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INTERNATIONAL

WHAT IS TURKEY'S LATEST 'DISINFORMATION' LAW?

The story so far:

On October 14, Turkey's parliament adopted the much-critiqued 'disinformation law' that accords jail terms of up to three years to social media users and journalists for spreading 'disinformation'. President Recep Erdogan's ruling AK Party along with its nationalist ally MHP voted for the bill that has drawn concerns about potential curtailment of social media and journalistic freedom in the country.

What does the law entail?

Cumulatively known as 'the disinformation law', it comprises about 40 articles that would amend about 23 different laws. Of the 40, the most contentious is Article 29. It designates it an offence to publicly disseminate misleading information about the country's internal and external security, public order and general well-being for the purpose of causing fear or panic among the populace. The Turkish government has argued that the law would combat cases where the internet is used to share illegal content under false names and where anonymous accounts slander and defame individuals of differing political thought, religion or ethnicity. The article introduces a jail term between one and three years for any violation with the extension of an additional half of the initially stipulated term if the actions are done in anonymity. To implement this law, social media platforms could now be asked to hand over user data to Turkish courts.

What are the concerns?

Critics, including the Venice Commission which is the advisory body to the Council of Europe on constitutional matters, have pointed to the unclear interpretation of certain crucial terminologies, especially 'disinformation'. The legislation accords the responsibility of determining the same to prosecutors. Critics here argue that Turkey being a heavily polarised country and the courts having previously turned against journalists and other social-scientists does not lend a confident picture. For example, Writing for Brookings, Asli Aydintasbas, Visiting Fellow at the Center on the U.S. and Europe points to how watchdogs challenged the official government statistic for September inflation (83.45%). An independent watchdog, ENAG pegged it at 186%. Ms. Aydintasbas says that with the latest set of legislations, content of this kind might qualify as 'disinformation'. The Commission also highlighted concerns on assertions about what should constitute disturbance to 'public peace'. "Following the meeting with the authorities, what seems to be the most alarming is that a public protest may be considered in itself a disturbance of public peace," it stated in its report. This also triggers questions on 'dissemination' of the alleged 'disinformation' especially when the boundaries between physical and online spaces are blurred. Thus, the legislation lacks clarity on how the entity shall be deemed guilty, that is, for sharing or manufacturing the information (especially in an offline space). It is for the above-mentioned reasons that a jail term appears to be a stretched penal provision.

Why are journalists concerned?

The law would now recognise news websites as part of mainstream media and they would thus have to comply with the same regulations as those for newspapers. This includes taking down reports when flagged by a regulatory authority and publishing a refutation on the same hyperlink.

Turkey already has an unimpressive record pertaining to press freedom. It ranks 149 out of 180 in the Press Freedom Index (2022). Additionally, as per a report of the Journalists' Union of Turkey, more than 270 journalists were put on trial last year, while 57 others were physically assaulted and 54 news websites and 1,355 articles were blocked.

THE JOB AND THE MAN

At a time when ethnonationalist and majoritarian far-right parties are on the ascent in many democracies across the world, the rise of Rishi Sunak, a man of colour and a practising Hindu, to the premiership of the predominantly white, Christian U.K., has great symbolic value. While his election as Britain's first non-white Prime Minister points to the readiness of Conservative MPs to look beyond the racial and religious barriers for a solution to the crisis both party and country are in, his victory was particularly welcomed by sections in India, who see some historical fulfilment in a man of Indian origin ruling over India's former colonial rulers. But the power of symbolism is limited when it is tested with the hard realities of the day. In fact, the very circumstances that led to his rise should themselves serve as a warning for the new leader. He is the fifth Prime Minister since the Tories' victory in the 2010 general elections, and the third in the last two months. Liz Truss, his immediate predecessor, had also promised to revive the economy but exited in seven weeks amid a hostile market reaction to her policy measures and an open revolt among the Tory MPs.

When the Conservatives won an outright victory in the 2019 elections under Boris Johnson, not many expected Mr. Sunak, a former hedge fund manager, to end up as the party leader in three years. And yet, he is now in 10 Downing Street, presiding over a party that is at war with itself and an economy that has an estimated budget deficit of $45 billion and is headed towards recession. The country is also struggling with a cost-of-living crisis, with inflation hovering around 10%. But he does not have any magic bullet to offer. As the budget deficit remains high and markets are edgy, he is likely to announce cost-cutting measures, but for Britons who are already grappling with high inflation, that would be bad news. And as Russia's Ukraine war is not expected to wind down any time soon, the energy crisis and inflationary pressure will stay. So, Mr. Sunak will have to walk a fine line between keeping the markets in good faith and providing relief to the public rattled by high inflation, while also opening larger reforms to bring back growth. A tall ask, but Mr. Sunak could at least have begun it on a clean slate. By re-appointing Suella Braverman, an immigration hardliner and an apologist of the empire who was fired by Ms. Truss after weeks into her job, as Home Secretary, Mr. Sunak is sending mixed signals. If he does not want to repeat the fate of his predecessors in an extremely volatile political and economic climate, he should be bold enough not to repeat their mistakes.

ONE-MAN RULE

China's President Xi Jinping emerged out of last week's Communist Party congress in even firmer grip on Chinese politics. With four Xi allies chosen to join the two others who continue on the Politburo Standing Committee — the seven-member Xi-headed body that rules China — he has engineered a clean sweep and complete domination that is unprecedented in Chinese politics. Even at the height of Mao Zedong's power, he had to contend with rival power centres. Mr. Xi faces no such challenges, having sent past rivals, such as Bo Xilai, as well as potential challengers, such as Sun Zhengcai, to prison on corruption charges. Past factional arrangements have also been decimated. Mr. Xi's predecessors, Jiang Zemin and Hu Jintao, no longer wield influence. Mr. Jiang did not attend the congress, while Mr. Hu was, on the final day, escorted out before he could vote on the resolutions passed unanimously. While his forced removal was attributed to health reasons, the extraordinary sight only underlined Mr. Xi's dominance. So did the early retirements of Premier Li Keqiang and Vice Premier Wang Yang, which paved the way for Xi allies to occupy the top positions. Mr. Li has been replaced by a close Xi associate, Li Qiang, who was criticised for this year's draconian COVID-19 lockdown of Shanghai. He is now the country's second-ranked leader. A constitutional amendment declares it is now an "obligation" of every party member to follow Mr. Xi, while the official Xinhua news agency noted the key factor in promotions was "loyalty" to Mr. Xi.

The Communist Party has framed the concentration of power in Mr. Xi's hands — and China's return to one-man rule — as a necessity. Mr. Xi has frequently criticised "weak leadership" that preceded him, and did so again at the congress. "Strong leadership", in the party's view, is the only guarantee for a "strong country" — a Xi catchphrase — to stand up to the U.S. and deal with domestic challenges such as a slowing economy. Markets, however, reacted with a crash, with Chinese stocks in Hong Kong falling by the most since 2008 and a record dumping of shares in Chinese firms by foreign investors. Chinese leaders have in the past described the current world order as offering a "period of strategic opportunity" for China. Mr. Xi changed that formulation, painting a picture of a darker world that also required "struggle" and a "fighting spirit", a phrase added to the constitution. Mr. Xi, in full command of the party and the military, is now likely to pursue that mission in his third five-year term.

CHINA'S MANDATE: GIVE GOOD NEWS OR ELSE

It's an observation that's a joke that's a cliché: "Koi… good news?" Newlyweds across languages, cultures and geographies have been subjected to a version of this euphemism even before the honeymoon glow wears off. Now, as if the "nudge-nudge wink-wink" pressure of the overbearing family wasn't bad enough, the paternal party-state in Xi Jinping's China has decided to take on the role. It is making calls to young couples, and strongly suggesting that they urgently reproduce.

Chinese social media has been replete with posts — they are often quickly taken down, though — of local government officials calling up women soon after their nuptials. Unlike the nosy in-law, though, the bureaucrat is direct: "Are you pregnant yet?" was reportedly the most common question. The pressure to reproduce seems to be a top-down phenomenon. At the recently concluded 20th Congress of the Chinese Communist Party, Xi declared that there would be a concerted effort by the state to boost birth rates. That, it is likely, explains the top-down obsession with babies.

The fact remains that China's one-child policy — in force from 1980 to 2015 — has had profound social and economic consequences. The set-up of the family, and the burden of care for the elderly threatens to overwhelm both individuals and the state's coffers. Now, in a bid to boost the young, working population, the state is promoting "masculine values" for men and exhorting the "traditional" responsibilities of women. In all this, no one seems to spare a thought for the ordinary Chinese couple. Their lives and choices seem to be in service to the ephemeral and changing goals of an ideological machine. Most people in India can attest to how intimately oppressive families can be. Imagine if the almighty state, too, tried to enter — and control — the most private of domains.

CARELESS THREATS

Russia's allegation that Ukraine was planning to launch a so-called dirty bomb shows how dramatically the Ukraine conflict has escalated. Russia's Defence Minister Sergei Shoigu held talks with many of his global counterparts, including Rajnath Singh, accusing Ukraine of potential "nuclear terrorism". A dirty bomb is not a nuclear bomb but a conventional explosive device with radioactive materials, the explosion of which could turn swathes of land uninhabitable for decades. Ukraine and its western backers have rejected the Russian allegations, saying the Russians, who have suffered setbacks, are making unfounded claims for a false flag attack. It is difficult to ascertain what is going on behind the fog of a full-scale war, but the talk of dirty bombs and nuclear terrorism does not bode well. Ever since the U.S.'s nuclear bombing of Japan in 1945, the world has largely treated the nuclear option as taboo. Even in 1962, when the Soviet Union and the U.S. were on the brink of conflict, their leaders managed to end the crisis amicably through dialogue. But unfortunately, Vladimir Putin's threat of using all means available to him to protect his country and Joe Biden's warning of a "nuclear Armageddon" are tantamount to normalising the nuclear option in the middle of a conflict that is in an escalatory spiral.

What is more surprising is that even as the war is steadily deteriorating, there is no conscious effort by any side to start a dialogue. Russia says it is ready for talks but has not given any concrete proposals, and its offer for talks cannot be trusted, especially after it announced the annexation of four partially controlled Ukrainian regions. Ukraine says it will not hold talks with Russia as long as Mr. Putin is in power and that it intends to fight till all Ukrainian regions are liberated, including Crimea. Ukraine's western backers say they would continue to support Ukraine's resistance "as long as it takes". As all sides take maximalist positions, escalation is creating its own dynamic, taking the whole world hostage. Eight months of war have already created economic and humanitarian disasters. And there are greater fears of a direct conflict between Russia and NATO, two nuclear forces. What more do the stakeholders of this war want before they actually begin serious talks? They should realise that unchecked escalation with an open possibility of a Russia-NATO war would be catastrophic for the whole world. The stakes are higher than their geopolitical goals. The rhetoric on nuclear attacks and retaliation should stop immediately and Russia, Ukraine and the West should begin talks to end the conflict. The alternative would be cataclysmic.

HAWK AIR DEFENCE EQUIPMENT

The United States is considering retrieving older HAWK air defence equipment from storage to send to Ukraine which is facing a heavy barrage of Russian drone-fired and cruise missiles, Reuters reported on Tuesday, quoting unnamed officials.

The report said it was unclear how many HAWK systems and missiles the United States had available to send to Ukraine. The White House declined to comment, it said.

HAWK after Stinger

The HAWK interceptor missiles would be an upgrade to the Stinger missile system, which is a smaller, shorter-range air defence system. The US sent the shoulder-fired anti-aircraft Stingers to Ukraine early on in the war, and then placed orders for more stocks of the missiles with Raytheon Technologies Corp. after they demonstrated great success in stopping Russian air assaults.

The US would likely initially send interceptor missiles for the HAWK system to Ukraine because it was unclear if enough US launchers — in storage for decades — were in good repair, a US official told Reuters.

NATO Secretary General Jens Stoltenberg has said that Spain intends to send four HAWK launchers, the report said.

PATRIOT predecessor

HAWK, short for 'Homing All the Way Killer', entered service with the US Army in 1959, during the Vietnam war. It underwent upgrades over the decades that followed, including a major one in 1971 that produced the so-called I-HAWK (or improved HAWK), with a kill probability of 85%.

The HAWK system was the predecessor to the PATRIOT missile defence system that Raytheon built in the 1990s. US forces largely stopped using HAWK from the early years of the new century. PATRIOT remains off the table for Ukraine, the Reuters report said, quoting US officials.

Presidential authority

The Biden administration would use the Presidential Drawdown Authority (PDA) to transfer the HAWK equipment, Reuters said. According to the US Department of State, PDA allows for the "speedy delivery of defence articles and services from Department of Defence stocks to foreign countries and international organisations to respond to unforeseen emergencies".

Military assistance under PDA does not require Congressional approval, and could "begin arriving within days — or even hours — of approval". A PDA is being considered for later this week, US officials have said, Reuters reported.

Following the waves of aerial attacks that targeted civilians and knocked out vital infrastructure in Ukraine earlier this month, President Joe Biden pledged to President Volodomyr Zelenskyy that the US would provide his country with advanced air systems.

Biden, who spoke by phone with Zelenskyy on October 10, assured him of continued US support against Russia's "senseless attacks" on civilian targets. "President Biden pledged to continue providing Ukraine with the support needed to defend itself, including advanced air defense systems," a White House statement on the phone call said.

The US has provided almost $17 billion worth of security assistance to Ukraine since the launch of Russia's invasion on February 24.

NATION

WHY IS PAKISTAN OFF FATF 'GREY LIST'?

The story so far:

On Friday, the Financial Action Task Force, the global watchdog on anti-money laundering and combating financing terrorism (AML/CFT) efforts, announced it would take Pakistan off its "grey list" of countries under "enhanced monitoring", and welcomed what it called Pakistan's "significant progress" in improving legal and government mechanisms. Pakistan, which has been trying to be taken off the list ever since it was listed in February 2018, hailed the decision, and Prime Minister Shehbaz Sharif thanked Foreign Minister Bilawal Bhutto Zardari and Army Chief General Qamar Bajwa, both of whom visited the U.S. in recent months, for their diplomatic efforts.

How does FATF work and what do 'grey lists' and 'black lists' refer to?

The 39-member body that was set up in 1989 out of a G-7 meeting of developed nations, is today made up of 37 countries and two regional organisations: the European Commission, the European Union's executive body, and the Gulf Cooperation Council. India joined with 'observer' status in 2006 and became a full member of FATF in 2010. According to its mission statement, FATF members meet regularly to monitor various countries, "review money laundering and terrorist financing techniques and counter-measures; and promote the adoption and implementation of the FATF Recommendations globally". The decision-making body of the FATF or Plenary meets thrice a year, in February, June and October, to take stock of "Mutual Evaluation Reports" (MERs) of the countries they review. If a country appears to have major deficiencies in its AML/CFT regime, it is put on a list of "jurisdictions under increased monitoring" or what is called the "grey list", and if it fails to address FATF concerns it is put on a "high-risk jurisdictions" list, called the "black list". Countries on both lists are subject to increasing levels of financial strictures, as the listing is like a global rating, and makes it difficult to procure loans from financial organisations like the IMF/World Bank, ADB etc., as well as to invite investment from private companies and other countries.

During the recent plenary session on October 20-21, FATF countries, including India, reviewed the record of about 26 countries, and agreed unanimously to take Pakistan and Nicaragua off the "grey list", add The Democratic Republic of Congo, Mozambique and Tanzania to the "grey list", while moving Myanmar from the "grey list" to the black list for actions taken by the military junta since they overthrew the government in a coup last February.

Why was Pakistan removed from the 'grey list'?

Deliberations of the FATF are made in complete secrecy, and decisions are meant to be made strictly on the basis of technicalities and procedure, so the grey listing of Pakistan has to be seen in the totality of the process and measures it has undertaken. Pakistan was also on the "grey list" from 2012-2015, when FATF had mandated many steps. Since 2018, it has been handed two action plans, comprising 34 points (27+7), asking Islamabad to bring in laws on money laundering, and anti-terror laws in line with international requirements. Pakistan also had to maintain a database of terror groups operating on its soil and the actions taken against them. This was a far cry from previous decades, when terror groups like al-Qaeda, the Taliban, and Jaish-e-Mohammad operated quite freely, and designated terrorists like Hafiz Saeed and Masood Azhar addressed public rallies and even took part in political processes.

What was the sticking point?

While Pakistan has completed many tasks, a major sticking point remained: In June 2021, then FATF President Marcus Pleyer had asked Islamabad to address the last remaining item by "demonstrating that terror finance investigations and [the] prosecution target senior leaders and commanders of UN-designated groups". Under UNSC guidelines, member states must ensure that all designated terrorists don't have access to funds, arms and travel, and that all such terrorists are effectively prosecuted.

In the last year, much of Pakistan's FATF reporting has been about bringing those terrorists, including Hafiz Saeed, 26/11 commander Zakiur Rehman Lakhvi, 26/11 planner Sajid Mir, IC-814 hijacking planner Rauf Asghar to court — and a conviction. However, Pakistan claimed it couldn't trace JeM chief Masood Azhar, wanted for a number of attacks from the 2001 Parliament attack and the J&K legislature bombing to strikes on military camps at Uri, Pathankot and the Pulwama bombing in 2019. It submitted to the FATF that he was believed to be operating from Afghanistan, a claim the Taliban denied. At the June plenary session, the FATF decided Pakistan was ready for an on-site visit that took place from August 31-September 2, and concluded that Pakistan's reporting was reflected in measures "on the ground". Having followed this procedure, it was only to be expected that at the October plenary, Pakistan would earn a reprieve, and even some praise from the FATF president for completing its action plans.

What has been India's response?

India is a member, and hence party to all FATF decisions that are made by consensus. As a result, it also agreed to the decision to take Pakistan off the list, conceding in a statement that due to the FATF, Pakistan had been "forced" to take "some action against well-known terrorists", including those involved in the Mumbai 26/11 attacks.

However, Ministry of External Affairs spokesperson Arindam Bagchi indicated that India would have liked more global checks on Pakistan, saying, "It is in global interest that the world remains clear that Pakistan must continue to take credible, verifiable, irreversible and sustained action against terrorism and terrorist financing emanating from territories under its control." Officials say another reason for some unease is that the United States, which has been a consistent partner in demanding action on terrorism from Pakistan, appears to have become more lenient in the last few months, after a new government headed by Mr. Shehbaz Sharif took office, and particularly given reports of Pakistan support to the U.S. on counter-terrorism operations in Afghanistan including the recent drone killing of al-Qaeda chief Ayman al- Zawahiri.

The Narendra Modi government is preparing for India's turn at FATF scrutiny or MER process, set to begin in early 2023, which it hopes will be a smooth process. In July this year, while introducing the Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful activities) Amendment, External Affairs Minister S. Jaishankar told Parliament that India had to take its international commitments on WMD seriously, both at the UN Security Council, and FATF recommendations which had "mandated provisions against financing in relation to WMDs".

VITAL INTERVENTION

There is good reason for the Supreme Court to ask the police to be proactive in dealing with hate speech by taking immediate legal action without waiting for a formal complaint. The Court has also warned of contempt action if the police showed any hesitation in compliance. Directed at the police in Delhi, Uttar Pradesh and Uttarakhand, the order is in response to the "unending flow of hate speeches" highlighted in a writ petition before it. The Court has referred to the growing "climate of hate", and taken note of the inaction in most instances, despite the law containing provisions to deal with the phenomenon. It is quite apparent that the governments at the Centre and in some like-minded States do not share the Court's concern for communal harmony, fraternity and tranquillity; in fact, some of them may be contributing to the vitiated atmosphere either by studied inaction or complicity in allowing provocative speeches in purported religious gatherings by majoritarian elements. Intervention by the highest court has become necessary in the light of some controversial religious leaders getting away lightly after making unacceptable comments, some of them tinged with a genocidal tenor. It is in such a backdrop that the Court has underscored the constitutional values of secularism and fraternity among all religions and social groups.

It was a religious conclave held in Haridwar late last year that set the tone for the 'hate speech' case that is being heard now. Even then, the Court had called for corrective measures, leading to another conclave being prevented by local authorities in Roorkee in Uttarakhand. While the intervention may have halted a few meetings at that time, it cannot be said that such transgressions have ended. There has been a disconcerting pattern of Hindu festivals becoming an occasion for the conduct of religious processions that end in clashes caused by provocative behaviour. In the name of dealing with the resulting clashes or disturbances, officials have resorted to demolishing the houses of those allegedly involved in the incidents, without following any process of law. Such developments have given rise to new curbs on minorities, such as unwarranted police probes into the holding of group prayers, and new allegations of purported plots to infiltrate Hindu events. Some television channels have been adding to the bigotry by their manner of functioning. Administrative bias on the one hand and the spread of social prejudice on the other cannot be allowed to vitiate the national mood. Towards that end, the Court must do everything possible to nudge authorities to enforce the law against the propagation of hate.

TV DOMINATES AS NEWS SOURCE, DESPITE POOR TRUST LEVELS

Indian news consumers' trust in private TV news channels is relatively much lower than their belief in newspapers and yet television continues to be the dominant news source. Notably, their trust in online news websites is lower than even the private channels, while the former is the third preferred source for accessing news after news channels and newspapers despite a surge in smartphone usage.

The conclusions are based on a survey done in 2022 by the Lokniti programme of Centre for the Study of Developing Societies, in partnership with Konrad Adenauer Stiftung. The study was conducted in 19 States among 7,463 citizens aged 15 years and above. The survey covers all segments of the society – the rural as well as the urban citizens, the rich and the poor, the young and the old, men and women, and the non-literate as well as the educated.

Over 70% of consumers said they watch news channels, while 48% read newspapers. About 37% also said that they visit websites to consume news. Over 40% said TV and about 22% said new media (internet/social media/mobile phone) as their dominant sources for news. Only 6% and 1% said newspaper and radio are the main sources respectively. Three out of every four homes have a television set, close to one in four get a newspaper daily or often and in 13% homes get magazines periodically or often. There is a music system or a transistor in 22% homes, whereas 76% have at least one smartphone owning member.

Interestingly, the number of persons who carry a mobile phone that is not “smart” has become miniscule. While 84 of every 100 homes have at least one mobile phone owning member, 76 of every 100 homes have a smartphone owning member. When individuals are considered, the survey shows that 26% of individuals owned an ordinary mobile phone and 43% owned a smartphone. This meant that more individuals in India today own a smartphone than an ordinary mobile phone, which was not the case till about three years ago. In 2019, a national survey by Lokniti had found 40% owned an ordinary mobile phone and 33% a smartphone.

Survey also shows that online websites are the least trusted among news sources. Only 11% “strongly” trust them, fewer than 13% who said the same for private TV news channels. In contrast, more than twice the share — 31% — said they strongly trust newspapers. Over 60% “strongly or somewhat” trust newspapers. Interestingly, 50% or more respondents “highly or moderately” trusted Twitter, WhatsApp and YouTube while less than half said the same about Facebook, Instagram and Telegram.

Over 50% of active internet users are concerned about receiving or being misled by fake news on the internet, social media and WhatsApp. 47% social media users have been misled by fake news at least once and about 38% shared such news unknowingly at least once and later realised that it was not true.

Put together, the results bring out a curious pattern of news consumption in India. Despite a surge in smartphone usage, TV and newspapers continue to beat websites in news consumption. And the trust in TV news is much lower than newspapers but it still is the dominant source of news.

EXPLOSIVE AFFAIR

With investigators finding tell-tale signs of a terror plot having gone awry, post Sunday’s predawn car blast near a temple in communally-fragile Coimbatore, the incident, unless tackled professionally with sensitivity, holds the potential of escalating existing tensions on the law and order and political fronts. Information that the car’s driver and suspected mastermind, who was charred, Jameesha Mubin, was briefly under the National Investigation Agency (NIA) radar, would certainly call into question the capabilities of the intelligence apparatus in sensing and forestalling a terror plot. It is sheer providence that an LPG cylinder in the car exploded, as preliminary investigation suggests, before Mubin could strike terror. What cannot be overlooked is that the incident came against the backdrop of serial Molotov cocktail attacks last month, targeting properties of right-wing outfits and their office-bearers in the wake of the nationwide ban on the Popular Front of India. To the credit of the police force, the larger design was unravelled and the suspected plotters unmasked in less than 24 hours. That half a dozen suspects have been arrested bears testimony to their investigation skills. Despite the police’s commendable post-blast action, realising the gravity and political ramifications of the issue at hand, Tamil Nadu Chief Minister M.K. Stalin did the right thing in recommending that the NIA take over the probe. Governor R.N. Ravi, a former IPS officer, has questioned the four-day delay in calling the NIA. However, that is a matter of perspective and individual assessment of the ground situation.

Politically, this has thrown up some challenges for Mr. Stalin. He has to delicately balance the duty of taking along the minorities and the administrative need to uncompromisingly deal with fundamentalists, who propagate violence as an answer to political problems. In this he would require the support of constituent parties of the DMK-led Secular Progressive Alliance, which should acknowledge the need for such balance. The DMK, as such, faces criticism of being soft on terror, due to the 1998 Coimbatore serial blasts, though Tamil Nadu has seen the fangs of terror during the AIADMK regime too (1993 RSS office blast). He also has to combat attempts trying to stoke communal passions and driving religious polarisation using this incident as a springboard. The BJP has seized upon the issue with a section of its leaders calling for a Coimbatore bandh on October 31 to put the heat on the government and consolidate itself politically. What is needed, though, is for the NIA and the government to deal with the plotters firmly while not providing scope for communalising and politicising terrorism.

WHAT IS FCRA, AND WHEN CAN AN NGO'S REGISTRATION BE CANCELLED?

The Ministry of Home Affairs has cancelled the Foreign Contribution (Regulation) Act (FCRA) licence of Rajiv Gandhi Foundation (RGF) and Rajiv Gandhi Charitable Trust (RGCT), organisations that are associated with the Nehru-Gandhi family, for alleged violations of the provisions of the Act.

Law on foreign funds

FCRA seeks to "regulate the acceptance and utilisation of foreign contribution or foreign hospitality by certain individuals or associations or companies and to prohibit [such] acceptance and utilisation…for any activities detrimental to the national interest…"

The law was enacted during the Emergency in 1976 amid apprehension that foreign powers were interfering in India's affairs by pumping in funds through independent organisations. These concerns had been expressed in Parliament as early as in 1969. The law sought to regulate foreign donations to individuals and associations so that they functioned "in a manner consistent with the values of a sovereign democratic republic". An amended FCRA was enacted under the UPA government in 2010. The law was amended again by the current government in 2020, giving the government tighter control and scrutiny over the receipt and utilisation of foreign funds by NGOs. A legal challenge to the 2020 amendments was rejected by the Supreme Court in April this year.

Provisions of the Act

Broadly, the FCRA requires every person or NGO wishing to receive foreign donations to be registered under the Act, to open a bank account for the receipt of the foreign funds in State Bank of India, Delhi, and to utilise those funds only for the purpose for which they have been received, and as stipulated in the Act. They are also required to file annual returns, and they must not transfer the funds to another NGO.

The Act prohibits receipt of foreign funds by candidates for elections, journalists or newspaper and media broadcast companies, judges and government servants, members of legislature and political parties or their office-bearers, and organisations of a political nature.

Registration under FCRA

NGOs that want to receive foreign funds must apply online in a prescribed format with the required documentation. FCRA registrations are granted to individuals or associations that have definite cultural, economic, educational, religious, and social programmes.

Following the application, the MHA makes inquiries through the Intelligence Bureau into the antecedents of the applicant, and accordingly processes the application. The MHA is required to approve or reject the application within 90 days — failing which it is expected to inform the NGO of the reasons for the same.

Once granted, FCRA registration is valid for five years. NGOs are expected to apply for renewal within six months of the date of expiry of registration. In case of failure to apply for renewal, the registration is deemed to have expired.

Cancellation of approval

The government reserves the right to cancel the FCRA registration of any NGO if it finds it to be in violation of the Act. Registration can be cancelled for a range of reasons including, if "in the opinion of the Central Government, it is necessary in the public interest to cancel the certificate". Once the registration of an NGO is cancelled, it is not eligible for re-registration for three years. All orders of the government can be challenged in the High Court.

OVER 20 WOMEN TAKEN TO EX-ANDAMANS CHIEF SECY HOUSE IN 'JOB-FOR-SEX' RACKET, KEY WITNESSES TELL POLICE PROBE TEAM

Probing allegations of gangrape and sexual assault against former Chief Secretary, Andaman & Nicobar (A&N) Islands, Jitendra Narain, and Labour Commissioner R L Rishi by a 21-year-old woman, the Special Investigation Team (SIT) of the A&N Police has found evidence and recorded key witness statements pointing to an alleged job-for-sex racket, The Indian Express has learnt.

As part of this, over 20 women are alleged to have been taken to Narain's residence in Port Blair during his year-long tenure and some of them are said to have got jobs in lieu of being sexually exploited, investigators have been told.

Senior police officers in Port Blair confirmed to The Indian Express that CDRs (call data records) and cell phone tower locations of mobile phones of the two bureaucrats, both suspended, and of the 21-year-old "match" the alleged sequence of events, as provided by the woman. Sources have also confirmed that the hard disk of the DVR (digital video recorder) of the close circuit (CCTV) camera system installed at the Chief Secretary's house was first erased and, subsequently, the DVR was removed at the time of his transfer from Port Blair to Delhi in July.

Denying the charges, Narain, in letters to the Home Ministry and A&N administration, has said there is a "conspiracy" against him and claimed that he has "specific materials which demonstrate the fake nature of the case." He has challenged his presence in Port Blair on one of the two dates given in the FIR and cited air tickets and appointment schedules to show his presence in New Delhi. On Wednesday, his lawyers moved a petition in the Sessions Court apprehending destruction of that evidence.

However, the 21-year-old's family members are understood to have told the police there was a mix-up in the dates given by the woman and have since clarified this in their testimonies to the SIT. When contacted in New Delhi, Narain said he could not comment on the latest developments since the matter was sub judice. His lawyer, who filed the latest petition in Port Blair today, declined to comment.

ONLINE BETTING ADS POP UP ACROSS SOCIAL MEDIA PLATFORMS, MEITY COULD INTERVENE

*"Create your betting account and get 300% bonus on first deposit. No official documentation needed, create account via WhatsApp."

*"An insider will give exclusive details about matches; 98% prediction accuracy on toss, session and match."

*"In 1 minute: Rs 424, in 2 hours: Rs 58684.77. Start playing teen patti."

These advertisements of online betting and gambling platforms are prominantly displayed across some of the major social media platforms of the country. This includes the entire range of the Meta family of platforms – Instagram, Facebook and WhatsApp – that are being used by advertisers to not just promote betting sites, but also to onboard users in just a few clicks, an analysis by The Indian Express has found.

The Information and Broadcasting Ministry had earlier issued advisories for streaming platforms and television channels asking them not to show advertisements that promote online betting platforms. However, no such advisory has been issued for social media platforms yet, even as the IT Ministry has indicated that there is concern about the trend and that it could intervene in the issue.

Accounts promoting online betting platforms were found to be occurring fairly frequently on both Instagram and Facebook – on the main home feed and in between stories that users upload, around every second or third advertisement was about an online betting platform. On YouTube, while such ads were not visible on the main home page, they showed up when searches specific to online betting were made.

Instagram and Facebook parent Meta allows all kinds of online betting ads in India after a written request, while Google only allows ads promoting fantasy sports apps and the rummy card game. Despite that, ads promoting sports betting sites could be seen on YouTube.

INDIGENISING DEFENCE PRODUCTION IS A GOOD IDEA WHOSE TIME HAS COME

India was the world's largest importer of arms in the period from 2017 to 2021, along with Saudi Arabia. It accounts for 11 per cent of the total imports across the world, according to the Stockholm International Peace Research Institute. This is a huge financial burden, but if a difficult neighbourhood makes it inevitable, manufacturing in India and buying from Indian makers is a sound strategic aim, which also keeps the money at home. China is possibly the second biggest weapon manufacturer in the world after the United States, overtaking Russia to reach that spot. It is the fifth biggest importer in the world, but its procurement from abroad is only a small share of its requirements. Of course, manufacturing weapons is more difficult than making other products. They have to match up to international standards and they have to be made quickly. India's Defence Research and Development Organisation and the tiny homegrown defence manufacturing sector know better than anyone else the battles over indigenisation of military hardware — insufficient research budgets, closely guarded technologies of foreign manufacturers, delays in delivery, and significantly, lack of faith among the end users, the armed forces, in indigenous hardware. The long saga of the Hindustan Turbo Trainer, the basic trainer aircraft unveiled by Prime Minister Narendra Modi at DefExpo, from the drawing board in 2013 to orders from the IAF just last year, is illustrative. But this is changing, with a powerful executive making it the centrepiece of a larger "atmanirbhar Bharat" initiative.

DefExpo 2022's "Only India " theme may also have been forced by the circumstances of geopolitics. Russia's war in Ukraine and India's neutrality led to the abrupt postponement of the international event originally scheduled in March. But in this revised version, it has provided the government a platform to showcase the progress made on this front. At DefExpo Prime Minister Narendra Modi reiterated a target of Rs 40,000 cr ($5 billion) annually for defence exports by 2025. State-owned defence manufacturing companies such as HAL must now show 25 per cent of turnover as export. In 2016-17, India's arms exports were $200 million. In FY 2020-21, they had increased more than five times to $1.54 billion. The sale of the India-Russia joint venture Brahmos to the Philippines accounted for the spike. Platforms such as the Light Combat Helicopter, launched last month, could also kindle international interest.

India will need a huge infusion of funds into research, massive technological strides, zero error quality, and the involvement of the private sector. Most of all, it will need the backing and support of India's armed forces. The yearly expansion of a "positive list", that is, items that the armed forces must buy from Indian manufacturers only, is a step in the right direction.

THE HEAVINESS OF ROCKETS, WHY IT MATTERS IN SPACE FLIGHT

The Indian Space Research Organisation (ISRO) crossed an important milestone with the successful launch of the LVM3 M2/OneWeb India-1 mission on Sunday. The LVM3 rocket carried almost 6 tonnes of payload into lower-earth orbit, the most that any ISRO mission has delivered into space till date. The success of the flight not only re-validated the viability of the LVM3 rocket, ISRO's most advanced launch vehicle, for keenly-awaited missions like the Gaganyaan, but also affirmed the agency's claim as a serious player in the heavy satellite launch market.

Very few countries have the capability to launch satellites weighing more than 2 tonnes. Until recently, even ISRO used to take the services of Ariane rockets of Europe to launch its heavy satellites. The LVM3 rocket, which used to be called GSLV Mk-III earlier, is meant to end that dependence, and also become the vehicle for the more ambitious parts of India's space programmes — manned missions, Moon landings and deep space explorations — in the near future.

India's rockets

India currently has three operational launch vehicles — the Polar Satellite Launch Vehicle or PSLV, of which there are multiple versions; the Geosynchronous Satellite Launch Vehicle or GSLV Mk-II; and the Launch Vehicle Mark-3 or LVM3. The PSLV has been the most commonly used, having carried as many as 53 successful missions since 1993. Only two flights of PSLV have failed. The GSLV-MkII rocket has been used in 14 missions, of which four have ended in failures, most recently in August last year. The LVM3 has flown five times, including the Chandrayaan 2 mission, and has never disappointed.

In addition, ISRO has been working on a reusable launch vehicle (RLV). Unlike other rockets, the RLV would not end up in space as waste. Instead, it can be brought back and refurbished for use multiple times.

Heavier rockets

LVM3 is the culmination of more than three decades of efforts to indigenously develop a rocket that can carry heavier payloads, or venture much deeper into space. These requirements not only result in a massive increase in the size of the rocket, but also necessitate a change in the engines and the kind of fuel being used.

Compared to vehicles that ply on land, or even on water, rockets are an extremely inefficient medium of transport. The passenger (or payload) comprises barely 2 to 4 per cent of the weight of the rocket. Between 80 and 90 per cent of the launch-time weight of any space mission is the fuel, or the propellant. This is because of the unique nature of a space journey, which involves overcoming the tremendous force of gravity.

The LMV3 rocket, for example, has a lift-off mass of 640 tonnes, and all it can carry to lower earth orbits (LEO) — about 200 km from the Earth's surface — is a mere 8 tonnes. To the geostationary transfer orbits (GTO) that lie farther ahead — up to about 35,000 km from Earth — it can carry much less, only about 4 tonnes. However, the LMV3 is not particularly weak when compared to the rockets being used by other countries or space companies for similar jobs.

The Ariane 5 rockets, frequently used by ISRO earlier for its heavy payloads, has a lift-off mass of 780 tonnes, and can carry 20-tonne payloads to lower earth orbits and 10 tonnes to GTO. The Falcon Heavy rockets from SpaceX, supposed to be the most powerful modern launch vehicles, weigh over 1,400 tonnes at launch time, and can carry payloads weighing only about 60 tonnes.

The constraints

The size of a launch vehicle is dictated by the destination in space it is headed towards, the kind of fuel — solid, liquid, cryogenic, mix — that is being used, and the size of the payload. The choice of any two of these variables places severe restrictions on the flexibility of the third, a predicament that is popularly referred to as the "tyranny of the rocket equation" in the space community.

Not surprisingly, most of a rocket's energy is burnt in travelling to the lower earth orbit. This is because the force of gravity is the strongest here. The journey farther into space is much more smooth, and requires far less energy. In fact, it takes half as much energy for a rocket to travel to the Moon from the LEO (a journey of nearly 4 lakh km) compared to what it takes to travel to LEO from Earth (about 200 km). It is for this reason that it is often said that the giant leap for mankind was not setting foot on the Moon, but in reaching the LEO.

If a space mission is headed towards the Moon or Mars or any other celestial body, the gravity of the destination also enters the equation. More energy would be expended in reaching such a destination, compared to simply attaining a space orbit to deposit a satellite.

The efficiency of the fuel being used is the other constraint on the flight of the rocket. Several chemicals are used as rocket fuels. They deliver different thrusts. Most modern-day rockets use multiple sets of fuels to power the different stages of the flight to optimise the results. The LMV3, for example, has solid fuels in the boosters which provide additional thrust during liftoff, a liquid stage, and a cryogenic stage.

Engineering ingenuity

With dreams of setting up a permanent station on the Moon, and taking human beings to Mars and beyond, rockets would need to carry more and more stuff to space. But the capacity of rockets is severely limited.

There are two kinds of engineering innovations that can be employed to fulfill the objectives of future missions. The rockets can make multiple trips, carrying components of larger structures that can be assembled in space. This is how the International Space Station and other similar facilities were built. The other is the possibility of the use of resources available in situ on the Moon and Mars. In fact, all future missions to the Moon are attuned to exploring this possibility.

WHAT IS THE DHARAVI REDEVELOPMENT PROJECT?

The story so far:

On October 18, Union Railway Minister Ashwini Vaishnaw and Maharashtra's deputy Chief Minister Devendra Fadnavis signed a 'definitive agreement' for handing over 47.5 acres of Railway land in Dadar for the Dharavi Redevelopment Project. The agreement, which was inked between the Ministry of Railways' Rail Land Development Authority and the Dharavi Redevelopment Project Authority, sets the foundation to redevelop one of the largest slum clusters in the world. The Ministry is set to get 0.21% of the profits.

Will Mumbai be slum-free?

As per the Slum Rehabilitation Authority (SRA) scheme, 48.35% of Mumbai's population live in slums. And of Mumbai's total area about 24% is occupied by slums. According to a survey carried out by the Maharashtra Social Housing and Action League, there are approximately 49,643 slum dwellers (39,208 residential and 10,435 commercial) and 9,522 renewal tenements in chawls (6,981 are residential and 2,541 are commercial) in Dharavi. The previous Maha Vikas Aghadi government also made moves toward development but was unable to acquire railway land from the Centre for the project. According to S.V. Srinivas, CEO of the Dharavi Redevelopment Project, of the more than 600 acres of Dharavi, the project covers roughly 240 hectares.

How much will redevelopment cost?

The cost of the project is estimated to have gone up more than six times from ₹4,000 crore in 2004 to ₹26,000 crore in 2019. Now it is estimated to be around ₹28,000 crore. On October 1, the Maharashtra government invited global tenders, the base price of which is ₹1,600 crore. The State government is looking at a joint venture wherein they will hold a 20% stake while the selected lead bidder will hold a majority 80% stake. Eight developers attended the pre-bid meeting, including the Adani Group. As per the announcement made by Mr. Srinivas, the bidding process is expected to close on October 31.

What does the project entail?

This is the fourth time in the last 18 years that the Maharashtra government is attempting to re-build Asia's largest slum cluster which is home to close to 58,000 families and around 12,000 commercial establishments. The redevelopment plan is an integrated development approach of the residential, commercial, and industrial with a floor space index of over 4. The SRA and the lead bidder will form a SPV, (a special purpose vehicle, an entity formed for a specific purpose of infrastructure and rehabilitation) and along with the Dharavi Redevelopment Authority will execute Phase 1 of the project which includes redevelopment of specific areas comprising slum and non-slum sections, buildings and chawls. The project includes development of "necessary on-site and off-site infrastructure, including water supply, sewage disposal, electricity supply, piped gas system within seven years from the date of a commencement certificate for the first phase."

When will the project be finished?

The Maharashtra government is highly optimistic about completing the entire process of rehabilitation and redevelopment in seven years starting next year. However, the companies who have shown interest have said that the period is 'insufficient' and seek atleast 10-12 years for the entire process to be completed.

GOING GREEN

Ensuring sustainable development requires more than good intentions and verbal commitments. And yet, commitment is that crucial first step. Tamil Nadu has struck out clearly for a future that would be climate conscious, greener, with a series of announcements this year — in the form of government orders and via the Budget. Apart from getting the Ramsar Site declaration for a record number of ecological zones as a well-planned and implemented initiative, it has also declared its intention to create green parks in 100 villages, that would cater to local requirements too. Also proposed are an elephant reserve at Agasthiyarmalai in the south, a dugong conservation park in the Palk Bay, a new bird sanctuary at Tiruppur, and establishing India's first-ever wildlife sanctuary for the slender loris in Dindigul and Karur district. While these and similar incremental efforts made possible with political will, if implemented well, will lend themselves to a visibly greener landscape, the bolder initiatives have been conceptualised within the challenging field of climate change, where conviction is the driver. The recently appointed governing council on Climate Change, which has experts including Montek Singh Ahluwalia, Nandan Nilekani and Erik Solheim, for instance, is an example of good intent followed by a solid tool to aid implementation. It will provide policy directives to the Climate Change Mission, advise on climate adaptation and mitigation activities, provide guidance to the State Action Plan on Climate Change and provide strategies for implementation. The setting up of a Green Climate Fund corpus is a further indication of commitment. Additionally, a special purpose vehicle, Tamil Nadu Green Climate Company, has been set up to advise on managing three important missions — Climate Change, Tamil Nadu Green and Wetlands.

But pursuing climate change has not been easy, not now, not ever. As per UN data, only 26 of 193 countries that agreed to enhance climate change action last year have followed up with concrete plans. For, indeed, the challenges are daunting. Environmental evangelism will have to drive these projects, so that the passion, urgency and seriousness that the parent institution (Environment and Climate Change department), brings to the table are absorbed by other departments. All modern states are beset by challenges in the sectors of energy transition, mobility transition and agricultural transition. It is crucial to build capacity capable of fashioning local solutions, and ensure that the announcements are all implemented, in a time-bound manner.

THE THOOTHUKUDI FIRING INQUIRY REPORT

The story so far:

On October 18, the Tamil Nadu government tabled the final report of the Justice Aruna Jagadeesan Commission of Inquiry (CoI) in the Assembly. The CoI was formed to inquire into the police firing that resulted in the killing of 13 people in May 2018 in Thoothukudi during the protests against the Sterlite Copper plant. Faulting the then Tamil Nadu government for the mishandling of the protest, the CoI recommended criminal and departmental action against those responsible.

What happened in 2018?

The Sterlite Copper plant, a unit of Vedanta Limited, was India's largest copper smelter until its closure in 2018. It started its operation in 1997 inside the State Industries Promotion Corporation of Tamil Nadu complex in Thoothukudi, 25 kilometres away from the ecologically sensitive Gulf of Mannar. Over the years, the plant faced numerous protests from those residing in nearby villages, environmentalists, and a few political parties due to concerns regarding pollution, including the degrading air and water quality as well as the negative impact on fishing. The protests intensified in early 2018 and continued daily in various forms like sit-ins, hunger strikes, public meetings etc. On May 22, 2018, thousands of protesters marched towards the district collector's office demanding the immediate closure of the plant. Claiming that the situation went out of control and that the protesters resorted to violence, the police opened fire resulting in the killing of 12 persons, including two women. Another man was killed the next day.

What were the key findings of CoI?

The then All India Anna Dravida Munnetra Kazhagam (AIADMK) government in Tamil Nadu formed the Justice Aruna Jagadeesan CoI the next day of the incident with a mandate to inquire into the "causes and circumstances leading to the opening of fire resulting in death and injuries to persons on 22.05.2018 and subsequent events at Thoothukudi..". Four years after its constitution, it has finally submitted the report to present Chief Minister M.K. Stalin on May 18, 2022.

Contrary to the assertions by the then Tamil Nadu government, particularly of the police that the firing was done inevitably to control the violence started by the protesters, the CoI squarely placed the blame on the police and revenue officials by terming the firing as disproportionate and largely unprovoked. The final report was sharply critical of the then Thoothukudi collector N. Venkatesh for failing to properly engage with the protesters.

On the day of the incident, the CoI observed that the police showed a lack of efficiency and planning in adopting crowd control measures to dissuade the protesters from reaching the Collectorate. The CoI said that "the shooting was unprovoked in as much as the harm that was sought to be averted was not more than the harm that would have been inflicted by not resorting to shooting." Apart from the 13 deaths, at least 33 more people sustained gunshot injuries. Going into detail of each death, the CoI observed that, in almost all the deaths due to firing, the gunshot injuries were on the faces of the victims, indicating that the police did not resort to the practice of aiming below the waist. Similarly, the firing was largely on protesters who did not pose any direct threat to the police or were retreating from the scene.

The then Chief Minister Edappadi K. Palaniswami came in for sharp criticism for commenting that he got to know about the incident through television reports. The CoI, however, observed that the CM was receiving minute-to-minute updates from then Chief Secretary Girija Vaidyanathan, Director General of Police T.K. Rajendran and Intelligence Chief K. N. Sathiyamurthy.

What has the CoI recommended?

The CoI named as many as 17 police officers and held them "jointly and severally accountable." It recommended departmental action against Mr. Venkatesh, for"his style of functioning reminiscent of abdication of his responsibility." It has also recommended an increase in the financial compensation to the family of the deceased to ₹50 lakh and ₹10 lakh to the injured.

How has the present Tamil Nadu government responded?

Terming the incident, a "big black mark" on the State's history, Mr. Stalin, while speaking in the Assembly on the report, said that the compensation to the families of the deceased will be increased by another ₹5 lakh from the ₹20 lakh already disbursed.

He assured that those responsible would be brought to book. He said that departmental action has been initiated against the collector and senior police officers. An officer in the rank of Deputy Superintendent of Police and three constables have already been suspended.

'INVISIBLE' DISEASE WREAKS HAVOC ON COMMERCIAL SANDALWOOD CULTIVATION

The threat to India's pride, sandalwood, is increasing as the deadly sandalwood spike disease (SSD), which hitherto was confined mainly to forest areas, has started spreading to private fields where the cultivation of this aromatic tree has been taken up on a commercial basis.

A study has now shown that this 'invisible' disease, which is wiping out the sandalwood trees, can transmit through seeds of infected trees through the presence of disease-causing bacteria called Phytoplasma. This phenomenon has been blamed for the spread of the SSD to commercial farms in a study by the Bengaluru-based Institute of Wood Sciences & Technology (IWST) in association with the National Centre for Cell Sciences, Pune. A paper published by them in the science journal biology on October 12 notes that several sandalwood plants grown by sourcing seeds from nurseries had tested positive for SSD.

The study has recommended accreditation of commercial production of sandalwood seedlings through testing to ensure that the plants are free from SSD. It has also called for a paradigm shift in policies handling sandalwood seedlings.

Dr. R. Sundararaj, head of Forest Protection Division in IWST, who spearheaded the study along with Dr. Amit Yadav and his team at NCCS, Pune, says the phenomenon of SSD transmitting through seeds has posed a challenge to commercial cultivation as the farmer will not be able to know when his sapling would start showing symptoms of the disease. Some have shown symptoms four years after planting.

Hence, the accreditation process would help safeguard the interest of growers, he said.

BCCI EQUITY POLICY: A STEP TOWARDS CLOSING THE GENDER GAP

On Thursday, the Board of Control for Cricket in India took a historic step towards reducing the gender pay gap in cricket. Under the "pay equity policy" centrally contracted players, men and women both, will now receive the same match fees. Women players who till now were paid Rs 1 lakh for a white-ball match and Rs 4 lakh for a Test match, will now be paid Rs 15 lakh for a Test, Rs 6 lakh for a one-dayer and Rs 3 lakh for a T20 international. While this is a significant move towards bridging the gender pay gap in the profession, it is only when women players start playing more matches across all formats internationally that equal match fee will actually lead to pay parity in the truest sense. The BCCI, whose mandate is to promote the game, must now push for more matches — only then will this move go beyond performative tokenism. In fact, it is the other announcement — of a women's IPL — that could translate to more far-reaching changes on the ground.

Unfortunately, the gender divide is not just limited to the cricket field. Women's labour force participation rate is considerably lower than that of men, and as studies have documented, there is a gender wage gap across occupations and industries. On this issue, India fares poorly when compared to other countries, even those at similar or lower levels of income. According to the World Economic Forum's Global Gender Gap report 2022, India ranked 135 out of 146 countries on the gender gap index, with the country faring poorly on economic participation and opportunity. Data presented in the report shows that there are few firms with majority female ownership and where women are employed as top managers. As per the International Labour Organisation's Global Wage Report 2018-19, the mean gender pay gap (based on hourly wages) in India was 34.5 per cent. This wage gap was the highest amongst the 73 countries with varying levels of per capita income examined in the report.

Indian governments have over the years taken steps to ensure wage parity, beginning with the Equal Remuneration Act. Yet gender wage gaps exist in both formal and informal labour market segments, and in this, societal prejudices play an important role. Given that gender-based discrimination is an important aspect of socio-economic inequalities, policy interventions must be guided by the urgency to reduce inequalities and expand opportunities for all, on and off the cricket field.

INDIA SECOND ONLY TO RUSSIA IN DOPING VIOLATIONS: AIU DATA

Kamalpreet Kaur, the 26-year-old Indian discus thrower, was banned for three years with effect from March 29 after she tested positive for a prohibited substance earlier this year. With Kaur, 62 Indian athletes have been caught doping or in possession of banned substances, according to the Athletics Integrity Unit (AIU) of World Athletics. Only Russia has recorded more doping violations than India with 87 athletes receiving punishment.

With Kaur's infraction, the number of Indian women with doping violations has gone up to 17. However, over 70% of all doping violations in India were by men. This share decreases to 60% if all the world athletes are considered.

Interestingly, Kaur's sporting discipline (discus throw) is among the least impacted by doping scandals. The world over, most doping violations are by long-distance runners. Globally, close to 33% of all violations were by long-distance runners, 23% by short-distance sprinters and 10% by middle-distance runners. All the other disciplines including games involving throws and jumps formed less than 5% of violations. The number of violations by Indian athletes is also annotated in the graph. Four Indian long-distance runners have been caught doping. But with 21 violations, short-distance runners stand out. In total, runners formed about half the Indian doping violations.

This is Kaur's first anti-doping rule violation. Notably, the infraction carries a punishment of four years, but was reduced to three as Kaur admitted to doping within 20 days of receiving the notice. The corresponding number for Indian athletes is annotated in the graph. Close to 56% of athletes got a four-year ban. The share of such athletes increases to 83% if only Indian athletes are considered.

Thirty-six athletes globally have got lifetime bans. Only one such instance has been listed for India. Hammer thrower Jitender Singh was banned for life after testing positive a second time.

Kaur's sample tested positive for Stanozolol metabolites. Stanozolol is a prohibited substance under the WADA 2022 prohibited list. According to the United States Anti-Doping Agency (USADA), Stanozolol is a "synthetic steroid that is derived from testosterone and has anabolic and androgenic properties". Stanozolol is the most used substance by Indian athletes, with seven being caught using or in possession of the drug.

However, EPO is the most commonly used drug the world over, with over 41 athletes getting caught using it. The USADA defines EPO as a "part of a class of substances called Erythropoiesis-Stimulating Agents." It is commonly used for "kidney failure, chemotherapy, and other medical conditions involving red blood cell loss and anaemia." The organisation says that EPO increases red blood cell mass and allows transportation of more oxygen to muscles increasing stamina and performance.

USE OF MOTHER TONGUE IN FOUNDATIONAL EDUCATION, NOW AND EARLIER

The new National Curriculum Framework (NCF) for the foundational stages of education, launched by Education Minister Dharmendra Pradhan last week, has recommended that mother tongue should be the primary medium of instruction in schools, both public and private, for children up to eight years of age.

The thrust on mother tongue as the medium of instruction, especially in the primary grades, has been a feature of education policies and curriculum frameworks over the years. Recommendations on English have, however, differed.

This latest push for the use of mother tongue comes after repeated, unequivocal policy articulations in its favour at the highest levels of the Union government, including from Prime Minister Narendra Modi and Home Minister Amit Shah.

What has the new NCF recommended?

According to the NCF, evidence from research confirms the importance of teaching children in their mother tongue during the foundational years and beyond.

"Since children learn concepts most rapidly and deeply in their home language, the primary medium of instruction would optimally be the child's home language/ mother tongue/ familiar language in the Foundational Stage," it states.

English, the NCF has observed, can be one of the second languages taught at that level.

What is the immediate, practical import of this recommendation?

At the national level, in schools affiliated to the CBSE or ICSE, English is the main medium of instruction from the primary classes itself. That has been the case despite efforts to get the boards to adopt the mother tongue or dominant regional languages at least for the primary grades. Neither of these boards has so far signalled any possible revision in the current arrangement.

Most state boards, meanwhile, have their regional languages as the main mode of instruction. However, every state government also runs schools in which English is the medium of instruction. In fact, the Andhra Pradesh and Telangana governments have taken policy decisions to gradually get all schools to impart education only in English. This had triggered a debate, which could well revive now in the light of the new NCF.

What did previous education policies recommend?

The first education policy, which was based on the recommendations of a commission headed by the former chairman of the University Grants Commission (UGC), Dr D S Kothari, observed that regional languages were already in use as the medium of education at the primary and secondary stages, and steps should be taken to adopt the same at the university stage as well.

The recommendations did not contain any specific instruction on mother tongue, but underlined that "special emphasis should be laid on the study of English and other languages".

The second education policy, introduced in 1986, too was silent on the use of the mother tongue as the medium of instruction at the foundational stage. However, the 1992 Programme of Action, which was based on a review of the 1986 policy, said that at the pre-school level, the medium of communication should be mother tongue/ regional language.

The new National Education Policy (NEP), which was introduced in 2020, marked a departure from the past, as it made a clear case for mother tongue. "Wherever possible, the medium of instruction until at least Grade 5, but preferably till Grade 8 and beyond, will be the home language/ mother tongue/ local language/ regional language," the NEP said.

And what about the previous NCFs?

The NCFs are detailed guidelines based on which school syllabi undergo revisions. In the NCFs, the role of the mother tongue has been specified more clearly from the beginning.

The first NCF, which was published in 1975, said clearly that "so far as possible, primary education should be in the mother tongue", which was the child's "most natural medium of communication".

In the case of learners whose mother tongue was also the language of the region, the medium of instruction at the elementary and secondary stages should be the regional language, it said — and in cases where they were different, the mother tongue should be the medium in the first two years of primary education, and the regional language should then take over.

The NCF 2000 pronounced emphatically: "The medium of instruction, ideally, ought to be the mother tongue at all the stages of school education."

NCF 2005 said the language of interaction and communication in Early Childhood Care and Education (ECCE) would "normally be the child's 'first' language, or home language". It added, however, that in the light of socio-political realities, English has to be introduced early as a second language, either in Class I or at the preschool level.

What is the Constitutional position on this issue?

Under Article 350A of the Constitution, the government must try to ensure that children from linguistic minority groups are educated in their mother tongue.

The provision ("Facilities for instruction in mother-tongue at primary stage") reads: "It shall be the endeavour of every State and of every local authority within the State to provide adequate facilities for instruction in the mother-tongue at the primary stage of education to children belonging to linguistic minority groups; and the President may issue such directions to any State as he considers necessary or proper for securing the provision of such facilities."

Article 351 says "It shall be the duty of the Union to promote the spread of the Hindi language, to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India and to secure its enrichment by assimilating without interfering with its genius, the forms, style and expressions used in Hindustani and in the other languages…specified in the Eighth Schedule…"

CENTRE RELEASES DRAFT POLICY: HOW THE CREDIT SYSTEM WILL WORK IN SCHOOLS

School students in India can soon earn 'credits' from classroom learning as well as extracurricular activities and deposit them in a 'bank' — much like the system already being followed in some colleges and universities.

The policy to integrate this credit system, the draft National Credit Framework (NCrF), was put in public domain by Education Minister Dharmendra Pradhan on Wednesday (October 19). It has been drafted by a 11-member committee headed by National Council of Vocational Education and Training (NCVET) chairperson Nirmaljeet Singh Kalsi.

What are 'credits' in the education system?

Credits are essentially a "recognition that a learner has completed a prior course of learning, corresponding to a qualification at a given level", according to the draft document. In other words, it is a way of quantifying learning outcomes.

How does the credit system work?

Take for example the Choice-Based Credit System (CBCS) followed by many universities in India. Under the CBCS, students need to earn a certain number of credits for completing a degree. While doing so, it offers them the opportunity to mix and match a wide variety of courses, enabling interdisciplinary and intradisciplinary education. This is not possible under the conventional marks or percentage-based evaluation system.

At a time the University Grants Commission (UGC) is encouraging provisions such as the four-year undergraduate programme with multiple entry and exit options, a credit-based approach has become imperative. Simply put, it offers flexibility in choosing courses, the option to change courses or institutions midway, or to reenter the education system after dropping out without losing years. The students can digitally deposit their credits in the Academic Bank of Credits or ABC, which in many ways works like a commercial bank, and redeem them whenever required.

What are credit frameworks?

Credit frameworks are guidelines to be followed by schools, colleges and universities in adopting the credit system. For example, the National Higher Education Qualification Framework (NHEQF) lays out the guidelines for higher educational institutions that want to implement the credit system.

How is the NCrF different from the existing frameworks?

The proposed NCrF seeks to integrate all the frameworks under one umbrella. Moreover, it also brings the entire school education system under the ambit of credits for the first time. So far, only the National Institute of Open Schooling followed a credit system. The NCrF also covers skill and vocational education.

How long will the credits earned by a student remain valid?

According to the University Grants Commission (Establishment and Operation of Academic Bank Of Credits in Higher Education) Regulations notified in July, 2021, the credits shall remain valid for a maximum duration of seven years.

What are the highlights of the NCrF?

The biggest change that the NCrF, once implemented, will usher in is in the school education sector. All the provisions of the credit system will also be available to school students. It will remove the need for equivalence certification for academic programmes that meet the NCrF requirements and facilitate transfer of students between schools and boards.

As the draft points out, "NCrF addresses the difficulties students are facing in respect of equivalence of certificates issued by various school education boards in India for the purpose of admissions in higher education institutions and employment in Central/State Government."

A student shall have to earn at least 40 credits for completing a year of school education after putting in 1200 hours of "notional learning hours".

What are "notional learning hours"?

Notion learning hours in the context of NCRF means time spent not just in classroom teaching, but also in a range of co-curricular and extracurricular activities. The list of such activities include sports, yoga, performing arts, music, social work, NCC, vocational education, as well as on the job training, internships or apprenticeships.

How will the credit points be obtained?

For the purpose of calculation, the NCrF has divided the education system into multiple levels. For school education, there are four levels. Students clearing class XII will be at credit level 4. For higher education, the levels are from 4.5 to 8 — which is basically from first year UG to PhD. The total credit points earned by the student will be obtained by multiplying the credits earned by them with the NCrF level at which the credits have been earned.

NALANDA VARSITY TO OFFER COURSE ON BAY OF BENGAL, AMID PM'S 'ACT EAST' POLICY

An introduction to the geographical significance as well as history, culture and art of the Bay of Bengal, an area of growing interest amid Prime Minister Narendra Modi's Act East Policy, will now be available in the form of an academic course at Nalanda University (NU), which has carved out a role for itself in strengthening India's linkages with East Asian countries.

The university, which now operates from its sprawling campus in Rajgir, Bihar, offers 'Bay of Bengal: An Introduction' as a certificate course from this September via online classes. NU also has plans to make the course available offline in the future. The three-week course will include lectures from experts on navigation, fisheries, track-II policies and culture of countries involved with Bay of Bengal — India, Bhutan, Bangladesh, Nepal, Sri Lanka, Myanmar, Thailand, Indonesia, Malaysia, Singapore, China, USA, France, Germany, UK, Japan and Korea.

PM Modi had announced on August 30, 2018, during the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) Summit's opening session in Kathmandu, that the Centre for Bay of Bengal Studies would be established at NU. The centre was inaugurated on September 29 by Saurabh Kumar, Secretary (East), Ministry of External Affairs, along with NU Vice Chancellor Dr Sunaina Singh.

The first batch of the 'Bay of Bengal: An Introduction' course has 19 participants who are from India, Indonesia, Colombia and China. Most of them are researchers and academics.

The course content includes the study of trade and commerce in the Bay of Bengal, traditional and non-traditional security, major sea lanes, energy and other resources, blue economy, sustainable development, coastal tourism, geopolitical competition, migration and refugees, piracy, pollution, traditions, art and architecture, religions, food, festivals, music, dance, clothing, movies and overall economic and ecological relevance of the bay today.

The Bay of Bengal is significant in terms of both India's Act East Policy and the bay's strategic orientations. India's SAGAR (Security and Growth for All in the Region) vision and the Indo-Pacific Ocean Initiative have also made it important for a specialised multidisciplinary research centre about the bay to be set up.

At the new NU campus, the focus is on how best to retain the cultural and architectural ethos of Nalanda Mahavihara, the 5th-12th century university that is considered one of the greatest centres of learning in ancient India.

U.P. PROMOTES TOMBS OF MUSLIM DEVOTEES OF KRISHNA FOR TOURISM

Amid the forested lanes of Gokul in Mathura are the once forgotten tombs of Raskhan and Taj Bibi, arguably the two most famous Muslim devotees of Lord Krishna. With the Uttar Pradesh government focussed on creating Krishna Janmabhoomi as a major pilgrim tourist destination in the State, the redevelopment of these burial sites has been prioritised. A 14-acre complex has been developed around the two hitherto neglected tombs.

A senior official of the State Tourism Department, who did not wish to be named, told The Hindu that the decision had been taken "keeping in mind the discussion around communal amity in the country nowadays". "Here are two widely respected Muslim devotees of Krishna and poets of repute. We wanted them to be rediscovered," the source said.

Raskhan, or Syed Ibrahim Khan, was a 16th century Sufi Muslim poet born either in Amroha or Hardoi in Uttar Pradesh. He became a follower of Krishna and spent his life in Vrindavan.

Taj Bibi, also known as the 'Mughal Mirabai', was the daughter of a Muslim nobleman, appointed by the Mughals to protect the Gokul area.

The official said the tomb complex was proposed to Uttar Pradesh Chief Minister Yogi Adityanath as one of the first pilgrim tourist sites to be developed in the Braj (Mathura-Vrindavan) area, and the Chief Minister was "excited" about the project, for which funds were released immediately.

Mr. Adityanath visited the site after its completion, as has Mathura MP Hema Malini. The complex receives around 2,000-3,000 visitors daily.

"The total cost of the project was around ₹10 crore," Pankaj Verma, Deputy CEO, Braj Teerth Vikas Parishad, said. The Parishad is dedicated to the redevelopment of the Braj region as a pilgrimage destination.

According to local officials, apart from the increase in tourist footfall, the area itself has been resuscitated as it had become a haven for drug addicts and petty criminals. Taj Bibi's mausoleum, which had been in a state of complete ruin, had been encroached upon.

Officials said there may be many more such historically important sites in Braj, which have to be redeveloped by providing better infrastructure for tourists.

NEW SPECIES OF GENUS ALLMANIA SPOTTED

A rather frail-looking plant spotted on the granite hillocks of Palakkad has been identified as a new species of the genus Allmania. Named Allmania multiflora, the species is quite special from both the botanical and conservation points of view, according to researchers.

An annual herb that grows to a height of about 60 cm, Allmania multiflora is only the second species of this genus identified so far anywhere. That is not all: the discovery has come 188 years after the genus and the first species were described by botanists.

Field surveys, genetic analysis, and molecular and morphometric investigations demonstrated it as distinct from Allmania nodiflora, which so far had been accepted as the lone Allmania species, a paper published in the journal Phytotaxa said. The paper has been authored by V.S. Anil Kumar, Department of Botany, University College, Thiruvananthapuram; S. Arya, a research scholar of the same department; V. Suresh, Department of Botany, Government Victoria College, Palakkad; and Duilio Iamonico, Sapienza University of Rome, Italy.

The first species, Allmania nodiflora, was originally published under the genus Celosia as Celosia nodiflora in 1753.

Specimens found in Ceylon (Sri Lanka) were first described as Allmania nodiflora in 1834. Its new-found cousin, Allmania multiflora, is currently known only from a few locations. Given its small population, the researchers have assessed it as critically endangered, applying IUCN Red List criteria.

The plant was discovered during ongoing studies on Amaranthaceae, the plant family to which the genus Allmania belongs. Found at heights ranging between 1,000 to 1,250 metres, Allmania multiflora is an annual herb, erect, with branches arising from the base. The stem is red to violet at the base and green above. Flowering and fruiting occurs from May to September.

Allmania multiflora has been so named for having a higher number of florets within an inflorescence.

The species faced a number of threats, explained Dr. Anil Kumar. "Its population is quite small, for one. It could be accidentally exploited by local people as a vegetable along with amaranths. Its habitat, granite hillocks, too face various forms of threats today," he said.

BATS EVICTED FROM MANIPUR CAVE FOR TOURISM, SAYS STUDY

The Khangkhui, locally called Khangkhui Mangsor, is a natural limestone cave about 15 km from Ukhrul, the headquarters of Ukhrul district. Excavations carried out by Manipur's archaeologists had revealed the cave was home to Stone Age communities.

The cave was also used as a shelter by the local people during the Second World War after the Japanese forces advanced to Manipur and the adjoining Nagaland. More importantly for conservationists, the cave housed large roosting populations of bats belonging to the Rhinolophidae and Hipposideridae families.

A study published in the Journal of Threatened Taxa by researchers from the Zoological Survey of India (ZSI) cited local guides as saying that the bats were killed and evicted from the Khangkhui cave after 2016-17 purportedly to make it "more tourist-friendly".

The researchers — Uttam Saikia and A.B. Meetei, both from ZSI's North East Research Centre in Shillong — recorded Blyth's horseshoe bat in the Khangkhui cave during two extensive field surveys covering nine districts of Manipur in 2019 and 2021.

This bat was one of 12 new species added to Manipur's mammalian fauna. The others included the ashy roundleaf bat, the intermediate horseshoe bat, the northern woolly horseshoe bat, the greater false vampire bat, the hairy-faced bat, Hodgson's bat, Hutton's tube-nosed bat and the round-eared tube-nosed bat.

Shanngam Shaliwo, Divisional Forest Officer, denied any planned extermination of the flying mammals. "No such killing of bats has been reported in our office," he told The Hindu. He said the cave has been steeped in the folklore of the dominant Tangkhul community, whose ancestors believed it was the abode of a protective deity.

The study mentions places in Manipur where bats are eaten for "supposed medicinal properties or as a supplementary source of protein".

"In Wailou village in Chandel district, we were informed that people do occasionally hunt bats in a cave though this practice is not widespread throughout the State. Another serious threat we noticed is the death of bats as unintended victims of illegal bird traps," the study said.

BUSINESS & ECONOMICS

INDIA'S IMPORTS FROM CHINA SURGE TO RECORD HIGH IN FIRST 9 MONTHS OF YEAR

India's imports from China have risen 31% for the nine months ended September, propelling two-way trade past $100 billion and the trade deficit to a record high. India imported $89.66 billion worth of goods from China in the period, the highest on record for three quarters in any year. Imports stood at $68.46 billion at the end of Q3 of 2021, which was itself a record high.

'Deficit grows'

India's exports to China in the first nine months of this year were, however, down by as much as 36.4% at $13.97 billion, data from China's General Administration of Customs (GAC) showed. The trade deficit in the period grew to $75.69 billion.

Bilateral trade is on track to surpass last year's record figure, but so is the deficit. In 2021, trade crossed $100 billion for the first time, reaching $125.6 billion. India's imports accounted for bulk of the trade, reaching a record high of $97.5 billion, which is almost certainly set to be exceeded this year.

'Imbalance worsens'

The rising trade volume this year underlines India's continued demand for Chinese machinery and intermediate goods, such as active pharmaceutical ingredients (APIs), despite long-running efforts to reduce reliance on China. While the fall in Indian exports, the reliance on Chinese goods in some sectors, and the widening imbalance are concerns, Indian officials say the growing imports also reflect rising demand for intermediates, which is a positive.

'ASEAN at top slot'

The growth in exports to India was among the highest for China's major trading partners. ASEAN remains China's biggest trading partner, with two-way trade reaching $717 billion after Q3, up 13.8%; followed by the European Union ($645 billion, up 7.9%,), and the United States ($580 billion, higher by 6.9%).

MANY EXPORTERS, IMPORTERS RELUCTANT TO HEDGE FOREX EXPOSURE

Despite the 11.2 per cent fall in the rupee's value in 2022, a large section of exporters and importers are reluctant to fully hedge their foreign exchange exposure owing to higher costs involved in the process and are awaiting a definite direction in the movement of the currency. While big corporates have robust risk management practices in place and the small and mid-sized players still have portions of their foreign exposure unhedged, a sizeable chunk of overseas loans are still unhedged, bankers said.

According to the June 2022 Financial Stability Report (FSR) of the Reserve Bank, of the outstanding external commercial borrowings (ECBs) of $ 180 billion, 44 per cent or $ 79 billion is unhedged. This included about $40 billion liabilities of public sector companies, mainly in the petroleum, railways and power sectors, which have assets with a natural hedge character. However, data on unhedged forex exposure of importers and exporters is not available but bankers said it may be manageable.

Hedging is a common financial practice used by exporters and importers to minimize the impact of unpredictable fluctuations in exchange rates. When the rupee falls, repayments become costlier in the absence of hedging. Hedging costs rise when the market faces high volatility. Forward contracts and currency derivatives are among the instruments used for hedging.

In the current year, the rupee has depreciated by around 11.28 per cent. Between September 1 and October 21, the currency has fallen by around 4 per cent, or Rs 3.4. It crossed the 83-mark for the first time on October 19. The Reserve Bank had recently asked banks to ascertain foreign currency exposure of entities annually. While exporters benefit from the rupee fall, importers take a hit if their exposure is uncovered.

Even banks are keeping a close watch on the unhedged portion of foreign currency exposures of corporates and nudging them to take action to reduce risks. "As a banker, when we lend in foreign currency, we generally insist on entities to hedge, so that the liability on currency risk is minimised,". Bankers said the RBI guidelines state that lenders have to collect information from the customers who are having unhedged foreign currency exposure at the end of every quarter. If the unhedged exposure is more, it adds to the cost for banks and, so, they are keeping a track on unhedged foreign currency exposure, said a banker.

Some experts believe that since the contract duration of exporters and importers is not a long one, they don't see one or two months of currency fluctuations as a challenge and can wait for some more time to get clarity on the currency's movement before deciding on hedging. "Importers are waiting for a correction in the current level of the rupee to hedge their exposure," a banker said.

Some exporters and importers see hedging as a strategy to speculate rather than from a risk management perspective, said a dealer from a forex advisory firm. By not hedging, they might be taking some risks that could go in their favour, he said.

Entities which do not hedge their foreign currency exposures can incur significant losses during the period of heightened volatility in foreign exchange rates, the RBI had said. These losses may reduce their capacity to service the loans taken from the banking system and increase their probability of default thereby affecting the health of the banking system. Since the movement of currency is dependent on various global factors, it is imperative for exporters and importers to fully hedge their forex exposures, experts said.

THE FM'S CALL FOR INDUSTRIAL INVESTMENT

The story so far:

Last month, Finance Minister Nirmala Sitharaman asked captains of industry what was holding them back from investing in manufacturing. She likened industry to Lord Hanuman from the Ramayana by stating that industry did not realise its own strength and that it should forge ahead with confidence. She said, "This is the time for India… We cannot miss the bus".

Why did she urge them thus?

Clearly, the Finance Minister did not see investments happening at a pace she would have liked. In the hope of revitalising private investment, the government had in September 2019 cut the tax rate for domestic companies from 30% to 22% if they stopped availing of any other tax SOP (standard operating procedure).

Niranjan Rajadhyaksha, CEO of Artha Global, says that Indian private sector investment has been weak for almost a decade now. "If we look at drivers of economic growth right now, there are amber lights flashing. The export story will be under threat because of the global slowdown, the government's ability to support domestic demand would also be limited as the fiscal deficit comes down. Because of the K-shaped recovery, private consumption is only concentrated in some parts of the income pyramid."

What is the current scenario?

Let's look at some indicators over the past few months; generally, changes in numbers are with respect to year-earlier figures, but when we have been through something as sudden and life-changing as a pandemic for at least two years, it is useful to see how figures from quarter to quarter or month to month have changed. This gives us an idea of how well or poorly we are recovering. In the GDP figures for the quarter ended June, gross fixed capital formation (GFCF) at 2011-12 prices rose 9.6% to ₹12.77 lakh crore, from ₹11.66 lakh crore in Q1 of FY20, which was the pre-pandemic period. This is in context of the overall GDP growth of 2.8% to ₹36.85 lakh crore in Q1 FY23 from ₹35.85 lakh crore in Q1 of FY20. Manufacturing GVA (gross value added) also rose 6.5% to ₹6,05,104 in Q1 FY23 from ₹5,68,104 in Q1, FY20. However, when one observes manufacturing growth from the immediately preceding quarter April-June vs January-March, we see that the sector has suffered a 10.5% contraction. While private final consumption expenditure, an essential pillar of our economy, climbed 26% year-on-year for the June quarter, the ₹22.08 lakh crore of private spending in April-June 2022 was a significant ₹54,000 crore, or 2.4%, less than that spent in the preceding quarter. And GFCF, which is viewed as a proxy for private investment, shrank quarter-on-quarter by 6.8%.

Industrial production has shown growth in each of the first five months of this fiscal year starting April, compared with a year earlier; but worryingly, monthly numbers as seen on the Index of Industrial Production (IIP) and the S&P Purchasing Managers' Index (PMI) for Manufacturing have progressed in fits and starts. In an article in The Hindu, Pulapre Balakrishnan, argued that capital expenditure by the government is a precursor to private investment but that it would take a sustained trend in public spending, for about half a decade at least, to help kindle enthusiasm in the private sector. While the government's intent to spend aggressively on infrastructure in its Budget for this fiscal is encouraging, he says this cycle should have started a few years ago. With the government having now announced intent, he says it must now focus on a couple of priorities; one that it must identify the right projects — investments must be made in productivity-enhancing infrastructure. Two, he warns that inflation could derail the best designed public spending programmes, and urges a step up in agricultural produce to help rein in food inflation.

What is happening to demand?

Private companies invest when they are able to estimate profits, and that comes from demand. The Centre for Monitoring Indian Economy's (CMIE) consumer sentiment index is still below pre-pandemic levels but is far higher than what was seen 12-18 months ago. RBI's Monetary policy report dated September 30 says, "Data for Q2 [ended Sept] indicate that aggregate demand remained buoyant, supported by the ongoing recovery in private consumption and investment demand." It shows that seasonally adjusted capacity utilisation rose to 74.3% in Q1 — the highest in the last three years.

And this, along with household savings intentions remaining high, might hold the key to the investment cycle kicking in.

LIQUIDITY IN SYSTEM TIGHTENS ON RISING CREDIT DEMAND, RBI FOREX INTERVENTION

The Reserve Bank of India (RBI) injected Rs 72,860.7 crore of liquidity into the banking system on October 21 — the highest since April 2019 — after liquidity condition tightened on higher demand for credit during the festival season and the central bank's intervention in the foreign exchange market to curb volatility in the rupee. On April 30, 2019, the net infusion of liquidity by the RBI was Rs 96,150 crore.

On October 24, 2022, the RBI again injected Rs 62,835.7 crore of liquidity into the system. Last month, the liquidity condition turned into a deficit mode on September 20 for the first time since May 2019, and the RBI had to inject Rs 21,873.4 crore into the system. Liquidity in the banking system refers to readily available cash that banks need to meet short-term business and financial needs. On a given day, if the banking system is a net borrower from the RBI under Liquidity Adjustment Facility (LAF), the system liquidity is said to be in deficit. If the banking system is a net lender to the RBI, the liquidity is said to be in surplus. The LAF refers to the RBI's operations through which it injects or absorbs liquidity into or from the banking system.

"Liquidity condition has tightened due to the RBI intervention in the forex market. Through intervention, the RBI sells dollars and sucks out rupee liquidity from the system. Also, seasonal demand for credit has gone up, which has resulted in less cash surplus with banks," said a banker.

The RBI has been using the country's foreign exchange reserves to stem the rupee's fall. From a record high of $642.5 billion on September 3, 2021, reserves have fallen to $528.3 billion on October 8, 2022, the latest RBI data showed.

Since April 2022, the reserves have depleted by $78 billion. RBI, however, has said that two-thirds of the fall in forex reserves in the current fiscal is due to valuation changes arising from an appreciating US dollar and higher US bond yields. Bank credit hit a decade high after it rose by 17.9 per cent in the fortnight that ended October 7. In absolute terms, credit outstanding stood at Rs 128.6 lakh crore as on October 7, rising by Rs 19.56 lakh crore over the last 12 months, according to the latest RBI data. The rise in the same period of last year was Rs 6.71 lakh crore.

The growth was driven by retail credit, higher working capital demand amidst high inflation, and lower funds raised in the capital market, Care Ratings said in a report. The rise in advances is expected to remain elevated in the short term due to the ongoing festival season, it said. "Rise in demand for credit during festivals leads to higher growth in credit than in deposits. If credit is higher than deposits, then automatically there is a liquidity issue," Bank of Baroda's chief economist Madan Sabnavis said. He said whenever there is a liquidity shortage in the system, RBI injects liquidity by buying back government securities (g-sec) through open market operations (OMO).

"It is not a formalised kind of G-SAP (G-sec acquisition programme) where securities are bought through open market operations. On any particular day, when the RBI sees a liquidity problem, it does buy securities, but the purchases get reported later," he said. Open market operations (OMO) means buying and selling of government securities in the open market in order to expand or contract the amount of money in the banking system. Purchases inject money into the banking system and stimulate growth while sales of securities do the opposite. Some experts believe that this liquidity infusion by the RBI on October 21 was on behalf of the government, which has started its spending.

"The government was to start spending from the beginning of October, but it got delayed. On October 21, the government would have released some amount for welfare and developmental activities," a banker said.

The government is likely to spend around Rs 3-4 lakh crore in developmental activities before the next budget, he said.

WHEN DOES RBI STEP IN TO MONITOR A BANK?

The story so far:

The Reserve Bank of India (RBI) has placed Dhanlaxmi Bank under tight monitoring with the Thrissur-based private bank's financial position coming under greater public scrutiny. The RBI's move comes in the wake of the intense court battle waged by a group of minority shareholders against the bank's management team over inadequate financial disclosures, rising expenses, and general mismanagement of the business. On Thursday, the bank noted that minority shareholders have called for an extraordinary general meeting next month to decide on restricting the spending powers of the current chief executive officer owing to the deteriorating capital adequacy situation of the bank.

How did it get to this situation?

Dhanlaxmi Bank's capital to risk weighted assets ratio (CRAR) dropped to around 13% at the end of March this year from 14.5% a year ago, prompting the RBI to take stock of the financial health of the bank. Under Basel-III norms, which were adopted by financial regulators across the globe in the aftermath of the financial crisis of 2007-08 that involved major failures in the banking system, banks are supposed to maintain their CRAR at 9% or above. The RBI's move to increase its oversight on Dhanlaxmi Bank is seen as a response to the deterioration in the bank's capital adequacy. It should be noted that Dhanlaxmi Bank's capital adequacy has dropped below the stipulated standards in the past and it has even been placed under the prompt corrective action framework (PCA) by the RBI to deal with serious deteriorations in its financial position.

Under the PCA, the RBI places restrictions on lending by troubled banks and keeps a close eye on them until their financial position improves sufficiently. Dhanlaxmi Bank has been accused by its minority shareholders of mismanagement in the wake of the decision of the management to expand the bank to new geographies amid an unexpected rise in expenses. The management has also been accused of inadequate disclosure of information to explain the rise in costs.

Why is capital adequacy important for a bank?

Capital adequacy ratio is an indicator of the ability of a bank to survive as a going business entity in case it suffers significant losses on its loan book. A bank cannot continue to operate if the total value of its assets drops below the total value of its liabilities as it would wipe out its capital (or net worth) and render the bank insolvent. So, banking regulations such as the Basel-III norms try to closely monitor changes in the capital adequacy of banks in order to prevent major bank failures which could have a severe impact on the wider economy. The capital position of a bank should not be confused with cash held by a bank in its vaults to make good on its commitment to depositors.

The CRAR, which is a ratio that compares the value of a bank's capital (or net worth) against the value of its various assets weighted according to how risky each asset is, is used to gauge the risk of insolvency faced by a bank. The riskier a type of asset held in a bank's balance sheet, the higher the weightage given to the value of the asset while calculating the bank's capital adequacy ratio. This causes the capital adequacy ratio of the bank to drop, thus signalling a higher risk of insolvency during crises. In other words, the CRAR tries to gauge the risk posed to the solvency of the bank by the quality or riskiness of the assets on the bank's balance sheet. In the case of Dhanlaxmi Bank, the write-down and reclassification of tier-2 bonds, which are considered effectively to be equivalent to equity capital since they are unsecured, in the next few months is expected to adversely affect the bank's capital adequacy ratio.

What happens next?

Dhanlaxmi Bank has been trying to issue additional shares in the open market through a rights issue in order to deal with its capital adequacy woes. Through a rights issue, the bank will be able to raise more equity capital from existing shareholders. This is in contrast to an initial public offering where shares are issued to new shareholders. The additional capital could help in raising the bank's capital adequacy ratio which is necessary to comply with regulations and serve as a buffer that absorbs any losses incurred by the bank on its loan book in the case of any crisis in the future.

The rights issue, however, has been delayed by the ongoing court battle with minority shareholders and the bank's non-compliance with rules regarding the composition and strength of the management board. This delay could compromise the bank's ability to meet the RBI's stipulated norms on capital adequacy anytime soon.

The RBI is likely to keep a close eye on Dhanlaxmi Bank over the next few months as the bank's ability to meet capital adequacy norms comes under greater strain. The central bank may even decide to intervene in case the delay of the rights issue threatens the bank's ability to comfortably meet the capital adequacy norms recommended under Basel-III regulations. In fact, Dhanlaxmi Bank could even become an acquisition target in case its management is unable to raise the required capital. In such a case, an investor with the capital required to immediately boost the bank's capital adequacy may well find favour with the RBI.

AN UNKIND HIKE

The Government recently increased the returns on a handful of small savings instruments for the ongoing October to December quarter by 0.1 to 0.3 percentage points. Popular investment avenues for the middle class such as the Public Provident Fund (PPF) and the National Savings Certificate were left out. On paper, the returns on these instruments are to be reset on a market-determined basis, with a spread of 0 to 100 basis points (one basis point equals 0.01%) over the yields on government securities with comparable maturities. That this has not been adhered to is evident even at a cursory glance, given the long pause between rate changes. Following interest rate hikes this year to curb inflation, government securities' yields have been shooting up. This month, the Reserve Bank of India (RBI) said that interest rates offered on various schemes in the current quarter are 44 to 77 basis points below the formula-implied rates. The PPF, for instance, should have been earning 7.72% this quarter instead of the 7.1% accruing now. It is noteworthy that the central bank, which usually publishes the formula-based small savings rates every month or two, had not spelt them out from May to September, although it did note in August that the spread between current rates and the formula-based rates had turned 'negative for most' schemes.

For households that have been grappling with 6%-plus inflation since January, punctuated by a few months of 7%-plus price rise, these meagre hikes are far from enough to lift sentiment. Bear in mind that this was the first change in these schemes' rates in 27 months — after a sharp cut in the range of 0.5 and 1.4 percentage points across schemes introduced in April 2020. That political considerations still determine the trajectory of small savers' nest-egg sizes can be gauged by the few recent occasions when rates were changed, or rolled back. The last time rates were hiked was in January 2019, just ahead of the Lok Sabha election. In March 2021, the Government had announced further cuts ranging from 0.4% to 1.1%, but withdrew the decision overnight, citing an 'oversight' amid a poll campaign for five States. However, even as a token gesture to voters in upcoming polls, this latest tweak in small savings rates does not make the cut. As the RBI's top brass warned earlier, negative returns have serious consequences for the economy if households, which are the biggest lenders, stop parking their savings in such fixed income instruments and banks. The next quarter should see a fairer and healthier reset of returns to negate inflation's dent on household savings.

AAP WANTS GODS ON CURRENCY: WHO DESIGNS RUPEE NOTES, AND HOW?

Several Aam Aadmi Party (AAP) leaders, led by party chief Arvind Kejriwal, on Wednesday (October 26) asked the government to put pictures of Goddess Lakshmi and Lord Ganesh on currency notes in order to bring "prosperity" to the country.

While the BJP — which accused the AAP of making "u-turns" in their approach to Hindu gods — and Congress — which said Kejriwal was the "B-team" of the BJP-RSS — fumed, it is interesting to recall the process of changing the design and form of Indian currency.

So, who decides what Indian bank notes and coins are supposed to look like?

Changes in the design and form of bank notes and coins are decided by the Reserve Bank of India (RBI) and the central government. Any change in design of a currency note has to be approved by the RBI's Central Board and the central government. Changes in the design of coins are the prerogative of the central government.

What role does the RBI play in issuing notes?

The central bank internally works out a design, which is put before the RBI's Central Board. Section 22 of The Reserve Bank of India Act, 1934, gives RBI the "sole right" to issue banknotes in India. Section 25 states that "the design, form, and material of bank notes shall be such as may be approved by the Central Government after consideration of the recommendations made by the [RBI's] Central Board".

The RBI's Department of Currency Management — currently headed by Deputy Governor T Rabi Sankar — has the responsibility of administering the core function of currency management. According to the RBI website, the Department addresses policy and operational issues relating to the "designing of banknotes; forecasting demand for notes and coins; ensuring smooth distribution of banknotes and coins throughout the country and retrieval of unfit notes and uncurrent coins from circulation; ensuring the integrity of bank notes", etc.

If the design of a currency note has to change, the Department works on the design and submits it to RBI, which recommends it to the central government. The government gives the final approval.

And who decides on the minting of coins?

The Coinage Act, 2011 gives the central government the power to design and mint coins in various denominations. In the case of coins, the role of the RBI is limited to the distribution of coins that are supplied by the central government.

The government decides on the quantity of coins to be minted on the basis of indents received from the RBI on a yearly basis, the central bank says. Coins are minted in four mints owned by the Government of India in Mumbai, Hyderabad, Kolkata and Noida.

How does RBI's currency management work?

The Reserve Bank, in consultation with the central Government and other stakeholders, estimates the quantity of banknotes that are likely to be needed denomination-wise in a year, and places indents with the various currency printing presses for their supply.

In terms of its clean note policy, the RBI provides good-quality banknotes to the public. Notes that are received back from circulation are examined, after which those fit for circulation are reissued, while the soiled and mutilated notes are destroyed.

Two of India's currency note printing presses (in Nasik and Dewas) are owned by the Government of India; two others (in Mysore and Salboni) are owned by the RBI through its wholly owned subsidiary, Bharatiya Reserve Bank Note Mudran Ltd (BRBNML).

Banknotes in denominations of Rs 10, Rs 20, Rs 50, Rs 100, Rs 200, Rs 500, and Rs 2,000 are currently being issued. Notes of Rs 2 and Rs 5 are no longer issued; however, older notes of these denominations, if still in circulation, continue to be legal tender. Re 1 notes, if in circulation, are also legal tender.

What are the types of notes issued so far?

* Ashoka Pillar Banknotes: The first banknote issued in independent India was the Re 1 note issued in 1949. While retaining the existing design, the new banknotes replaced the portrait of King George with the symbol of the Lion Capital of the Ashoka Pillar at Sarnath in the watermark window.

* Mahatma Gandhi (MG) Series, 1996: All the banknotes of this series bear the portrait of Mahatma Gandhi on the obverse (front) side, in place of the symbol of Lion Capital of Ashoka Pillar, which was moved to the left, next to the watermark window. These banknotes contain both the Mahatma Gandhi watermark as well as Mahatma Gandhi's portrait.

* Mahatma Gandhi series, 2005: The "MG series 2005" notes were issued in denominations of Rs 10, Rs 20, Rs 50, Rs 100, Rs 500, and Rs 1,000. They contain some additional/ new security features as compared to the 1996 MG series. The Rs 500 and Rs 1,000 notes of this series were withdrawn w.e.f. the midnight of November 8, 2016.

* Mahatma Gandhi (New) Series, 2016: The "MGNS" notes highlight the cultural heritage and scientific achievements of the country. Being of reduced dimensions, these notes are more wallet friendly, and are expected to incur less wear and tear. The colour scheme is sharp and vivid.

IRDAI PUTS RESTRICTIONS ON CROSS-BORDER REINSURERS

Insurance regulator IRDAI has put restrictions on the operations of over 300 cross border reinsurers (CBRs) which are active in the Indian reinsurance market.

Among other things, CBRs will have to retain a minimum 50 per cent premium by way of premium deposit with the clients. It will be the responsibility of the insurers to maintain this premium in a separate designated or escrow account as well as to invest such amount into Government of India securities. In the order of preference with which Indian general insurers can reinsure the business, CBRs are almost placed at the bottom. Before giving business to them, an insurer has to be declined by Indian reinsurers like GIC Re, foreign reinsurance branches (FRBs) and Lloyd's and reinsurers who are present in IFSC (Gift City). CBRs don't have any offices in India and just have to register with the IRDAI to get business through brokers. They normally offer cheaper pricing than other reinsurers.

IRDAI said maximum overall cession limits allowed per CBR will be 10 per cent for CBRs with BBB rating, 17.5 per cent for rating BBB+ and up to A+ and 25 per cent for rating above A+. On the other hand, the IRDAI has proposed to bring in major changes in the existing reinsurance regulations and has reduced the capital requirements of foreign reinsurance branches (FRBs) in India to Rs 50 crore from existing Rs 100 crore. According to insurance industry observers, by putting more restrictions on the activities of CRBs and by relaxing norms for Indian FRBs, the IRDA wants these CRBs to set up operations in the country or at the IFSC.

FRBs had earlier informed the IRDAI that for doing business in India, they have to invest in many things including bringing in substantial capital and comply with many regulations while the CBRs don't have to do any such things which is not creating a level playing field among the players. Led by the state-owned GIC Re with a premium of Rs 43,000 crore, the size of the Indian reinsurance market is around Rs 75,700 crore where over 300 CBRs have almost mobilised around Rs 15,000 crore premium while 10 FRBs have done of business of around Rs 17,500 crore of premium in 2021-22.

In the year 2020-21, 332 CBRs participated in Indian reinsurance business as against 378 CBRs in the year 2019-20, IRDAI Annual

Report says. According to IRDAI, every Indian reinsurer should maintain a minimum retention of 50 per cent of its Indian business. The retrocession to IIO (IFSC insurance office) up to 20 per cent of Indian reinsurance business is reckoned while computing with the minimum retention of 50 per cent of the Indian reinsurance business, it said.

Meanwhile, IRDAI on Wednesday allowed FRBs and Lloyd's India to repatriate excess capital.

THE CCI'S ₹1,300 CRORE FINE ON GOOGLE

The story so far:

The Competition Commission of India (CCI) has imposed a provisional fine of ₹1,337.76 crore on Alphabet-owned Google for "abusing its dominant position" in markets related to the Android mobile device ecosystem.

How did Google violate the competition law in India?

The CCI, the country's competition watchdog is empowered under the Competition Act, 2002, to check whether companies especially large tech companies are not eliminating healthy competition in the market and creating a monopoly. The current case by CCI against Google started in 2019 and since then the regulator has examined various practices of the tech giant with respect to relevant markets.

The first is regarding the Android operating system (OS). All smartphones need an OS to run applications and programs and one of the most prominent OS is Android which was acquired by Google in 2005. According to Counterpoint research, 97% of India's 600 million smartphones are powered by Google's Android OS. Google operates and manages the Android OS and licenses other Google proprietary applications such as Chrome and Play Store through it. Original Equipment Manufacturers (OEMs) or smartphone companies then use this OS and Google apps on their mobile phones. While the Android source code is openly accessible and covers the basic features of a smartphone, it does not include Google's proprietary applications. To use these applications, manufacturers have to enter into agreements with Google that govern their rights and obligations such as the Mobile Application Distribution Agreement (MADA), the Anti-fragmentation Agreement (AFA) etc. The CCI held that through these restrictions in agreements, Google makes sure that the manufacturers who wished to use Google apps had to use Google's version of Android.

Secondly, Google is the dominant player in the app store market for Android OS worldwide (except China). According to the EU, the Google Play Store accounts for more than 90% of apps downloaded on Android devices globally. The CCI held that through the mandatory pre-installation of the Google Suite (which includes Play Store), consumers did not have the option of side-loading or downloading apps outside of the play store. Third is the company's dominance in the general internet search market and the non-OS specific browser market (meaning engines like Chrome, Firefox, etc.). As of last year, Google has a 92% share in the global search engine market. Therefore, by having Revenue Sharing Agreements with mobile manufacturers for its services, Google was able to "secure exclusivity" for its search services to the "total exclusion of competitors". The CCI said that these agreements with OEMs guaranteed Google continuous access to search queries of mobile users, helping not only in protecting its advertisement revenue but also in reaping the network effects through "continuous improvement of services, to the exclusion of competitors". This was also compounded by making Google the default search browser in Android smartphones. Finally, due to Google's agreements with manufacturers, another of its revenue-earning apps — Youtube, the CCI said, gained a significant edge over competitors in the online video hosting platforms market. The mention of Google's antitrust practices with regard to Youtube was the distinguishing factor between the CCI probe and the EU probe of Google in 2018.

What has CCI told Google to change?

Apart from the "cease and desist" order against Google for indulging in anti-competitive practices, the CCI has directed it to take certain measures with regard to the Android OS ecosystem. Some of the major directions include — that smartphone makers should be allowed to choose which of Google's proprietary apps they want to install, that the licensing of Play Store to manufacturers should not be linked with requirements to pre-install Google search services or any other Google apps, that Google should allow users to choose their default search engine for all search entry points etc. The CCI also noted that there were "glaring inconsistencies" in the revenue data presented by Google and gave it 30 days to provide the requisite financial details and supporting documents.

What are the other antitrust suits?

Google is already facing two other antitrust probes by the CCI. In June 2021, the Commission ordered a probe into allegations that Google had abused its dominant position with Android in India's smart television market and in November 2020, the CCI had initiated a probe to look into allegations that Google abused its dominant position to push its payments system. Google also faces three probes each in the U.S. and the EU. The EU suits have altogether imposed fines totalling around $8 billion on Google.

WHY BAD RESULTS FOR ALPHABET AND MICROSOFT IS BAD NEWS FOR INDIA'S IT SECTOR AS WELL

Shares of Alphabet Inc (parent of Google) and Microsoft Corp fell sharply by 9.6 per cent and 7.7 per cent on Wednesday following weaker-than-expected earnings for the quarter ended September, and growing concerns over the economic slowdown in the US and other economies.

With inflation the biggest concern for the world economy and central banks including the US Federal Reserve raising rates over the past two to three quarters, growth outlook for companies and the broad investor sentiment has been dampened. As the American tech giants face the heat, the Indian IT sector — which depends to a large extent on business and revenue from the US and other developed economies — is unlikely to go unscathed. North American and European markets account for over 80 per cent of revenues of TCS and Infosys.

What is hurting the IT sector?

High inflation and sharp rate hikes have weakened the growth outlook of the US economy and forced companies to reduce their IT budgets amid talk of a coming recession. Rising prices and interest rates have increased the cost of capital for American companies and eaten into disposable incomes of individuals, forcing them to cut spending. This has directly impacted the tech companies in regard to their products, services, and ad revenues. An adverse macroeconomic situation in the US and Europe will keep order flows, business growth, and revenue and share prices of Indian IT majors on a leash.

How have Indian firms done?

TCS and Infosys, the two leading Indian IT companies, posted strong results for the quarter ended September. TCS announced a net profit of Rs 10,431 crore for the quarter, an 8.4 per cent year-on-year increase; Infosys reported a consolidated net profit of Rs 6,021 crore, an 11 per cent jump.

However, analysts say that since the IT companies are largely dependent on the US and Europe for business and revenues, they are likely to face pressure. While India is seen as being relatively well placed amid the current global economic turmoil, the IT sector may be hit due to stronger global linkages.

WHY USERS NEED TO WAIT FOR 5G IMPLEMENTATION

The story so far:

Prime Minister Narendra Modi announced the launch of next generation 5G services in India on October 1. However, nearly three weeks after Mr. Modi launched 5G services in India, the majority of mobile phone users — who have a 5G-enabled handset and are in cities where the services has been launched — may need to wait till December to enjoy the high speed internet.

Which operators have launched 5G, and in which cities?

Currently, two operators, Bharti Airtel and Reliance Jio, are offering 5G services in limited cities. While Bharti Airtel has announced commercial rollout of these services in Delhi, Mumbai, Chennai, Bengaluru, Hyderabad, Siliguri, Nagpur and Varanasi, rival Reliance Jio has started beta trials of these services in Mumbai, Delhi, Kolkata and Varanasi. However, even in these cities, the network is not uniformly available. For example, in Delhi and Chennai, Bharti Airtel 5G services are currently available only in select areas.

While Bharti Airtel has committed to introduce 5G services in the entire country by March 2024, Reliance Jio has promised to "deliver 5G to every town, every taluka, and every tehsil of our country" by December 2023. The third private operator Vodafone Idea is expected to begin the rollout of 5G services soon.

A network rollout is undertaken in phases and will require significant investments by operators. For example, Reliance Jio has announced plans to invest ₹2 lakh crore in the rollout of a nationwide standalone 5G network by December 2023.

Will all smartphone owners be able to use 5G?

No. Only users of 5G capable smartphones will be able to experience these services. Currently, of the total smartphone base of about 600 million, only about 50-60 million handsets are estimated to be 5G smartphones, even though the first 5G smartphone was unveiled in the country two years ago in 2020.

However, even users of these 50-60 million phones have been having trouble latching on to 5G services in the area where it is available. For the phones to start latching on to 5G networks in India, the first thing needed is support for 5G bands such as n1, n12, n78, n28, n58 (these are some of the bands that are expected to work in India). A user can check this by viewing the phone's specification on the manufacturer's website. A single phone can support multiple 5G bands. For phones that support the 5G bands in India, manufacturers need to undertake conformance and performance tests to make sure that network speed and quality are maintained. These tests take time, and hence the delay of a couple of months.

For example, one of the things that the handset makers and operators need to ensure is that the network does not drop when users move from a 5G network area to a 4G network area or vice versa.

According to industry experts, a similar testing process was followed when 4G — predecessor to 5G services — was introduced. However, at that time, handset makers and operators had ample time (about two years) between buying the spectrum in the 2010 auctions and the beginning of 4G rollout.

A note by brokerage firm CLSA notes that while India has concluded 5G auction, globally 5G deployments have stepped up with 210 operators having deployed 5G networks. It added that the worldwide march to 5G accelerated with China launching 5G in 2020. Additionally, while China dominates global 5G base stations count and accounts for about 60% of total 5G base stations deployed globally, Chinese telcos expect to complete nationwide coverage by 2022 end.

What are the manufacturers saying?

Most manufacturers have said that they are working with the operators to roll out an over the air (OTA) update that will enable users to access 5G services.

Apple has said that it is working with "carrier partners in India to bring the best 5G experience to iPhone users as soon as network validation and testing for quality and performance is completed. 5G will be enabled via a software update and will start rolling out to iPhone users in December."

For Samsung and Xiaomi, some devices already offer support for the 5G network. For others, Samsung has committed to rolling out the OTA updates by middle of November 2022, and Xiaomi has said it will begin rollout of OTA Diwali onwards. Google hasn't given a timeline for its devices but has said it is working with operators to enable functionality at the earliest.

HOW INVITS WORK AND GENERATE THEIR RETURNS

The buzz around the recent bond offer from the National Highway Infrastructure Trust (NHIT) has led to a lot of curiosity about Infrastructure Investment Trusts or InvITs.

The Government of India too is increasingly using the InvIT route to monetise assets held by government entities, and bring in broad-based public shareholding. Should retail investors look at InvITs as a replacement for shares, fixed income instruments or something else? Well, InvITs are an in-between vehicle that have features of stocks, bonds and mutual funds. Before investing in them, it's useful to know how they work and generate returns.

How they work

InvITs list on the bourses to raise money to acquire a portfolio of infrastructure assets that are already running and generating regular cash flows.

InvITs can own any assets capable of generating steady cash flows over time. Companies with listed shares are free to conserve their profits and reinvest it in the business, while holding back dividends. But under SEBI regulations InvITs are required to compulsorily distribute 90% of the income they earn every year to their unit holders.

This makes InvITs more suitable for income-seeking investors rather than growth-seeking ones. SEBI also caps the borrowing that an InvIT can take on to 70% of its assets. While investors in a stock IPO become part owners of the underlying business, investors in an InvIT become part owners of the operating assets it owns. InvITs may own their infrastructure assets directly or through arms called special purpose vehicles (SPVs).

InvITs globally tend to own many types of assets — warehouses, oil pipelines, power plants and roads.

But in India, the listed InvITs mainly own toll roads or power transmission lines. These assets generate toll collections or transmission fees which make up the InvIT's distributable cash flows. Both shares and InvITs, once listed on the exchange, trade in the secondary market on a daily basis. Investors are free to buy or sell units of the InvIT at the traded price.

While shares are priced in the markets based on their profit potential, InvITs tend to be priced based on the distributions they make.

A key metric for InvIT investors to track is the distribution per unit (how much cash it is able to pay out on a per unit basis) and the yield, which is the annual distribution as a percentage of the InvIT's market price. An InvIT is also required to get its portfolio periodically valued by independent valuers who declare a net asset value (NAV) per unit. The price of the InvIT can trade at a premium or discount to this NAV, but does not usually stray far from it.

Regulation, governance

Unlike companies, the kind of assets an InvIT can own are subject to regulation. SEBI requires listed InvITs to have at least 80% of their asset value in completed infrastructure assets that are already churning out cash. Only the remaining can be invested in under-construction projects, shares and bonds of infrastructure companies, government securities and so on. Apart from this, InvITs are also required to distribute a minimum 90% of the cash they earn and cap their debt at 70%.

SEBI rules also specify an InvIT governance structure that is akin to mutual funds. InvITs are initially floated by a sponsor (a promoter) who is usually an owner of infrastructure assets. For subsequent assets it may still look to the sponsor, or shop elsewhere. Just as AMCs manage mutual funds, InvITs usually have an investment manager.

The investment manager, for a fee, operates and maintains the InvIT's assets, acquires and sells assets as the need arises and takes decisions on distributions.

Returns and taxation

InvITs may earn their returns from the assets they own in three forms. One, if the InvIT holds assets on its own balance sheet, it may earn income from toll collections, power transmission fees or other avenues, which, after meeting expenses, is distributed to shareholders. Two, if the InvIT holds assets through an SPV, it may earn dividends from the SPV's profits. Three, the InvIT may also lend to the SPV to acquire and maintain assets in which case it will earn income from it by way of interest receipts and loan repayments. The returns that an InvIT distributes to its unitholders can take all three forms.

The taxation of the distribution you receive depends on its source. Interest and dividend income will be taxed like income from bonds and shares respectively and direct payouts by the InvIT will be taxed as income in your hands. The capital gains you make on trading in InvIT units on the exchanges are treated as short term and taxed at 15% if held for less than 36 months, and taxed at 10% if held beyond this period.

LIFE & SCIENCE

ISRO TO BOOST NAVIC, WIDEN USER BASE OF LOCATION SYSTEM

The Indian Space Research Organisation (ISRO) is working on a series of improvements to NavIC, or India's equivalent of the Global Positioning System (GPS), so that more people are motivated to install and use it. Plans are also afoot to give it a global reach, S Somanath, ISRO Chairman, said on the sidelines of the India Space Conference on Wednesday.

NavIC (Navigation with Indian Constellation), or the Indian Regional Navigation Satellite System (IRNSS), is a constellation of seven satellites akin to the U.S. GPS, the European Galileo and the Russian GLONASS, and can be used to track location.

Though available for use in mainland India and within 1,500 km around it, the system is not in wide regular use in India primarily because mobile phones have not been made compatible to process its signals. The Indian government has been pressing manufacturers to add compatibility and has set a deadline of January 2023, but media reports suggest this is unlikely before 2025.

Mr. Somanath told The Hindu that adding the L1 band into NavIC would be a major change. This bandwidth is part of the GPS and is the most used for civilian navigational use. "Currently NavIC is only compatible with the L5 and S bands and hasn't easily penetrated into the civilian sector," he said. " Currently (NavIC) only provides short code. This has to become Long Code for the use of the strategic sector. This prevents the signal from being breached. This had been part of the original scheme for NavIC, but less work has gone into it," he added.

There are five more satellites in the offing to replace defunct NavIC satellites that would be launched in the coming months. However, to make NavIC truly "global", more satellites would need to be placed in an orbit closer to earth than the current constellation, said Somanath.

HOW A NEW FEATURE FROM THE IPHONE 14 LINE-UP IS CREATING FALSE EMERGENCIES

The story so far:

On September 7, in its "Far Out" event Apple released the iPhone 14 line-up. Along with other updates, the new phones got a feature the company called 'Crash Detection'. The feature makes the phone detect when the user has had a fall, after which it could make a call to emergency assistance services. The feature is also designed to share important information like the location of the user with assistance services. However, reports have emerged in the U.S. of the new iPhones calling emergency assistance services when users are on a rollercoaster ride.

How does the Crash Detection feature work?

The crash detection feature, available throughout the iPhone 14 line-up, makes use of the dual-core accelerometers, the dynamic range gyroscope, the barometer, the GPS and the microphone. These provide critical information used to detect ambient changes. The information collected includes G-force measurements, changes in cabin pressure, sudden changes in speed and detection of loud noises.

According to Apple, this information is used by its motion algorithms to determine whether the device has been in a crash or not. Apple states that its algorithms have been trained with over a million hours of real-world driving and crash record data to provide accurate results. Upon detecting a crash, the feature brings up an emergency services call interface on the iPhone. The interface can be used to dismiss the call within 20 seconds. If that is not done, it is designed to call for assistance and share the user's latitudinal and longitudinal location with an approximate search radius. In case the device is connected with a vehicle using CarPlay, emergency calls activated by the vehicle will be directed through the iPhone.

Crash detection is also available on the Apple Watch and emergency calls are routed through it if users have it on when in a crash. The feature works only when devices have an active network connection. The crash detection feature, thus makes use of the data collected by different hardware features to determine the intensity of a crash and contact emergency assistance services.

What could be causing the iPhone to dial 911 on rollercoasters?

So far numerous reports of the iPhone calling emergency services when taken on rollercoasters have emerged from across the U.S. In Kings Island, an amusement park, crash detection triggered calls to emergency services on at least six different occasions.

It seems that the combination of quick acceleration, loud ambient sound, and sudden changes in pressure, all experienced on a rollercoaster, are triggering the crash detection feature. And while all these changes are experienced in a car crash as well, Apple's algorithms that have apparently been designed to react to these changes are unable to differentiate between a car crash and a roller coaster ride. This seems to be the main culprit behind the accidental triggering of the crash detection feature.

Apple executives stated that G-forces are the biggest factor in determining a car crash. Rapid changes and high G-force experienced on a rollercoaster may be behind the accidental triggers, according to a report by TechCrunch. The executives, however, said that determining a car crash is a complex process and that there is "no silver bullet" when looking at reliable indicators of a crash. Therefore, determining the exact factor behind the accidental triggers might not be easy. The report also reveals that the iPhone 14 line-up can use satellite SOS to route emergency calls when active network connection is not available. The feature, however, is only available in the U.S. and Canada for now.

How does one avoid accidental triggers?

The simple solution to avoid accidental calls to emergency services is to not take the devices with crash detection features on rollercoasters or other rides in an amusement park. But, as that might not always be possible, users can either switch off their devices or simply put them on airplane mode. This would ensure that even if crash detection is activated it will not be able to make calls due to the absence of an active mobile connection. Users can also disable the "call after serious crash" feature that can be found in the emergency SOS settings in the iPhone 14 line-up. Another possible solution could be geo-tagging amusement parks to disable crash detection in certain areas. However, this solution will need a software upgrade from Apple.

Accidental calls to emergency services is not a new problem. Features allowing users to make 911 calls in case of an emergency has been baked into Android and iOS software for some time now. However, their reliability has been somewhat questionable. ^

Reports have emerged of Pixel phones unable to make emergency service calls in the U.S. and Australia. In December 2021, reports emerged of Pixel phones getting stuck dialling 911 emergency services. At the time, the problem reportedly originated in the power button which led to the devices rebooting and then dialling 911. Apple's iPhones had faced similar problems previously in 2018, when reports of accidental calls to emergency services were revealed. Earlier devices from Apple starting from the iPhone X had also faced the problem when long pressing the power and volume buttons would call emergency services. After reports of several accidental calls, the company added an alert that would notify users before making the call.

CHRONICLER OF DARK DAYS

A novel about Sri Lanka's traumatic past has won the Booker Prize for 2022 even as the world is watching a traumatic present unfold in the island nation. Shehan Karunatilaka's second novel, The Seven Moons of Maali Almeida, a decade after his prize-winning debut Chinaman, moved the judges for taking readers straight to "the world's dark heart – the murderous horrors of civil war Sri Lanka of the late 1980s-90," but once there, also providing glimpses of "tenderness and beauty, love and loyalty, and the pursuit of an ideal that justify every human life".

Seven Moons, a first-person narrative written in second person, revolves around the story of a war photographer, Maali Almeida (his father is Sinhalese, mother Burgher and they are not together any more), who wakes up dead one day, and wants to know how he got there. Besides solving the whodunnit, he also wants to tie up some loose ends and ensure that a bunch of damning photographs he has stored under a bed reaches the right hands. His ghostly self has seven moons to be able to finish that work before he disappears into a "bureaucratic afterlife with an absent god." In life, he had been caught in a love triangle with a girl, Jacqueline Vairavanathan or Jaki, and a boy, Dilan or DD, son of Stanley Dharmendran, the only Tamil Minister in the Sri Lanka Cabinet.

In an interview to thebookerprizes.com, the 47-year-old writer said after the end of the civil war in Sri Lanka, in 2009, he wanted to write about it. There was a debate over how many civilians died and whose fault it was. But Karunatilaka didn't feel "brave enough to write about the present", so he went back 20 years, "to the dark days of 1989". There was an ethnic war, the LTTE was dominant, there was a Marxist uprising, the Indian Army too had made an appearance, and there were state-sponsored counter-terror squads.

In Karunatilaka's words, "It was a time of assassinations, disappearances, bombs and corpses. By the end of the 1990s, most of the antagonists were dead, so I felt safer to write about these ghosts, rather than those closer to the present." In the novel, Maali makes a cheatsheet for an American journalist confused by all the abbreviations, from LTTE (Liberation Tigers of Tamil Eelam) to JVP (Janatha Vimukthi Peramuna) and STF (Special Task Force), and adds lines of caution, "Don't try and look for the good guys 'cause there ain't none."

Gallows humour

Asked how did he write a book which is "angrily comic", despite the grim background, Karunatilaka quipped that Sri Lanka specialises in "gallows humour, [we make] jokes in the face of our crises. Laughter is clearly our coping mechanism". When Maali asks a fellow ghost what are the rules in afterlife, he is told: "No rules, Sir. Like Down There. You make your own." In his ghostly existence, Maali, who is gay, can float about only when someone mentions his name.

It has been a great year for the subcontinent, with Geetanjali Shree too winning the International Booker Prize for Tomb of Sand (translated by Daisy Rockwell). Karunatilaka is the second Sri

Lankan to be awarded the Booker Prize after Michael Ondaatje in 1992 (The English Patient). Like India, Pakistan and Bangladesh, Sri Lanka has a rich tradition of authors writing in English, from the late Carl Muller, who was also outrageously funny, to Romesh Gunesekera, Shyam Selvadurai, Andrew Fidel Fernando and others; last year, Anuk Arudpragasam's A Passage North, also set in the backdrop of the civil war, was shortlisted for the Booker.

AT COP27, MOVE THE NEEDLE ON CLIMATE ACTION

India and other developing economies are justifiably worried about the damage to growth from COVID-19, Russia's war in Ukraine, and the global economy's downturn. But these troubles pale in comparison with the climate catastrophe already resulting from the current trajectory of greenhouse gas (GHG) emissions, whose effects hit developing economies and the poor hardest. That is why it is imperative that COP27 — the United Nations' climate summit which opens in Egypt from November 6 — makes real advances to stave off the worst effects of global warming. This means going beyond COP21's important Paris agreement (2015) on national commitments to cut GHG emissions and COP26's notable Glasgow agreement (2021) to stem deforestation.

The core issues

Despite nervousness in making bold commitments in these uncertain times, a breakthrough must be made in rectifying decades of lopsided emissions by rich countries. They are still unwilling to offset past excesses by extending the massive financing that developing economies need for climate action. Just as problematic is the continuous and heavy burning of fossil fuels by the top five emitters — China, the United States, India, Russia, and Japan — as well as Southeast Asian countries taken together. What is worse, many of their plans are woefully inadequate for reaching carbon neutrality by 2050 to help keep temperatures rise below 2°C as envisaged in the Paris agreement. COP27 would be a success if progress is made on both these issues. One way would be for the summit to name the countries that are most out of line and ask them to do more.

On the other hand, rich countries have already shown that they can mobilise vast resources to tackle global emergencies. They did this in the 2008–09 global financial crisis and spectacularly so in the $15 trillion committed in 2020 (by one estimate), by the major economies to fight COVID-19. But when it comes to climate change, rich countries are failing dismally in raising the UN-goal of at least $100 billion annually in climate finance for developing countries. COP27 should move the needle on this vital area.

Reaching carbon neutrality by 2050 is the absolute minimum for all major emitters if unthinkable scenarios of global warming are to be averted. The reverberating message from COP27 should be that the price for achieving carbon neutrality is a fraction of the cost of having to adapt to an increasingly unliveable planet. Ahead of COP27, Singapore has announced that it will achieve net zero emissions by 2050, a powerful signal even if coming from a country with only 0.1% of the carbon footprint.

Advance the year for net zero

India's reliance on fossil fuels is extremely high. High GDP growth, India's biggest goal, just cannot be achieved in the face of runaway climate change. The country has set a target date of 2070 for net zero. China is the world's leader in renewable energy, but its share of coal and gas in energy production remains over 70%, with the country continuing to finance massive fossil fuel-based infrastructure. China has announced net zero for 2060. India and China awkwardly weakened the goal of COP26 from a "phase-out" of coal power to a "phase-down". This, however, is the moment to advance their date for net zero to 2050. Energy is responsible for about three-fourths of GHGs in the air, and low carbon energy needs to lead the decarbonisation of the global economy. India's plan for decarbonisation, even if very gradual at present, will nevertheless need to see a massive switch to renewable energy. Electric power has made progress in adopting renewables in its energy mix, but a far bigger switch from fossil fuel is needed for domestic heating and cooling. Factors in the way of a more ambitious adoption of renewables such as solar and wind include the variability in their generation due to weather conditions, weak transmission grids, and poor financial conditions of power distribution companies.

Banks can scale up climate projects

COP27 should call for the extensive use of markets to help shift the global economy to a low-carbon path. The summit could back a radical shift in countries adopting carbon pricing, for example, via a significant carbon tax on the source of pollution. It should reiterate the need for all countries to eliminate fossil fuel subsidies. In terms of climate financing, something similar could be done to what was achieved during the COVID-19 pandemic, when rich countries raised vast amounts of financing. Climate projects can be vastly scaled up by multilateral development banks, such as the World Bank and Asian Development Bank, all of which have strong climate-action mandates.

Based on the mixed track record of past summits, expectations may not be high for what COP27 may bring. One way that it could advance the climate agenda is by choosing commitments to be backed by UN-member states that will be seen by governments to be benefiting them — in terms of health and cleaner cities, to name just two examples — and putting their economies on a more environmentally sustainable path that alone can deliver national interests in these tense economic times. India has historically been a hesitant climate actor, not unlike other big emitters. COP27, which will be held at Sharm El Sheikh, Egypt (November 6-18), is a chance for the country to strongly back environmentally sustainable development in its national interest.

CLIMATE CHANGE AMPLIFYING HEALTH IMPACTS OF MULTIPLE CRISES, SAYS THE LANCET REPORT AHEAD OF COP27

Ahead of this year's United Nations climate change conference (COP27), a major new report has said that the continued dependence on fossil fuels is compounding the health impacts of the multiple crises the world is facing — including the fallouts of the Covid-19 pandemic, the war in Ukraine, the cost of living crisis, and climate change.

favourites at World T20?

Dr Romanello is co-author of The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels. "New findings presented in the seventh annual global report of the Lancet Countdown on Health and Climate Change reveal that governments and companies continue to follow strategies that increasingly threaten the health and survival of all people alive today, and of future generations," an official release on the report said. The report represents the work of 99 experts from 51 institutions, including the World Health Organization (WHO) and the World Meteorological Organisation (WMO), the release said.

According to a fact sheet on the specific impacts on India — which uses data from the report but is not itself a part of the report — climate change is affecting almost every pillar of food security:

* The duration of the growth season for maize has decreased by 2%, compared to a 1981-2010 baseline, while rice and winter wheat have each decreased by 1%.

- From 2012-2021, infants under one year old experienced an average of 72 million more person-days of heatwaves per year, compared to 1985-2005. For the same period, adults over 65 experienced 301 million more person-days. This means that, on average, from 2012-2021, each infant experienced an additional 0.9 heatwave days per year while adults over 65 experienced an additional 3.7 per person, compared to 1986-2021.
- From 2000-2004 to 2017-2021, heat-related deaths increased by 55% in India.
- In 2021, Indians lost 167.2 billion potential labour hours due to heat exposure with income losses equivalent to about 5.4% of national GDP.
- From 1951-1960 to 2012-2021, the number of months suitable for dengue transmission by Aedes aegypti rose by 1.69%, reaching 5.6 months each year.

"These are early warnings and we need to take mitigation measures like adapting heat action plans in each city. For instance, the Ahmedabad heat action plan that has shown mortality can be reduced, should be adapted everywhere," Ahmedabad-based public health expert and Director, Indian Institute of Public Health, Gandhinagar, Dr Dilip Mavalankar, told The Indian Express.

GRAZING ANIMALS IMPORTANT IN MITIGATING CLIMATE CHANGE

Grazing animals can have a significant impact on the stability of soil carbon in grazing ecosystems, finds a study. Researchers from Indian Institute of Science, Bengaluru (IISc), observed that experimentally removing grazing animals from the ecosystem resulted in higher fluctuations in soil carbon from one year to the next. The research has been published in PNAS.

The researchers, with the support of the Himachal Pradesh State government, local authorities and the people of the Kibber village in Spiti, established some fenced plots where grazing animals were excluded and adjacent plots where animals like yak and ibex grazed. Sumanta Bagchi from the Centre for Ecological Sciences and Divecha Centre for Climate Change, IISc, and his students examined soil samples, year after year, over the decade following 2005 when the study began.

Grazers and stability

They found that soil carbon in the fenced plots fluctuated 30%-40% more than that in the plots where animals were allowed to graze.

Grazing ecosystems, such as grasslands, shrublands, and steppes savannahs cover about 10% of India and about 40% of the world, says Dr. Bagchi, in an email to The Hindu. Historically, these ecosystem support nearly all megafauna around the world and are home to reptiles, birds, amphibians.

Such "drylands" have been threatened by alternate land use. "Drylands seem to lack a legitimate standing in our policy due to the unfortunate 'wasteland' tag which originated during our colonial past that was enamoured by forests. Many Indian ecologists, including my colleagues, are trying to change this mindset," he says.

Substitute populations

"Grazing ecosystems store carbon in the soil and therefore decarbonise the atmosphere. Large mammals are crucial for all this. Unfortunately, wild mammals are confined to a few parks and reserves. Elsewhere wildlife has long been replaced by domestic livestock," he explains.

The questions that come up are: While this replacement is inevitable for livelihoods and food security, are livestock ecological substitutes of the wild mammals they have displaced? Can livestock provide equivalent carbon services, and how can they be managed? These aspects are missing in current policy on livestock, and we do not have all the answers yet. "We need to protect land which has wildlife and restore degraded lands. We need to better manage livestock," he says.

IN CHINA, A FIRST INHALABLE VACCINE AGAINST COVID-19: CAN NEEDLE-FREE WORK?

Authorities in Shanghai have started administering an inhalable vaccine against Covid-19, apparently a world first, the Associated Press reported on Wednesday. The vaccine is being offered for free as a booster dose for previously vaccinated people, according to an announcement on an official city social media account, the report said.

Like a 'sweet' mist

The vaccine is a mist that is sucked in through the mouth, the AP reported. A video posted by an online Chinese state media outlet showed people at a community health centre sticking the short nozzle of a translucent white cup into their mouths, the report said.

The accompanying text said that after slowly inhaling, people hold their breath for five seconds, with the entire procedure completed in 20 seconds. "It was like drinking a cup of milk tea," one Shanghai resident said in the video, according to the AP report. "When I breathed it in, it tasted a bit sweet."

The inhalable vaccine has been developed by the Chinese biopharmaceutical company CanSino Biologics Inc. as an aerosol version of its one-shot adenovirus vaccine, which uses a relatively harmless cold virus, the AP said.

Intranasal vaccine

In September this year, India's national drug regulator cleared Hyderabad-based Bharat Biotech's iNCOVACC, the country's first intranasal Covid-19 vaccine for emergency use in unimmunised adults.

iNCOVACC, which uses a modified chimpanzee adenovirus, will be delivered through the nasal route, which would potentially trigger an immune response in the mucosal membrane. It has been designed to not only protect against infection but also reduce transmission of the virus.

The vaccine is not yet part of India's national immunisation programme. Bharat Biotech, the manufacturer of Covaxin, had first announced an intranasal vaccine in September 2020, after the first wave of the pandemic. It was widely billed as a potential gamechanger at the time.

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