the starting point. The charges against Ms. Suu Kyi may make little sense, but it seems likely that she will be sentenced by a court of law. A question that may have arisen in her mind is that if detention, again, was to be her fate, even after winning an internationally accepted election, would it have been preferable to stand up to the army and regain the world's respect which came after a lifetime's sacrifice?*

hey demand the Generals free the detained elected leaders and restore democracy. Myanmar's military has been one of the most consistent enemies of democracy. In the past, challenges to its powers were met with brutal crackdowns. Still, the junta has continued to face popular resistance. The crackdown on the protests of August 8, 1988 did not prevent the 'saffron revolution' of 2007 — protests led by Buddhist monks. Than Shwe, the then leader of the country, suppressed them but had to offer a new Constitution in 2008 as a compromise. This Constitution was the basis of the partial transition to democracy in 2015 when the NLD came to power. But even that experiment would not last more than five years, thanks to the power-hungry generals of Tatmadaw. But they were wrong to expect the Myanmar people, who experienced at least limited liberties and democracy for five years after decades of the repressive dictatorship, to allow them to consolidate power easily. The protesters have called for civil disobedience, stoppage of work, sit-ins and mass demonstrations. The strike has already paralysed the banking system at a time when the economy, hit hard by COVID-19, is struggling to stand on its feet. The military is also facing international sanctions and condemnation. There is no easy way out for Gen. Min Aung Hlaing, the commander-in-chief and the coup's main architect, from the crisis he has put himself in. The Generals should realise that years of repression have not killed Myanmar's aspirations for democracy. They should not repeat 1988 or 2007. They should stand down, respect the election results, release the leaders and hand power back to the elected government.

CLEAN ENERGY POST COVID-19 (ARMIDA SALSIAH ALISJAHBANA - UNDER-SECRETARY-GENERAL OF THE UNITED NATIONS AND EXECUTIVE SECRETARY OF ESCAP)

The year 2020 was one that only a few of us will forget. While the effects of the COVID-19 pandemic have played out unevenly across Asia and the Pacific, the region has been spared many of the worse effects seen in other parts of the world. The pandemic has reminded us that a reliable and uninterrupted energy supply is critical to manage this crisis. Beyond ensuring that hospitals and healthcare facilities continue to function, energy supports the systems and coping mechanisms we rely on to work remotely, undertake distance learning and communicate essential health information. Importantly, energy will also support cold chain systems and logistics to ensure that billions of vaccine doses make their way to the people who need them the most.

Healthy progress

The good news is that our region's energy systems have continued to function throughout the pandemic. A new report, titled *Shaping a Sustainable Energy Future in Asia and the Pacific: A greener, more resilient and inclusive energy system*, released on Monday by the *United Nations*



Economic and Social Commission for Asia and the Pacific (ESCAP) shows that energy demand reductions have mainly impacted fossil fuels and depressed oil and gas prices. Renewable energy development in countries across the region, such as China and India, continued at a healthy pace throughout 2020. As the Asia-Pacific region moves towards clean, efficient and low-carbon technologies, the emergence of the pandemic raises some fundamental questions. How can a transformed energy system help ensure our resilience to future crises such as COVID-19? Can we launch a 'green recovery' post COVID-19 that simultaneously rebuilds our economies and puts us on track to meet global climate and sustainability goals? By emphasising the importance of Sustainable Development Goals (SDGs) as a guiding framework for recovering better together, we must focus on two critical aspects. First, by making meaningful progress on SDGs, we can address many of the systemic issues that made societies more vulnerable to COVID-19 in the first place — health, decent work, poverty and socioeconomic inequalities, to name a few. Second, by directing stimulus funding to investments that support the achievement of SDGs, we can build back better. If countries focus their stimulus efforts on industries of the past, such as fossil fuels, we risk not creating the jobs we need, or deflecting from the right direction for achieving the global goals that are critical for future generations. The energy sector offers multiple opportunities to align stimuli with clean industries of the future.

Added resilience

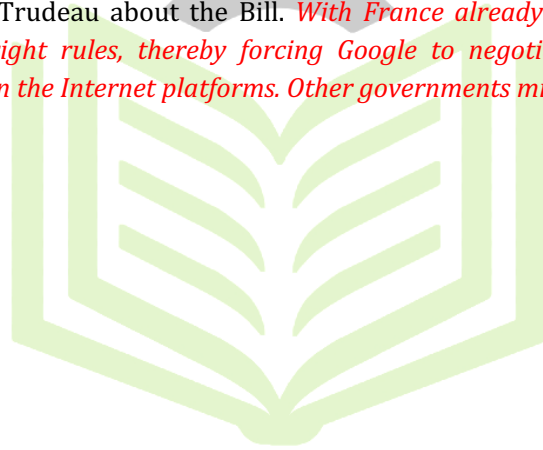
Evidence shows that renewable energy and energy efficiency projects create more jobs for the same investment in fossil fuel projects. By increasing expenditure on clean cooking and electricity access, we can enhance economic activity in rural areas and support modern infrastructure that can make these communities more resilient and inclusive, particularly for the well-being of women and children. Additionally, investing in low-carbon infrastructure and technologies can create a basis for the ambitious climate pledges we need to fulfil to reach the Paris Agreement target of a 2-degree global warming limit. On this note, several countries have announced carbon neutrality. Phasing out the use of coal from power generation portfolios and substituting it with renewables, ending fossil fuel subsidies, and implementing carbon pricing are some steps we can take. The COVID-19 crisis has forced us to change many aspects of our lives. It has shown that we are more adaptive and resilient than we may have believed. But we should not waste the opportunities this crisis presents. It should not deflect us from the urgent task of making modern energy available to all and decarbonising the region's energy system through a transition to sustainable energy. Instead, it should provide us with a renewed sense of urgency.

LEVEL PLATFORMS

A new law in Australia that seeks to make technology platforms such as Google and Facebook pay news publishers for use of their content presents governments in democracies with an idea worth considering, if not emulating. The law, which is based on the realisation of a severe power imbalance between giant Internet platforms and news media, marks a rare intervention by any government in platform-publisher relationships. It seeks to level the playing field by mandating that platforms negotiate with publishers of news regarding payment for their content. The platforms are not used to paying for such content. The power imbalance is not just an Australian reality, though. It is everywhere. This imbalance has only intensified over the past decade or so, during which time platforms have gained so much power that they have become de facto gateways to the



net. They have also grown massively to become some of the richest companies on earth today. Unfortunately, during the same time, there has been a precipitous decline in the fortunes of the news media, which provides the journalistic resources on the ground to keep a population, especially in a democracy, well informed. *Journalism houses have struggled to stay afloat, what with their long, successful offline business models becoming less viable*. As a result, across the world, many have gone out of business and hundreds and thousands of journalists have lost their jobs. It is no one's case that this law is flawless. Far from it. Leaving aside Google and Facebook, which unsurprisingly opposed it, *many experts do reckon that it is against the principles of an open Internet*. Many others do refer to the pressure from the traditional media lobby, which includes the likes of Rupert Murdoch's News Corp. But the point to note is the intent. In launching the Bill, which is now just a few days away from getting passed by the Senate, the Australian Government has shown that it realises that the cost of not intervening in this unequal battle is high. *At stake is the sustainability of the news media industry*. That Australia chose to intervene is critical as countries, outside of the European Union, have often adopted a laissez-faire approach to administering tech giants. But this may change. Australian Prime Minister Scott Morrison has himself taken the initiative in reaching out to India's Prime Minister Narendra Modi and Canadian Prime Minister Justin Trudeau about the Bill. *With France already having given shape to new European Union copyright rules, thereby forcing Google to negotiate licensing deals with its publishers, the heat is on the Internet platforms. Other governments might take the cue*.



DreamIAS



NATION

MIZORAM GROUP SEEKS ASYLUM FOR COUP-HIT MYANMAR VILLAGERS

Mizoram's apex students' body has asked the State government to provide asylum to some villagers in Myanmar affected by the military coup there. The State's Mizo National Front (MNF) government, headed by Chief Minister Zoramthanga, said asylum would be considered if there was a formal request cleared by the Centre. *People belonging to Myanmar's Chin community were seeking to migrate to Mizoram to escape a military crackdown, primarily because of the Chin National Army (CNA), an extremist group seeking self-determination in Chin State across the border. The Chin community and the Mizos in India belong to the Zo ethnic group, which share the same ancestry.* Claiming that the Chins have been affected by the civil unrest in Myanmar, the Mizo Students' Union appealed to the State government to play a proactive role and accept those affected as refugees. Mizoram's Home Minister Lalchamliana said his government had not yet received a request for asylum from any individual or group. Representatives of the CNA had about a fortnight ago approached the authorities of a border village in Mizoram's Champhai district, seeking shelter for the Chin people. The district's Deputy Commissioner Maria C.T. Zuali brought the matter to the notice of the State government. "If they need political asylum, they should apply as per protocol," Ms. Zuali said.

LONDON COURT'S NOD FOR NIRAV MODI'S EXTRADITION

The Westminster Magistrates Court in London on Thursday allowed India's extradition request against businessman Nirav Modi, who is wanted in connection with the ₹13,758 crore Punjab National Bank fraud, ruling that a prima facie case had been made out. The order will be sent to the Secretary of State for the United Kingdom's Home Department for further action. The Secretary of State has to take a decision within two months or seek an extension from the High Court. Appealing the Secretary of State's decision in the High Court is only possible with the court's permission. Notice of application for approval to appeal has to be sought within 14 days of extradition, or discharge, ordered by the Secretary of State. *"Unless there is an appeal, a requested person must be extradited within 28 days of the Secretary of State's decision to order extradition (subject to any appeal),"* according to the UK's official website. In its order, the Westminster Magistrates Court held that there were sufficient grounds warranting Mr. Nirav Modi's trial in India. It also accepted the evidence put forth by the Central Bureau of Investigation and the Enforcement Directorate that he had conspired to destroy the proof against him and intimidate witnesses. It was alleged that he forcibly kept his employees, some of who were dummy directors in the firms floated by him, in illegal custody in Cairo and got their mobile phones destroyed in Dubai. *The UK court observed that Barrack 12 in Mumbai's Arthur Road Jail was spacious enough for Mr. Nirav Modi and that he would get sufficient security. It was convinced that he would not be denied justice in India.*

ADULTERY AS 'MISCONDUCT' (RAJINDER VIJ - SENIOR IPS OFFICER IN CHHATTISGARH)

Every civil servant, whether a member of the All India Services (AIS), State Service or Central Service, is governed by a moral code of conduct. Similarly, the conduct of army officers and jawans is administered under the Army Act. While the AIS conduct rules require its members to "maintain



absolute integrity and devotion to duty” and do “nothing which is unbecoming of a member of the service”, the Army Act contains penal provisions for displaying “unbecoming conduct” or “disgraceful conduct”. The Central and State Civil Services conduct rules also demand similar integrity from its members. *Surprisingly, what exactly constitutes an “unbecoming conduct” or “unbecoming of a member of a service” is nowhere defined.* It, therefore, leaves ample scope for the employer or disciplinary authority to use this leverage and set up parameters of misconduct for its subordinates. One such conduct, which has been a subject of debate for long, is *whether illicit or adulterous relations with another woman or man amounts to misconduct under service rules, particularly after the Supreme Court’s verdict in Joseph Shine vs Union of India (2018).* This contention assumes significance in light of the Centre’s application for clarification that the SC’s aforesaid decision on decriminalising adultery under IPC should not apply to the armed forces. Though the matter has been referred to a Constitution Bench, Justice Rohinton Nariman while issuing notice made an observation that “something which is not adultery because the section [497 IPC] has been struck down will still be ‘unbecoming conduct’”. This observation, in fact, is in contrast to the judgments made by various High Courts in the past. In 1985, the Calcutta High Court in Rabindra Nath Ghosh (In re) held that a head constable who was living with another woman ignoring his married wife was not guilty of any misconduct in the performance of his duties as a policeman. *In State of U.P. vs BN Singh (1989), the Allahabad High Court ruled that in order to bring a case of a government servant within the definition of ‘personal immorality’ on the habit of sex, it must be shown “that this habit of the government servant has reduced his utility as a public servant so as to damage the government or official generally in public esteem”.* Justice M. Katju, in Pravin Solanki vs State of U.P. (2001) held that “unless an employee does some act which interferes with his/her official function then ordinarily whatever he/she does in his/her private life cannot be regarded as misconduct”. More importantly, after the Joseph Shine case, the Rajasthan High Court in Mahesh Chand Sharma vs State of Rajasthan (2019) held that “no employer can be allowed to do moral policing on its employees which go beyond the domain of his public life”. The court said that though adultery is an immoral act and is not to be appreciated, “the same would, however, not be a ground for initiating departmental proceedings by the employer and it be left best for the person who may be affected to take remedy...”.

Ambiguous expressions

When various High Courts have held that the act of adultery is not a sufficient ground to initiate departmental proceeding unless it interferes with an employee’s official functions, the observations of Justice Nariman that the Army Act is “on a different footing” because the expression used is “unbecoming conduct” have, once again, raised the contention between “misconduct” and “immoral act”. Hence, the SC must address expressions such as “unbecoming of a civil servant” or “unbecoming” or “disgraceful” conduct. It is understood that “misconduct” is nothing but unlawful behaviour, misfeasance, may involve moral turpitude and must be improper or wrong behaviour, wilful in character. *Any government or public authority would want its employees to maintain integrity not only during the discharge of their official duties, but also in the public domain. With such a public policy in place, whether adulterous conduct is sufficient to initiate departmental action is a million-dollar question that the Supreme Court must answer.*



A COLONIAL RELIC

A sessions court in Delhi has affirmed the belief that a dispassionate scrutiny of outlandish claims by the police is necessary for protecting the liberty of those jailed on flimsy, often political, reasons. Rejecting the purported evidence presented by the Delhi Police against climate change activist Disha Ravi, as “scanty and sketchy”, Judge Dharmender Rana has granted bail to the 22-year-old arrested for nothing more than editing a document shared among a network of activists raising global support for the farmers’ protests against three central laws. Even though it was quite obvious that the claim of a global conspiracy behind the unsavoury and violent incidents that took place on January 26 in New Delhi lacked credence, the order of bail is still notable for subjecting the specific charges to strict judicial scrutiny at a fairly early stage. In particular, *the judge has applied the established test for a charge of sedition under Section 124A of the IPC to pass muster: that the act involved must constitute a threat to public order and incitement to violence. He found that there was not even an iota of evidence indicating that the ‘toolkit’, a shared Google cloud document with ideas on how to go about amplifying the protests, in anyway incited violence.* He was clear that there was no causal link between the violence and Ms. Ravi, a conclusion that confirmed widespread criticism that the arrest was unnecessary, and that the entire case was nothing more than a reflection of government paranoia. *The episode highlights a trend that has caused concern in recent times: the tendency of the rulers to treat instances of dissent, especially involving strident criticism of policies and laws in which particular regimes are deeply invested, as attempts to provoke disaffection and disloyalty.* Hence, it is significant that the judge not only saw Ms. Ravi’s activism as related to her freedom of speech and expression, but went on to say that an attempt to reach a global audience is part of that freedom. *In the backdrop of the claim that those who prepared the toolkit made common cause with Khalistani separatists, Judge Rana showed refreshing clarity in maintaining that mere interaction with a group with dubious credentials could not be used to consider someone culpable.* It should also be underscored that such bail orders should not be rare or special, but be routine judicial responses to cases in which there is a mismatch between the accusation and the evidence. It is by now fairly clear to everyone except, perhaps, the government and its vociferous supporters, that there is no place in a modern democracy for a colonial-era legal provision such as sedition. Too broadly defined, prone to misuse, and functioning as a handy tool to repress activism, the section deserves to be scrapped.

SEDITION LIES IN THE EFFECT, NOT IN CONTENT (SATVIK VARMA - AN ADVOCATE BASED IN NEW DELHI)

Recent charges of sedition against individuals have brought back focus to *a law introduced in the Indian Penal Code in 1870. In Kedar Nath Singh v. State of Bihar (1962), the Supreme Court upheld the constitutional validity of sedition and noted it as being a reasonable restriction on free speech as provided in Article 19(2) of the Constitution. It made clear that a citizen has the right to say or write whatever she likes about the government, or its measures, by way of criticism or comments, as long as she does not incite people to violence against the government established by law or with the intention of creating public disorder.* One wonders, if the law provides this protection, then why is this archaic, yet powerful, law often used to quell dissent?



Why the law needs a relook

Following the Kedar Nath case, the Bombay High Court, in the case of cartoonist Aseem Trivedi, issued guidelines which the police must follow prior to invoking the provisions of sedition. These inter alia include an objective evaluation of the material to form an opinion on whether the words and actions cause disaffection, enmity and disloyalty to the government as they must be of the magnitude that they incite violence or tend to create public disorder. The Court also directed obtaining a legal opinion in writing from a law officer of the district who must give reasons on how the pre-conditions are met. This needs to be followed by a second opinion from the State's public prosecutor. And while courts have on numerous occasions cautioned law enforcement agencies not to misuse the provisions on sedition, and follow court directions, regrettably, they are grossly ignored. The problem therefore lies in the poor implementation of the law and guidelines. This is evident from recent reports, based on data from the National Crime Records Bureau. *Between 2016 and 2019, the number of cases of sedition under Section 124A increased by 160%, while the rate of conviction dropped to 3.3% in 2019 from 33.3% in 2016.* Notably, many charged were individuals protesting government action, which the Constitution Bench in Kedar Nath held falls outside the ambit of sedition. Consequently, the staggering numbers have got people saying that *"the aim is not to punish or convict anyone but to incarcerate them... the process itself is the punishment."* This data and the gross misuse of the legal provisions compel one to state that *even though a Constitution Bench upheld the vires of the law of sedition, the circumstances now require a complete relook at the provision.* After all, when the situation changes, the statute calls for a change as law cannot afford to remain static. In the Internet age, where we are all consumed by social media and where information travels at the speed of lightning, what can lead to public disorder has itself become debatable. With cyberbullies and a select few being able to make things trend, even the wrong ones, a lot has changed from 1962 when the Kedar Nath case was decided. Even otherwise, clutching on to a foreign legal order is no longer needed. Interestingly, however, the present situation is the reverse. *The U.K. repealed the offence of sedition in 2010 and India is holding onto a relic of the British Empire. As recent as 2018, the Law Commission of India took note of this and questioned how far it is justified to retain Section 124A, especially in view of the fact that several existing statutes take care of various actions which were earlier considered seditious.* It also sought consideration on whether keeping Section 124A would serve any purpose and whether reducing the rigour of the law of sedition would be detrimental or beneficial to the nation. The outcome of this consultative paper is unknown, but the discussion needs to be rekindled.

An effect-based test

And till the law on sedition continues to remain on our statute book, courts must adopt what some Western countries follow: an effect-based test which examines the effects of the seditious text rather than a content-based test which reviews the text alone. As an Additional Sessions Judge recently noted while granting bail in a case on sedition, "the law of sedition is a powerful tool in the hands of the state to maintain peace and order in the society. However, it cannot be invoked to quieten the disquiet under the pretence of muzzling the miscreants."

It is not the alleged seditious acts that are creating fragments in our society; it is in fact the persecution of individuals and labelling them that are really creating cracks in our socio-political ecosystem. In the words of Martin Luther King, Jr. "We must learn to live together as brothers or perish together as fools."



HUMAN RIGHTS ARE EVERYONE'S BUSINESS (SEEMA CHISHTI - A JOURNALIST BASED IN NEW DELHI)

The ongoing protests by farmers against the three hastily promulgated agriculture laws have drawn international attention, with the denial of democratic rights to them by the government's construction of military-grade barriers and shutting down of the Internet at protest sites getting strong statements of support from numerous international celebrities. The official response of the Ministry of External Affairs was disproportionate to the provocation, but it was not merely the reaction of a thin-skinned government. *The argument put forth by the government pushed a more fundamental premise: it warned the concerned global voices that these matters — democracy and human rights, left unstated — were India's 'internal affair'.* The recent arrest of the 22-year-old environmental activist, Disha Ravi, for amplifying the farmer protests internationally, unmasked the government's designs to criminalise those who speak for human rights. This attitude was also visible in the Home Ministry's directions to social media companies to block accounts of those expressing a point of view contrary to that of the government. A democracy which does not ensure and secure universal rights for all is a democracy only in name. Being respected, not having their dignity violated and having a sense of security is what everyone, anywhere should get, whether it is Syrians on an Italian shore, the Rohingya in Myanmar, Hindus in Pakistan or stateless refugees on a border in Mexico. *No government has immunity because it violates human rights in its jurisdiction.* Prime Minister Narendra Modi could not have been more misplaced as he was, when he spoke of 'Foreign Destructive Ideology' in Parliament to refer to global concerns for rights of protesting farmers. *The belief that what India or what any other nation does to its people is an 'internal matter', is as misdirected a defence as the one a wife-beating husband deploys with his neighbours — that it is not their business.*

Nation and the idea of rights

India played a signature role in drawing the world together to oppose the apartheid government of South Africa, and it took till 1962 to override the sovereignty shield used by the government to continue oppressing the Black population. India stayed firm from the 1950s till a resolution was adopted and a United Nations Special Committee Against Apartheid was set up by the United Nations. *India's work, in consistently creating awareness and resistance against the demonisation of Nelson Mandela via the Rivonia trial in 1963, checked the Apartheid regime from awarding him the death sentence.* The principle document signed in the last century, *the Universal Declaration of Human Rights laid down the terms for the post-war world, it enshrined the rights and the freedoms of all people, living everywhere.* It was not something that was forced down India's throat by its colonial rulers. India was a member of the first Human Rights Commission, which was to draft the 'international bill of rights'. *The Universal Declaration of Human Rights was drafted from January 1947 till December 10, 1948, when it was eventually adopted by the General Assembly. Along with the Charter of the United Nations that was signed earlier in San Francisco in 1945, Indian freedom fighters did their best to influence it and make its brief wider and more effective. Mahatma Gandhi issued a press statement in April 1945 which was directed at participants of the San Francisco conference and he extensively quoted from the All India Congress Committee resolution of August 8, 1942: "While the AICC must primarily be concerned with the independence and defence of India in this hour of danger, the Committee is of opinion that the future peace, security and ordered progress of the world demand a world federation of free nations, and on no other basis can the*



problems of the modern world be solved.” A line is particularly evocative – “...Thus the demand for Indian independence is in no way selfish. Its nationalism spells internationalism.” At the time of the conference, *Vijaya Lakshmi Pandit who went on to become the first woman President of the UN General Assembly, was on a year-long lecture tour of the U.S., and she had a deep impact on African-Americans battling entrenched racism at the time.* Pandit powerfully advocated Mahatma Gandhi and Nehru’s ideas and emphasised their universality and the indivisible nature of rights that all human beings must enjoy. She sent a note to the conference, urging them to be bolder than they were to be eventually. Scholars agree that Pandit’s alliances with Eleanor Roosevelt, Black activists and others forged at the time, subsequently helped push for a more comprehensive adoption of the Universal Declaration of Human Rights in 1948. The work of Indians like Hansa Mehta, Minoo Masani and Lakshmi Menon conveyed the message as being the same as that of the freedom movement — of freedom from oppression for all human beings (<https://bit.ly/3qLAGiA>).

Rights are indivisible

The makers of the Indian Constitution did not invoke paranoia about respecting Indian tradition, customs or hiding perverse practices. Dr. Sarvepalli Radhakrishnan famously said while commending the Objectives Resolution, or the basic road map of the Constitution, to the Assembly, that the endeavour was “a fundamental alteration in the structure of Indian society,... to abolish every vestige of despotism, every heirloom of inorganic tradition.” The triad of ‘Liberty, Equality and Fraternity’ engraved in the Preamble, drew significantly from the slogan which had proved influential following the French Revolution. It flowed from the realisation, in Dr. B.R. Ambedkar’s words, that given the vice-like grip of the “graded inequality” of the caste system, all three elements, together, were absolutely essential if Indians were to realise their full potential. To quote B.R. Ambedkar who on the eve of the adoption of the Preamble explained how Liberty, Equality and Fraternity were connected and locked into each other firmly: “Without equality, liberty would produce the supremacy of the few over the many. Equality without liberty would kill individual initiative. Without fraternity, liberty would produce the supremacy of the few over the many. Without fraternity, liberty and equality could not become a natural course of things. It would require a constable to enforce them.”

New Delhi’s recent moves

To cite Atmanirbhar as a counter to international concerns about freedoms, equality and the right to dissent amounts to hiding behind the flimsy excuse of sovereignty to escape the bitter truth of the slithering slope of democratic rights India appears to be going down. The case the Indian government is making is all the more specious as its own immediate concern expressed, officially by its *External Affairs Minister when visiting Sri Lanka, on the Sri Lankan government needing to do more to safeguard Tamil lives belies this principle. The starkest case where India made human rights of citizens of other countries its business was in 2019 when the Citizenship (Amendment) Act, offered a home for certain persecuted citizens of three foreign countries.* When it comes to universal human rights and international attention, *the premier example is of the liberation of Bangladesh which India led and shepherded by invoking these principles.* That *India chose to and continues to host the Dalai Lama*, who attracts visible support from high-profile global celebrities, is a testament to New Delhi’s commitment to human rights. That the public concern from international celebrities is tantamount to foreign ‘intervention’ carries no weight, as this is not about the Central Intelligence Agency or Vladimir Putin’s Russia meddling in Indian electoral processes. In fact, *the Bharatiya*



Janata Party has been cavalier about amending the Foreign Contribution (Regulation) Act, or FCRA, rules permitting itself, a political party, to whitewash foreign funds with retrospective effect, in 2016.

The issue is a reality problem

The Prime Minister and his government have actively courted foreign approval. Two dozen foreign envoys were taken on a guided tour of Kashmir last week because getting a favourable opinion from foreigners matters to the government. At the height of tensions and the shutdown there, before Indian Members of Parliament were allowed, a delegation of far-right European Parliament members was bussed around deserted streets. The Prime Minister has personally appeared with celebrities in foreign lands during his numerous trips, seeking their approval. The craving for approval is natural for any publicity-seeking politician, but a democracy cannot be reduced to only demanding praise from the rest of the world and raising the bogey of 'internal matters' when international voices express solidarity with dissenters and raise serious concerns. Global concerns about democratic rights in India cannot be dealt with by arresting messengers, bullying 'amplifiers' or shutting down social media accounts. India does not have an image problem; it has a reality problem. Changing the reality and adhering to best democratic practices inside is the only durable solution if the Modi government wants its image 'fixed'.

OPEN MINDS

The Centre has saved itself from continuing embarrassment at the international level by withdrawing the Education Ministry's ill-thought-out guidelines for holding online conferences, seminars and training sessions. The sweeping circular, issued in consultation with the External Affairs Ministry, created a bottleneck for scientists in public universities, colleges and organisations and erected new bureaucratic barriers in a pandemic-hit phase when virtual conferences are the only viable channel for researchers to collaborate with global peers. Academicians and others organising the events were, as per the January circular, required to get prior official approval and ensure that the conference topics do not relate to security of the state, border, the northeast, Jammu and Kashmir, Ladakh, and broadly, any "internal matters". Event organisers were also mandated to give preference to technological tools and channels not owned or controlled by hostile countries or agencies. The effect of such a vague and abstruse set of instructions could only be to abandon efforts to organise conferences. To their credit, Indian scientists spoke out, and the Indian Academy of Sciences sounded a warning on the order's detrimental effect on development of science, prompting a rethink. The pandemic from last year has underscored the value of virtual collaboration for many, although it cannot be argued that it completely substitutes for face-to-face interactions, trust-building and team formation. Without hurdles posed by visas, expensive travel, physical disability and so on, thousands of scientists have been able to participate in online conferences. Attendance at such events grew by 80% in 2020 over 2019 for the Plant Biology Worldwide Summit and over 300% for the American Physical Society meeting, as also for international meetings on cancer, lasers and electro-optics. Many scientists also think a combination of post-COVID-19 physical conferences and new possibilities enabled by virtual collaborations promise to forge even stronger alliances. An entirely new avenue has also opened up for national conferences with global experts taking part that researchers and students in the smallest towns can attend. This cannot, however, happen if institutions are bound by a bureaucratic straitjacket. India has made good strides in some fields with a growing number of peer-reviewed



publications, especially in chemistry and physical sciences, as the Nature Index notes. Moreover, rigorous work can help allay concerns, such as on biopiracy, by documenting natural assets. *The humanities, too, need to be freed from paranoid restrictions on research topics, curbs on scholars, and the growing pressure to sanctify cultural notions of science and history.* Good sense has prevailed on the issue of online conferences, and it should lead to a more liberal approach to all research.

BAIL AS RIGHT

In granting bail for six months to poet Varavara Rao in the Bhima Koregaon case on medical grounds, the Bombay High Court has affirmed the principle that even the stringent provisions of an anti-terrorism law are not invincible before a prisoner's constitutional rights. Jailed under the draconian Unlawful Activities (Prevention) Act, Mr. Rao, 82, suffered from a host of ailments, and his condition was deteriorating until he was treated at the Nanavati Hospital on the intervention of the National Human Rights Commission. The court overruled the National Investigation Agency's objection that bail should not be granted on medical grounds once an undertrial prisoner's bail application was rejected on merits under UAPA, as long as access to treatment in a government hospital was available. The NIA had argued that in view of the statutory bar on granting bail under Section 43D(5) of the UAPA if the accusation against a person is prima facie true, any bail given on health grounds would open up the floodgates to similar petitions. The court looked at Mr. Rao's plight from the perspective of his right to life under Article 21. It ruled that "a Constitutional Court cannot be a mute spectator to the undertrial being sent to prison and then to government hospitals, where his health deteriorates further, to be ultimately shifted to the Private Superspeciality Hospitals, upon intervention of courts...". This could not continue back and forth only because his bail application has been turned down on merits, it said. *Bail is routinely denied in most cases under UAPA. It became a watertight embargo since the Supreme Court in 2019 gave a ruling that made it nearly impossible for anyone arrested under UAPA to be released on bail, unless the accused could demonstrate that the charges against them were prima facie untrue.* However, a few recent judicial decisions have sought to carve out exceptions. The Supreme Court laid down recently that prolonged incarceration without any possibility of an early completion of trial could be a ground for granting bail. In Mr. Rao's case too, the High Court has noted that charges are yet to be framed, and 200 witnesses have to be examined once the trial begins. The temporary release of the octogenarian poet ought to turn public attention on the others incarcerated for a long time in the Bhima Koregaon case, in which lawyers and activists have been accused of plotting with Maoists to overthrow the government. *Recent revelations that some of the electronic evidence in the case may have been planted remotely by a piece of malware have dented the prosecution's claims about the existence of a plot.* It is unfortunate that there is *no sign of either an expeditious trial or any possibility of release of those arrested after a case of alleged provocative speeches made during a Dalit commemoration event held on December 31, 2017 in Pune, was transformed by the police into a sinister Maoist plot.*

JAILED ACTIVIST RONA WILSON'S COMPUTER WAS COMPROMISED

A report by Arsenal Consulting, a digital forensics firm from Chelsea, U.S., has cast doubts on the electronic evidence gathered by the investigating agency against 42-year-old activist Rona Wilson and 15 others arrested in the Bhima Koregaon violence case, including Surendra Gadling, Mahesh

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



Raut, Shoma Sen, Sudhir Dhawale, Arun Ferriera, Vernon Gonslaves, Sudha Bharadwaj and P. Varavara Rao. Arsenal Consulting, which was roped in by the American Bar Association to examine a clone of the hard disk of Mr. Wilson's computer, stated that *a hacker controlled his computer for a period of 22 months to plant documents, which led to an investigation that supposedly unravelled a Communist Party of India (Maoist) conspiracy to eliminate Prime Minister Narendra Modi "in another Rajiv Gandhi type incident".* A copy of the report is with The Hindu. It is part of the writ petition filed by Mr. Wilson in the Bombay High Court *that explains how a hacker exploited the IP addresses provided by one 'Host Sailor' and used proxy servers to plant a "trojan horse NetWire". This initially subjected Mr. Wilson to surveillance, and later on, remotely through the malware, delivered various files, including the incriminating correspondence with the other accused. The same were stored in a folder which was set to a "hidden mode", and over a period of 22 months, from time-to-time, various letters and material came to be planted on Mr. Wilson's system without his knowledge, mentions the plea seeking the quashing of the FIR and chargesheet against him. The report further states that the folders and documents were never opened by Mr. Wilson or anyone else and their existence was unknown to him. The hacker also synchronised these documents in such a way that they would get planted in any external memory device connected to the laptop. The report demonstrates that Mr. Wilson's computer was compromised through a mail sent to his email account, which carried an attachment in the form of a document ("another victory.rar").* Since it appeared to be innocuous, Mr. Wilson tried opening it but did not succeed in opening it. But *because he had clicked on the attachment, it helped the attacker install the malware in his laptop.* It is stated in the report that the attachment was enveloped in a decoy file, namely "another victory.rar", and clicking the same resulted in a chain of events that led to the installation of the malware on his device. The attacker retained access to Mr. Wilson's computer for over 22 months, starting June 13, 2016, and used a remote access facility for planting the incriminating letters, while conducting surveillance on his activities without Mr. Wilson getting a hint of it.

What is NetWire?

NetWire, which first surfaced in 2012, is a well-known malware. It is also one of the most active ones around. It is a remote access trojan, or RAT, which gives control of the infected system to an attacker. Such malware can log keystrokes and compromise passwords. Malware, according to cybersecurity experts, essentially do two things. One is data exfiltration, which means stealing data. Most anti-virus software are equipped to prevent this. The other involves infiltrating a system, and this has proven to be far more challenging for anti-virus software. NetWire is described as an off-the-shelf malware, while something like Pegasus, which used a bug in WhatsApp to infiltrate users' phones in 2019, is custom-made and sold to nations.

What is a command and control server?

The commands emerging from this server is what the infected system will carry out.

How did Arsenal Consulting figure out that the incriminating documents were never opened on Mr. Wilson's computer?

Arsenal Consulting says it reviewed the NTFS file system, which can be found on any Windows system. This is a system of storing and organising files. It keeps a log of the files — whether they are created, modified, or deleted. Object identifiers are assigned to files when they are either



created or first opened. Arsenal Consulting says none of the “top ten documents” have any such identifiers. Also, it says, it studied the Windows Registry to check the version of Word program that Mr. Wilson had. *It found that he had a 2007 version, but the incriminating documents were saved from the 2010 or 2013 version of Word.* It also says that Mr. Wilson’s pen drive was also synchronised with the command and control server.

(M)93% BIHAR MINISTERS ARE CROREPATIS: ADR REPORT

As many as 93% of Ministers in the Chief Minister Nitish Kumar’s Cabinet are millionaires and criminal cases are pending against 64% of them, said the latest Association for Democratic Reforms (ADR) report. All 14 Ministers from the BJP quota are millionaires, while 11 of them face criminal cases and eight serious criminal cases. The Cabinet has a total of 31 Ministers. The ADR report analysed self-sworn affidavits of 28 Ministers only. Details of two Ministers — Ashok Choudhury and Janak Ram — were not analysed as currently they are neither members of the Assembly nor the Legislative Council. Due to lack of complete details, another Minister from the BJP quota Ram Surat Rai’s affidavit available on the Election Commission of India website too could not be analysed. The report said the BJP has the largest number of millionaire Ministers and 11 of them face criminal cases, while eight of them face serious criminal cases. As many as 11 of the Ministers are below 50 years of age and 16 are graduate or have above educational qualifications. JD(U)’s nine out of 11 Ministers are millionaires and four of them face criminal cases, said the report. The Ministers from other ruling alliance parties too have criminal cases pending against them.

VOICE VOTE AS CONSTITUTIONAL SUBTERFUGE (ANUJ BHUWANIA - PROFESSOR AT THE JINDAL GLOBAL LAW SCHOOL. HE IS THE AUTHOR OF ‘COURTING THE PEOPLE: PUBLIC INTEREST LITIGATION IN POST-EMERGENCY INDIA’)

The Karnataka *Prevention of Slaughter and Preservation of Cattle Bill* was passed by the State’s Legislative Council on Monday, February 8. The Bill had already been passed by the Legislative Assembly where the State government enjoys a majority. But the prospect of the Bill passing the Upper House was doubtful as the Opposition parties — the Congress and the Janata Dal (S) — have a majority in the Council; and both were opposed to the Bill. But the law was passed by the Council despite the lack of a majority. Instead of having a division vote based on actual voting as is usual and as the Opposition members had demanded, the presiding officer just declared the Bill passed by voice vote without any division.

New legislative template

If this sounds rather familiar, it is because an uncannily similar process was followed to pass the controversial farm laws (by the Rajya Sabha) in September 2020. Here too, the government seemed to lack a majority to pass the bills in the Upper House. And instead of a division vote, a voice vote was deemed to be adequate by the Deputy Speaker of the House. In both cases, the pandemonium in the House caused by heated interventions by the Opposition was used as a pretext to resort to a voice vote. In the last few months, while there has been extensive discussion of the farm laws, they have largely been about the merits of the laws and the need for reforms in the agrarian sector. But the fact that the legislative process followed for these laws did away with



actual voting in the Upper House has not been given the prominence it deserves. The government has repeatedly invoked the multiple consultations around these laws over the years to justify them, but the fact that the pieces of legislation were passed without an actual legislative majority voting for them does not seem pivotal. *These two sets of laws passed with a voice vote seem like a new template for bypassing the constitutionally envisaged legislative process.* Indeed, *both were first passed as ordinances; such was the urgency felt for enacting them.* And once they were tabled in the legislature, *the governments insisted on the Bills not being referred to the legislative committees in either case,* even though the Opposition repeatedly raised the demand.

The Money Bill ruse

The voice vote subterfuge supplements the other technique repeatedly deployed over the last few years to bypass the Upper House of Parliament — the Money Bill route, utilised increasingly in instances even where the laws concerned would not easily fit within that definition. *Most notoriously, the Aadhaar Bill was passed in this manner. But other controversial laws such as those pertaining to electoral bonds, retrospective validation of foreign political contributions and the overhaul of the legal regime relating to tribunals have also been carried out through the Money Bill ruse.* A majority of the Supreme Court in the Aadhaar case upheld such use, though the dissenting judge called such use of the Money Bill as nothing less than “a fraud on the constitution” (<https://bit.ly/2NNgwpy>). *A later constitutional Bench of the Court has since noted the problem with the majority position and has referred the issue of interpreting the Money Bill provision to a larger Bench.*

The Rajya Sabha's role

The fact remains that even if all these laws were actually unquestionably desirable and necessary, the dubious mechanisms followed for their enactment would surely mean they are unjustifiable. That is precisely why the justification for such subterfuge to pass these laws is so revealing. *The increasing use of the Money Bill route was defended by the then Leader of the Rajya Sabha when he deplored the repeated questioning by the indirectly elected Rajya Sabha of the wisdom of the directly elected Lok Sabha. Underlying this common sentiment is a tendency to devalue bicameralism itself.* The Lok Sabha is seen as directly representing the will of the people, and the Rajya Sabha as standing in its way. And since democracy itself is seen purely in terms of parliamentary majority in the Lower House, the countervailing function of the Upper House is rarely seen as legitimate. The Rajya Sabha has historically stopped the ruling party from carrying out even more significant legal changes. *The notorious Emergency-era 42nd Constitutional Amendment could not be repealed in toto by the post-Emergency Janata regime because the Congress continued to have a strong presence in the Rajya Sabha. The Rajiv Gandhi government's proposed 64th Constitutional Amendment Bill on Panchayati Raj was narrowly defeated in the Rajya Sabha, even though it enjoyed the highest ever majority in Lok Sabha. But neither of these governments resorted to constitutional subterfuge or attacked the Rajya Sabha's raison d'être.* Indeed, the Rajya Sabha is undoubtedly imperfect, partly because of constitutional design. And partly because obviously undesirable practices, such as members representing States they have no affiliation to, have been allowed to flourish. But forms of constitutional fraud that reduce it to a cipher cannot be condoned, and it is important to understand the crucial constitutional role that such a body plays.



The value of bicameralism

Legal philosopher Jeremy Waldron has explained the virtues of bicameralism, especially when the two Houses are chosen by different processes of representation and elected on a different schedule. The very questioning of the monopoly of the Lower House to represent the 'people' makes bicameralism desirable, he argues. *In India, the fact that the Rajya Sabha membership is determined by elections to State Assemblies leads to a different principle of representation, often allowing different factors to prevail than those in the Lok Sabha elections.* John Stuart Mill had warned in his classic treatise on representative democracy that "a majority in a single assembly, when it has assumed a permanent character—when composed of the same persons habitually acting together, and always assured of victory in their own House — easily becomes despotic and overweening, if released from the necessity of considering whether its acts will be concurred in by another constituted authority." Now *that judicial review is hardly practised in India, the second chamber's performance of such a role becomes particularly important as it offers the opportunity for a second legislative scrutiny.* The other merit of bicameralism for Waldron is especially significant in a Westminster system like India, where the Lower House is dominated by the executive. The Rajya Sabha holds the potential of a somewhat different legislative relation to the executive, making a robust separation of powers possible.

Taking legislature seriously

Arguably though, the malaise that allows such legislative humiliation to be tolerated in India runs even deeper, evident in the contempt for the legislature that has been shown by the executive in this country since the mid-1970s. Never though has it been more apparent than during the pandemic. While the British Prime Minister was being taken to task on 'Prime Minister's Questions' every Wednesday in the House of Commons even during the pandemic, Parliament in India was not even convened until it became necessary, and that too after suspending Question Hour. The legislature's role here is seen as only to pass legislation — the faster the better. But in a country where judicial procedure is perceived as an obstacle to justice by judges themselves, it should not surprise us that legislators view legislative procedure as dispensable so that laws can be enacted by hook or by crook.

THE ABSURDITY OF THE ANTI-DEFECTION LAW (M.R. MADHAVAN - PRESIDENT OF PRS LEGISLATIVE RESEARCH, NEW DELHI)

The events in Puducherry highlight, yet again, the absurdity of the anti-defection law. In what has now become the standard operating procedure, several MLAs from the treasury benches resigned, lowering the numbers required for a no-confidence motion to succeed. This formula has been seen recently in other States such as Madhya Pradesh and Karnataka. *The anti-defection law was included in the Constitution as the Tenth Schedule in 1985 to combat the "evil of political defections". The main purpose was to preserve the stability of governments and insulate them from defections of legislators from the treasury benches.* The law stated that any Member of Parliament (MP) or that of a State legislature (MLA) would be disqualified from their office if they voted on any motion contrary to the directions issued by their party.



Range of the provision

The provision was not limited to confidence motions or money bills (which are quasi-confidence motions). It applies to all votes in the House, on every Bill and every other issue. It even applies to the Rajya Sabha and Legislative Councils, which have no say in the stability of the government. Therefore, an MP (or MLA) has absolutely no freedom to vote their judgement on any issue. They have to blindly follow the direction of the party. This provision goes against the concept of representative democracy. There are two broadly accepted roles of a representative such as an MP in a democracy. One is that they are agents of the voters and are expected to vote according to the wishes and for the benefits of their constituents. The other is that their duty to their constituents is to exercise their judgement on various issues towards the broader public interest. In this, they deliberate with other MPs and find a reasonable way through complex issues. *The anti-defection law turns the concept of a representative on its head. It makes the MP neither a delegate of the constituency nor a national legislator but converts them to be just an agent of the party.*

A broken chain in India

Look at the contrast with other democracies. For example, *in the recent vote on the impeachment of former U.S. President Donald Trump, seven members from his party in the U.S. Senate, the Republicans, voted to convict him.* Such a decision does not have any legal repercussion. Of course, the party may take action (it did not). Also, voters may decide to reject the legislator for re-election — and that is the core design element of representative democracy. *The legislator is accountable to voters, and the government is accountable to legislators. In India, this chain of accountability has been broken by making legislators accountable primarily to the party.* This means that *anyone from the party having a majority in the legislature — which is, by definition, the party forming the government — is unable to hold the government to account.* Further, *all legislators have a ready explanation for their voting behaviour: they had to follow the party's direction. This negates the concept of them having to justify their positions on various issues to the people who elected them to the post.*

Eroding legislatures

An important consequence of the anti-defection law is the hollowing out of our legislatures. *If an MP has no freedom to take decisions on policy and legislative proposals, what would be the incentive to put in the effort to understand the different policy choices and their outcomes? The core role of an MP to examine and decide on policy, Bills and budgets is side-lined.* Instead, the MP becomes just another number to be tallied by the party on any vote that it supports or opposes. The framers of our Constitution did not intend this outcome. While introducing the draft Constitution, Dr. B.R. Ambedkar outlined the differences between the presidential and parliamentary forms of government. He said that the presidential form (such as in the United States) had higher stability but lower accountability as the President is elected for four years, and cannot be removed except for proven misdemeanour. In the parliamentary form, the government is accountable on a daily basis through questions and motions, and can be removed any time it loses the support of the majority of members of the Lok Sabha. *The drafting committee believed that India needed a government that was accountable, even at the cost of stability. The anti-defection bill weakens the accountability mechanism.*



Inducing instability

What is more, it does not even provide stability. The political system has found ways to topple governments. This includes the methods used in Puducherry this week — of reducing the total membership through resignations. The Constitution was amended to ensure that any person disqualified for defecting cannot get a ministerial position unless they are re-elected; the way around this has been *to resign rather than vote against the party.* In other instances, the *Speaker — usually from the ruling party — has delayed taking a decision on the disqualification. This has led to strange situations such as members who continue to be part of the main Opposition party becoming Ministers (Andhra Pradesh in the term of the last Assembly). The Supreme Court has tried to plug this by ruling that the Speaker has to take the decision in three months, but it is not clear what would happen if a Speaker does not do so.* The premise that the anti-defection law is needed to punish legislators who betray the mandate given by the voters also seems to be flawed. *If voters believe that they have been betrayed by the defectors, they can vote them out in the next election. However, we have seen many of the defectors in States such as Karnataka and Madhya Pradesh being re-elected in the by-polls, which were held due to their disqualification.*

Onus is on parties

The problem arises from the attempt to find a legal solution to what is essentially a political problem. If stability of government is an issue due to people defecting from their parties, the answer is for parties to strengthen their internal systems. *If they attract members on the basis of ideology, and they have systems for people to rise within the party hierarchy on their capabilities (rather than inheritance), there would be a greater exit barrier.* These characteristics seem absent in many of the political parties, and we have seen a large number of defections despite the anti-defection law. To sum up, *the anti-defection law has been detrimental to the functioning of our legislatures as deliberative bodies which hold the executive to account on behalf of citizens. It has turned them into fora to endorse the decision of the government on Bills and budgets. And it has not even done the job of preserving the stability of governments.* The Tenth Schedule to the Constitution must be repealed.

THE STRUCTURAL FRAGILITY OF UNION TERRITORIES

The issue of nomination of members to the Puducherry Assembly had raised a huge controversy. *The Government of Union Territories Act provides for a 33-member House for Puducherry of whom three are to be nominated by the Central government. So, when the Union government nominated three BJP members to the Assembly without consulting the government, it was challenged in the court. Finally, the Supreme Court (K. Lakshminarayanan v. Union of India, 2019) held that the Union government is not required to consult the State government for nominating members to the Assembly and the nominated members have the same right to vote as the elected members.* Nomination as such is not new to the Indian legislature. There is provision for nomination of members to the Rajya Sabha [Article 80 (i)(a)]. But clause (3) of the Article specifies the fields from which they will be nominated. The purpose of this nomination is to enable the House to draw on the expertise of those eminent members who are nominated and thus enrich the debate in the House. *But in the case of nomination to the Puducherry Assembly, no such qualification is laid down either in Article 239A or the Government of Union Territories Act. This leaves the field open for the Union government to nominate anyone irrespective of whether he or she is suitable.* The Supreme

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



Court took too technical a view on the matter of nomination and did not go into the need to specify the fields from which those persons could be nominated and also lay down a fair procedure to be followed for nomination of members. As things stand, the law invites arbitrariness in dealing with the nomination of members to the UT legislature. If a different party runs the government in the UT, this provision will be used by the Union government with a vengeance, which is what happened in Puducherry.

LOSS OF TRUST

The month-long political instability in Puducherry has ended with the resignation of Chief Minister V. Narayanasamy on Monday after he failed to prove his majority on the floor of the House. Though the fall of his government appeared imminent a few days ago, the way in which the political events played out highlighted the limits of the constitutional provisions to discourage defection of elected legislators. Not long ago, *the Narayanasamy Ministry had a comfortable majority with 19 members in the 33-member Assembly. The disqualification of a Congress MLA in July last year did not make any difference to the situation. But, in the last one month, six MLAs from the Congress-DMK combine quit the House. Among them were two Ministers and a couple of MLAs who gave up their seats just a day before the floor test. Two of those who quit the Assembly have since joined the BJP. Under the changed circumstances, the non-Congress front, comprising the All India N.R. Congress (AINRC), the AIADMK and the BJP, gained an edge with 14 members, as the strength of the House was reduced to 26.* With the Assembly elections in the Union Territory just a few weeks away, the Lt. Governor Tamilisai Soundararajan should recommend placing the Union Territory under President's rule. Any other course would only serve to highlight the unprincipled nature of the defections. *Parliamentary democracy thrives not just through adhering to the letter of the law but also by building and respecting healthy precedents and conventions. This was given a go-by when the Centre, in June 2017, nominated three BJP functionaries as MLAs. There was nothing illegal about it, but this raised questions of political propriety in the light of the BJP drawing a blank in the 2016 Assembly election. When one of the nominated MLAs died in mid-January this year, the ruling party at the Centre lost no time in nominating an office bearer of the party to fill the vacancy, though the term of the present House ends on June 8.* The recent events have to be seen against the backdrop of the *BJP's efforts to gain a foothold in the Union Territory*, where its principal adversary, the Congress, has been the pole star. Besides, for the last few years, the BJP has been relentlessly attacking the Narayanasamy regime. *The month-long resignation drama can only be seen as part of the BJP's larger game plan of realising its goal of "Congress-mukt Bharat" (Congress-free India). There would have been no objection to the BJP's pursuit had it played the game in a fair manner.* The BJP should be aware that any negative role on its part will not go well with the words of Prime Minister Narendra Modi who, in his first monthly radio address, Mann Ki Baat, after getting re-elected in May 2019, said: "...beyond laws and rules, democracy is embedded in our sanskaar [tradition]; democracy is our culture. Democracy is our heritage." By engineering defections so close to the election, the BJP might have lost more than it gained.



FEDERALISM AND INDIA'S HUMAN CAPITAL (KEVIN JAMES - CO-AUTHOR FOR THIS ARTICLE AND RESEARCH ASSOCIATE AT THE CENTRE FOR SOCIAL AND ECONOMIC PROGRESS (CSEP), NEW DELHI. ANOOP SINGH - DISTINGUISHED FELLOW AT CSEP. KANDARP PATEL - DIRECTOR, NATIONAL ACADEMY OF AUDIT & ACCOUNTS, SHIMLA. MR. SINGH AND MR. PATEL WORKED WITH THE FIFTEENTH FINANCE COMMISSION)

*Investing in human capital through interventions in nutrition, health, and education is critical for sustainable growth. But India's human capital indicators remain low. In the World Bank's Human Capital Index, the country ranked 116th. The National Family Health Survey-5 for 2019-20 shows that malnutrition indicators stagnated or declined in most States. The National Achievement Survey 2017 and the Annual Status of Education Report 2018 show poor learning outcomes. In addition, there is little convergence across States. This is a cause of concern as these statistics could worsen due to the COVID-19 pandemic. Several government initiatives have been launched to address these issues. The National Health Policy of 2017 highlighted the need for interventions to address malnutrition. On the basis of NITI Aayog's National Nutrition Strategy, the Poshan Abhiyaan was launched, as part of the Umbrella Integrated Child Development Scheme. The latest Union Budget has announced a 'Mission Poshan 2.0' and the Samagra Shiksha Abhiyan has been the Centre's flagship education scheme since 2018. However, India spends just 4% of its GDP as public expenditure on human capital (around 1% and 3% on health and education respectively) — one of the lowest among its peers. International experience suggests that one reason why these interventions are not leading to better outcomes may be India's record with decentralisation. Globally, there has been a gradual shift in the distribution of expenditures and revenue towards sub-national governments. These trends are backed by *studies demonstrating a positive correlation between decentralisation and human capital*. In recent years, India has taken some steps towards decentralisation. The Fourteenth Finance Commission increased the States' share in tax devolution from 32% to 42%, which was effectively retained by the Fifteenth Finance Commission. *In India, three tiers of government are envisaged, with the Constitution dividing powers between the first two tiers — the Centre and the States, as per the three lists under the Seventh Schedule. While public health is in the State List, the broader subject of economic and social planning is in the Concurrent List. In 1976, education was shifted from the State List to the Concurrent List through the 42nd Amendment. The placement of a subject in the Concurrent List, in effect, indicates the presence of overarching considerations that warrant the Centre's involvement.* Fiscally, *while the Constitution assigns the bulk of expenditure responsibilities to States, the Centre has major revenue sources. To address this vertical imbalance, the Constitution provides for fiscal transfers through tax devolution and grants-in-aid.* In addition, the Centre can make 'grants for any public purpose' under Article 282 of the Constitution. *While fiscal transfers that are part of tax devolution are unconditional, transfers under grants-in-aid or Centrally Sponsored Schemes (CSSs) can be conditional.* Therefore, the increase in the States' share of tax devolution represents more meaningful decentralisation.*

Several imbalances

The 73rd and 74th Amendments bolstered decentralisation by constitutionally recognising panchayats and municipalities as the third tier and listing their functions in the Eleventh and Twelfth schedules, respectively. These include education, health and sanitation, and social welfare for panchayats, and public health and socio-economic development planning for municipalities.

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



However, the Constitution lets States determine how they are empowered, resulting in vast disparities in the roles played by third-tier governments. Despite some shifts towards greater State autonomy in many spheres, the centralised nature of India's fiscal architecture has persisted. *Centrally Sponsored Schemes have formed a sizeable chunk of intergovernmental fiscal transfers over the years, comprising almost 23% of transfers to States in 2021-22.* But its outsized role strays from the intentions of the Constitution. Article 282 of the Constitution is listed as a 'Miscellaneous Financial Provision', unlike Articles 270 and 275, which fall under 'Distribution of Revenues between the Union and the States'. Constitutional expert Nani Palkhivala had characterised it as more of a residuary power, opining that grants-in-aid under Article 275 as per Finance Commission recommendations are the more appropriate, regular route. The Supreme Court in *Bhim Singh vs Union of India* had observed that "Article 282 is normally meant for special, temporary or ad hoc schemes". There are issues in the design of CSSs as well, with the conditions being overly prescriptive and, typically, input-based. Against this, international experience reveals that schemes with output-based conditions are more effective. Moreover, *CSSs typically have a cost-sharing model, thereby pre-empting the States' fiscal space. This is incongruous, given that many CSSs cover subjects in the State and Concurrent Lists, such as health and education. A functionally and fiscally empowered third tier would not only be more in keeping with the constitutional spirit, but also lead to better outcomes.* But ironically, States, too, have been responsible for centralisation. Many States do not clearly demarcate or devolve functions for panchayats and municipalities. Further, third-tier governments are not fiscally empowered either. *The collection of property tax, a major source of revenue for third-tier governments, is very low in India (under 0.2% of GDP, compared to 3% of GDP in some other nations).* The Constitution envisages State Finance Commissions (SFCs) to make recommendations for matters such as tax devolution and grants-in-aid to the third tier. However, many States have not constituted or completed these commissions on time, and hence, *the Fifteenth Finance Commission has recommended no grants after March 2024 to any State that does not comply with the constitutional provisions pertaining to SFCs.*

Towards a solution

To begin with, the Centre needs to rethink the nature of its actions. It should play an enabling role, for instance, encouraging knowledge-sharing between States. For States to play a bigger role in human capital interventions, they need adequate fiscal resources. To this end, States should rationalise their priorities to focus on human capital development. *The Centre should refrain from offsetting tax devolution by altering cost-sharing ratios of CSSs and increasing cesses.* The unconditional nature of these vertical transfers should be effectuated in spirit. Concomitantly, the heavy reliance on CSSs should be reduced, and tax devolution and grants-in-aid should be the primary sources of vertical fiscal transfers. Panchayats and municipalities need to be vested with the functions listed in the Eleventh and Twelfth Schedules. *Leveraging the true potential of our multi-level federal system represents the best way forward towards developing human capital.*

HISTORY & PRECEDENT OF PRESIDENT'S ADDRESS IN PARLIAMENT

In the United Kingdom, the history of the monarch addressing the Parliament goes back to the 16th century. In the United States, President George Washington addressed Congress for the first time in 1790. *In India, the practice of the President addressing Parliament can be traced back to the*



Government of India Act of 1919. This law gave the Governor-General the right of addressing the Legislative Assembly and the Council of State. The law did not have a provision for a joint address but the Governor-General did address the Assembly and the Council together on multiple occasions. There was no address by him to the Constituent Assembly (Legislative) from 1947 to 1950. And after the Constitution came into force, President Rajendra Prasad addressed members of Lok Sabha and Rajya Sabha for the first time on January 31, 1950. The Constitution gives the President the power to address either House or a joint sitting of the two Houses of Parliament. Article 87 provides two special occasions on which the President addresses a joint sitting. The first is to address the opening session of a new legislature after a general election. The second is to address the first sitting of Parliament each year. A session of a new or continuing legislature cannot begin without fulfilling this requirement. When the Constitution came into force, the President was required to address each session of Parliament. So during the provisional Parliament in 1950, President Prasad gave an address before every session. The First Amendment to the Constitution in 1951 changed this position and made the President's address once a year.

By the govt, about the govt

There is no set format for the President's speech. The Constitution states that the President shall "inform Parliament of the cause of the summons". During the making of the Constitution, Prof K T Shah wanted the President's address to be more specific. He suggested that the language be changed to specify that the President shall inform Parliament "on the general state of the Union including financial proposals, and other particular issues of policy he deems suitable for such address". His amendment was inspired by the US Constitution, according to which the President "shall from time to time give to the Congress information on the State of the Union, and recommend to their consideration such measures as he shall judge necessary and expedient". But Prof Shah's amendment was rejected by the Constituent Assembly. The address of the President follows a general structure in which it highlights the government's accomplishments from the previous year and sets the broad governance agenda for the coming year. The speech that the President reads is the viewpoint of the government and is written by it. *Usually, in December, the Prime Minister's Office asks the various ministries to start sending in their inputs for the speech. A message also goes out from the Ministry of Parliamentary Affairs asking ministries to send information about any legislative proposals that need to be included in the President's address. All this information is aggregated and shaped into a speech, which is then sent to the President. The government uses the President's address to make policy and legislative announcements.* For example, in 1985 President Giani Zail Singh announced that Prime Minister Rajiv Gandhi's government intended to introduce a new national education policy and the anti-defection law. In 1996, Prime Minister Atal Bihari Vajpayee's 13-day government announced its intention of giving statehood to Uttaranchal and Jharkhand (Vananchal) and 33 per cent reservation to women in legislatures. And in 2015, President Pranab Mukherjee voiced the Narendra Modi government's plan to expedite financial sector reforms and its endeavour for the smooth conduct of legislative business and enactment of progressive laws in Parliament.

Procedure & tradition

In the days following the President's address, a motion is moved in the two Houses thanking the President for his address. This is an occasion for MPs in the two Houses to have a broad debate on governance in the country. The Prime Minister replies to the motion of thanks in both Houses, and



responds to the issues raised by MPs. The motion is then put to vote and MPs can express their disagreement by moving amendments to the motion. Opposition MPs have been successful in getting amendments passed to the motion of thanks in Rajya Sabha on five occasions (1980, 1989, 2001, 2015, 2016). They have been less successful in Lok Sabha. For example in 2018, Lok Sabha MPs tabled 845 amendments of which 375 were moved and negatived. The President's address is one of the most solemn occasions in the Parliamentary calendar. *It is the only occasion in the year when the entire Parliament, i.e. the President, Lok Sabha, and Rajya Sabha come together. The event is associated with ceremony and protocol. The Lok Sabha Secretariat prepares extensively for this annual event.* In the past, it used to get 150 yards of red baize cloth from the President's house for the ceremonial procession. An officer of Lok Sabha would also be instructed to remind the ADC to the President to bring the water and tumbler from Rashtrapati Bhawan for the President's use. The President arrives at Parliament House escorted by the Presidential Guards and is received by the presiding officers of the two Houses, the Prime Minister, the Minister for Parliamentary Affairs, and the Secretaries-General of the two Houses. He is then escorted to the *Central Hall where he delivers his address* to the assembled MPs of Lok Sabha and Rajya Sabha.

SCIENTIFIC DISINTEREST

The presence of Union Health Minister Harsh Vardhan at a press conference to promote Coronil, an Ayurvedic pill promoted by Baba Ramdev's Patanjali Ayurved, is objectionable on more than one count. Coronil is a concoction of common herbs known to Ayurveda. Since June, there have been attempts to deploy it into India's COVID-19 management protocol. *Dr Vardhan, alongside Cabinet colleague Nitin Gadhari, was at a press conference with Baba Ramdev and other promoters of Patanjali to announce a scientific publication describing the efficacy of Coronil in ridding volunteers, part of a clinical trial, of coronavirus.* For one, Coronil is a product manufactured by a private company. *Doctors — Harsh Vardhan is an ENT surgeon — are explicitly barred from promoting drugs of any sort.* Though Dr Vardhan didn't explicitly mention Coronil in his address at the function, what public functionaries are seen to be doing speaks louder than what they say. *Baba Ramdev first claimed that his product was endorsed by the WHO. Following media reports, WHO South-East Asia tweeted that it hadn't reviewed or certified the effectiveness of any traditional medicine for the treatment of COVID-19.* What transpired was that India's apex drug regulator had certified Coronil as a pharmaceutical product in "supporting COVID treatment and an immunity booster" and cleared it for export. It hasn't recommended it as treatment for COVID-19. *The publication of a double-blinded, randomised clinical trial in a research journal isn't an endorsement of a product, but an essential requirement of reporting the drug's action to subject experts. The report reveals that the medicine was only tested on 95 of those asymptomatic and "mildly symptomatic" but confirmed as RT-PCR positive.* The 45 patients who got the actual treatment (and not a dummy pill) tested COVID-19 negative significantly quicker. However, these numbers are small. A large proportion of those with mild or no symptoms are expected to clear out the infection without any external intervention. There was no information in the study on the number of days that elapsed before the patients tested positive, making the role of the drug in clearing out the virus unclear. True, allopathic medicine too has cut corners: an ICMR-led trial ultimately couldn't justify the administration of hydroxychloroquine; the Drugs Controller General of India approved itolizumab by Biocon that was tested only in a sample of 30 but was advertised as a "breakthrough drug"; and Covaxin was approved before its efficacy was known. Processes are imperfect, but the government must demonstrate its scientific disinterest when evidence is wanting.

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



The Indian Medical Association on Monday expressed shock and dismay at what it called is a “blatant lie of WHO certification” for Patanjali’s Coronil tablet, which the company said can be used to fight COVID-19. It has also demanded an explanation from Health Minister Harsh Vardhan about his presence at the event where Coronil was launched last week. The association’s two-page note comes after the World Health Organization clarified that “it has not reviewed or certified the effectiveness of any traditional medicine for the treatment of COVID-19”. The IMA said it was shocked to note the “blatant lie” of certification for a “secret medicine” launched in the presence of the Health Minister, who is a doctor as well. The country “needs an explanation” from him, it said in a statement. Patanjali Ayurved managing director Acharya Balkrishna put out a clarification shortly before the WHO tweet. “We want to clarify to avoid confusion that our WHO Good Manufacturing Practices compliant COPP certificate to Coronil is issued by the Drugs Controller General of India, Government of India. It is clear that WHO does not approve or disapprove any drugs. WHO works for building a better, healthier future for people all over the world,” he said. The AYUSH Ministry had earlier said Coronil can be sold only as an immunity-booster and not as a cure.

MINISTRY DISOWNS ‘COW SCIENCE’ EXAMINATION

With the Rashtriya Kamdhenu Aayog (RKA) having cancelled its “indigenous cow science” examination after widespread criticism about its promotion of fake claims and pseudoscience, the Animal Husbandry Department said the two-year-old body had “no mandate” to conduct such an examination. Any future awareness programme would be conducted “on a scientific basis”, a senior official overseeing the RKA told The Hindu. Under the leadership of Vallabhbhai Kathiria, the body’s Chairman, the RKA had announced a national “Kamdhenu Gau Vigyan Prachar Prasar Exam” to be held on February 25. *Reference materials for the exam made a number of unscientific claims, including that the dung of indigenous cows protected against radioactivity, their milk had traces of gold, and that cow slaughter caused earthquakes. The RKA had the backing of the University Grants Commission (UGC), which publicised the examination, causing widespread outrage.* “This gau vigyan [cow science] programme was announced by the then Chairman, Mr. Kathiria. And his term was up to February 20 only. Before leaving the office, he postponed it,” said O.P. Chaudhary, Joint Secretary in the Animal Husbandry Department, which oversees the RKA. Mr. Kathiria did not respond to calls or requests for comment on the postponement. RKA was set up in February 2019, it was given a mandate as an advisory body on issues related to the protection, conservation and development of the indigenous cow and its progeny. After examining the situation, the Ministry would appoint a new Chairperson for the RKA and send fresh information to those who had already registered for the exam, he said.

THE KOCH RAJBONGSHI VOTE IN ASSAM, WEST BENGAL

Union Home Minister Amit Shah will on Thursday visit Assam and West Bengal, where he will address a community vital to upcoming Assembly elections in both states — the Koch Rajbongshis. In Assam, he will visit the home of Ananta Rai, an influential leader said to be a descendant of the erstwhile royal family of Cooch Behar. In West Bengal, Shah will flag off a yatra and visit the Madan Mohan Temple in Cooch Behar.



Who are the Koch Rajbangshis?

They are a community that traces its roots to the Kamata kingdom, which comprised parts of Assam, West Bengal and adjoining territories. After Independence, the princely state of Cooch Behar became part of West Bengal. Today, Koch Rajbangshis are found in Assam, Meghalaya, West Bengal and Bihar, and in Bangladesh, Nepal and some parts of Bhutan.

How significant are they politically?

They are estimated to number over 33 lakh in West Bengal, mostly the northern districts, and have a large presence in Assam. "We are one of the largest communities in Assam, with our own language and culture," said Hitesh Barman, chief adviser of All Koch Rajbangshi Students' Union (AKRSU). They account for more than 30% of the electorate in North Bengal. Rai is the founder of the Greater Cooch Behar People's Association (GCPA) and proclaims himself a Maharaj.

A number of organisations representing the community, mostly based in West Bengal, have been demanding a separate Kamatapur state consisting of North Bengal and parts of lower Assam. There is also a militant outfit, Kamatapur Liberation Organisation.

In 2012, the Trinamool government set up the *Cooch Behar Panchanan Barma University*, named after a 19th century Rajbangshi leader and reformist. Ahead of the Assembly Polls, Chief Minister Mamata Banerjee has announced three *new police battalions including 'Narayani' in Cooch Behar; the Koch Rajbangshis have long demanded a 'Narayani Regiment' in the Indian Army.* The Centre, for its part, recently *awarded the Padma Shri to Dharma Narayan Barma, a retired teacher from the community. In Assam, the government last year formed the Kamatapur Autonomous Council comprising predominantly Koch Rajbangshi villages in some lower Assam districts. Grant of ST status to Koch Rajbangshis (among six communities in Assam) remains in the pipeline.* Last month, BJP national president J P Nadda claimed that the ST status has already been granted, but the Opposition said it is misinformation.

THE MAHARASHTRA-KARNATAKA BORDER DISPUTE – THE PAST AND THE PRESENT

Maharashtra has staked claim to over 7,000 sq km area along its border with Karnataka, comprising 814 villages in the districts of Belagavi (Belgaum), Uttara Kannada, Bidar, and Gulbarga, and the towns of Belagavi, Karwar, and Nippani. All these areas are predominantly Marathi-speaking, and Maharashtra wants them to be merged with the state. The genesis of the dispute lies in the reorganisation of states along linguistic and administrative lines in 1956. The erstwhile Bombay Presidency, a multilingual province, included the present-day Karnataka districts of Vijayapura, Belagavi, Dharwad, and Uttara Kannada. In 1948, the Belgaum municipality requested that the district, having a predominantly Marathi-speaking population, be incorporated into the proposed Maharashtra state. However, The States Reorganisation Act of 1956 made Belgaum and 10 talukas of Bombay State a part of the then Mysore State (which was renamed Karnataka in 1973). While demarcating borders, the Reorganisation of States Commission sought to include talukas with a Kannada-speaking population of more than 50 per cent in Mysore. But the opponents of the region's inclusion in Mysore have maintained that in 1956, Marathi-speakers outnumbered Kannada-speakers in those areas. Political parties in Maharashtra are united on the merger of the border areas with the state. The dispute features in every election manifesto of the Congress, NCP, Shiv



Sena, and BJP. Over the last six decades, every Governor's address (which outlines the state government's policies and programmes) to the joint session of the Maharashtra Assembly and Council has mentioned the border dispute to loud applause from members across parties.

Recent incidents

This is not the first time that this matter has arisen in the last 13 months of the Maha Vikas Aghadi (MVA) coalition government. Bus services between Kolhapur (Maharashtra) and Belgaum (Karnataka) had to be suspended for a few days following tensions that flared on both sides of the border after Chief Minister Thackeray referred to the contentious areas as "Karnataka-occupied Maharashtra" in the Assembly. He also named two senior ministers, Eknath Shinde and Chhagan Bhujbal, to a co-ordination committee to oversee the expeditious resolution of the case in favour of Maharashtra in the Supreme Court. *Late last year, the Maharashtra government asked all ministers to wear black bands on November 1, which is celebrated in Karnataka as Rajyotsava or state Formation Day, to express support for Marathi-speaking people in Karnataka. Thackeray reiterated his commitment to redrawing Maharashtra's borders to include areas that now lie in Karnataka on January 17, which is observed in Maharashtra as Martyrs' Day, while paying tributes to those who died in the 1956 border struggle to join Maharashtra.* Deputy Chief Minister Ajit Pawar echoed the pledge.

The Mahajan Commission

The BJP government in Karnataka has accused Maharashtra of seeking to incite violence on the border dispute, and Karnataka Chief Minister B S Yediyurappa has vowed he would "not part with an inch of land". The Mahajan Commission had "long ago settled the dispute", Yediyurappa said, condemning Maharashtra. *The Mahajan Commission was set up by the Government of India in October 1966 to look into the border dispute. In its report submitted in August 1967, the Commission, led by former Chief Justice of India Mehr Chand Mahajan, recommended that 264 villages should be transferred to Maharashtra, and that Belgaum and 247 villages should remain with Karnataka. Maharashtra rejected the report, calling it biased and illogical, while Karnataka welcomed it. Despite demands from Karnataka, the Centre never implemented the recommendations of the report.* Earlier this week, Sharad Pawar said the report was "100 per cent against Maharashtra".

The BJP's dilemma

At a time when the BJP has tried to corner Thackeray on the issue of renaming Aurangabad, challenging him to act on the old promise, the border row has handed the Shiv Sena an opportunity to hit back at its former ally. The Maharashtra BJP had lain low for long, shying away from saying anything that would pit it against its own government and party in Karnataka. However, former Chief Minister Devendra Fadnavis has now said that the Maharashtra BJP wants that the predominantly Marathi-speaking border areas should be merged with Maharashtra. "Irrespective of the party in power, both states have from the beginning struck to their positions. The Maharashtra BJP's stand remains unchanged," Fadnavis has said.



WHAT IS THE 'TOP 25' DRIVE INITIATED BY MUMBAI POLICE?

The Mumbai police have started a drive titled 'Top 25' aimed at keeping under check history-sheeters and those they believe could foment trouble. A look at what the drive is and how far it has been implemented.

What is the 'Top 25' drive of the Mumbai police?

The Mumbai police commissioner has asked all 95 police stations in the city to make a list of the "top 25" criminal elements in their jurisdictions, and ask them to sign a bond of good behaviour failing which they would have to pay a fine. The aim is to rein in criminal elements and those the police believe could create a law and order problem in the city. While this practise that is termed "chapter proceedings" has been followed in the past, the amount a person would usually forfeit was around ₹10,000 – ₹15,000. Now, the amount has been raised up to ₹50 lakh. Recently, a person under the jurisdiction of Mahim police station forfeited a bail bond of ₹15 lakh.

How is the police calculating the surety amount now?

The police are now going through the bank details and tax returns of the person and the surety amount is set in accordance with the annual income of the offender or his family. The police believe that the threat of having to pay a high amount will act as a deterrent and that a few thousands as surety amount did not have the desired effect.

What are chapter proceedings though?

Chapter proceedings are preventive actions taken by the police if they fear that a particular person is likely to cause law and order trouble. These proceedings are unlike punitive action taken in case of an FIR with an intention to punish. Here, the police can issue notices under sections of the Code of Criminal Procedure to ensure that the person is aware that creating nuisance could result in action against him, which includes paying a fine, in the absence of which, he could be put behind bars.

Does a person served with the notice can take legal recourse against the notice?

Yes, on receiving the notice under section 111, a person can appeal before the courts. In fact, in the past, courts have come down strongly against chapter proceedings in some cases. In 2017, while striking down a notice issued to the owner of a bar, the Bombay High Court said "chapter proceedings cannot be initiated on the basis of an incident of trivial nature".

Any notable cases where the Mumbai police had issued chapter proceedings?

Recently, the Mumbai police initiated chapter proceedings against the owner of Republic media Arnab Goswami in October. They referred to the two FIRs that had been registered against Goswami in the city last year. The two FIRs are linked to the content on his news shows on Republic TV channel in the aftermath of crowding of migrants outside Bandra railway station and the lynching of sadhus at Palghar. It was alleged that the attempt was to communalise the two incidents, following which FIRs were registered. Eventually, in June, the Bombay High Court



stayed the FIR against Goswami and directed that no coercive steps be taken against him till the time the petition is disposed of.

NEW PARADIGM IN ANIMAL HUSBANDRY (ATUL CHATURVEDI - THE SECRETARY, MINISTRY OF ANIMAL HUSBANDRY, DAIRYING AND FISHERIES; AND NAINA SHARMA WORKS AT INVEST INDIA)

In June 2020, while the country was reeling under the initial wave of COVID-19 and subsequent lockdowns, the Central government unveiled a string of measures to cushion the economy, as a part of which the Animal Husbandry Infrastructure Development Fund (AHIDF) was announced. As an allied industry of agriculture, the animal husbandry and dairy sector collectively employs more than 100 million people. Since the bulk of establishments in this sector is concentrated in rural India, the socio-economic relevance of this sector cannot be overstated. The AHIDF has been set up with an outlay of ₹15,000 crore. *As per the provisions of AHIDF, a project will be eligible for a loan amount that covers up to 90% of the estimated cost – with an **interest subvention** of 3% for all eligible entities.* Applicants can submit the proposal with a complete Detailed Project Report through the *Udyami Mitra Portal*. The Ministry's website has been updated with the relevant technical details for prospective applicants. As such, this is the first major fund launched by the government that includes a diverse set of stakeholders such as FPOs, private dairy players, individual entrepreneurs, and non-profits within its ambit. As an example of a sub-sector concern where the dairy value chain could be strengthened, there is a pressing need to enhance chilling infrastructure at collection centres by setting up bulk milk coolers to prevent wastage of milk. Currently, there is an infrastructure gap of about 120-130 MMT, which translates into an investment potential of approximately ₹20,000 crore. If the infrastructure needs for milk processing and distribution are included, then the overall potential investment opportunity is to the tune of ₹1,40,000 crore across the dairy value chain. There is also considerable potential to increase the productivity of cattle, especially by enhancing the quality of animal feed. With this in mind, the AHIDF has been designed to support the establishment of animal feed plants of varying capacities – including setting up of mineral mixture plants, silage making units, and animal feed testing laboratory. To spur on innovative solutions, the Ministry in collaboration with Invest India has invited ideas from domestic start-ups for the development of new varieties of green fodder and enriched animal feed. The infrastructure gap of 10-18 MMT in the production and supply of affordable compound cattle feed translates into an investment potential of around ₹5,000 crore.

Boosting the poultry industry

In a similar vein, there are not only economic but nutritional benefits to boosting the poultry segment's output, efficiency and quality. *India is the fourth largest chicken meat producer and the second largest egg producer in the world and is well-positioned to help mitigate rampant malnutrition given that chicken meat provides the cheapest source of protein per unit.* With eggs being introduced as part of the mid-day meal within several anganwadis in the country, an upgradation in poultry infrastructure would be closely intertwined with social justice outcomes too. Finally, macro benefits regarding climate change and employment are linked to this sector. Enhanced infrastructure can make processing units more energy-efficient and help mitigate their carbon footprint. The AHIDF also has the potential to create over 30 lakh jobs, even as it overhauls



domestic infrastructure towards giving greater prominence to India's dairy and livestock products in the global value chain.

THE FARAKKA 'LOCK' AND HILSA, WHY THERE IS BOTH HOPE AND APPREHENSION

It has been reported that an old project to facilitate the movement of hilsa upstream along the Ganga to its spawning grounds of yore may come to fruition this year. Back in February 2019, the government had unveiled a project to redesign the navigation lock at the Farakka Barrage at a cost of Rs 360 crore to create a "fish pass" for the hilsa.

The journey of shimmering scales

*In scientific parlance, the hilsa (*Tenualosa ilisha*) is an anadromous fish. That is, it lives most of its life in the ocean, but during the rainy season, when it is time to spawn, the hilsa moves towards the estuary, where the rivers of India and Bangladesh meet the Bay of Bengal. A large part of the shoal travels upstream in the Padma and the Ganga — some are known to move towards the Godavari, and there are records of hilsa migration to the Cauvery.* Culinary lore has it that the fish that travel the farthest upstream have the best combination of the flavours of the sea and the river. *Historical records also show that until the 1970s, the hilsa would swim the Ganga upstream to Allahabad — and even to Agra. But the Farakka Barrage, which became operational on the Ganga in 1975, disrupted the westward movement of the hilsa. The barrage had a navigation lock that stopped the fish from swimming upstream beyond Farakka. In Buxar on the border of Bihar and Uttar Pradesh, the last recorded catch of the hilsa was made 32 years ago.* The role of the Farakka Barrage in disrupting the hilsa's journey is well documented, and has been discussed in Parliament as well. On August 4, 2016, then Union Water Resources Minister Uma Bharti told Lok Sabha about plans to create "fish ladders" to help the fish navigate the obstacle posed by the barrage.

Fish ladders/fish ways/fish passes

Fish passes — also known as fish ladders or fish ways — aim to assist fish in crossing obstacles presented by dams and barrages. They usually consist of small steps that allow the fish to climb over the obstacles and enable them to reach the open waters on the other side. For the intervention to work, the water running over these ladders must be controlled — it must be adequate to catch the attention of the fish, but not too strong to deter them from swimming against it. *The most rudimentary first fish ladders are said to have been forged out of bundles of tree branches that helped fish cross difficult channels in Western Europe.* In 1837, Canadian lumber mill owner Richard McFarlan patented a fish ladder designed to help fish bypass a dam at his water-powered mill. By the late 19th century, fish passes had become common in the United States and Canada. About the same time, Francis Day, the pioneering fish scientist of colonial India, experimented with fish ladders to enable unhindered movement of the hilsa across anicuts in the Cauvery's northern tributary, the Kollidam. The experiment was tried for about 40 years before being given up. Fish passes also proved ineffective in North India. By the middle of the 20th century, the utility and effectiveness of fish ways was being seriously debated in the US. A paper in the May 1940 issue of 'The Stanford Ichthyological Bulletin' put the question in perspective: "The devising of a fish pass is fraught with uncertainty, because it is almost impossible to prophesy the behaviour of fish and quite impossible to anticipate the vagaries of water. The subject involves a working knowledge of hydraulics, and while hydraulic engineers conversant with the habits and



requirements of fish are rarely to be found, the rules and assumptions of hydraulics themselves are apt to be disconcertingly upset when applied to the functioning of a fish pass. The subject is by no means within sight of finality.”

No clear path yet, for fish or the plan

More than 75 years later, the predicament endures. A 2013 study led by the American ecologist J Jed Brown noted that “state-of-the-art fish passage facilities have been unsuccessful. Some migratory species, such as sturgeons, do not pass through at all. But even the species that do make it through do so in numbers far less than stated targets”. Brown’s research found that about 2% of American shad, a species closely related to the hilsa, passed through the dams on the Merrimack, Connecticut and Susquehanna rivers in the US. *As of the 2019 plan, the new fish pass on the Ganga was to cover only 8 metres, a fraction of the Ganga’s width at Farakka.* It seemed likely that only a small number of hilsa might sneak through, but it was doubtful if the new fish way would allow large shoals of the fish to return to their former spawning grounds further upstream. It is not immediately clear if the plan has been modified. Lovers of the hilsa may have to wait a while longer.

WHY A RARE DUCK HAS CREATED A FLUTTER IN UPPER ASSAM

Floating in the Maguri-Motapung beel (or wetland) in Assam’s Tinsukia district for over a week is the spectacular and rare Mandarin duck. First spotted on February 8 by Madhab Gogoi, a Tinsukia-based birder and tour guide, the duck has since become the star of the wetland — an area affected by a blowout and fire at a natural gas well located close by in May 2020. The bird was last sighted in this part of Assam more than a century ago, in 1902.

What is the Mandarin duck and why is it exciting?

*Considered the most beautiful duck in the world, the Mandarin duck, or the (*Aix galericulata*) was first identified by Swedish botanist, physician and zoologist Carl Linnaeus in 1758.* The eBird website, a platform that documents birds world over, describes it as a “small-exotic looking bird” native to East Asia. “It’s very beautiful, with majestic colours and can be spotted from a distance,” said Deborshee Gogoi, a Digboi-based professor of marketing, and a birder, who also spotted the duck last week, “It was a male — we could tell because in this species, *the males are more colourful than the females.*” The eBird website describes the male as “very ornate with big orangey ‘sail fins’ on the back, streaked orangey cheeks, and a small red bill with a whitish tip” and the female with “narrow white spectacles on a shaggy grey head, bold pale dappled spots along flanks, and pale bill tip.” The *migratory duck breeds in Russia, Korea, Japan and north-eastern parts of*





China, explained Gogoi. It now has established populations in Western Europe and America too. In 2018, when a Mandarin duck was spotted in a pond in New York City's Central Park, it created a flutter among local residents. *The duck, however, rarely visits India as it does not fall in its usual migratory route. There are only a handful of recorded sightings here.* "It was recorded in 1902 in Dibru river in the Rongagora area in Tinsukia," said Hatiboruah, "More recently, it was sighted in Manipur's Loktak Lake in 2013, and in Saatvoini Beel in Manas National Park and Tiger Reserve in Assam's Baksa district 2014." According to ornithologist Dr Anwaruddin Choudhury, a former joint secretary of the forest department, *while the duck is not a globally threatened species, spotting one is always considered significant because they only make "rare appearances."* Hatiboruah said it was a "historical sighting, especially because no one can say when we will see it again."

What is the Maguri beel, why is it important?

The Maguri Motapung wetland — an Important Bird Area as declared by the Bombay Natural History Society — is located close to the Dibru Saikhowa National Park in Upper Assam. According to Gogoi, the wetland has a grassland adjacent to it. "The entire ecosystem (grassland and wetland) is very important as it is home to at least 304 bird species, including a number of endemic ones like Black-breasted parrotbill and Marsh babbler." *In May 2020, the beel was adversely affected by a blowout and fire at an Oil India Limited-owned gas well. The resulting oil spill killed a number of fish, snakes as well as an endangered Gangetic dolphin, and the fire had burnt a large portion of the grassland.* Hatiboruah said that there has been considerable recovery due to at least nine waves of floods last year that cleared the oil. Gogoi added that while most migratory season usually begins in September, the birds arrived only in November possibly because of the fire, which was doused only then. "However, the sighting of the duck is undoubtedly a positive sign," he said.

NESTING SITES COULD BE OVERRUN BY ANDAMANS DEVELOPMENT PROJECT (PANKAJ SEKHSARIA HAS BEEN RESEARCHING ISSUES OF THE A&N ISLANDS FOR MORE THAN TWO DECADES AND HAS AUTHORED FIVE BOOKS ON THE ISLANDS)

Proposals for tourism and port development in the Andaman and Nicobar (A&N) Islands have conservationists worried over the fate of some of the most important nesting populations of the Giant Leatherback turtle in this part of the Indian Ocean. The largest of the seven species of sea turtles on the planet and also the most long-ranging, Leatherbacks are found in all oceans except the Arctic and the Antarctic. Within the Indian Ocean, they nest only in Indonesia, Sri Lanka and the Andaman and Nicobar Islands and are also *listed in Schedule I of India's Wildlife Protection Act, 1972*, according to the highest legal protection. *Surveys conducted in the A&N Islands over the past three decades have shown that the populations here could be among the most important colonies of the Leatherback globally.* There is concern now, however, that at least three key nesting beaches — two on Little Andaman Island and one on Great Nicobar Island — are under threat due to mega "development" plans announced in recent months. *These include NITI Aayog's ambitious tourism vision for Little Andaman* and the proposal for a mega-shipment port at Galathea Bay on Great Nicobar Island.



Little Andaman in focus

The Little Andaman plan, which proposes phased growth of tourism on this virtually untouched island, has sought the de-reservation of over 200 sq km of pristine rainforest and also of about 140 sq km of the Onge Tribal Reserve. Two sites where key components of the tourism plan are to be implemented are both Leatherback nesting sites —



South Bay along the southern coast of the island and West Bay along its western coast. South Bay is proposed to be part of the “Leisure Zone” where a film city, a residential district and a tourism special economic zone are to come up. West Bay is to be part of West Bay Nature Retreat with theme resorts, underwater resorts, beach hotels and high-end residential villas. The roughly 7-km-long beach at West Bay has been the site of ongoing marine turtle research projects. Set up post-2004 by the Andaman and Nicobar Environment Team (ANET), Dakshin Foundation, the Indian Institute of Science and the A&N Forest Department to monitor how turtle populations have responded after the devastating earthquake and tsunami, it has thrown up new information on turtles and their behaviour. Not only are the numbers of females nesting here significant, satellite telemetry has revealed hitherto unknown migration patterns. Satellite-tagged female turtles have been tracked swimming up to 13,000 km after nesting on West Bay, towards the western coast of Australia and southwest towards the eastern coast of Africa. One of the tagged turtles travelled to Madagascar, covering 12,328 km in 395 days while another travelled 13,237 km in 266 days to the Mozambique coast.

ARMY RAISES A SPECIALIST UNIT TO ‘SNIFF OUT’ COVID-19

Since November last, *Casper and Jaya* have been deployed in Chandigarh and Delhi to screen samples and detect COVID-19 among soldiers posted to forward areas of the Northern Command. The two are ‘specialist’ military dogs, Casper, a two-year-old male Cocker Spaniel, and Jaya, a one-year-old female Chippiparai. They are the first two canines trained to detect COVID-19 cases from sweat and urine samples. “From the trials and operational deployment, it has been inferred that COVID-19 volatile metabolic biomarkers are within the threshold limit of olfactory detection capability of trained dogs and can help in quick and real time detection of disease,” said Lt. Col. Surender Saini, instructor at the Army’s Remount Veterinary Corps (RVC), Meerut. They can detect COVID-19 with 95% accuracy, he said. “They are not medically accepted. They are used to screen large numbers,” Lt. Col. Saini said. *Samples identified as positive by the dogs are confirmed through the RT-PCR test.* Eight more military dogs are now being trained, and they will be equipped by March. These include two Chippiparais, two Cocker Spaniels and four Labradors. From among the group in the Army, a foreign breed and a desi breed were selected first. *The sensitivity and specificity of results from the dogs based on screening of 279 urine and 267 sweat samples during*

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



trials were found to be very high, an officer said. The two dogs underwent 12 to 16 weeks of training with exposure to positive and negative samples. They were deployed on November 22 last at a transit camp in Delhi and a total of 806 transients were screened. They were also deployed in Chandigarh, where they screened over 300 samples. Of the over 3,800 samples screened, 22 positive cases were detected. A dog can screen approximately 100 samples in an hour with a rest period of five minutes after every 15 minutes.

IMPARTING DIRECTION TO SCIENCE IN INDIA (S. VARAHASIMHAN - HISTORY OF SCIENCE ENTHUSIAST BASED IN CHENNAI)

National Science Day, on February 28, is a moment to celebrate the progress that India has made in science and technology research, thanks to its science policies. It is also an opportunity to ponder about the problems that we face in research. As for the metrics on scientific research in India, there is the good news, the not-so-good news, and some hope.

Publications and patents

The good news: from the report published by the National Science Foundation of the U.S. in December 2019, India was the third largest publisher of peer-reviewed science and engineering journal articles and conference papers, with 135,788 articles in 2018 (<https://bit.ly/3qWY7FN>). This milestone was achieved through an average yearly growth rate of 10.73% from 2008, which was greater than China's 7.81%. However, China and the United States had about thrice and twice the number, respectively, of India's publications. *The not-so-good news is that publications from India are not impactful.* From the report, *in the top 1% of the most cited publications from 2016 (called HCA, or Highly Cited Articles), India's index score of 0.7 is lower than that of the U.S., China and the European Union. An index score of 1 or more is considered good.* The inference for India is that the impact, and hence the citation of publications from India, should improve. The other relevant report is on patents filed by India. The World Intellectual Property Organization (WIPO) through their Patent Cooperation Treaty (PCT) is the primary channel of filing international patent applications. In its report for 2019, *WIPO says India filed a modest number of 2,053 patent applications* (<https://bit.ly/3pYlddN>). *Compared to the 58,990 applications filed by China and 57,840 by the U.S., India has a long way to go.* This was the first time that China filed more patent applications than the U.S. The Indian Government put in place the National Intellectual Property Rights (IPR) Policy in 2016 to "stimulate a dynamic, vibrant and balanced intellectual property rights system". One of the objectives is human capital development (<https://bit.ly/3pYwZoe>). The mission to foster innovation, replicate it at scale and commercialise it is a work in progress consequent to the policy. However, we need hawk-eye's focus à la China which filed just 276 patent applications in 1999 but rose to become an innovation titan in 2019.

Science policies over time

India realised early as a republic the need to use science to become a welfare state. There have been four science policies till now, after 1947, with the draft of the fifth policy having been released recently. India's first science policy adopted in 1958, Scientific Policy Resolution, aimed to develop scientific enterprise and lay the foundation for scientific temper. It led to the establishment of many research institutes and national laboratories, and by 1980, India had developed advanced scientific infrastructure with sufficient scientific personnel. The focus in the



second science policy, Technology Policy Statement, in 1983, was technological self-reliance and to use technology to benefit all sections of the society, while strengthening research in fields such as electronics and biotechnology. The Science and Technology Policy 2003, the first science policy after the economic liberalisation of 1991, aimed to increase investment in research and development and brought it to 0.7%. The Scientific and Engineering Research Board (SERB) was established to promote research. In 2013, India's science policy included Innovation in its scope and was called Science, Technology and Innovation Policy. The focus was to be one of the top five global scientific leaders, which India achieved through building partnerships with States, establishing more research and development centres and collaborating in international projects such as the Large Hadron Collider in the European Union. The draft of the Science, Technology and Innovation Policy 2020 (STIP2020), the fifth science policy that was released in January 2021 offers hope to research in India (<https://bit.ly/3dO9s73>): it has an ambitious vision to “double the number of full-time equivalent (FTE) researchers, Gross Domestic Expenditure on R&D (GERD) and private sector contribution to the GERD every 5 years” and to “position India among the top three scientific superpowers in the next decade”. *STIP2020 defines an Open Science Framework which will create a “one nation, one subscription” solution that will give all individuals and institutions in India access to all top journals through a central subscription.* This scheme will provide fillip to improving access to knowledge. It also defines strategies to improve funding for and participation in research. *India's Gross Domestic Expenditure on R&D (GERD) is currently around 0.6% of GDP. This is quite low when compared to the investments by the U.S. and China which are greater than 2%. Israel's GERD is more than 4%.* A key reason for India's low funding in R&D is the low private sector contribution. *STIP2020 defines solutions to improve funding thus: all States to fund research, multinational corporations to participate in research, fiscal incentives and support for innovation in medium and small scale enterprises. These are good ideas. The new measures should not become a pretext to absolve the Union and State governments of their primacy in funding research; the government should invest more into research.*

Key areas and focus

Other critical focal areas are inclusion of under-represented groups of people in research, support for indigenous knowledge systems, using artificial intelligence, reaching out to the Indian scientific diaspora for collaboration, science diplomacy with partner countries, and setting up a strategic technology development fund to give impetus to research. Science diplomacy is at the fore now with India offering COVID-19 vaccines to many countries; formulating a policy around it will yield dividends. Support for indigenous knowledge systems should enable them to improve upon their limitations in subscribing to transparency and verifiability. The policy seeks to define strategies that are “decentralized, evidence-informed, bottom-up, experts-driven, and inclusive”. It is in draft stage and will have to be finalised and placed before the cabinet for approval. It makes the right moves and strikes the right notes to make India future-ready. More specific directives and implementation with a scientific temper without engaging in hyperbole will be key to the policy's success; and its success is important to us because, as Carl Sagan said, “we can do science, and with it we can improve our lives”.



WHY IS INDIA OPENING UP THE GEO-SPATIAL SECTOR?

The Ministry of Science and Technology Monday released new guidelines for the Geo-spatial sector in India, which deregulates existing protocol and liberalises the sector to a more competitive field.

What is geo-spatial data?

Geospatial data is data about objects, events, or phenomena that have a location on the surface of the earth. The location may be static in the short-term, like the location of a road, an earthquake event, malnutrition among children, or dynamic like a moving vehicle or pedestrian, the spread of an infectious disease. Geospatial data combines location information, attribute information (the characteristics of the object, event, or phenomena concerned), and often also temporal information or the time at which the location and attributes exist. Geo-spatial data usually involves information of public interest such as roads, localities, rail lines, water bodies, and public amenities. The past decade has seen an increase in the use of geo-spatial data in daily life with various apps such as food delivery apps like Swiggy or Zomato, e-commerce like Amazon or even weather apps.

What is the present policy on geo-spatial data?

There are strict restrictions on the collection, storage, use, sale, dissemination of geo-spatial data and mapping under the current regime. The policy had not been renewed in decades and has been driven by internal as well as external security concerns. The sector so far is dominated by the Indian government as well as government-run agencies such as the Survey of India and private companies need to navigate a system of permissions from different departments of the government (depending on the kind of data to be created) as well as the defence and Home Ministries, to be able to collect, create or disseminate geo-spatial data. Initially conceptualised as a matter solely concerned with security, geo-spatial data collection was the prerogative of the defence forces and the government. GIS mapping was also rudimentary, with the government investing heavily in it after the Kargil war highlighted the dependence on foreign data and the need for indigenous sources of data.

Why has the government deregulated geo-spatial data?

This system of acquiring licenses or permission, and the red tape involved, can take months, delaying projects, especially those that are in mission mode – for both Indian companies as well as government agencies. The deregulation eliminates the requirement of permissions as well as scrutiny, even for security concerns. Indian companies now can self-attest, conforming to government guidelines without actually having to be monitored by a government agency- these guidelines therefore place a great deal of trust in Indian entities. There is also a huge lack of data in the country which impedes planning for infrastructure, development and businesses which are data-based. *The mapping of the entire country, that too with high accuracy, by the Indian government alone could take decades. The government therefore felt an urgent need to incentivise the geo-spatial sector for Indian companies and increased investment from private players in the sector.* While for decades, geo-spatial data has been a priority for strategic reasons and for internal and external security concerns, this priority has seen a shift in the past 15 years – geo-spatial data has now become imperative for the government in planning for infrastructure, development,



social development, natural calamities as well as the economy, with more and more sectors such as agriculture, environment protection, power, water, transportation, communication, health (tracking of diseases, patients, hospitals etc) relying heavily on this data. *There has also been a global push for open access to geo-spatial as it affects the lives of ordinary citizens, and the new guidelines has ensured such an open access, with the exception of sensitive defence or security-related data. Large amounts of geo-spatial data are also available on global platforms, which makes the regulation of data that is freely available in other countries, untenable.*

What impact is this expected to have?

By liberalising the system, the government will ensure more players in the field, competitiveness of Indian companies in the global market, and more accurate data available to both the government to formulate plans and administer, but also for individual Indians. Startups and businesses can now also use this data in setting up their concerns, especially in the sector of e-commerce or geo-spatial based apps – which in turn will increase employment in these sectors. Indian companies will be able to develop indigenous apps, for example an Indian version of google maps. There is also likely to be an increase in public-private partnerships with the opening of this sector with data collection companies working with the Indian government on various sectoral projects. *The government also expects an increase in investment in the geo-spatial sector by companies, and also an increase in export of data to foreign companies and countries, which in turn will boost the economy.*

WHO IS B B LAL, THE PADMA VIBHUSHAN AWARDEE WHO LED EXCAVATION AT RAMJANMABHOOMI SITE?

Archaeologist Braj Basi Lal who led an excavation at the Ramjanmabhoomi site in the mid-1970s in among those honoured with the Padma Vibhushan this Republic Day. Lal was the director general of the Archaeological Survey of India between 1968 and 1972, and has worked extensively on archaeological sites associated with the Harappan civilisation and the Hindu epic Mahabharata. He has also served on several UNESCO committees and was awarded the Padma Bhushan by the president of India in 2000. He is best known for his theory of a temple-like structure underneath the now demolished Babri mosque.

Who is B B Lal?

Lal was born in 1921 at Jhansi in Uttar Pradesh and is currently a resident of New Delhi. He developed an interest in archaeology after completion of his Masters degree in Sanskrit from Allahabad University. In 1943, he served as a trainee in the excavation under the renowned British archaeologist Mortimer Wheeler and began his career as an archaeologist from the site of Taxila. In the course of over 50 years, Lal worked on over 50 books and 150 research papers published in national and international journals. Some of his most notable books include, 'The Saraswati flows on: The continuity of Indian culture' published in 2002 and 'Rama, his historicity, mandir and setu: Evidence of Literature, Archaeology and other Sciences' published in 2008. In his book, 'The Saraswati flows on', *Lal criticised the argument held by historian of ancient India R S Sharma of the Aryan invasion or immigration theory. Lal's view that the Rig Vedic people were the same as those who were part of the Harappan civilisation is largely controversial and has attracted a lot of criticism from historians.* Between 1950 and 1952, *Lal excavated a number of sites associated with*



the Mahabharata. Consequently, he discovered a number of Painted Grey Ware sites in the Indo-Gangetic divide and upper Yamuna-Ganga Doab. In a paper he wrote about twenty years later in 1975 titled, 'In search of India's traditional past: Light from the excavations at Hastinapura and Ayodhya', he summarised his findings as "the available archaeological evidence tends to indicate there did exist a basis for the Mahabharata story which no doubt got immensely inflated during the course of time."

What were his findings in the Ramjanmabhoomi site in Ayodhya?

On the lines of the investigations carried out in the Mahabharata sites, Lal commenced on another project in 1975 titled, 'Archaeology of the Ramayana sites'. The project was funded by the ASI, Jiwaji University, Gwalior and the Department of Archaeology in the government of Uttar Pradesh. The project was inaugurated at Ayodhya on March 31, 1975. It excavated five Ramayana related sites including, Ayodhya, Bharadwaj Ashram, Nandigram, Chitrakoot and Shringaverapura. In his 1975 paper, Lal wrote about the ongoing excavation at Ayodhya: "the excavations so far conducted at Ayodhya do not indicate the beginning of the site before 8th century BC." While he mentioned the discovery of coins and pottery at Ayodhya in this paper, no mention was made of the temple remains then. However, in 1990, Lal wrote of the 'pillar-base theory' on the basis of his excavations. He claimed to have found temple-like pillars which would have formed the foundation of the Babri Masjid. Lal's findings were carried in the BJP-affiliated magazine, Manthan. *In his 2008 book titled, 'Rāma, His Historicity, Mandir and Setu: Evidence of Literature, Archaeology and Other Sciences,' he wrote, "attached to the piers of the Babri Masjid, there were twelve stone pillars, which carried not only typical Hindu motifs and mouldings, but also figures of Hindu deities. It was self-evident that these pillars were not an integral part of the Masjid, but were foreign to it." His theory of the temple-like pillars was recognised as the interpretive framework of the court appointed excavation team in 2002.*

WHAT IS SAKA NANKANA SAHIB, AND WHY IT MATTERS IN SIKH HISTORY

Nankana Sahib, the birth place of first Sikh guru, Guru Nanak Dev, was also the site of the first big agitation by the SGPC to take back control of gurdwaras from mahants backed by the British. The centenary of Sri Nankana Sahib massacre, which is popularly known as Saka Nankana Sahib, is being marked in an event there on February 21 this year. The Indian Express looks back at the important event and its importance in Sikh as well as Indian history.

Efforts to free Nankana Sahib

The SGPC came to existence in November 1920, a month after Sikhs removed partial restrictions on Dalit rights inside Golden Temple in Amritsar. It started gurdwara reform movement which was aimed at taking possession of historical Sikh Gurdwaras, which had turned personal property of the priests, who were called mahants. These mahants were also accused of running practices from gurdwaras which were not approved in Sikhism. Mahant Narain Das was in control of Gurdwara Nankana Sahib. Newly formed SGPC asked him to improve the administration of gurdwaras in October 1920. However, the mahant took it as challenge to his authority and started equipping himself with arms and fortified the gurdwara. SGPC leader Lachman Singh Dharowal was attacked by mahant's men inside gurdwara on birth anniversary of Guru Nanak Dev Ji in presence of British



officials in November 1920. But no action was taken against the mahant. Sikh leaders made attempts to bring mahant to the negotiation table but their efforts failed.

The February massacre

Meanwhile, all the mahants and other groups, who were in control of Sikh gurdwaras, also organised themselves and started holding meetings against any move of the SGPC to take control away from them. *They called "Sikh Sanatan Conference" in Lahore on February 19, 20 & 21, 1921. Some motivated Sikh leaders took it as an opportunity to take control of the Gurdwara Nankana Sahiba as Mahant Narain Das would be busy in Lahore. Master Tara Singh and other Sikh leaders tried to stop the Sikh jatha on the way to Nankana Sahib but failed to convince the leaders leading the jatha.* Mahant Narain Das also came to know about jatha coming to Gurdwara Nankana Sahib as he was all set to leave for Lahore by train and returned back. The unarmed Sikh jatha entered inside the gurdwara and with a plan to take possession of gurdwara in a non-violent manner. On the other side, *the mahant was all prepared for an armed attack and he leashed his men equipped with fire arms, sticks and sharp-edged weapons on this jaths. As the jatha entered the gurdwara, all the gates were closed. Around 60 Sikhs were killed in the main hall. 25 bodied were found in a single room. A 12-year-old survived the attack after he managed to hide under the palanquin on which Guru Granth Sahib was installed.* Many got bullet shots. Some injured Sikhs were even burnt alive in boiling water during the attack. Others were chased down to a railways track nearby and killed there. Total number of casualties stood between 150 to 200.

Taking control of the gurdwara

After the incident, Mahant Narain Das ran away, while the British police arrested 26 Pathans and sent them to Lahore in special train. The incident, however, created an impression among Sikhs that the British government had played a hidden part in this massacre. *All the prominent Sikh leaders reached Nankana Sahib on February 21, 1921. Kartar Singh Jhabbar reached with 2,200 Sikhs. Initially, police and Army tried to stop the jatha, but later Sikhs were allowed to take control of the gurdwara.* The then Punjab Governor and his council members also reached Nankana Sahib on February 22 and ordered handing over control of gurdwara to Sikhs. *Mahatma Gandhi reached Nankana Sahib on March 3, 1921. Gandhi said that the British government was part of this massacre.* He also said that cruelty of this massacre was more than that of Jallianwala Bagh. "I wish to see the bravery of Lachhman Singh and Dalip Singh in Mulshi Peta. Without raising a little finger, these two warriors stood undaunted against the attack of Mahant Narain Das of Nankana Sahib and let themselves be killed," said Gandhi.

SGPC movement takes first political turn

The British government also arrested Mahant Narain Das. Meanwhile, SGPC formed its own probe team and asked Mahatma Gandhi to be part of it. Gandhi asked Sikh leaders to give support to the non-cooperation movement of the Congress party. The SGPC called a meeting on March 6, 1921 and Prof Mota Singh passed a resolution and decided to support the non-cooperation movement being run by Mahatma Gandhi. The resolution said that Sikhs must give all the support to the non-cooperation movement. However, the move was not welcomed by some of the SGPC leaders. Jathedar Kartar Singh Jhabbar, Harbans Singh and Bhai Jodh Singh had opposed this resolution as they feared



that it would mix a religious movement with a political movement. However, a resolution was passed with a majority vote.

SGPC joining non-cooperation movement angered British

The British government was not amused with the decision of SGPC leadership to be part of a political movement. Sikh leaders Kartar Singh Jhabbar, Teja Singh Bhuchar, Tara Singh Thethar, Bhai Lakha Singh and others were arrested from Nankana Sahib for allegedly taking illegal control of gurdwaras on March 15, 1921. In May 1921, SGPC asked Sikhs to wear black clothes and turbans as protest against British government. At Nankana Sahib, two big utensils were kept which were used to colour the turbans black. Arrested Sikh leaders were released after five months. The court found Mahant and his men guilty in just six months and main accused were sentenced to death. Later, death sentence was commuted to life term. Mahant was released from jail in 1930. However, Nankana Sahib Gurdwara agitation was just a big leap in Gurdwara Reform movement followed by Guru Ka Bagh Morcha and other agitations till Sikh Gurdwara Act came into existence in 1925.

THE FORGOTTEN PEASANT UPRISING OF ASSAM IN 1894

Twenty five years before the Jallianwallah Bagh massacre, more than a hundred peasants fell to the bullets of the British on January 28, 1894 in Assam. The unarmed peasants were protesting against the increase in land revenue levied by the colonial administration, when the military opened fire. Today a "martyrs column" stands where the incident took place — Patharughat, a small village in Assam's Darrang district, 60km northeast of Guwahati.

After the British annexation of Assam in 1826, surveys of the vast lands of the state began. On the basis of such surveys, the British began to impose land taxes, much to the resentment of the farmers. In 1893, the British government decided to increase agricultural land tax reportedly by 70- 80 per cent. "Up until then the peasants would pay taxes in kind or provide a service in lieu of cash. "Across Assam, peasants began protesting the move by organising *Raj Mels*, or peaceful peoples' conventions."

It is one of the "most tragic and inspiring episodes in the saga of the Indian freedom movement." However, it rarely features in mainstream historical discourse of the freedom struggle. *For the larger Assamese community, Patharughat comes second only to the Battle of Saraighat, when the Ahoms defeated the Mughals in 1671.* "It is extremely inspirational for the Assamese community, like a national awakening," Deka said. While many often refer to the episode as the "Patharughat Ron" or the "Battle of Patharughat", Dutta said it was a "misnomer." "It was a peaceful protest and a precursor to the Civil Disobedience movement, which was later propagated by Mahatma Gandhi." In the introduction of his book, he writes that it was "one of the few occasions in the history of the pre-Congress, pan-Indian anti-imperialist movement, when, in the absence of a well defined leadership, the masses organised themselves to resist the autocratic designs of the British."

What about the site today?

A martyrs column was erected at the site on 28 January, 2001 by the Army and unveiled by SK Sinha, former Governor of Assam. Every year on January 28, the government and local people pay respects



to the martyrs of the incident (*Krishak Swahid Diwas*) in an official function. On January 29, the Indian Army pays its respects in military style. According to Deka, over the years, films, theatre, folktales and, serials have been made on the subject. "That is how it's slowly entering popular imagination," he said.

RED FORT AND DELHI — SYMBOLS AND NARRATIVES OF POWER DOWN THE AGES

Before the 13th century, Delhi — or 'Dilli' — was, politically speaking, a moderately significant town. It was for long the capital of the modestly sized kingdom of the *Rajput Tomar dynasty*. By the mid 12th century it was conquered by the Rajput Chauhans who, however, ruled from Ajmer. It was the conquest by Ghurid Turks in the late 12th century that put Delhi on the map as a centre of power. As the capital of the Sultanate, Delhi gradually developed an aura of power — in the popular imagination, it came to be associated with a dominant power in the subcontinent. *Babur, having defeated Ibrahim Lodi at Panipat in 1526, headed for Delhi, which he described as "the capital of all Hindustan", even though the Lodis had ruled from Agra for the previous two decades.*

Seat of Mughal power

During the first century or so of Mughal rule, Agra was the capital for longer than Delhi. Still, the Mughals continued to be seen as rulers of Delhi. A Sanskrit inscription from 1607 refers to Akbar as "Dillishvara", the lord of Delhi, though he had ruled from Delhi for a very short time. In a Persian inscription dated 1621 on the Salimgarh Bridge adjoining the Red Fort, Jahangir, who never reigned from Delhi, was described as "Shahanshah e Dehli", the emperor of Delhi. It was only in the reign of Shah Jahan (1628-58) that the Mughal connection to Delhi was given concrete form, with the founding of the city of Shahjahanabad and the inauguration of its palace citadel, the Red Fort, in 1648. From that date to the end of Mughal rule in 1857, Delhi would be the formal capital of the Mughal empire. There was another important feature of the Delhi of these two centuries. From the 13th century, the capital had been located at a number of different sites – Mehrauli, Kilugarhi, Siri, Tughlaqabad, Jahanpanah, Firozabad, and Dinpanah. Now it came to be settled permanently in Shahjahanabad, with the emperor's seat being in the Red Fort.

Coveted political prize

The significance of Delhi and the Red Fort was thrown into sharp relief by political developments in the 18th century, once the Mughal empire started on the long road to decline. Erstwhile Mughal provinces such as Bengal, Awadh, and Hyderabad broke away, and new forces like the Sikhs and the Marathas arose. Not only did the Mughal territories shrink, the Mughal emperor became increasingly ineffectual even within them. Yet, such was his symbolic significance as the source of legitimate sovereign authority that many of these new states, including a newcomer, the East India Company, continued to rule in his name, and to issue coins in his name until well into the 19th century. *The control over the emperor and of Delhi was, therefore, a prize worth fighting for.* Safdar Jang, the Nawab of Awadh, fought a civil war in an attempt to keep his position as Prime Minister of the Mughal emperor. The Sikhs had their ambitions, and came up to the walls of the city in 1783 before retreating. *The Marathas met with greater success the following year, when Mahadji Sindhia became the power behind the throne. Finally, the East India Company defeated the Maratha forces in 1803, and went on to control Delhi and the emperor for the next 54 years.* In the popular imagination, legitimate rule was associated with the Mughal emperor to the extent that *when the*



country broke out in revolt in 1857, the mutinous soldiers made their way to Delhi, seeking his leadership. When the revolt in Delhi had been crushed, the British army occupied the Red Fort and the officers drank to their Queen's health in the *Diwan-e-Khas*, where the Mughal emperors had held court. *It was in this same hall that Bahadur Shah was put on trial, convicted, and exiled.* Nearly ninety years later, *in 1945-46, the memory of that trial foreshadowed another historic trial in the fort — that of the personnel of the Indian National Army, which generated an immense wave of nationalist sentiment in the run-up to Independence.*

Symbol of the nation

With the coming of Independence, it was necessary that the site of the Red Fort, over which the British colonial government had sought to inscribe its power and might, be symbolically reclaimed for the Indian people. It was for this reason, that *after the first hoisting of the national flag at India Gate on August 15, 1947, the next day, the Prime Minister hoisted it on the ramparts of the Red Fort — this was to then become India's lasting Independence Day tradition.* In the context of a site marked by power and authority, and acts of challenging and reclaiming that authority, what is the significance of a group of predominantly Sikh farmers raising the flag of the Khalsa? History books tell us that *when the Sikhs made an incursion to Delhi in 1783, they turned away from the walls*, not entering the city. The incident is remembered very differently in Sikh hagiographies. Sikh legend says that the armed Sikhs occupied the Red Fort and unfurled the Nishan Sahib, demonstrating their victory over the Mughal throne. This account, itself contested, has fuelled more recent events such as the celebration of an annual Fateh Divas at the Red Fort since 2014, supposedly marking the anniversary of the events of 1783. The similarities between Fateh Divas and the events of January 26 may be deceptive. While one celebrated a victory over an empire that was seen by the Sikhs as oppressive, the other was clearly a challenge to the authority that controls the site today.

INSCRIPTION ON VIJAYANAGAR KING'S DEATH DISCOVERED

The first-ever epigraphical reference to the date of death of Vijayanagar king Krishnadevaraya has been discovered at Honnenahalli in Tumakuru district. As per the inscription, Krishnadevaraya, one of the greatest emperors of India who ruled from the South, died on October 17, 1529, Sunday, and incidentally this day was marked by a lunar eclipse. K. Munirathnam, Director, Epigraphy Branch of the Archaeological Survey of India, Mysuru, said their office received a photograph of the inscription from K.R. Narasimhan, a retired professor, who stays in Yelahanka, Bengaluru. On deciphering, it turned out to be an inscription recording the date of death of Krishnadevaraya, he added. The inscription is engraved on a slab kept on the north side of the Gopalakrishna temple at Honnenahalli in Tumakuru district and is written in Kannada, said Prof. Narasimhan. It records the demise of *Kṛishṇadēvarāya — (Vīrakṛishṇarāya mahārāyalu yī tathā tithiyalu astamayārāgalu)* in Śaka 1451, Virōdhi, śu. 15, lunar eclipse, which corresponds to 1529 AD, October 17, Sunday, according to Prof. Munirathnam. The inscription also registers gift of village Honnenahalli in Tumakuru for conducting worship to the god Veeraprasanna Hanumantha of Tumakuru.



THE BLANK PAGES IN INDIA'S ONLINE LEARNING EXPERIENCE (SUNNY SEBASTIAN - FORMER VICE-CHANCELLOR, HARIDEV JOSHI UNIVERSITY OF JOURNALISM AND MASS COMMUNICATION, JAIPUR, RAJASTHAN)

The world is presently grappling with the adverse impact of the COVID-19 pandemic in the social, economic and political spheres. India can be counted among those nations that have been impacted severely. COVID-19 has affected all sectors. However, there are areas where countries such as India should be more worried about. One of them is education, especially education of the girl child. Around 300 million children across all age groups are reported to be out of school in India now (the number is of the period when all schools were closed). And as and when schools finally reopen in the country, the number of children returning to class has to be closely scrutinised. The education sector faces the challenges of delivery, especially of pedagogical processes, classroom assessment frameworks, students' support and teacher-student engagement.

Realistic assessment is key

More than just the numbers, the authorities have to realistically assess the level of understanding of students who have returned to schools after 'digital learning' at home. *This is crucial as studies conducted on government-run schools in various States indicate poor performance — a majority of children, especially girl students, have missed out much on the various e-mail platforms offered.* Apart from poor access to digital data, the children were burdened with household/farm work; girl students in particular were apprehensive of being given away in marriage. There is credible evidence that students, parents and teachers were unprepared for the pedagogic shift.

A challenge and the response

School closures have had a significant impact on both students and their families, more in the case of the vulnerable and underprivileged sections. The lockdown happened during the last quarter of the academic year which led to the postponement of examinations and the curtailment of the prescribed syllabi. On their part, governments tried to put in place measures to address the situation. The basic strategy was to give a push to the digital distance learning method. The focus was on the use of text/video/audio content through SMS, WhatsApp, radio and TV programmes to reach out to students and engage them. *The Union Ministry of Human Resource Development in March 2020 started sharing free e-learning platforms. They included the Diksha portal which has e-learning content aligned to the curriculum, and e-Pathshala, an app by the National Council of Educational Research and Training for Classes 1 to 12 in multiple languages. SWAYAM hosts 1,900 complete courses including teaching videos, computer weekly assignments, examinations and credit transfers, aimed both at school (Classes 1 to 12) and higher education. SWAYAM Prabha is a group of 32 direct to home channels devoted to the telecasting of educational programmes.* While this looks fairly impressive, there are many pitfalls. Studies indicate that the rapid transition to digital learning has been very challenging. The initiative failed to take into account existing divides — spatial, digital, gender and class. *A recent UNICEF report points out that the massive school closures exposed the uneven distribution of technology that is needed to facilitate remote learning. The chances for an education-enabled social and economic mobility appear to be grim in the country.*



The impact is multi-fold

Following closure of schools, boys became inattentive to studies while girls, with lesser opportunities, were more involved in household chores. With their educational routine having been disrupted, children, in many cases, have also forgotten what they learnt earlier. Again, the decision to postpone the board examinations and to allow automatic promotion to the higher classes is bound to affect the quality. A survey promoted by the Centre for Budget and Policy Studies (<https://bit.ly/2ZDCzSy>), in July 2020, of 3,176 households of Assam, Bihar, Uttar Pradesh, Telangana and Delhi, found that in families which faced cash and food shortages, only 50% of the boys and girls were confident of returning to school. The abilities of the families and communities concerned to support the educational journeys of the children have been found to be affected. *One should remember that attending schools is not about learning alone. The long closure of schools has also meant the disruption of a range of activities such as the mid-day meal scheme, the school health programme and pre-metric scholarships to girl children.* These activities in the past have had a lot to do with the enrolment as well as regular attendance. As for the digital initiative, it was taken up in a haphazard manner. Many States lacked adequate digital infrastructure and even teachers were poorly equipped to teach. Also, they were not consulted before the initiative. Now, the biggest complaint of the authorities concerned seems to be that teachers have been drawing their salaries doing precious little.

NGO activities as a contrast

Interestingly, schools run by the non-governmental organisation sector did fairly well during the interregnum. Catering mostly to the poor and backward segments, these schools did not go online. Instead, teachers visited individual students at home. They also taught children in small groups. *There seems to be consensus that online classes are not comparable to actual classroom education. The attempts at digital learning have only exposed the wide digital divide between the rich and the poor and the urban and rural areas.* Education planning has to be context specific, gender responsive and inclusive. *Enabling measures should include access to online education, removal of barriers in pre-metric scholarships and ensuring the provision of mid-day meals, iron and folic acid tablets and provision of personal hygiene products to girl students even when schools are closed. Once schools reopen finally, the authorities should establish the re-enrolment of children as mandated by the National Education Policy 2020. Mass outreach programmes should be developed with civil society to encourage re-enrolment. Remedial tuitions and counselling are advisable, along with scholarships, targeted cash transfers and other entitlements to retain the poorest at school. It is also apt to consider making secondary education for girls free. Given the seriousness of the situation, one expects the governments to keep the budgetary share of education to 6% of GDP, as emphasised by the President of India.*

CONCLUSIVE LAND TITLING AND ITS CHALLENGES

The Centre wants to reform the country's land markets through a fundamental legal and procedural shift in how land titles are awarded. In 2020, even as laws for farm reform and labour code reform were being enacted, the government's think tank, NITI Aayog, took steps to initiate land reforms. A Model Bill on Conclusive Land Titling was sent to States and Union Territories last June seeking their comments. In September, after many States failed to send in their feedback, the Centre warned that their agreement would be presumed.

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



How does the current system work and what will change in the new system?

India currently follows a system of presumptive land titling. This means that land records are maintained, with information on possession, which is determined through details of past transactions. Ownership, then, is established on the basis of current possession. Registration of land is actually a registration of transactions, such as sale deeds, records of inheritance, mortgage and lease. *Holding registration papers does not actually involve the government or the legal framework guaranteeing the ownership title of the land. On the other hand, under a conclusive land titling system, land records designate actual ownership. The title is granted by the government, which takes the responsibility for accuracy. Once a title is granted, any other claimant will have to settle disputes with the government, not the title holder. Further, under conclusive land titling, the government may provide compensation to claimants in case of disputes, but the title holder is not in any danger of losing ownership,* says agricultural economist T. Haque, who chaired the Special Cell on Land Policy at NITI Aayog which recommended a shift to conclusive titling in a 2017 report.

Why is conclusive land titling needed?

The main advantage is that a conclusive system will drastically lower litigation related to land. According to a 2007 World Bank study on 'Land Policies for growth and poverty reduction', *land-related disputes accounted for two-thirds of all pending court cases in India.* A NITI Aayog study on strengthening arbitration estimated that *disputes on land or real estate take an average time of 20 years in the courts to be resolved.* "Right now, because land titles are based on transactions, people have to keep the entire chain of transaction records, and a dispute on any link in that chain causes ambiguity in ownership," says Dr. Haque. He says the potential impact is extensive. *"Once conclusive titling is in place, investors who want to purchase land for business activities will be able to do so without facing the constant risk that their ownership may be questioned and their entire investment may go to waste,"* he says, noting that the spectre of long-running court cases currently stifles the appetite for investment in many sectors of the economy. "The idea is to promote an active land market," he adds. *Land disputes and unclear titling also create hurdles for infrastructure development and housing construction, leading to costly delays and inefficiency. In cities, urban local bodies depend on property taxes that can be levied properly only if there is clear ownership data available. Ambiguity in ownership also results in a black market for land transactions, which deprives the government of taxes. In rural areas, the need is even more acute. Access to agricultural credit is dependent on the ability to use land as collateral. Without being able to prove their ownership of land and access formal credit from banks, small and marginal farmers are often left at the mercy of unscrupulous moneylenders, entrenching themselves in a mountain of debt.*

What does the model Bill propose?

The Bill circulated by the NITI Aayog in 2020 calls for Land Authorities to be set up by each State government, which will appoint a Title Registration Officer (TRO) to prepare and publish a draft list of land titles based on existing records and documents. This will be considered a valid notice to all potential claimants interested in the property, who will have to file their claims or objections within a set period of time. If disputing claims are received, the TRO will verify all the relevant documents and refer the case to a Land Dispute Resolution Officer (LDRO) for resolution. However, disputes which are already pending in courts cannot be resolved in this way. Having considered and resolved all the disputed claims, the Land Authority will publish a Record of Titles. Over a three-year period,



these titles and the decisions of the TRO and the LDRO can be challenged before Land Titling Appellate Tribunals, which will be set up under the law. After a three-year period, entries in the Record of Titles will be considered conclusive proof of ownership. Further appeals can only be taken up in High Courts.

What are the difficulties?

“The biggest challenge is that land records have not been updated for decades, especially in rural and semi-urban areas. Land records are often in the name of the grandparents of the current owner, with no proof of inheritance. Unless they are based on updated records, conclusive land titles could create even more problems,” says Dr. Haque. He says *comprehensive village-level surveys with community involvement are a necessary precursor to the land titling process*. Relying on current records or even satellite imagery will not provide the same accuracy as actual, on-the-ground, local surveys. However, local governments have not been provided with the resources or manpower to conduct such surveys, says Dr. Haque. If surveys are not conducted, the onus falls on village claimants, many of whom have no access to documentation, to proactively challenge the titling during the three-year period.

A NEW PEAK

After a peak of nearly 98,000 fresh daily COVID-19 cases on September 16, 2020, the number of new cases reported per day in India has seen a slow but steady decline to reach below 12,000 in mid-February. But the trajectory of the curve began to reverse in the past week following a spike in cases in a few States — *Maharashtra, Punjab, Chhattisgarh and Madhya Pradesh*. In Kerala, the daily fresh cases have in fact been slowly declining for over a week. The recent case decline in the State stands out against the trend since early January 2021. Kerala was contributing between 45% and 50% of India’s total daily cases for many weeks. But despite the drop to about 33% in the past week, there has been an increase in the daily fresh cases nationally — from a seven-day average of 11,100 cases in the second week of February to 12,900 cases in the last week. In the last three weeks, from less than 3,000 daily cases, the numbers in Maharashtra have been increasing, particularly so in the past week to touch nearly 7,000 on February 21. As in the beginning of the pandemic, since mid-February, Maharashtra is once again contributing the most daily cases nationally. *While the absolute increase in cases in Punjab, Madhya Pradesh and Chhattisgarh might not be high, in percentage terms, the increase is significant and clearly marks a spike*. The steady drop in cases has been recorded since mid-September last year despite the much-feared festival season, winter, large gatherings, almost absent restrictions in the free movement of people across States and national borders, and not-so-good adherence to mask wearing. Though the third countrywide sero survey conducted by the ICMR between December 17, 2020 and January 8, 2021 found that only 21.5% (around 225 million people) of India have been exposed to the virus — and hence, a large population is still vulnerable to infection — no spike was seen till a few days ago. No scientific explanation has been found to demystify this phenomenon; lack of targeted testing and/or integrity in reporting could be the only plausible reasons. But the recent spike, either due to the infection of people who are virus-naive, or reinfection, *raises the possibility of the spread of any of the three variants first found in other countries or the emergence of a new variant here in India. This highlights the importance of undertaking large-scale sequencing of the SARS-CoV-2 genome from infected people to trace and track the emergence and spread of any variants*. While a



few institutions in India have been sequencing the genome, the scale is nowhere near what is required. It is also time to speed up vaccination coverage to protect a large population of vulnerable people and increase mask wearing. There is no room for complacency.

COMBATING VACCINE HESITANCY (RAKESH DUBBUDU - THE FOUNDER OF THE FACT-CHECKING INITIATIVE FACTLY AND NANDITHA KALIDOSS - HEALTH FELLOW (MISINFORMATION) AT FACTLY)

According to the World Health Organization, vaccine hesitancy is defined as a reluctance or refusal to vaccinate despite the availability of vaccine services. Like Western nations, vaccine hesitancy has been a cause of concern in the past in India as well. For instance, U.P. witnessed a sudden dip in the uptake of oral polio vaccines when the Muslim community was struck by misconceptions that the vaccine led to illness and infertility. Similar hesitancy was witnessed in Tamil Nadu and Karnataka, which are otherwise familiar with the concept of vaccines. Hesitancy for the MMR (measles, mumps, and rubella) vaccine was sufficiently high in the Malappuram district of Kerala to render community immunisation a challenging goal. Vaccine hesitancy is as old as the concept of vaccination itself. However, in times of uncertainty, people are particularly susceptible to misinformation due to an intricate combination of cognitive, social and algorithmic biases i.e., information overload and limited attention spans. The debates around hesitancy for COVID-19 vaccines include concerns over safety, efficacy, and side effects due to the record-breaking timelines of the vaccines, competition among several companies, misinformation, and religious taboos. According to a survey conducted by LocalCircles in December, a community social media platform, about 69% of the respondents said they will not rush to vaccinate themselves against the pandemic. Another survey indicates that 55% of healthcare professionals are hesitant to take the vaccine; 64% prefer to do an antibody test before vaccination. Despite negligibly low cases of adverse effects reported so far, such notions have silently wormed into our vaccination efforts.

People can choose to not be inoculated, but to break the chain of transmission, it is imperative to have the right strategy in place. Hence, it is suggested that we adopt the idea of libertarian paternalism, a concept of behavioural science, which says it is possible and legitimate to steer people's behaviour towards vaccination while still respecting their freedom of choice. Vaccine hesitancy has a different manifestation in India, unlike in the West. According to the World Economic Forum/Ipsos global survey, COVID-19 vaccination intent in India, at 87%, exceeds the global 15-country average of 73%.

The way forward

Instead of anti-vaxxers, the target audience must be the swing population i.e., people who are sceptical but can be persuaded through scientific facts and proper communication. The second measure is to pause before you share any 'news' from social media. It becomes crucial to inculcate the habit of inquisitive temper to fact-check any news related to COVID-19 vaccines. The third measure is to use the celebrity effect — the ability of prominent personalities to influence others to take vaccines. Studies suggest that celebrities can serve as agents of positive social change, erasing scepticism associated with vaccine adoption and prompting information-seeking and preventative behaviours. We can start with politicians and government officials who are next in line for vaccination. Celebrities can add glamour and an element of credibility to mass vaccinations both



on the ground and on social media. The infodemic around vaccines can be tackled only by actively debunking myths, misinformation and fake news on COVID-19 vaccines.

INDRADHANUSH 3.0 TO FILL GAP IN IMMUNISATION DUE TO COVID

The States and Union Territories (UTs) have rolled out the Intensified Mission Indradhanush (IMI) 3.0 scheme to cover children and pregnant women who missed routine immunisation during the COVID-19 pandemic, the Health Ministry said in a release issued on Tuesday. More than 29,000 children and 5,000 pregnant women were covered on the first day, it added. The first phase has been rolled out from February 22 for 15 days. The campaign is scheduled to have two rounds of immunisation lasting 15 days (excluding routine immunisation and holidays). It is being conducted in 250 pre-identified districts/urban areas across 29 States/UTs.

Remote areas

Beneficiaries from migration areas and remote areas would be targeted as they may have missed their vaccine doses during the pandemic. As per the guidelines released for IMI 3.0, the districts have been classified to reflect 313 low risk, 152 medium risk and 250 high risk districts. The Ministry said adherence to COVID-appropriate behaviour (CAB) during immunisation activities has been strongly emphasised. The States have been asked to follow a “staggered approach” to avoid crowding at the session sites and even plan break-up sessions if a staggered approach is not effective. The sessions have also been planned in such a way that not more than 10 beneficiaries are present at the session site at one given point in time.

₹16 CRORE DRUG IS THEIR ONLY HOPE OF SURVIVAL

*A gene therapy costing ₹16 crore is the only shot at life for nearly 200 children with Spinal Muscular Atrophy (SMA) Type 1, a rare genetic disease, in Karnataka. Last month, the therapy — Zolgensma — was offered free to a 14-month-old baby from Bhatkal (Uttara Kannada) who was the lucky winner of a lottery through a compassionate access programme by Novartis, the Swiss drugmaker. This lottery is held once in two weeks for SMA children across the world and doctors at Baptist Hospital, that has a dedicated Paediatric Neuromuscular Service, are hoping more children will benefit. “The therapy is a one-time infusion that takes about an hour,” Ann Agnes Mathew, consultant paediatric neurologist and neuromuscular specialist, at Baptist Hospital told The Hindu. *The therapy was approved by U.S. regulators in May 2019 and has since then turned into a miracle drug for this rare disorder that destroys a baby’s muscle control. “SMA is a disease caused by loss of nerve cells, which carry electrical signals from the brain to the muscles. The protein needed for this signalling is coded by a gene for which everyone has two copies - one from the mother and the other from the father. A child develops this disorder only if both the copies are faulty. Without treatment, this disease is ultimately fatal,”* said Dr. Mathew. *The disease as it progresses, makes it extremely difficult for the babies to carry out basic activities like sitting up, lifting their head or swallowing milk.* Pointing out that the current treatment options range from medicines, which increase these proteins, to replacing the faulty gene, the doctor said, *“Zolgensma is a revolutionary treatment, which works by supplying a healthy copy of the faulty gene, which allows nerve cells to then start producing the needed protein.* That halts deterioration of the nerve cells and allows the baby to grow more normally.” The drug has a 14-day shelf life and when it was sent from U.S. for*



the Bhatkal baby, it was stuck with customs for three days in mid-January making doctors jittery. Dr. Mathew said she had to personally meet the Customs officials to get it released. “When we explained the situation to them, they immediately released it. Any further delay would have been risky. The baby is doing fine now,” she said.

38 babies die

Pointing out that 38 babies had succumbed to the rare disease over one-and-half years in Karnataka, Dr. Mathew said most families have given up hope as they cannot afford the treatment. A Bengaluru-based couple — Naveen Kumar and Jyothi — have taken to crowdfunding on ImpactGuru.com to cover the cost of Zolgensma for their 10-month-old baby Janish diagnosed with SMA.

SLOW ON SAFETY

India has, according to the just-released World Bank-commissioned report, Traffic Crash Injuries and Disabilities, 1% of the world’s vehicles but 11% of all road accident deaths; the Union Transport Ministry put the number of dead in 2019 at 1,51,113, and injured at 4,51,361. Those who suffer the most are from low income households, especially in rural areas, and women bear the long-term financial and psychological impact of the losses more. Such a cringeworthy performance, affecting the fundamental right to life of the average citizen, should have led to intensive measures and a determined campaign to end the carnage, but the Centre and the States are evidently prepared to take only incremental steps. In the wake of a bus mishap, the immediate response has been to order a magisterial inquiry, which is no substitute for a technical investigation conducted by safety experts. Union Transport Minister Nitin Gadkari has actively campaigned for road safety, and the Motor Vehicles (Amendment) Act of 2019 has provisions that aim to bring about change. But most States have been lukewarm towards hard steps to bring order to the roads, viewing zero tolerance rule enforcement through the lens of populism. This is reflected in the spate of accidents on India’s highways, which witnessed 61% of deaths from just 5% of all accidents, as per 2019 data. *The Centre must now set a timeline to operationalise the National Road Safety Board, for which draft rules were circulated in December last year, to lay down engineering standards and complaints procedures that will help citizens hold States to account. Transport departments continue to take an indulgent view of rule violations. Political parties and others fix illegal flag poles and spears on car bonnets and metal contraptions to SUV bumpers, which are deadly in an accident.* Even with high political will — and there is no evidence this is present in all the States — ending the “silent pandemic” of accidents will need education, civil society cooperation and professional policing. Meeting the SDGs on transport and reduced road deaths and injuries will need actions that go beyond pious declarations.

HOW ACCREDITED DRIVER TRAINING CENTRES COULD DO AWAY WITH TESTS FOR LICENSE

There will soon be no need to navigate through the maze of bureaucracy and agents at the local road transport authority office, perform a driving test before an official and also, maybe, grease a few palms, in order to obtain a driver’s license in India. The Ministry of Road Transport and Highways under Nitin Gadkari has come out with proposed rules that will enable the setting up of



Accredited Driver Training Centres across the country. Successful, time-bound completion of training in these centres will be enough to secure a license from the state transport authorities. The government, through a draft notification issued last week, has sought to amend the Central Motor Vehicles Rules, to enable existence of these training centres in a new avatar as well as introduce “techniques of fuel-efficient driving” in the training module for all aspiring drivers. The government has invited comments/objections, if any, from the public for the next 30 days on the draft notification. After that the final version will be notified and be part of the official rules.

Accredited Driver Training Centres

Anyone can set up these training centres providing they fulfil the accreditation criteria laid down by the Centre, which includes an accreditation fee of Rs 50,000. The State Transport Authority or designated official of authorised agency notified by the Central Government, will process the applications for accreditation to the driver training centres and grant a license to run such centre for five years. *To get a license, a candidate will have to go through 29 hours of training in four weeks, in which 21 hours are practical training including four hours in simulator, virtually driving through rain, fog, night etc.* For medium to heavy vehicles, the training is for 29 hours spread over 38 weeks in which 17 hours are in theory classes and 21 hours are in *practical including three hours on a simulator. Theories including everything related to driving including road rage, etiquettes of good driving habits and the like. Practical includes on track as well as on road driving sessions.* The centres will also offer refresher and remedial courses and also user-specific courses.

Features of the training centre

For this, the training centres should have infrastructure of at least 2 acre in plains or 1 acre in hilly districts, besides adequate parking area for the vehicles meant to be used for training. *They should have simulators for both light motor vehicle driving as well as commercial, heavy motor vehicle driving.* They should also have two class-rooms with teaching aids like computers and Multimedia Projector for holding theory classes/lessons on traffic rules, driving procedures, vehicle mechanism, public relations and first aid. Online tests and evaluation are a must. *There has to be a driving track to provide practice to the trainees for manoeuvring, parking, reverse driving, driving on slopes. The centres should also have biometric attendance systems—presumably so that no candidate can fudge attendance in training sessions.* The centres are required to employ qualified instructors, have the facility for e-payment, real time evaluation, online evaluation process and adequate staff resources in each category (Teaching staff, IT personnel, cleaning staff etc. *The criteria for instructors is a minimum of 12th pass, at least five years of driving experience and a course in motor mechanics or any other higher qualification in mechanical engineering.* The centres will be subject to a yearly audit by authorities and also surprise audits. *They will have to maintain an electronic record of everything to show that the activities are as per the norms.* The first audit happens in three months after the centre is declared fit to operate. Accreditation can also be cancelled if the audit finds lapses, which have also been defined.

Why this change?

As per multiple estimates, India has a shortage of over 2 million drivers especially in the transport industry. Studies link this shortage with driver fatigue and errors in driving that cause road crashes and fatalities. *According official data, around 84 per cent of road accidents take place due*



to faults of drivers. “We want to open driving training centres particularly in the tribal area. The people who are educationally, socially and economically backward, that is agriculture, tribal and the 115 aspirational districts, where we need to start more driving training centres,” Nitin Gadkari, Road Transport and Highways minister has recently said. *Two years ago, the government also did away with any minimum educational criterion for applying for a commercial driving license citing that driving is about possessing a skill and not really about educational qualification.* The centre has been enabling or facilitating driver training for years. *Under existing scheme by the Ministry of Road Transport and Highways, the Centre assists in setting up of Institutes of Driving Training and Research (IDTR) and Regional Driver Training Centres (RDTCs) and Driving Training Centres in the country. The scheme also provides financial assistance of up to Rs 18.5 crore per IDTR and Rs 5 crore per RDTC. It also grants 50 per cent of the project cost or up to Rs 1 crore per Driving Training Centre. As of last year there were 29 ITDRs spread in all major states and five RDTCs, four in Maharashtra and one in Kolkata.* The Accredited Driver Training Centres will do away with the need to perform tests in front of state transport authorities in order to obtain a license. This is new. *The move also brings India on a par with other developed countries which have linked driver training with issuance of licenses.*



DreamIAS



BUSINESS & ECONOMICS

FISCAL DEFICIT SOARS TO ₹12.34 LAKH CR.

The Central government's fiscal deficit soared to ₹12.34 lakh crore, or 66.8% of the revised Budget estimates at the end of January of the current fiscal. The fiscal deficit at the end of January in the previous financial year was 128.5% of the Revised Estimates (RE). In the current fiscal ending March 31, the fiscal deficit is likely to touch ₹18.48 lakh crore, or 9.5% of the GDP. In absolute terms, the fiscal deficit stood at ₹12,34,004 crore at the end of January 2021, as per the data released by the Controller General of Accounts (CGA).

INDIA 'OUT OF RECESSION', GDP GROWS 0.4%

India's economy resurfaced to growth territory in the third quarter of fiscal year (FY) 2020-21, clocking a 0.4% rise in the gross domestic product (GDP), as per data from the National Statistical Office (NSO). GDP had shrunk in the first two quarters by 24.4% and 7.3% as per revised data, amid the COVID-19 pandemic and lockdowns, marking a technical recession. The NSO has also revised its advance national income estimates for FY21 to project an 8% decline in GDP, compared with the 4% growth seen in FY20. The NSO had earlier estimated a 7.7% shrinkage for FY21. The Finance Ministry termed the 0.4% real GDP growth in Q3 as a return to 'the pre-pandemic times of positive growth rates' and a reflection of a 'further strengthening of V-shaped recovery that began in Q2'. India's farm sector remained resilient, clocking a 3.9% growth in Gross Value Added (GVA) to the economy in the October-to-December quarter, after recording a 3.3% and 3% rise in the first two quarters, respectively. For the full year FY21, the NSO expects only two sectors to record positive growth in GVA — agriculture (3%) and electricity, gas, water & other utilities (1.8%). Overall GVA is expected to contract 6.5% in the year, led by an 18% dip in trade, hotels and other services, a 10.3% decline in construction, and an about 9% fall in mining and manufacturing GVA. In Q3, manufacturing, construction and financial, real estate and professional services staged a return to growth for the first time in the year after two bad quarters. Manufacturing GVA grew 1.6% after dipping 35.9% and 1.5% in the first two quarters. Construction saw the sharpest recovery – with GVA rising 6% after falling 49.4% and 7.2%. Services including trade, hotels, transport and communication remained in trouble, with GVA declining 7.7%, though it was better than the -47.6% and the -15.3% reading in Q1 and Q2. The Finance Ministry said the resurgence in manufacturing and construction augured well for them to drive growth in FY22 and added that services, which account for more than 50% of India's GVA and the biggest source for pushing consumption, had done remarkably better in Q3. "Real GVA in services has also improved from a contraction of 21.4% in Q1 to a negligible contraction of 1% in Q3," the Ministry said.

CABINET APPROVES PLI PLAN FOR PHARMACEUTICALS, IT HARDWARE

The Union Cabinet on Wednesday approved the Production Linked Incentive (PLI) Scheme for the pharmaceuticals and IT hardware sectors, entailing an outlay of ₹15,000 crore and ₹7,350 crore, respectively. The PLI scheme for pharmaceuticals, for nine years till 2028-29, will benefit domestic manufacturers, help create employment and is expected to contribute to the availability of a wider range of affordable medicines for consumers, the government said. The scheme is expected to bring



in investment of ₹15,000 crore in the pharmaceutical sector. “The scheme is expected to promote the production of high-value products in the country and increase the value addition in exports.

‘20,000 direct jobs’

Total incremental sales of ₹2,94,000 crore and total incremental exports of ₹1,96,000 crore are estimated during six years from 2022-23 to 2027-28,” it said, adding that the growth in the sector is expected to add 20,000 direct and 80,000 indirect jobs for both skilled and unskilled personnel. The scheme also aims to create global champions from India that have the potential to grow in size and scale using cutting edge technology and thereby penetrate global value chains. *The Cabinet also approved the PLI Scheme for IT hardware such as laptops, tablets, all-in-one PCs and servers.* The scheme, under which *an incentive will be given on net incremental sales of goods manufactured in India for four years, will benefit five ‘major global players’ and ten domestic ‘champions’ in IT hardware,* the government said. “This is an important segment to promote manufacturing under AtmaNirbhar Bharat as there is huge import reliance for these items at present... It will enhance the development of the electronics ecosystem in the country,” it added. The Centre said the scheme could generate more than 1,80,000 jobs (direct and indirect) over four years.

GOVT. TO REVIEW ANTI-DUMPING DUTY ON CHINESE STEEL PRODUCTS

The Commerce Ministry’s investigation arm DGTR has initiated a probe to review the need for continuing imposition of anti-dumping duty on certain types of steel products imported from China following complaints from domestic industry, according to a notification. ISMT Ltd. and Jindal Saw Ltd. have filed *an application before the Directorate General of Trade Remedies (DGTR) for a sunset review of anti-dumping duty imposed on imports of seamless tubes, pipes and hollow profiles of iron, alloy or non-alloy steel from China.* The applicants have alleged that dumping of these products from China has continued even after imposition of anti-dumping duty, and there has been a significant increase in the volume of imports. *DGTR would review the need for continued imposition of the duties in force and examine whether the expiry of existing duties is likely to lead to continuation or recurrence of dumping and impact the domestic industry. The duty on the product was first imposed in February 2017 and is set to expire on May 16 this year.*

PRIVATE BANKS CAN HANDLE GOVT. BUSINESS NOW: FM

Finance Minister Nirmala Sitharaman on Wednesday announced that *the embargo on private banks handling government business had been lifted, paving the way for such lenders to handle tax payments, pension payments and even small savings schemes.* The government’s decision has been conveyed to the Reserve Bank of India, the Finance Ministry said in a statement, as *the central bank is entrusted with authorising private banks to undertake handling of government and its agencies’ business. Only a few private banks were permitted to take up such business earlier.*



HERE'S WHY TELCOS COULD LAUNCH 5G AS EARLY AS SEPTEMBER

The Department of Telecommunications (DoT) on Thursday reduced the notice period for telcos to six months for rolling out a new service by using new technology. This notice period was earlier one year for telcos.

Why do telcos need to give notice before launching new services?

As part of the National Frequency Allocation Plan (NFAP), whenever a new company wants to enter into the telecommunications market, or an existing telecom company wants to launch a new technology, a notice period of one year had to be given to the DoT so authorities can make arrangements for the spectrum required. The first NFAP, released in 1986, has since been revised multiple times to suit growing number of users in the country as well as the demands of telecom companies. The Union government owns all the publicly available assets within the geographical boundaries of the country, which also include airwaves. With the expansion in the number of cellphone, wireline telephone and internet users, the need to provide more space for the signals arises from time to time. The spectrum waves, however, are also used by agencies such as the Indian Space Research Organisation and defence systems for secure communication. Some of the companies also buy some spectrum for establishing secured communication between their various locations. The DoT thus mandates that all such new technologies which are being launched for commercial purposes give a notice period so that adequate arrangements can be made.

How will the reduced time period help in faster 5G roll out?

In the notice inviting applications for the spectrum auctions to be held in March, the DoT amended the clause by cutting down the notice period to six months from one year. *A total of 2251.25 MHz of spectrum across seven frequency bands at a reserve price of Rs 3.92 lakh crore has been put up for sale.* The government has put up, for auction in March, frequency bands only for 4G services. This could mean that the telecom companies could start limited commercial testing of 5G services on frequency bands that are being auctioned in March. For example, on Thursday, Bharti Airtel announced the successful demonstration of its live 5G service over a commercial network in Hyderabad, the first in India, showcasing the readiness of its network for the next level of mobile telephony. *The network has been rolled out on a use case basis on a non-standalone basis on the 1800 MHz frequency band. The roll out on a non-standalone basis means that network can fall back on 4G if there are some glitches in the 5G network.* Though the company would still need more spectrum and permission from the DoT to start offering 5G services on a commercial basis, it can now start these real time tests from September 2021 after buying spectrum in March 2021. Apart from Bharti Airtel, its market rival Reliance Jio Infocomm, had also announced a few days ago that it had begun advanced 5G tests on its network and planned to bring 5G in India as soon as the second half of this year.

How will Indian users benefit from faster roll out of 5G?

5G or fifth generation is the latest upgrade in the long-term evolution (LTE) mobile broadband networks. On par with global players, India had, in 2018, planned to start 5G services as soon as possible, with an aim to capitalise on the better network speeds and strength that the technology



promised. However, *claims on spectrum space by the Defence Ministry and space department on part of the spectrum that was identified for 5G services has led to the delay up until now.* With the shortened notice period for service roll out, telcos feel they will be able to commercially launch the new technology as early as first half of 2022. This would mean that Indian users would be at the forefront of adopting a new technology and experiencing the various uses of it. The introduction of new technology would also mean development of new industry such as 5G handsets around the periphery.



DreamIAS



LIFE & SCIENCE

TIME AND PERSEVERANCE

The possibility of life on Mars has excited the imagination. Among the scientific community, the current thinking is that life may have existed on the earth's ruddy planetary neighbour a long time ago. *Understanding this will enrich our studies of evolution and nurture of life outside the earth. The recent NASA mission, Mars 2020, that was launched from Cape Canaveral, Florida on June 30, 2020, landed on the Jezero Crater in Mars on February 18, to much celebration.* Of special magnificence was the entry, descent and landing of the mission's Perseverance rover, described as the *'shortest and most intense part'*. Entering the Martian atmosphere at about 20,000 km per hour, *the mission had to bring the Perseverance rover to a halt on the surface in just seven minutes.* Also, *since it takes 11 minutes for a radio signal to reach the earth from Mars,* the mission control could not really guide the landing, and the rover had to complete this process by itself. During the complicated landing process, using a camera eye, the rover checked the ground below to avoid hazardous terrain, all in a few breath-taking minutes. NASA's exploration of Mars has focused on finding traces and trails of water that may have existed, and relate it to finding evidence of ancient life. Its earlier Mars expedition which carried the Curiosity rover, landed on August 5, 2012. It identified regions that could have hosted life. *Expected to last at least the duration of one Mars year, or about 687 earth days, the science goals this time are to look for signs of ancient life and collect rock and soil samples.* Perseverance will take the inquiry made by Curiosity to the next level and search for signs of past life by studying the Jezero Crater. *The crater was chosen for study as based on an earlier aerial survey, it was found to be home to an ancient delta. Clay minerals and carbonates were seen, making the crater a good place to search for life's existence. Further, the rover will study the geology here and store samples in a place that can be accessed by a future mission which would return them to the earth.* The rover will test out technologies that could help sustain the presence of humans there in the future. *This includes an instrument to extract oxygen from the atmospheric carbon dioxide. The rover also carries a helicopter named Ingenuity that is specially designed to fly in Mars's thin atmosphere; its sole purpose would be to demonstrate flight on Mars.* Finally, to the question whether little green microbes did inhabit Mars in the distant past — only time and Perseverance can answer that.

HOW HOSPITABLE ARE LAKES ISOLATED BENEATH ANTARCTIC ICE?

British scientists have found (Science Advances) that lakes underneath the Antarctic ice sheet could be more hospitable than previously thought, and can host more microbial life. More than 400 'subglacial' lakes have been discovered beneath the Antarctic ice sheet, many of which have been isolated from each other and the atmosphere for millions of years. Researchers drilled into two small subglacial lakes at the edge of the ice sheet, where water can rapidly flow in or out and found microbial life beneath. The lakes being cut off from sunlight, they derive their energy not through photosynthesis but by processing certain chemicals found in sediments on the lake beds. Since the sediments are found only on the lake bed, the water mixing is required so that the sediments are evenly distributed. While water in surface lakes gets mixed by the action of wind and convection currents due to the sun's heat, the team found that in the lakes beneath the Antarctic, ice mix is due to geothermals — rising from the interior of the Earth and generated by the combination of heat left



over from the formation of the planet and the decay of radioactive elements. “The water in lakes is not still and motionless; the flow of water is quite dynamic, enough to cause fine sediment to be suspended in the water. With dynamic flow of water, the entire body of water may be habitable, even if more life remains focused on the floors,” Louis Coustou from the University of Lyon and the British Antarctic Survey and one of the authors of the study said in a release.

J&J SINGLE-SHOT VACCINE FOUND 66% EFFECTIVE IN PHASE 3 CLINICAL TRIALS; WHAT THIS MEANS

In yet another promising development on Covid-19 vaccines, Johnson & Johnson announced on Friday that its single-shot candidate has been found 72% effective in the US; 66% effective overall at preventing “moderate to severe” Covid-19; and 85% effective in preventing severe disease across all regions studied, 28 days after vaccination in all adults 18 years and older. *The vaccine, developed at J&J’s Janssen Pharmaceutical Companies, will be the first single-dose vaccine introduced for commercial use, once cleared for emergency use. All other vaccines currently being administered require a booster second dose to trigger a robust immune response.* J&J plans to file for US Emergency Use Authorisation in early February, and is expected to have the product ready to ship immediately following authorisation. *J&J is using its flagship AdVac vaccine platform, which was also used to develop and manufacture Janssen’s European Commission-approved Ebola vaccine regimen and construct its Zika, RSV, and HIV investigational vaccine candidates. Janssen’s AdVac vectors are based on a specific type of adenovirus — one genetically modified so that it can no longer replicate in humans and cause disease.* The phase 3 trial is being conducted in eight countries across three continents — with 44% (19,302) of the participants in the US, 41% (17,905) in Central and South America (Argentina, Brazil, Chile, Colombia, Mexico, Peru) and 15% in South Africa. Nearly one-third (14,672) are over age 60. “Efficacy against severe disease increased over time with no cases in vaccinated participants reported after day 49,” J&J said. It said the candidate demonstrated “complete protection” against Covid-related hospitalization and death, 28 days post-vaccination. On safety, J&J said that overall fever rates were 9% with Grade 3 fever in just 0.2%. “Overall serious adverse events (SAEs) reported were higher in participants who received placebo as compared to the active vaccine candidate. No anaphylaxis was observed,” J&J said.

VIRUSES, THEIR VARIANTS, AND VACCINES

SARS-CoV-2 variants have emerged independently in several countries, and research published over the past week indicates that the virus is changing more quickly than was once believed — and that it may continue to develop towards evading currently available vaccines. We deconstruct the science, summarise the breaking research, evaluate the concerns, and suggest a prescription for India.

Why do viruses mutate?

Like all life, viruses carry a genetic code in the form of nucleic acids — either DNA or RNA. When cells multiply, the DNA within them replicates as well, to make copies for the new cells. During replication, random errors are introduced into the new DNA, much like spelling errors when we write. Just as we can spell-check, our cells carry enzymes to ‘proofread’ and correct these mistakes to maintain the fidelity of our genetic material. *While the errors in DNA virus genomes can be*



corrected by the error-correcting function of cells in which they replicate, there are no enzymes in cells to correct RNA errors. Therefore, RNA viruses accumulate more genetic changes (mutations) than DNA viruses. Evolution requires not just mutations, but also selection. While most mutations are deleterious to the virus, if some allow a selective advantage — say better infectivity, transmission, or escape from immunity — then the new viruses out-compete the older ones in a population. The mutations can be synonymous (silent) or non-synonymous (non-silent); the latter also changes an amino acid (protein building block) at that position in the coded protein.

How much has SARS-CoV2 mutated?

Coronaviruses have an RNA genome with two unique features. At 30,000 nucleotides (nucleic acid units) they have the largest genome among RNA viruses. This allows coronaviruses to produce an enzyme that can correct RNA replication errors. Consequently, coronaviruses have rather stable genomes, changing about a thousand times slower than influenza viruses, which too are RNA viruses that cause respiratory illness.

A mutation called D614G emerged in late January 2020 to change the amino acid at position 614 in the virus' Spike protein from aspartate (D) to glycine (G). Because this variant infected and replicated better and produced 'fitter' viruses, it now accounts for over 99 per cent of the virus circulating globally. Other mutations are now emerging in this background. Viruses with mutations within the receptor-binding domain (RBD) of the Spike protein have the most potential to evade antibodies that develop as a result of natural infection or vaccination. The RBD binds the cellular receptor allowing the virus to infect cells, and anti-RBD antibodies neutralise the virus.

Only the UK variant viruses have so far been reported from India — and that too, in travellers. There is no reported local transmission, but considering its increased infectivity, this is likely to happen. The evidence so far suggests that current vaccines would still protect against the UK variant, even if with reduced efficacy.

DreamIAS