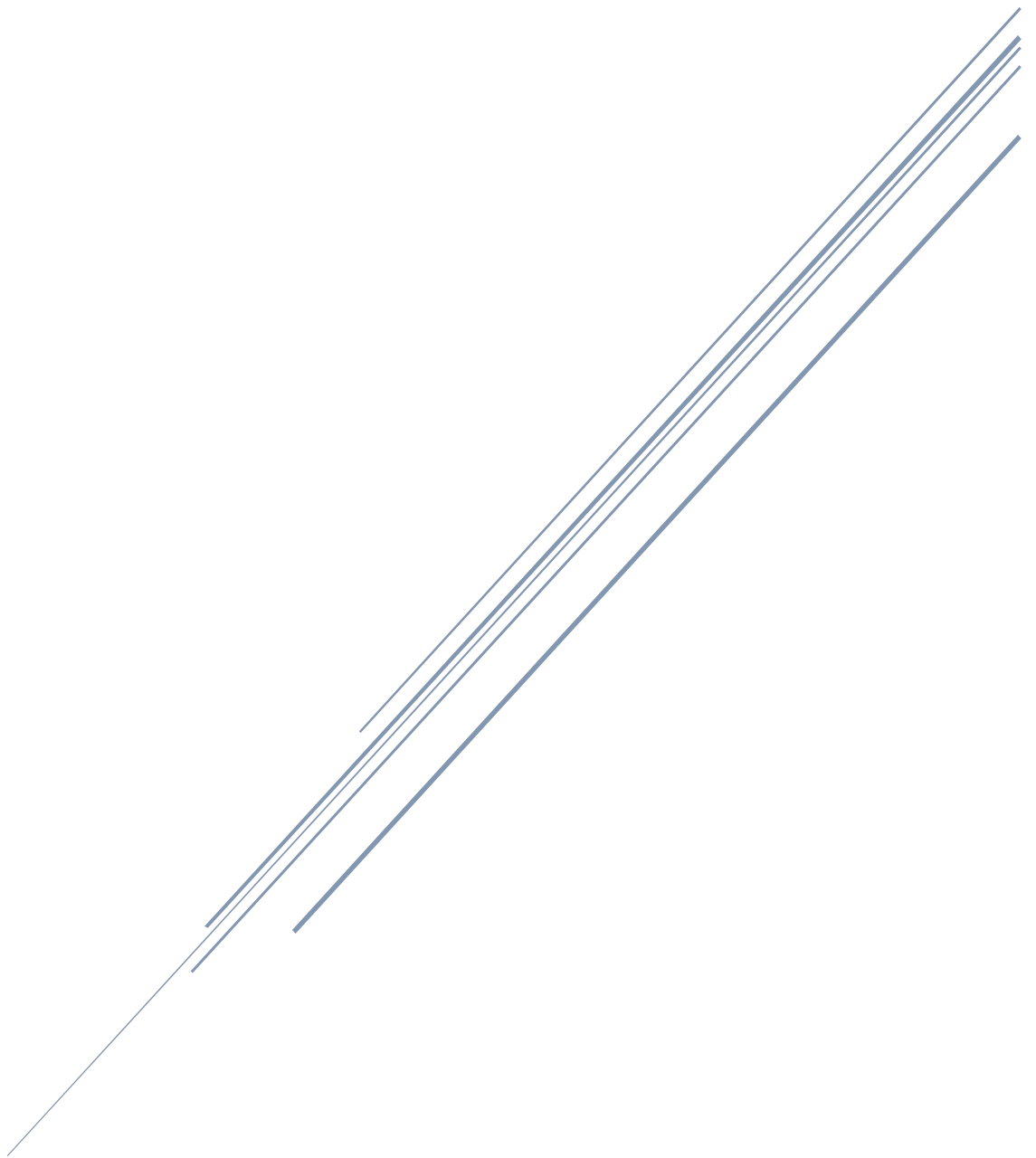


CURRENT AFFAIRS FOR UPSC

18th to 24th September 2022





INTERNATIONAL

DANGEROUS MOMENT

Russian President Vladimir Putin's announcement of a partial troop mobilisation marks an acknowledgement of the limits of his "special military operation" in Ukraine and a readiness to escalate the conflict in response to setbacks. His original plan was to meet his military objectives through a limited war. He had mobilised more than 1,50,000 troops and ordered a sharp thrust into Ukraine from multiple fronts on February 24, but this plan did not quite work as Ukrainian forces, backed militarily and economically by the U.S. and Europe, slowed down the enemy's advances and made the invasion costly for the Russians. Earlier, Mr. Putin had to withdraw troops from around Kyiv and Kharkiv and focus on Ukraine's east and south where the Russians made territorial gains. But Russia suffered its first major battlefield defeats earlier this month in Kharkiv Oblast in the northeast where its troops had to retreat in the face of a lightning Ukrainian counter-offensive. This setback seemed to have quickened Kremlin's move to consolidate its positions in captured Ukrainian territories. Pro-Russia separatists in Luhansk, Donetsk in the east and Kherson and Zaporizhzhya in the south are now planning to hold referendums on joining the Russian Federation. As the results are known even before the first ballot is cast, the door is now shutting on the possibility of a negotiated settlement of the conflict based on the pre-war borders.

For Mr. Putin, the escalation comes with added risks. He went into Ukraine with limited forces in the first place because he knew that a general mobilisation, which would need nationwide conscription, could be unpopular. But almost eight months later, his war has not only failed to meet its declared objectives, which includes Ukraine's "demilitarisation", but has also seen a reinvigorated NATO throwing its collective weight behind Ukraine and expanding itself further into the Russian borders by taking in Finland and Sweden as its members. Mr. Putin and his Defence Minister Sergei Shoigu acknowledged the challenges on Wednesday. If Mr. Putin, who dialled up the nuclear threat, said his troops are facing the best of "the Western military machine" in Ukraine, Mr. Shoigu, whose Ministry till now avoided calling the military operation a war, said Russia today "is at war with the collective West". Faced with battlefield setbacks, sanctions and geopolitical challenges, Mr. Putin believes escalation is the way forward. But there is no certainty that a partial mobilisation would produce quick results and it could well trigger a cycle of escalation. All this means that the war is entering a far more dangerous phase.

G4 COUNTRIES HIGHLIGHT 'URGENT NEED' FOR REFORM IN UN SECURITY COUNCIL

Reform of the United Nations has been a central theme of External Affairs Minister S. Jaishankar's visit to the United Nations this week, and on Thursday, he met with his counterparts from Germany, Brazil and Japan under The Group of Four (G4) banner following the BRICS meeting. The group is primarily focused on UN Security Council (UNSC) reform, and permanent membership for G4 members. On Thursday, they reiterated their commitment to pushing forward reform and expressed dissatisfaction at the lack of progress.

"Reiterated our joint commitment to work towards text based negotiations that leads to Reformed Multilateralism. Will continue our cooperation towards this goal," Mr. Jaishankar tweeted after the meeting. India is currently a non-permanent member of the Council.

In addition to reiterating their support for each other's bids to become permanent members of the UNSC, the G4 also reiterated its support for African countries being represented in a



permanent and non-permanent capacity. The G4 felt that the UN decision making bodies needed to be urgently reformed as global issues were increasingly complex and interconnected, a joint press statement from the group said. The “inability” of the UNSC to “effectively” address these problems “vividly demonstrate[s] the urgent need” for UNSC reform, the statement said.

U.S. President Joe Biden emphasized its support for expanding permanent and non-permanent seats on the Council, during his UNGA address on Wednesday. However, State Department spokesperson Ned Price had said in 2021 that the U.S. supports expansion of body provided it “does not alter or expand the veto”.

On Thursday, the G4 ministers expressed concern that the 76th Session of the UN General Assembly did not make “meaningful progress” in the Inter-Governmental Negotiations (IGN), which, according to the G4, was constrained by a lack of transparency.

WILL THE FUTURE OF THE COMMONWEALTH CHANGE?

The story so far: The death of Queen Elizabeth II of the United Kingdom, the country’s longest serving ruler, who reigned for over 70 years, marks not only the end of an era for the British monarchy, but also a turning point for the 14 Commonwealth realms of which she was the Head of State. There has been a significant transformation of the socioeconomic milieu in these countries compared to the Elizabethan era, including calls in several nations to establish a republic and break free of historical ties to the British monarchy. Thus, it is possible that during the reign of the incumbent King Charles III, the Queen’s successor, more nations will follow in the footsteps of Barbados, which in 2021 became the 18th country to remove the British monarch from the role of head of state and substitute them with a national government functionary.

What is the Commonwealth and what are its realms?

The Commonwealth of Nations is a group of 56 countries comprised mostly of former British colonies. While members of the Commonwealth are predominantly located in Africa, the Americas, Asia, and the Pacific, with many of them emerging economies, the three European members of the group are Cyprus, Malta, and the U.K. The developed nations of the Commonwealth are Australia, Canada, and New Zealand.

The Commonwealth consists of both republics and realms. The British monarch is the Head of State for the realms, whereas the republics are ruled by elected governments, except in the case of five countries — Brunei Darussalam, Eswatini, Lesotho, Malaysia, and Tonga — each a self-governed monarchy.

The realms are comprised of Antigua and Barbuda, Australia, the Bahamas, Belize, Canada, Grenada, Jamaica, New Zealand, Papua New Guinea, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, the Solomon Islands, and Tuvalu.

How is the Commonwealth viewed by its members?

Even if the situation is changing vis-à-vis the realms and their Heads of State, the broader Commonwealth group, of which India and other South Asian countries are members, remains strong and fosters policy coordination among its members through its Heads of Government Meetings, a feature that has gained additional salience in the context of post-pandemic economic recovery. In this regard, Queen Elizabeth played a critical role in championing the organisation



and maintaining the group's relevance, regularly travelling to meet with leaders of Commonwealth nations across the world.

This has not always been the case. During the Queen's third and final visit to India in 1997, many expected an apology for the Jallianwalla Bagh massacre of 1919, carried out by the erstwhile colonial government, and ordered by General Reginald Dyer. Yet that apology never came, and instead the Queen only referenced the killings during a banquet speech when she said, "It is no secret that there have been some difficult episodes in our past. Jallianwala Bagh is a distressing example." Tactless remarks by her husband, Prince Philip, questioning the number of deaths in the massacre, added salt to injured sentiment. It was also in 1997 that the U.K. handed over control of Hong Kong to the People's Republic of China, thereby losing after 156 years what was considered to be one of the most important colonies in Asia.

More recently, in March 2022, King Charles' son and now heir to the throne, Prince William, his wife, Kate, and other royals faced demonstrations and demands for reparations for slavery while on a tour of the Caribbean that also witnessed several gaffes and awkward moments by the visitors from the U.K.

Which nations are moving towards ending formal ties to the British monarchy?

The debate in some of the Commonwealth realms, including for example Australia, has led to popular movements to reposition the country in question as a republic. In Canberra, the administration of Australian Prime Minister Anthony Albanese appointed in June 2022 for the first time a Minister, Matt Thistlethwaite, to set in motion the gradual transition towards a republic. In this regard it is likely that there will be a referendum on the question of severing official ties to the monarchy in the months ahead.

While Prime Minister Jacinda Ardern of New Zealand has said that her country would support King Charles, she added that it would become a republic "in time".

Similarly, Prime Minister Philip Davis of the Bahamas has said he intends to conduct a referendum to remove King Charles from the role of official Head of State, thereby moving the country, which gained independence in 1973, towards being a republic. Governments in five other Caribbean nations — Antigua and Barbuda, Belize, Grenada, Jamaica and Saint Kitts and Nevis — have signalled their intention to act similarly.

Thus, it is not beyond imagination that following the death of Queen Elizabeth, the Commonwealth realms might fade into being a relic of the past, and nations that suffered a history of colonialism — along with its attendant violence and resource extraction — will move forward to establish themselves as republics.

RISE OF THE FAR-RIGHT

Sweden's Prime Minister Magdalena Andersson resigned last week after her government narrowly lost the general elections. Andersson's Swedish Social Democratic Party, which has been in power since 2014, was edged out by the right-wing Opposition which rode a strong wave of support for the Sweden Democrats (SD), an ultra-nationalist, far-right party which traces its origins to neo-Nazi groups of the 1980s. While Andersson's party secured 30% of the vote, her centre-left coalition could muster only 173 seats, three less than the Opposition's 176 in a 349-member Parliament where 175 is needed for majority.



The Sweden Democrats, with 20.5% of the votes and 73 seats, have emerged as the largest entity in the right-wing coalition, which also includes the Moderate Party (19% vote share and 68 seats); the much smaller Christian Democrats (19); and Liberals (16). In the 2018 elections, too, the SD had done well, securing 62 seats and prompting an avalanche of editorials decrying the rise of the far-right in Sweden. Back then, however, the dominant public opinion — in a country that's deemed a gold standard of progressive politics — was so hostile to the SD that none of the Opposition parties dared to ally with them, allowing the Social Democrats to return to power. Not any more.

The 2022 elections are a watershed moment for the country: for the first time an ultra-nationalist, anti-immigrant party would be in a position to influence Sweden's public policy as part of the ruling coalition. Before the elections, Moderate Party leader Ulf Kristersson was the Opposition's candidate for Prime Minister, with none of the other coalition members keen on having the SD as part of the government. But with the SD emerging as the largest member of the bloc, there are likely to be protracted negotiations over government formation — a process that took four months in 2018. While Mr. Kristersson is still likely to be the next Prime Minister, it remains to be seen whether the SD, as kingmakers, would be agreeable to staying out of the government.

At any rate, the rightwing bloc seems united on the core issues that propelled the rise of the SD: immigration and law and order. In 2015, when it had a population of 10 million, Sweden took in 163,000 immigrants, mostly Syrians and Iraqis — the highest per capita of any European Union country. Welcoming refugees is one thing, but their integration — especially when their numbers are large and the influx is sudden — is something else altogether.

National identity

Over time, it became clear that the coloured immigrant communities either could not gain acceptance, or were not accepted, as part of the Swedish national identity, which elements like the Sweden Democrats began to explicitly define as 'white' only — in stark contrast to the state's professed ideal of multiculturalism. Excluded from the mainstream — unemployment among Sweden's immigrant population is four times that of native Swedes — the immigrants began to be seen as the 'other', as people who have come to exploit the country's generous welfare system. Along with rising immigrant populations, Sweden also witnessed a sharp rise in crime, especially gang violence. Sweden has seen 50 deadly shootings in 2022 alone — a far cry from the boringly peaceful Nordic paradise of the popular imagination. The SD, led by 43-year-old Jimmie Akesson, saw in the rising crime rates a chance to move from the fringes to the mainstream, which they did by connecting a legitimate problem (worsening law and order) with their pet agenda — an end to immigration.

Sweden's progressive politics was perhaps adequate in 'normal times'. But after the Ukraine war, amid a cost of living crisis sparked by rising energy prices, and a government seen as too soft on crime, the SD had enough ammunition to stoke people's unspoken, subterranean prejudices and anxieties. Mr. Akesson's slogan, not surprisingly, is Make Sweden Great Again, and it is fixated on two issues that hark back to a singular xenophobic agenda: clamp down on immigration and crack down on criminals through tougher policing. In other words, even the law-and-order agenda, which seems legit, is susceptible to be deployed as a dog whistle for anti-immigrant sentiments.

Sweden, to its credit, held out the longest against the wave of far-right populism sweeping through Europe. But clearly, even Swedish 'exceptionalism' — it was the only country in Europe not to impose a lockdown at the peak of the COVID pandemic — has its limits.



ERA OF WAR IS OVER

Compared to its relatively low-key past, the Summit of the Shanghai Cooperation Organisation's (SCO) Council of Heads of State in Samarkand took place in the cross-hairs of international attention. Apart from the SCO's new agreements on regional engagement, discussions among the eight members including four Central Asian states (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) focused on inducting Iran as a member, broadening the SCO dialogue partners to West and South Asia, and on trade, tourism and counter-terrorism in the region. However, more focus was on the bilateral meetings on the sidelines, as this was the first such major conference that Russian President Vladimir Putin attended since the Ukraine war, as well as part of the first visit abroad by Chinese President Xi Jinping since the COVID-19 pandemic and Taiwan tensions. Prime Minister Narendra Modi's attendance was equally meaningful, given that it was the first time he met Mr. Putin since the war, and Mr. Xi since the standoff at the LAC, in 2020. This was also the first time he came face to face with Pakistan Prime Minister Shehbaz Sharif, and speculation was rife that he would hold meetings with India's adversaries. While the meetings with Mr. Sharif or Mr. Xi did not materialise, western capitals focused on his Putin meeting. Mr. Modi's opening comment to Mr. Putin, that the "era of war" has ended, has been read as an "admonition" of Russia's war in Ukraine. However, it would be wrong to read Mr. Modi's engagement with Mr. Putin as any kind of "public shaming", but rather an expression of the concern over the war, something that Mr. Putin said he understands. A day before, Mr. Putin had also said to Mr. Xi that he understood China's concerns, indicating Russia's realisation of the need to effect a ceasefire and dialogue.

India now comes into prominence as Chair of the SCO, and is making preparations for next year's SCO summit ahead of the G-20 summit in New Delhi. India needs to ensure the participation of all SCO members including China and Pakistan, despite the tensions, which will entail some diplomatic elbow grease by



External Affairs Minister S. Jaishankar in the next few months, beginning this week at the UN General Assembly. India's pitch to the SCO for connectivity with the Eurasian region hinges on its development of Chabahar port through Iran and traversing U.S. sanctions, while still competing with the China-Pakistan backed transit routes through Gwadar. On terrorism, India will have to ensure the SCO walks the talk on building a new consolidated list of terrorist groups, an area where it is frequently thwarted by China. Meanwhile, New Delhi will also have to balance its ties, keeping western partners in the Quad and other groupings reassured, especially as the polarisation between the U.S.-EU coalition and a Russia-China-led combine continues to grow.

WHAT ARE THE 'COLOUR REVOLUTIONS' THAT CHINA'S XI JINPING HAS WARNED AGAINST?

Chinese President Xi Jinping on Friday (September 16) appealed to Russia, India, and other members of the Shanghai Cooperation Organisation (SCO) to cooperate with each other in order to prevent foreign powers from destabilising their countries by inciting "colour revolutions".

Speaking in the city of Samarkand in Uzbekistan at the annual SCO summit — the regional security grouping that also includes Pakistan, Iran, and the Central Asian nations of Kazakhstan,



Kyrgyzstan, Tajikistan, and Uzbekistan, President Xi called upon member states to support efforts by each country to safeguard their own security and development interests.

Xi also offered to train 2,000 law enforcement personnel to set up a regional counterterrorism training centre and to “strengthen law enforcement capacity building”.

What are “colour revolutions”?

Colour revolutions refer to a series of uprisings that first began in former communist nations in Eastern Europe in the early 2000s, but are also used in reference to popular movements in the Middle East and Asia. Most have involved large-scale mobilisation on the streets, with demands for free elections or regime change, and calls for removal of authoritarian leaders.

Protesters often wear a specific colour, such as in Ukraine’s Orange Revolution, but the term has also been used to describe movements named after flowers like the Jasmine Revolution in Tunisia. In 2019, Beijing had said the protests in Hong Kong had taken on “colour revolution characteristics”.

Moscow and Beijing have long criticised colour revolutions for being destabilising influences that have been orchestrated by the United States and its Western allies to overthrow regimes in order to further their own geopolitical interests.

A look at some of the better known “colour revolutions”.

Orange Revolution: It refers to a series of protests that occurred in Ukraine between November 2004 and January 2005. The movement was in response to reports from international and domestic observers that claimed that the country’s 2004 Presidential election runoff between Viktor Yushchenko, an ally of the West, and then incumbent President Viktor Yanukovich, who was backed by Moscow, was rigged in favour of the latter.

The election commission had declared Yanukovich the winner of the election, drawing criticism from the US and European Union who said they would not recognise the results. Russia, however, claimed to have found no evidence of election fraud.

In the aftermath of the elections, protesters wearing orange took to the streets across the country. Orange was Yushchenko’s campaign colour. The results were subsequently annulled and the Ukrainian Supreme Court ordered a re-vote, in which Yushchenko emerged victorious and the movement was concluded.

Tulip Revolution: Also called the First Kyrgyz Revolution, the movement led to the ouster of Kyrgyzstan’s President Askar Akayev in early 2005. These protests were in response to the parliamentary elections in February, in which Akayev’s allies and family members won.

Foreign observers argued that the election process was deeply flawed, and the Organisation for Security and Co-operation in Europe (OSCE) claimed that election fraud had occurred. According to a Wall Street Journal report from February 2005, the US government had provided aid to the Kyrgyz opposition before the election via non-governmental agencies.

Protests erupted in the country against Akayev who had been President since 1990. In March 2005, opposition leaders joined demonstrators and they began to occupy the area outside the Parliament building in the capital city of Bishkek. As the movement gained momentum across the country, there were growing calls for the removal of Akayev. He refused to negotiate at first, but

on March 24 that year, fled the country with his family, eventually finding his way to Russia, where he resigned the following month.

Jasmine Revolution: The popular uprising that occurred between December 2010 to January 2011 in Tunisia was in response to the underlying corruption, unemployment, inflation and lack of political freedoms in the country.

The immediate catalyst for the movement was the self immolation of a young vegetable vendor in front of a government building in the town of Sid Bouzid after his wares were confiscated by the police. His action, which became the symbol of the hardship and injustice Tunisians faced under the reign of longtime President Zine el-Abidine Ben Ali, ignited protests across the country. Western media houses were quick to adopt the phrase Jasmine revolution, ostensibly in reference to Tunisia's national flower, to describe the movement.

The Tunisian government faced widespread domestic and international criticism for the violence used by security forces to quell the movement. Hundreds were reportedly killed and thousand injured, and President Ali's pledges of reforms did little to ease tensions. The protests not only led to Ali's ouster in January 2011, but also inspired a wave of protests in North Africa and the Middle East, which came to be known as the Arab Spring.

CRISIS IN CAUCASUS

The violent border clashes between Armenia and Azerbaijan have raised fears of another war in the Caucasus. The countries had fought a disastrous weeks-long war in 2020 over the disputed Nagorno-Karabakh region in which Azerbaijan made gains before Russia forced a ceasefire. Tensions remained with the occasional flare-ups, but Tuesday's clashes were the deadliest since 2020. Armenia and Azerbaijan have accused each other of provocation, but the fighting, as per initial reports, took place on the Armenian side and Armenia took heavier casualties. It may not be a coincidence that the crisis broke out at a time when Russia, Armenia's security ally, has been struggling to hold its gains in Ukraine. Armenia is a member of the Russia-led Collective Security Treaty Organisation, whose NATO-like charter stipulates that an attack against one member could be treated as an attack against all. Armenia had turned to Russia for help, but Moscow's response was rather cautious — it called for de-escalation and claimed that it had brokered another ceasefire.

The dispute over Nagorno-Karabakh goes back to the pre-Soviet era. When the Soviet Union was formed, the Armenian majority enclave became part of the Azerbaijan Soviet Republic. When the Soviet Union collapsed and

THE NAGORNO-KARABAKH CONFLICT



Armenia and Azerbaijan became independent republics, the clashes resurfaced. Armenian rebels in Nagorno-Karabakh fought off the Azeri forces and joined Armenia. But Azerbaijan never gave



up its claims; nor did the two countries reach any peace agreement over the enclave. Unlike in the 1990s, Azerbaijan now looks economically and politically stronger. In the 2020 conflict, it got military and diplomatic assistance from Turkey while Russia was reluctant to get dragged into the conflict on behalf of Armenia. Now, Russia's ability to project power in its neighbourhood appears to be further limited on account of Ukraine. On the other side, gas-rich Azerbaijan, which still has the backing of Turkey, is being courted by the EU for increased gas supplies. These regional developments seem to have emboldened Azerbaijan. But its ambition could be costly for everyone. Russia will find it difficult to retain its influence in Central Asia and Caucasus if it continues to ignore Armenia. At the same time, getting dragged into another battlefield would be challenging. A conflict in the Caucasus would further destabilise the global energy markets, hurting all economies, particularly energy-starved Europe. For Turkey, which is trying to balance between Russia and the West over Ukraine, another war in its neighbourhood would further complicate its foreign policy choices. The last thing the world needs now is another war. So, all sides should enforce a lasting ceasefire between Armenia and Azerbaijan and ensure calm in the troubled mountains of Nagorno-Karabakh.

ANALYSING THE KYRGYZSTAN-TAJIKISTAN CONFLICT

The story so far: Nearly 100 people have been killed and scores injured in violent border clashes between Kyrgyzstan and Tajikistan over the last week. A ceasefire, brokered by Russia, was agreed on Friday. The two landlocked countries share a 1,000-km long border, a large part of which is disputed. There have been flare-ups in the past as well over sharing water and land resources.

What is happening at the border?

The last few weeks have seen constant shelling, violent confrontations by local communities, and active engagement by security forces on either side. The Batken region of Kyrgyzstan is seeing families being moved out and getting relocated. According to the Ministry of Emergency Situations of Kyrgyzstan, close to 1,50,000 people out of the 5,50,000 odd population of the Batken region have either fled the area or have been relocated by the state. The situation in Osh, Kyrgyzstan, is no different. The highly militarised borders also add to tensions.

The clashes are replaying old pre- and post-Soviet era legacies. The borders of the two republics were demarcated under Joseph Stalin's leadership. Historically, the Kyrgyz and Tajik populations enjoyed common rights over natural resources. The issue of the delimitation of the border is a relic of the Soviet era. While regular talks have tried to resolve the issue, one of the crucial points of disagreement remains over the map which should be used for demarcation purposes. Almost half of its close to a 1000 km border is disputed.

The creation of the Soviet Union saw the large-scale redistribution of livestock to collective and state farms, which upset the existing status quo. Unfortunately, there was only so much land to go around. The Tajik territory saw their livestock increase, and with scarce grazing land, agreements were signed between the two populations over the utilisation of Kyrgyz territory by the Tajiks' livestock.

What led to the current flare-up?

The ideological basis of the current set of clashes is reinforced by developmental issues, thus providing a fertile ground for the entire geopolitical space to become a hotbed of multiple minor



conflicts and clashes. The environmental trajectory of the conflict can be further highlighted by incidents which saw groups from either side planting trees in disputed areas and engaging in a physical confrontation using agricultural equipment as weapons. Ferghana valley continues to be a site of struggle and frequent violent outbursts, with the location consisting primarily of Tajiks, Kyrgyz, and Uzbeks, who have historically shared common sociological specificities, economic activities, and religious practices.

The collapse of the Soviet Union and the subsequent dissolution of the then-existing water and land agreements saw the creation of multiple smaller independent farms, which led to a marked increase in water consumption patterns among the farmers. Both countries share multiple water channels with undulating trajectories and flow, which upset equitable access to water on both sides. As a result, small-scale conflicts occur practically every year during the crucial irrigation period.

Both countries, while sharing a closely intertwined historical past, have had differing internal dynamics since coming into statehood. One can trace their instability to transnational challenges and internal ethnic strife. Leaders of both countries have contributed in one way or the other to the continuation of the conflict through the imagination of a particular type of development project, hoping to stabilise the internal dynamics of their respective countries and legitimise their power. This 'development project' is similar to how the Soviet Union looked at modernisation — which resulted in the large-scale displacement of nomadic communities, eventually contributing to the 'environment driver' of the current conflict.

What is the road ahead?

The path to resolution of the conflict will require groups to agree upon a common map. The international community will have to make efforts to solve the dispute by involving elders in the communities, as historically, elders have been used to resolve conflicts. The informal small-scale governance mechanisms would also have to be further strengthened through a concerted effort.

AGEING REGIME

The death of a young Iranian-Kurdish woman while in the custody of the morality police has triggered nationwide protests in the Islamic Republic, bringing the clerical regime under public pressure yet again. Twenty-two-year-old Mahsa Amini had been detained earlier this month for allegedly wearing the hijab (headscarf) in an "improper" way. The authorities attributed her death three days later to a heart attack while being trained on hijab rules, but her parents and activists say she was beaten to death. The incident triggered widespread anger in a country where state suppression of women's rights and resistance has always been a big political issue. Several cities, including Tehran, the capital, and Mashhad, a conservative city that hosts one of Shia Islam's holiest shrines, saw demonstrators chanting slogans against the clerical establishment and women publicly burning hijabs. Rights groups say some 36 people, including security personnel, have been killed in seven days. These are the most notable mass protests since the 2019 agitations sparked by a rise in fuel prices, and a key political challenge for President Ebrahim Raisi, who took office last year. As in the past, the regime has made it clear that it would use force to quell the protests, with the Revolutionary Guard Corps terming the protesters "traitors" and urging the authorities to "crush" them.

The mandatory hijab rules were introduced in 1981, two years after the revolution that saw the fall of the Pahlavi monarchy and the seizure of power by the Shia clergy. While the Mullahs have



since built a system of clerical dictatorship with limited democratic practices, two things have remained constant — state-sponsored conservatism and social repression. This model also produced constant tensions between the rulers and the ruled; those tensions have become more prominent in recent years as the political experiments to reform the system from within failed and economic miseries mounted because of American sanctions. In the last 25 years, Iranians elected two reformist Presidents for two terms — Mohammad Khatami in 1997 and Hassan Rouhani in 2013. But they failed to make any substantial reforms in the political system, which is tightly controlled by the clerical establishment. The lack of reforms and ballooning economic and political pressure often triggered large-scale protests and violent repression — in 2009, 2019, and now in 2022. Protests are part of the political culture in democracies. But in a dictatorship that claims the legacy of a politico-religious revolution, repeated protests chanting slogans such as “death to the dictator” are signs that the Islamic revolution is ageing. Iran’s clergy should learn from the social strife and be ready to address the larger problems that its state and society face.

STANDOFF INVOLVING PRESIDENT’S OFFICE, EXECUTIVE AND JUDICIARY TRIGGERS A CONSTITUTIONAL CRISIS IN NEPAL

It is unfortunate that the seventh anniversary of the promulgation of Nepal’s Constitution has been marred by an unforeseen, though not an entirely surprising standoff between the constitutional head, the executive and the judiciary. Chief Justice Cholendra Shumsher Rana is under undeclared house arrest after an impeachment motion against him moved by the outgoing Parliament. President Bidhya Devi Bhandari and Prime Minister Sher Bahadur Deuba’s government are at war with each other over her refusal to grant assent to a new citizenship bill that seeks to give citizenship by birth and descent to an estimated 500,000 people. The President had sent it back with questions, some of which are seen as valid, including its gender regressive portions. The Opposition sees the Bill as a government sop to the Terai region ahead of the elections. The elections are scheduled on November 20, but only if Bhandari, who belongs to the Opposition United Marxist Leninist Party, does not take any action by which the polls could get postponed, such as usurping the powers of the executive.

The President heightened such concerns when earlier this week she attended virtually a meeting of the Chinese Global Security Initiative despite some reservations in sections of the government. The theme of the conference was “Acting on the Global Security Initiative to Maintain Global Peace and Stability”. The Chinese invitation to Nepal to attend the conference came on the heels of a mid-September visit by Li Zhanshu, head of the Standing Committee of the Chinese National People’s Congress, the third by a Chinese dignitary since March, when foreign minister Wang Yi visited. The head of the international liaison department of the Chinese Communist Party Liu Jinchao visited in July.

The constitutional crisis underlines the failure of Nepal’s political class to manage the sweeping changes that came about after the 2008 abolition of the monarchy. The instability meant that the making of the Constitution would take another nine years. It was promulgated amid protests by the Madhesis whose demands for equal treatment of the Terai region with the hill provinces were not met. The protest led to a blockade of Nepal from the Indian side. If elections are held as scheduled, all indications are that the campaign will be polarised over the Citizenship Bill, and by extension along pro and anti-India lines. In the five years since the last election, Kathmandu was a revolving door of governments formed by different political combines with hardly the time or the inclination to address governance issues. It is hardly a propitious beginning to the next five years.



NATION

FROM LODHA TO RAMANA

Between 1971 and 1993, strong single party governments occupied the Centre, and the executive insisted on appointing 'committed judges' to the Supreme Court, in a clear attempt at court packing. Multiple supersessions took place, with the executive exercising prerogative in appointing Chief Justices, and the seniority convention was openly flouted. The shocker came with the decision in the first judges' case in 1981 (SP Gupta), where it was held that the opinion of the Chief Justice of India would not be binding on the government.

With the second judge's case in 1993, and around when Justice M.N. Venkatachaliah took over as the CJI, the trend reversed and the judiciary practically wrested the power of appointments back from the executive. Judicial primacy and the collegium's creation happened in this period, and while the collegium has since acquired considerable notoriety for being arbitrary and undemocratic, it still occupies the field today.

When we examine the evolution of the Indian Supreme Court and the office of the CJI, it is a classic example of a constant shifting and rebalancing of power between the judiciary and the executive. When the executive was powerful, usually through a single party majority, as with the Indira Gandhi and Rajiv Gandhi-led governments, the judiciary practically succumbed to the executive's control. However, when relatively weaker coalition governments were elected, the judiciary restored powers to itself.

This rebalancing is playing out again now. Since 2014, the executive is once again a single party majority under the Narendra Modi-led BJP government. Consequently, the judiciary's powers are weaker than before, and the executive is back in control. We see a rise in autocratic tendencies of the executive, through the slow destruction of democratic institutions, the misuse of investigating agencies, communal polarisation, and a gradual chipping away at constitutional protections available to citizens, all of which a weak judiciary is unable or disinclined to tackle.

From 2014 to 2022, the eight years the Modi government has been in power, eight individuals have occupied the office of the CJI, from Justice R.M. Lodha as the 41st Chief Justice to Justice N.V. Ramana as the 48th. This article attempts to examine how their tenures have contributed to the evolution of the Court and the office of the CJI.

The CJIs of the Modi era

Immediately before the Modi government first came to power in 2014, the CJI was Justice P. Sathasivam, who, rather unfortunately, chose to accept the Governorship of Kerala almost immediately after he demitted office. This unusual and arguably irregular appointment was made without an appropriate cooling period, and went against the BJP government's own policy, with Arun Jaitley having openly proclaimed that giving jobs to judges upon retirement would help governments influence courts. This also set a dangerous precedent for future judges, that is seen even today.

What might have been perceived as a gauntlet thrown into the ring by the executive did not deter Justice Sathasivam's successor, Justice R.M. Lodha, from making bold and unconventional decisions of his own. Most notably, he revived the dormant trend of direct appointments from the Bar to the Bench in the Supreme Court, a practice which was permitted under the Constitution,



but seldom attempted. His recommendations were mostly successful, but one was famously not, with the appointment of Gopal Subramaniam being refused by the government. This could have been the Modi government's first confrontation with the judiciary, and Justice Lodha even later said that he was open to pursuing Mr. Subramaniam's appointment, but the lawyer himself withdrew his candidature, due to which confrontation was sidestepped. Justice Lodha became a household name for his report on reforms in the Board of Control for Cricket in India. Ironically his report was subsequently completely diluted by the very Court that had appointed the committee to recommend reforms in the first place.

It was under Justice H.L. Dattu, who followed Justice Lodha as CJI, that the first major confrontation between the executive and the judiciary took place. The fourth judge's case, concerning the validity of the National Judicial Appointments Commission (NJAC) Act, had been referred to a five judge Bench, and heated arguments ensued. The judiciary stood its ground and eventually emerged victorious, and the NJAC Act, an undoubtedly flawed legislation, was struck down. While the collegium is an arbitrary, secretive and undemocratic process of judicial appointment, and communication and transparency in its operations are more than desirable, the design of the NJAC as proposed was not the appropriate solution. However, the Supreme Court could have fixed the flaws in the NJAC Act, perhaps by reading down the provisions to address its shortcomings, but chose not to do so.

After the NJAC judgment, matters were still not settled, and the memorandum of procedure for appointments to the higher judiciary became the centrepiece of the dispute between the executive and the judiciary. The tension continued when Justice T.S. Thakur took over as the CJI. He was the last CJI in the Modi era to have shown some spine in matters of judicial administration and appointments. Besides vociferously highlighting the plight of the overburdened Indian judiciary, in one instance even shedding tears in the Prime Minister's presence, Justice Thakur assiduously worked at mechanisms of filling up of vacancies, authoring an important judgment in this regard. He set the National Judicial Data Grid rolling, which today connects all levels of the judicial system and provides a surfeit of information to litigants.

But his reform efforts took a controversial turn when he attempted about 20 transfers of judges across High Courts. He was not the first judge to attempt such large-scale transfers; Justice Venkatachaliah and Justice S.H. Kapadia had tried this too, but their motivations for the transfers were not always unambiguous, and their experiments arguably failed, with many transferred judges being repatriated. Legal scholars and even former judges have lamented that such transfers are akin to treating judges like civil servants, and are a grave threat to the independence and overall integrity of the judiciary. Some of Justice Thakur's transfer orders were evidently bad calls, and were reversed soon enough.

Unfortunately, transfers continue till date, many being arbitrary and unjustified, and following no documented policy. Notwithstanding his swipes at controversy, Justice Thakur was also the last Chief Justice to really stand up to the government. Up until here, the Supreme Court had stood its ground while confronting the executive. After this, things changed completely.

India's first CJI from the Sikh community, Justice J.S. Khehar, had a short tenure of less than eight months, in which he was party to many landmark judgments, including the Right to Privacy and Triple Talaq judgments. Justice Khehar's term also revived debates on the lack of transparency and fairness in managing the roster in the Supreme Court, an issue that spanned the tenures of multiple CJIs thereafter.



Certain unproven allegations in a suicide note by Kalikho Pul, a former Chief Minister of Arunachal Pradesh, directed at multiple judges, including Justice Khehar himself, came to the Court's attention. Without dwelling on the veracity of the allegations, the procedure Justice Khehar followed was without precedent and also without propriety. The Supreme Court, in its own decision in Veeraswami, had said that criminal proceedings against someone in the higher judiciary could only be initiated in consultation with the CJI. Further, if allegations were made against the CJI directly, permission may have to be sought from other Supreme Court judges. Mr. Pul's wife wrote to Justice Khehar seeking permission to file an FIR against the judges mentioned in the note. Despite being named himself, the CJI, of his own accord, flouting all concerns of conflict of interest, chose to list the letter as a writ petition (converting an administrative question into a judicial one). Critically, this demonstrated a complete disregard of basic principles of natural justice, and set an example for others to follow.

The other controversial development during Justice Khehar's tenure was the conviction and subsequent imprisonment of a High Court judge, Justice C.S. Karnan, for contempt of court. Besides criticising the Court's exercise of its disciplinary powers and contempt jurisdiction, many also deemed the decision unconstitutional for overlooking Parliament's exclusive privilege to remove a member of the higher judiciary in an act. The root problem of judicial appointments was ignored, as also the question of how certain judges could enter the higher judiciary without adequate scrutiny.

The next CJI was Justice Dipak Misra, whose tenure is remembered for the unprecedented press conference held by his four fellow judges, condemning the CJI's internal administrative decisions, specifically that court conventions of bench strength and bench composition in the allocation of cases were not being followed, and that the CJI had selectively assigned, without any rational basis, important cases to preferential benches. The trigger was the Brijgopal Harkishan Loya case, the conspiracy theories surrounding his death, and the decision to allocate the matter to a certain Bench contrary to roster and convention.

The issue of the master of roster and conflict of interest also emerged. A Bench led by Justice Misra was hearing a murky CBI case pertaining to bribery around admissions in a debarred medical college, which also involved allegations of attempts to bribe sitting High Court and Supreme Court judges. Separate petitions sought a court-regulated investigation in this case, with a request to list this matter before a Bench other than the CJI's Bench, for reasons of conflict of interest. Instead of sitting out the case, as propriety and common sense would have demanded, Justice Misra chose to hear these petitions himself, even adjudicating on the scope of the powers of the CJI himself. Ultimately, after lots of twists and turns, the petitions were dismissed with heavy fines, but the debate around conflict of interest within the judiciary was only getting more accentuated.

He was also the first CJI against whom an impeachment motion was proceeded against, although it was eventually quashed by the Rajya Sabha. Despite these controversies, Justice Misra managed to set up the maximum number of constitutional benches as CJI and strove constantly to achieve a balance between adjudication and disposal.

The next CJI, Justice Ranjan Gogoi, also had a controversial tenure. He had been a party to the press conference earlier, and had famously also encouraged "noisy judges" to be more questioning of the system. However, the absolute disregard of conflict of interest took its most prominent turn in his tenure, when Justice Gogoi sat in the hearing (although he did not sign the order) of a sexual harassment complaint made by an employee of the Supreme Court against himself. All principles of natural justice were broken in handling this complaint. Besides the CJI himself constituting a



committee for examining the charges, the committee report exonerating the CJI was also not disclosed to the complainant, let alone the public at large. Her grievance was also about unfair dismissal and victimisation, which seems to have not been addressed by the committee. Much later, she was reinstated in service under the next CJI Bobde.

Justice Gogoi was also obsessed with secrecy, and routinely asked for information to be submitted to the court in 'sealed covers' (this has since been discontinued with Justice D.Y. Chandrachud's order denouncing the practice.) This was employed in cases such as the Assam's National Register of Citizens (NRC) matter, the Rafale dispute, the electoral bonds issue, and so on. In the NRC case, the manner in which the judiciary took over the executive's role, leaving the citizenship rights of millions under cloud, led commentators to term this as the rise of the 'executive court'. His treatment of habeas corpus petitions filed from Jammu & Kashmir in the wake of the abrogation of Article 370 prompted an eminent lawyer to say that the "Gogoi Court has, at reckless speed, run a coach-and-four through the centuries-old established law on habeas corpus." In his tenure, the practice of what some legal scholars describe as 'judicial evasion' also grew; the Supreme Court would avoid hearing certain cases altogether, especially those of utmost importance to the nation, such as the electoral bonds case, the Citizenship Amendment Act case, the abrogation of Article 370, etc., or would sit on such cases without passing any orders of consequence.

Justice Gogoi also accepted an appointment as a Member of Parliament (Rajya Sabha) soon after retirement, and fears expressed at the time of Justice Sathasivam's post retirement appointment resurfaced of increased executive and legislative interference in matters of the judiciary. Already, there was a growing deferential attitude in the judiciary towards the executive. Disturbingly, at about the same time, there was also a tendency towards sycophancy that started among Supreme Court judges, with Justice Arun Mishra and Justice M.R. Shah showering praises on the Prime Minister publicly. Justice Gogoi's Bench concluded the long-standing Ayodhya dispute, but there appears to be no end in sight to end communal strife, with Gyanvapi, and perhaps even Kashi and Mathura to follow.

Justice Gogoi was followed by Justice Sharad A. Bobde as CJI, who had the longest tenure in the Modi era, clocking in a little over one year and five months. While that gave an opportunity to boldly experiment with technology in the judiciary, it also led to greater subservience on the part of the judiciary towards the government. The practice of judicial evasion that began under Justice Gogoi continued in his term. This period also saw the Court give preferential treatment to certain matters, for example, in the bail matters of journalists Siddique Kappan versus Arnab Goswami.

CJI Bobde's Bench, in an unprecedented order, also stayed the controversial farm laws, and appointed a committee to examine the issue comprising individuals who had already publicly supported the laws themselves. Justice Bobde will also be remembered for his vocal displeasure of the use of Article 32 petitions as a means of approaching the court, as also attempting to take away the right to adjudicate on COVID cases from High Courts. The sad plight of migrant labourers in India during the pandemic was a tragedy, and the Supreme Court's attitude towards the situation reflected the ivory towers it had built for itself.

Despite these controversial decisions, Justice Bobde made an attempt at judicial reform by issuing guidelines on the appointment of ad-hoc judges to tackle judicial pendency. It is also notable that during his term, not a single appointment was made to the Supreme Court. Justice Bobde was reluctant to recommend Justice Akil Kureshi to the Supreme Court, a respected senior High Court Chief Justice, who had incidentally also issued an order against a high functionary of the government. On the other hand, Justice Nariman was insistent on recommending his name. This



led to a standoff within the collegium, and speaks volumes about the so-called independence of the collegium.

The latest Chief Justice to have completed his term in office in this period is Justice N.V. Ramana. Justice Ramana has been the most publicly visible face of the Supreme Court in the modern era. Besides delivering speeches and engaging with the public at large across the country, Justice Ramana has also brought back some of the old glory of the Supreme Court. The institution seems to be the 'sentinel on the qui vive' once again. Public confidence in the judiciary has also improved with certain bail orders and stays (e.g., sedition), and the Pegasus inquiry.

That said, his tenure has also seen some judgments from his associate judges seriously undermining civil liberties. The decision on the Prevention of Money Laundering Act, which was in the same vein as the Court's earlier decision in the Unlawful Activities (Prevention) Act (the Watali case), had the effect of virtually detaining people for an indefinite period, comparable only to the ADM Jabalpur case. The Teesta Setalvad/Zakia Jafri and Himanshu Kumar cases also happened on his watch, seeming as though the Supreme Court was criminalising petitioners who dared to approach the Court on civil liberty matters.

It is pertinent to note that Justice Ramana also filled up all posts in the Supreme Court and made a significantly large number of appointments in the higher judiciary, including appointing many women judges, in a direct move to improve the diversity in the system. Unfortunately, the practice of judicial evasion continued in Justice Ramana's term, and no constitutional Benches were formed, and neither were important matters taken up.

The future

The Supreme Court today is headed by the 49th Chief Justice of India, Justice U.U. Lalit, who will have a tenure of less than three months. Although it is too early to make any substantial remarks on his tenure, in the short time that he has been in office, Justice Lalit has already shown that the registry can be reformed through improving processes of filing and listing of cases. He has also taken initiatives in the formation of benches and certain initial orders that he has given, e.g., in the Kappan and Setalvad cases, granting bail to individuals where the original indictment itself was without basis. All these developments hold promise for the judiciary, and there is hope that the Supreme Court will live up to its functions of being the true custodian of the Constitution and protector of fundamental rights that it was once meant to be.

In the coming decades, the Supreme Court will continue to face challenges from multiple fronts, particularly the executive. It will also have newer responsibilities of strengthening the Indian judiciary, especially the lower courts, which seem to have faltered in recent times in many respects. A dynamic and thoughtful leadership, supported by puisne judges, should be able to ensure that these challenges and responsibilities are met appropriately. The Supreme Court of India, as also the office of the CJI, will continue to evolve, but hopefully, they will do so in the right direction.

KNOWING THE KILLER

Sentencing after conviction is a knotty problem in cases relating to capital offences. Trial judges are called upon to make a decision on whether only a death sentence will meet the ends of justice, or a life term will be enough. As a salutary norm, the Supreme Court has laid down that the death penalty can be imposed only in the "rarest of rare" cases. Subsequent judgments have sought to



buttress this principle by holding that the gruesome nature of the offence may not be the sole criterion to decide what brings it under the 'rarest of rare' category. The offender, his socio-economic background and his state of mind are also key factors in this regard. In practice, the sentencing part of the trial takes place after the court records a conviction. It is often done on the same day as the verdict, with only some limited arguments being heard on 'mitigating circumstances' from the convict's side and on the 'aggravating circumstances' from the prosecution. The latest order of a three-judge Bench, referring to a Constitution Bench the issue of granting a meaningful opportunity to convicts on the question of sentence, is a big stride in humanising the sentencing process.

Same-day sentencing has been upheld by several judgments, with the Supreme Court often saying where a meaningful opportunity has been given to the convict to present mitigating factors, the mere fact that death was awarded on the same day would not vitiate the sentence. Some High Courts have given a chance to convicts to present mitigating factors so that the inadequacy of the sentencing process in the trial court does not matter. Present thinking, however, is veering towards the view that courts must elicit reports from the jail authorities, probation officers and even trained psychologists to assess the mitigating factors in favour of not imposing the death penalty. In its referral order, the Bench has also raised the question as to the stage at which mitigating factors are to be presented. It has noted that the scales are tilted against the convicts now, as it is only after conviction that they are able to speak about mitigating circumstances. The prosecution, on the other hand, presents its case from the beginning on how heinous the crime was, and how much the accused deserved maximum punishment. The Constitution Bench may come up with new guidelines under which the trial courts themselves can hold a comprehensive investigation into factors related to the upbringing, education and socio-economic conditions of an offender before deciding the punishment. The legal and moral dilemma of sending someone to the gallows, of course, will subsist only as long as the death penalty remains on the statute book.

INDIAN TV CHANNEL'S HATE SPEECH ECOSYSTEM AND WHAT THE SC GETS WRONG ABOUT IT

Justices K M Joseph and Hrishikesh Roy of the Supreme Court have rightly flagged what has become a disquieting routine on the airwaves not only at prime time but almost all the time: Talking heads spewing hate, nutcases passed off as experts as long as they can froth on a Hindu-Muslim issue, each one locked in a race to the bottom, and all this while, anchors provoking, cheering from the studio. Of course, switching off the TV is the best answer to this trash but the bench has a point when it suggests this erodes the social compact, deepens the divide.

Unfortunately, the court's prescription is problematic. Not only does it overlook the structural forces that enable this hate speech ecosystem, its solution could become more of a problem. Hearing a bunch of petitions that seeks directions from the Court to the government to curb hate speeches on TV channels, the judges have proposed that guidelines along the lines of Vishaka, the SC judgment on sexual harassment at workplace, can be put in place until the state brings in a law to regulate hate content on television. The anguish of the court is understandable but its proposal is fraught. Hate speech has to be read within the purview of Article 19, which safeguards the freedom of speech. In numerous cases, the Supreme Court has upheld the primacy of Article 19 and warned against state overreach (Romesh Thappar vs. The State of Madras, 1950 and Shreya Singhal vs. Union of India, 2015 among others). It has also defined what constitutes hate speech. Any overarching law or guidelines to regulate speech stands the risk of violating the letter and



spirit of Article 19. In a polarised discourse marked by imbalances of power, who will define hate speech?

The court said the “visual media” in India is the “chief medium of hate speech” and felt that the government was “standing by as a mute witness when all this is happening”. The silence, in many cases, is strategic and deliberate. That’s the nub. At the heart of the problem is the political economy of TV news which thrives on hate speech today more than ever. There is little cost to pay for hate speech, there are few incentives for TV at prime time to be fair and accurate. Indeed, most anchors are paid employees of their channels and they know they can get away with peddling hate because someone in the boardroom has taken a call in its favour. Justice Roy minced few words: “Hate drives TRPs, drives profit.” And when politics fuels, legitimises that hate, judicial interventions are unlikely to work. A new law on hate speech, as the court has suggested, runs the risk of being challenged — and violated — every second given the ceaseless cycle of news and social media. Try enforcing guidelines on what is hate speech or what is not on Twitter or YouTube. Indeed, there is a formidable record of evidence to show how several IPC provisions meant to check hate speech — including Section 153 (A) or 295 (A) — end up being weaponised by the state and its agencies to curb dissent. The court must judge every instance of hate speech in its own context. Nothing is a stronger deterrent against hate speech than those in power speaking up against it, calling it out every time, without fail. Not much will be achieved by lecturing TV channels on the power of love, when they have discovered the profit in hate.

THE CASE OF NIKAH HALALA IN INDIA, AND A LONG COURT BATTLE

The story so far: Sameena Begum, a Delhi-based victim of instant triple talaq and a fraud marriage approached the Supreme Court in 2018 seeking a ban on nikah halala. Following her petition, the Court issued notices to the Government of India, the National Human Rights Commission, the National Commission for Women and the National Minorities Commission. The five-judge Bench headed by Justice Indira Banerjee shall hear the case this October.

Why did Sameena Begum approach the Supreme Court?

Sameena Begum filed a PIL seeking the annulment of halala marriage and polygamy. She requested the court that Section 2 of the Muslim Personal Law (Shariat) Application Act, 1937, be declared arbitrary and in violation of Articles 14, 15, 21 and 25 of the Constitution. She has also requested the court to ensure that provisions of the Indian Penal Code, 1860, apply to all Indian citizens. She contended that nikah halala is rape under IPC Section 375.

She was not alone in seeking annulment of nikah halala. With her was Farzana Parveen who used to live in Noida with her husband Abdul Qadir. Qadir pronounced triple talaq but later put a condition to accept her back: she should undergo halala marriage. Parveen refused to marry another man for the sake of getting back to Qadir. Instead, she sought judicial redress, seeking a ban on nikah halala.

The Koran allows a man to divorce his wife a maximum of two times. On both the occasions, separated by at least one menstrual cycle — instant triple talaq is not mentioned anywhere in the Koran — he is allowed to cancel the divorce. If the spouses fail to resume cohabitation during this period, they are allowed to remarry without any third-party intervention. This can be done only twice. If the man takes his wife back after the second pronouncement of divorce and then divorces her for the third time, he is not allowed to marry her again. The woman becomes an independent being with full choice over her life.



Halala, the way the Koran speaks of it, empowers women to take independent decisions. It saves women from temperamental husbands who divorce in a fit of anger, then cancel it, then divorce again, unleashing an endless cycle of marriage and divorce.

The Indian reality is way removed from the scriptural injunctions. Often a man pronounces triple talaq in a fit of anger. A little later, he realises his mistake and approaches a maulana who often tells him that he has exhausted all three chances at divorce; his erstwhile wife is now prohibited to him for reconciliation unless she marries another man, and he either divorces her or dies. For the purpose of going back to the erstwhile husband, sham marriages are enacted wherein a woman marries another man with a pre-decided date and time of divorce. The nikah is conducted with the understanding that the divorce shall take place the next day after consummation of marriage. Usually, nikah halala stems from instant triple talaq and ends with it.

Is nikah halala prevalent across the globe?

In Saudi Arabia, where divorces are on the rise, no cases of halala have been reported. No case has been reported from the UAE, Kuwait and Yemen either. In India, the Muslim Women's Protection of Rights on Marriage, passed after invalidation of triple talaq by the Supreme Court, is silent on nikah halala. The Act made instant triple talaq a criminal offence but steered clear of halala which takes place as a consequence of triple talaq. If the first husband is punished for giving her instant triple talaq, the second for doing likewise to facilitate her return to her former husband, where does that leave the woman?

PFI IS A SECURITY THREAT AND A POLITICAL PROBLEM — ANY STRATEGY TO CHECK ITS INFLUENCE NEEDS TO FACTOR IN BOTH

The nationwide searches and raids at various offices of the Popular Front of India (PFI) and arrests of its leaders have turned the spotlight on the activities of the organisation. The National Investigation Agency (NIA), which led the searches, has stated that it has “evidence that the PFI leaders and cadres were involved in funding of terrorism and terrorist activities, organising training camps for providing armed training and radicalising people to join banned organisations”. PFI workers have been arrested in the past for carrying out political murders as well as attacking people perceived to have insulted Islam — the sensational attack on T J Joseph, a college teacher in Kerala, for allegedly defaming the Prophet, had highlighted the violent nature of PFI politics. This has reinforced the perception about the PFI as a group that sees violence as a tool to push its polarising political agenda. However, it would be myopic to view the PFI challenge purely in terms of national security; it also poses a political challenge that needs to be framed in terms beyond arrests and FIRs.

The PFI emerged from a radical strand in Muslim politics that found acceptance within a section of the community after the demolition of Babri Masjid in 1992 and the rise of Hindutva agendas. It was also influenced by ideas of political Islam that gained ground after the Iranian revolution in the late 1970s. When SIMI, the most prominent exponent of this politics was banned, new groups emerged. These outfits ostensibly articulated their politics through the prism of rights guaranteed by the Constitution but their work often violated the norms of legitimate political action. The PFI was formed in 2007 through the merger of National Democratic Front in Kerala, Karnataka Forum for Dignity, and Manitha Neethi Pasarai in Tamil Nadu, after the Centre banned SIMI. The PFI is not a marginal or secretive political group. It works overground and its political wing, the Social Democratic Party of India (SDPI), is active in electoral politics. The PFI has been working to expand its footprint by claiming to represent the disenfranchised and marginalised Muslims. It taps



into wells of resentment to earn political legitimacy even if that means using violence and defying the rule of law. This is the political context of the appeal for the PFI.

It is for NIA and other state agencies to address the security threat that the PFI poses. States and the Centre need to work together on this. However, unlike insurgent groups that are delinked from the political process, the PFI and SDPI are woven into the social and political fabric of Kerala and parts of Karnataka and Tamil Nadu. At a time of majoritarian politics and steady shrinking of Muslim representation in political institutions, the PFI will always be on the lookout for fresh fodder. That is as serious a challenge as the one it poses on security.

RULES FOR IDENTIFYING CRIMINALS

The story so far:

On September 19, the Ministry of Home Affairs (MHA) notified the rules governing The Criminal Procedure (Identification) Act, 2022. The Act was passed in March by the Parliament. Until rules are notified, an Act cannot be implemented or come into force. The legislation would enable police and central investigating agencies to collect, store and analyse physical and biological samples including retina and iris scan of arrested persons.

What is the legislation about?

The Act seeks to repeal the Identification of Prisoners Act, 1920, which is over 100-years-old. The old Act's scope was limited to capturing of finger impression, foot-print impressions and photographs of convicted prisoners and certain category of arrested and non-convicted persons on the orders of a Magistrate.

The Statement of Objects and Reasons of the bill when it was introduced in Parliament said that new "measurement" techniques being used in advanced countries are giving credible and reliable results and are recognised world over. It said that the 1920 Act does not provide for taking these body measurements as many of the techniques and technologies had not been developed then. The Act empowers a Magistrate to direct any person to give measurements, which till now was reserved for convicts and those involved in heinous crimes. It also enables the police upto the rank of a Head Constable to take measurements of any person who resists or refuses to give measurements.

As per the rules, "measurements" include finger-impressions, palm-print, footprint, photographs, iris and retina scan, physical, biological samples and their analysis, behavioural attributes including signatures, handwriting or any other examination referred to in Section 53 or Section 53A of the Code of Criminal Procedure, 1973 (2 of 1974). Though it has not been specified, analysis of biological samples could also include DNA profiling.

What about concerns that the Act will be misused?

When the Bill was debated in Parliament in March this year, the Opposition members termed it "unconstitutional" and an attack on privacy as it allowed the record of samples of even political detainees.

However, the rules notified on September 19 state that samples of those detained under preventive Sections such as 107, 108, 109, 110, 144, 145 and 151 of the CrPC shall not be taken unless such person is charged or arrested in connection with any other offence punishable under



any other law. It can also be taken if a person has been ordered to give security for his good behaviour for maintaining peace under Section 117 of the said Code for a proceeding under the said Sections.

The rules do not mention the procedure to be adopted for convicted persons.

Who will be the repository of the data?

The National Crime Records Bureau (NCRB) under MHA will be the one-stop agency for storing and preserving the data of arrested persons. The State governments can also store the data, but it shall provide compatible application programming interfaces for sharing the measurements or record of measurements with the NCRB. The rules state that the NCRB will issue Standard Operating Procedure (SOP) for collection of measurements which would include specifications of the equipment or devices to be used, specifications and the digital and physical format of the measurements etc. The rules said that in case any measurement is collected in physical form or in a non-standard digital format, it shall be converted into standard digital format and thereafter uploaded in the database as per the SOP. Only authorised users could upload the measurements in the central database in an encrypted format.

What are the provisions for destruction of records in case a suspect is acquitted?

The procedure for destruction and disposal of records are yet to be specified by the NCRB. The rules state that any request for destruction of records shall be made to the Nodal Officer who is to be nominated by the respective State Government. The nodal officer will recommend the destruction after verifying that such record of measurements is not linked with any other criminal cases.

WHAT NUMBERS DON'T TELL US

The latest numbers are out. 9,180 prisoners with mental illness, 150 deaths by suicide, five prisoners with schizophrenia and epilepsy have died.

While we know the numbers, we do not know what is being considered as a mental illness and whether these numbers are limited to persons who are in the mental health ward, or does it also include those who are living in barracks but still on psychiatric medication. We also do not know when the onset of the illness was and what the different illnesses were or how long they have been in prison for. The National Crime Records Bureau's (NCRB) Prison Statistics India Report is out for the year 2021. Perhaps it needs repeating, yet again that there is a mental health crisis in prisons.

We often hear that the aim of punishment (or at least one of its aims) is reform and rehabilitation. Yet when we look at the place where that punishment is served, we find conditions that, instead of promoting rehabilitation, ensure despair, hopelessness and helplessness. In any case, our prisons are not overcrowded with convicts, rather it is the undertrial population that makes up for over 70% of prison population. More than half of those with mental illness were undertrials (58.4% were undertrials, while 41.3% were convicts). However, the numbers could very well be higher.

For instance, Project 39A's report on mental health and the death penalty, Deathworthy, revealed that over 60% of death row prisoners had a current episode of mental illness, but many of them had not been identified by the prison as needing treatment and care. Deathworthy also revealed



that suicide had little to do with mental illness and a lot with absent social support, violence, distress, and despair.

Lack of solutions

India's National Mental Health Policy, 2014, considers prisoners a class of people vulnerable to mental ill-health. But while the NRCB gives us data confirming this categorisation, it does not take us much further towards crafting solutions, and leaves us none the wiser. Why do we have so many prisoners living with mental illness? Were all these prisoners living with a mental illness before incarceration, or did they have their first episode in prison? The system is not equipped to give us such crucial information.

Understanding these numbers in a meaningful context is important because without that our default response to this crisis will continue to be that of treatment and conversations will get stuck at the poor healthcare infrastructure in prison.

To resolve the mental health crisis in prison, a purely medical approach will take us only so far. We need to take a more all-encompassing approach, move beyond treatment of individuals and towards identifying the social and underlying determinants of mental health in prisons. We need to look at mental health in prisons from a social and structural perspective as well. Otherwise, we might end up with a heavily medicated prison population, but not a healthy one.

Aspects of incarceration

There are aspects of incarceration that cause distress — loss of liberty, loss of close contact with loved ones, loss of autonomy. A certain amount of distress in the prison population is, therefore, bound to be present. However, firstly the conversation cannot simply end there; the distress must be addressed in a way which is not limited to medicating it away. Secondly, there are aspects of incarceration that are now assumed to be its common features, such as overcrowding and violence, but are certainly not inherent to incarceration. It would be absurd to think a population subject to persistent violence (of different kinds) will be healthy.

Anyone who has interacted with prisoners and prison officials will attest to the fact that each is suspicious of the other and the relationship (as skewed as it is) is based on mistrust and fear. Spaces which are meant to facilitate rehabilitation instead become spaces with further disempowerment and disenfranchisement.

It is no coincidence that these are goals that are essential for a mentally healthy population. Reform, rehabilitation or reintegration are meant to make prisoners confident in their lives, their choices and their ability to take decisions and be responsible and accountable for it. The process is meant to be empathetic and caring. Instead, it is violent, harsh and ultimately leaves the prisoner no better off, if not worse off. That there are high rates of suicides and mental illness shouldn't surprise us. It should, though, make us question the aim and effectiveness of our penal and social justice policy.

THE PROCESS OF INCLUSION/EXCLUSION FROM THE SCHEDULED TRIBES LIST

The story so far: On September 14, the Union Cabinet approved a proposal to add several tribes to the list of Scheduled Tribes (ST) in States such as Himachal Pradesh, Tamil Nadu, Chhattisgarh and Uttar Pradesh, so that they can avail of benefits meant for STs, including reservation. The announcement by Minister of Tribal Affairs Arjun Munda came even as six tribal communities of



Assam — Adivasi, Chutia, Koch-Rajbongshi, Matak, Moran and Tai-Ahom — threatened to launch protests over an "inordinate delay" in their inclusion in the ST list.

Which communities have been added to the ST list?

The communities approved for inclusion in the ST list are the Hatti tribe in the Trans-Giri area of Sirmour district in Himachal Pradesh, the hill tribes of Narikoravan and Kurivikkaran of Tamil Nadu, the Binjhia community in Chhattisgarh and the Gond community in certain districts of Uttar Pradesh. The Cabinet has approved the addition of several alternative names for already existing Scheduled Tribes in Chhattisgarh and Karnataka so that the difference in spellings and pronunciations do not result in members of these communities being left out of the benefits meant for them.

Significantly, even as the Union Cabinet has decided to include these communities under the ST list, this is not the first time they have been categorised for benefits of reservation. Most of these communities had been either included in the list of Scheduled Castes (SC) or Most Backward Classes till now.

How is a community added or removed from SC, ST lists?

The process begins at the level of a State or Union Territory, with the concerned government or administration seeking the addition or exclusion of a particular community from the SC or ST list. The final decision rests with the President's office issuing a notification specifying the changes under powers vested in it from Articles 341 and 342. The inclusion or exclusion of any community in the Scheduled Tribes or Scheduled Castes list come into effect only after the President assents to a Bill that amends the Constitution (Scheduled Castes) Order, 1950 and the Constitution (Scheduled Tribes) Order, 1950, as is appropriate, after it is passed by both the Lok Sabha and Rajya Sabha.

A State government may choose to recommend certain communities for addition or subtraction from the list of SCs/STs based on its discretion. This recommendation may come from studies or commissions like in the case of classifying the Hatti community in Himachal Pradesh. Following this, the proposal to include or remove any community from the Scheduled List is sent to the Union Ministry of Tribal Affairs from the concerned State government. After this, the Ministry of Tribal Affairs, through its own deliberations, examines the proposal, and sends it to the Registrar General of India (RGI). Once approved by the RGI, the proposal is sent to the National Commission for Scheduled Castes or National Commission for Scheduled Tribes, following which the proposal is sent back to the Union government, which after inter-ministerial deliberations, introduces it in the Cabinet for final approval.

As for the communities approved for addition to the list by the Cabinet earlier last week, a Bill was introduced in Parliament by the Tribal Affairs Minister this year, specifying the exclusion of the Gond community from the SC list in four districts of Uttar Pradesh and moving them to the ST list. Similarly, another Bill was also introduced by Mr. Munda, to shift certain communities in Jharkhand from the SC list to the ST list and add synonyms and variations in spellings for certain other communities in the ST list.

What is the criteria to begin the process?

To establish whether a community is a Scheduled Tribe, the government looks at several criteria, including its ethnological traits, traditional characteristics, distinctive culture, geographical



isolation and backwardness. However, in March this year the Supreme Court said it wanted to fix fool-proof parameters to determine if a person belongs to a Scheduled Tribe and is entitled to the benefits due to the community. It said the judiciary was no longer sure about an “affinity test” used to sift through distinct traits to link a person to a tribe. There is the likelihood, it said, that contact with other cultures, migration and modernisation would have erased the traditional characteristics of a tribe. An apex court Bench of Justices Hemant Gupta and V. Ramasubramanian referred the question of fixing the parameters to a larger Bench, pointing out that the issue was a “matter of importance” when it came to issuing caste certificates.

How many Scheduled Tribes are there officially?

According to the Scheduled Tribes in India as revealed in Census 2011, there are said to be 705 ethnic groups listed as Scheduled Tribes under Article 342. Over 10 crore Indians are notified as STs, of which 1.04 crore live in urban areas. The STs constitute 8.6% of the population and 11.3% of the rural population.

SUPREME COURT QUOTA FOR DALIT MUSLIMS AND CHRISTIANS: STORY SO FAR

The Centre is likely to soon decide on setting up a national commission to study the social, economic and educational status of Dalits who converted to religions other than Hinduism, Buddhism and Sikhism. Several petitions are pending before the Supreme Court seeking Scheduled Caste (SC) reservation benefits for Dalits who converted to Christianity or Islam.

Why don't Dalits who convert to Christianity and Islam get quota benefits?

The original rationale behind giving reservation to Scheduled Castes was that these sections had suffered from the social evil of untouchability, which was practised among Hindus. Under Article 341 of the Constitution, the President may “specify the castes, races or tribes or parts of or groups within castes, races or tribes which shall...be deemed to be Scheduled Castes”.

The first order under this provision was issued in 1950, and covered only Hindus. Following demands from the Sikh community, an order was issued in 1956, including Sikhs of Dalit origin among the beneficiaries of the SC quota. In 1990, the government acceded to a similar demand from Buddhists of Dalit origin, and the order was revised to state: “No person who professes a religion different from the Hindu, the Sikh or the Buddhist religion shall be deemed to be a member of Scheduled Caste.”

Does this religion-based bar apply to converted STs and OBCs as well?

It does not. The Department of Personnel and Training (DoPT) website states, “The rights of a person belonging to a Scheduled Tribe are independent of his/her religious faith.” Following the implementation of the Mandal Commission report, several Christian and Muslim communities have found place in the Central and state lists of OBCs.

What efforts have been made to include Muslims and Christians of Dalit origin among SCs?

After 1990, a number of Private Member’s Bills were brought in Parliament for this purpose. In 1996, a government Bill called The Constitution (Scheduled Castes) Orders (Amendment) Bill was drafted, but in view of a divergence of opinions, the Bill was not introduced in Parliament.

The UPA government headed by Prime Minister Manmohan Singh set up two important panels: the National Commission for Religious and Linguistic Minorities, popularly known as the



Ranganath Misra Commission, in October 2004; and a seven-member high-level committee headed by former Chief Justice of Delhi High Court Rajinder Sachar to study the social, economic, and educational condition of Muslims in March 2005.

The Sachar Committee Report observed that the social and economic situation of Dalit Muslims and Dalit Christians did not improve after conversion. The Ranganath Misra Commission, which submitted its report in May 2007, recommended that SC status should be “completely de-linked...from religion and...Scheduled Castes [should be made] fully religion-neutral like...Scheduled Tribes”.

The report was tabled in both Houses of Parliament on December 18, 2009, but its recommendation was not accepted in view of inadequate field data and corroboration with the actual situation on the ground.

A report by a team of sociologists led by Satish Deshpande, titled Dalits in the Muslim and Christian Communities — A Status Report on Current Social Scientific Knowledge, said in January 2008 that there was a strong case for extending SC status to Dalit Christians and Dalit Muslims. However, the study, which was commissioned by the National Commission for Minorities, was also not considered reliable due to insufficient data.

What view did the BJP take before it came to power?

In February 2010, the BJP national executive passed a resolution criticising the Misra Commission. It said that the “Commission cannot dictate or thrust its opinion on the Christian Pope or Muslim maulvis... Reservation would amount to a formal introduction of a caste system in Islam and Christianity, thus changing the basic tenets of these religions, which is outside the jurisdiction of both Parliament and the judiciary and also contrary to the provisions of the Koran and the Bible.”

Back in 1961, the Akhil Bharatiya Pratinidhi Sabha (ABPS), the highest decision making body of the RSS, had said: “If any scheme of separate reservation...of different sects is sought to be envisaged for political purposes, it will prove highly detrimental to national unity...” In 1990, in response to Christian demands for reservation on the lines of neo-Buddhists, the ABPS said “the Constitution makers envisaged these concessions only to remove caste-based discrimination and inequality prevalent in Hindu society...”.

What happens here onward?

Based on the recommendations of the Ranganath Misra Commission, there are some petitions pending before the Supreme Court, seeking reservation benefits for Christians and Muslims of Dalit origin. In the last hearing on August 30, a three-judge Bench headed by Justice Sanjay Kishan Kaul gave Solicitor General of India Tushar Mehta three weeks’ time to present the stand of the Union government on the issue. The next hearing is scheduled for October 11.

THE GOVERNOR-GOVERNMENT STAND-OFF IN KERALA DIMINISHES THEIR OFFICES

The public spat between Kerala Governor Arif Mohammad Khan and Chief Minister Pinarayi Vijayan on Monday marks a new low for their already frosty relationship. In an unprecedented step, Khan addressed the media and leveled serious charges against Vijayan, his office staff, the ruling CPM and its leaders, and the state police. Later, speaking at a public function, Vijayan accused Khan of being servile to the RSS and warned him not to question the credentials of the CPM. The tone and tenor of their engagement diminishes the prestige of the offices they hold. Khan



is a senior politician with a wealth of parliamentary and administrative experience while Vijayan, who has no family, caste or class lineage to boast of, has risen from the ranks and is the unchallenged leader in his party as well as government. Both Khan and Vijayan must step back and rescue the relations between two most important public offices in the state, which seem to be in free fall at present.

The Governor-government stand-off started soon after Khan was appointed to the office in 2019. He alleged that delegates to the Indian History Congress at Kannur University heckled him and that the administration did not take action. Later, he objected when the government decided to extend the tenure of the Kannur university vice-chancellor, Gopinath Ravindran: Khan referred to him as a “criminal” and alleged that he made several illegal appointments at the university. He raised Ravindran’s appointment on Monday and claimed he submitted to the government decision after the CM intervened personally. Khan has also refused to sign on controversial Bills pertaining to amending the Lokayukta and the autonomy of universities. His complaints regarding university appointments have substance and need to be probed independently. But these ought to be raised in proper forums and in a language that befits the high office he holds. As the occupant of a constitutional office, Khan should know he cannot stoop to standards followed by street-level political functionaries or turn combative against an elected government in public.

The confrontation in Kerala comes in the backdrop of a string of Governor-government spats in Opposition-ruled states — among them West Bengal, Tamil Nadu and Maharashtra during the MVA government. Opposition parties today see the Governor’s office as ready to destabilise their governments at the instance of the Centre. This trust deficit has to be bridged at the earliest. Raj Bhavan needs to get off its high horse and accept that it is not an ombudsman of the state government. And the state government needs to thicken its skin, not see in every Raj Bhavan missive a plot to topple it. Unfortunately, given how Raj Bhavans are behaving these days, this is easier said than done for both sides.

PROMISING SIGNS

The decision by the insurgent Nationalist Socialist Council of Nagalim (Isak-Muivah faction) to re-engage in talks with the Union government, conditionally, on the basis of the Framework Agreement signed in August 2015, is a welcome one. This breaks a deadlock that has persisted in talks since October 2019, which was set as a deadline for the peace accord. The possibility of a resumption of talks received a boost last week when the NSCN(IM) and other Naga groups represented in the Naga National Political Groups (NNPGs) pledged in a joint statement to “overcome the cynicism” and that they are “committed to a dialogue in order to move forward” the talks for an accord. With a group of legislators and Ministers from the State meeting up with the NSCN(IM)’s representatives — a step that has borne fruit — the stage is now set to take forward the talks, a process that seems to have been put on the backburner in October 2019. The Centre and the NSCN(IM) must review what went wrong since the Framework Agreement was reached in 2015 and the complexities that have remained since the landmark ceasefire agreement that was signed between the two parties in 1997.

One key factor preventing a comprehensive peace accord has been the splintered nature of the Naga insurgency and the need for the Centre to deal with groups other than the NSCN(IM). But the insurgency as a whole has weakened considerably over time and this has paved the way for talks to a negotiated accord. Second, the demands related to the greater “Nagalim”, made by the NSCN(IM) apart from other rebels would have implications in other States, and this has complicated negotiations. Any agreement would have to be careful about not changing the



boundaries of the existing States in the country as doing so could spark conflagrations in other North-east States where inter-ethnic relations remain volatile. While the machinations by the Centre in getting a deal done, especially the secretive nature of the talks, have played a part in the deadlock in talks, it is clear that the obdurate and intransigent demand for a separate flag and a Naga constitution by the NSCN(IM) has been a stumbling block as well. The spat between the former Governor and interlocutor R.N. Ravi and the NSCN(IM) also did not help matters. The differences of opinion on the aforementioned issues need to be dealt with directly by the representatives of the Naga groups and the Government. It is not enough to promise a solution for the sake of publicity.

INTERNAL DEMOCRACY

The Election Commission of India (ECI) has rejected the idea of a ‘permanent president’ for a party, while taking issue with the Yuva Jana Shramika Rythu Congress Party (YSRCP), which rules Andhra Pradesh. The party reportedly elected Chief Minister Y.S. Jagan Mohan Reddy as its president for life in July 2022. The ECI says such a step is inherently anti-democratic. The YSRCP’s response to the ECI’s letters sent earlier, that it will conduct an “internal enquiry”, borders on the absurd. There is merit in the ECI’s view and its insistence on internal democracy, as no individual should be elected leader for life. Any party that participates in a democratic process, and wants to govern and legislate, should include formal and periodic election of office-bearers as part of the way it functions as an association. Indian political parties are of myriad kinds — some, such as the Bharatiya Janata Party or the Communist parties, are structured, cadre-based organisations that function towards an ideological goal or a principle; others, such as the Congress, are more loosely structured collections of individuals with even different strands of opinion but functioning within an association that has core ideals; some others still reflect social or regional cleavages and so on.

Increasingly, the fragmentation of India’s polity into a federalised, multi-party system has also given way to domination by “charismatic” individuals or their families, mainly because of the nature of support that these parties enjoy or due to their financing structures which necessitates centralised control by a single coterie or a family. This is why several political parties today do not insist on thoroughgoing internal elections to secure their leadership; and even if they do conduct polls, they lack sufficient contestation and are done to reaffirm the dominance of the high command. In some cases, with electoral politics being a zero-sum game, political parties are loath to allow internal contest, fearing that this could foster disunity, as opposed to nomination and consensus-building on leadership. The ECI has periodically used guidelines issued for registration of parties under Section 29A of the Representation of the People Act, 1951 to remind parties to conduct elections and to ensure that their leadership is renewed, changed or re-elected every five years. But the commission does not have any statutory power to enforce internal democracy in parties or to mandate elections. The lack of such substantive power only leads to parties carrying out the ECI’s edicts in a mechanical manner. However, with dynasticism and a lack of internal democracy becoming a matter of public debate, perhaps public pressure would finally bear upon parties to do the right thing.

WHY CUET-UG ‘NORMALISES’ MARKS, AND HOW IT DIFFERS FROM OTHER SCORING SYSTEMS

The National Testing Agency and the University Grants Commission (UGC) maintain that the normalisation of marks is the best method available to offer a level playing field to all candidates who took the entrance exam.



More than a week after the announcement of the CUET-UG (Common University Entrance Test-Under Graduate) results, students continue to have doubts over the assessment and scoring system followed by the National Testing Agency (NTA) in preparing “normalised” marks that will be considered by the universities in carrying out admissions.

The NTA and the University Grants Commission (UGC) maintain that the normalisation of marks is the best method available to offer a level playing field to all candidates who took the entrance exam, saying it was drawn up by a committee of experts from the Indian Statistical Institute, IIT Delhi, and Delhi University.

CUET-UG results: What is ‘normalisation’?

The CUET-UG was held on multiple dates and multiple sessions between July 15 and August 30. As a result, there were different sets of question papers for every subject. Naturally, there were variations in the level of difficulty of question papers on the same subject. Moreover, in the case of CUET-UG, there were apprehensions that those taking the test in the initial set of dates may not be able to meet the performance level of candidates who appeared in dates fixed in August. The normalisation formula is supposed to address these concerns by ensuring that candidates are neither benefitted nor disadvantaged due to any such factor.

Is this method applied in the case of all entrances?

Yes, normalisation is used to compare the performances of students on a common scale even in the case of entrances such as JEE Main (engineering). However, there is a difference. In the case of JEE Main, the percentile scores are normalised. Before going further, we need to know what a percentile is. Simply put, percentile denotes the relative performance of a candidate compared to those who took the test in the same session. A 100 percentile indicates that 100% candidates of a particular session have scored equal to or less than the topper. A student with a percentile score of 70 would indicate that she has scored more than 70% of the candidates of her session.

How is CUET-UG different?

In the case of JEE Main, the raw marks obtained by the students are first transformed into a scale ranging from 0 to 100 for each session of examinees. As a result, the toppers of two different sessions may have different raw scores, but both their percentile scores will be 100. The same applies to each category of percentile. But in the case of CUET-UG, raw scores are converted into percentile scores and then into normalised scores. But universities will consider only the normalised raw score while preparing merit lists. This method has been shown to be accurate for estimating normalised marks of candidates when the tests are held in multiple sessions with varying difficulty levels in a given subject, according to the NTA.

What is the mathematical formula used for a normalised percentile?

To calculate the normalised percentile score of a candidate, three variables are required: the raw score of the candidate (A), the total number of candidates with a score equal to or less than her raw score (B), and the total number of candidates in that particular session (C). The mathematical formula applied is B divided by C multiplied by 100. For example, take the case of a student who appears in a session with 41,326 other candidates. Say, she obtains 121 marks, scoring more than 37,244 other candidates of her session. Her normalised percentile score will be $37,244/41,326 \times 100$, which comes to 90.1224411. Percentile scores will be calculated up to 7 decimal places.



And what is the formula to calculate a normalised raw score?

In tabulating the marks, the NTA first sorted the candidates in a descending order based on their percentile scores first. Then the raw marks of the students were listed against their percentiles. A third metric called 'interpolated mark' was calculated for each candidate using a method called linear interpolation. To understand its meaning, consider a person covering a certain distance at a uniform pace. Now, through linear interpolation one can find out the possible time that she would take to cover one third of the distance (or two third or any other length of the total distance). This mathematical concept was applied to find the interpolated marks for every student, assuming that every student appeared in the same paper twice. Their actual raw marks were then divided by the interpolated marks, and the normalised marks arrived at.

THE CONTROVERSY OVER NAAC'S SYSTEM FOR ASSESSING HIGHER EDUCATION

The National Assessment and Accreditation Council (NAAC), which carries out quality checks or assessments of Indian Higher-level Educational Institutions (HEIs), courted controversy recently over the rating of the Maharaja Sayajirao University of Baroda and allegations of bribery in the process.

When the NAAC released the ratings, the institute's score changed from A to A+ on the back of improvement across parameters. The allegations have surfaced at a time when the NAAC is exploring changes in its approach.

What is NAAC?

The NAAC, an autonomous body under the University Grants Commission (UGC), assesses and certifies HEIs with gradings as part of accreditation. Through a multi-layered process, a higher education institution learns whether it meets the standards of quality set by the evaluator in terms of curriculum, faculty, infrastructure, research, and other parameters. The ratings of institutions range from A++ to C. If an institution is graded D, it means it is not accredited.

How is the accreditation process carried out?

In a recently-published white paper, co-authored by NAAC executive committee chairman Bhushan Patwardhan and former Indian Institute of Science Education and Research professor KP Mohanan, the current approach has been described as "input-based". In other words, NAAC relies heavily on self-assessment reports of applicant institutions.

The first step has an applicant institution submitting a self-study report of information related to quantitative and qualitative metrics. The data is then validated by NAAC expert teams, followed by peer team visits to the institutions. This last step has sparked controversy.

What is the latest controversy about?

NAAC had reportedly withheld the grading of the Maharaja Sayajirao University of Baroda after receiving an anonymous complaint that the university unduly tried to influence the peer review team with gold, cash and other favours.

However, on September 15, NAAC released the improved grading, terming the allegations as "false". Interestingly, the controversy has surfaced at a time when the council is considering reducing the role of the peer team visits in the overall scheme of things. "The process of Peer Team Visits adds substantial effort on the part of both NAAC and the HEIs. Hence, we recommend that

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



the role of Peer Team visits be facilitatory in nature and not have a significant weightage in assessment and accreditation,” according to the white paper published on July 13 following its review and endorsement by the NAAC academic advisory committee and the advisory council.

What are the alternatives being explored?

From the prevailing “input-based” approach, the NAAC plans to adopt an “outcome-based approach”. The white paper states the current system is akin to accepting the claim of a PhD candidate that his thesis is of high quality. Instead, it suggests that emphasis should be on finding out if students are equipped with relevant skills and academic abilities.

Rather than relying exclusively on the self-study reports of the HEIs, the NAAC should ask institutions to provide evidence such as samples of learning materials, continuous assessment tasks and final examinations to show they have outcomes of learning specified in the syllabus, according to the white paper.

How many institutions in India are accredited?

There are 1,043 universities and 42,343 colleges listed on the portal of the All India Survey on Higher Education. As per the latest data from June 21, there were 406 universities and 8,686 colleges that were NAAC-accredited. Among the states, Maharashtra accounts for the highest number of accredited colleges at 1,869 – more than twice as many as Karnataka’s 914, the second highest. Tamil Nadu has the most accredited universities at 43.

Can all higher educational institutes apply for accreditation?

Under the rules, only higher education institutions that are at least six years old, or from where at least two batches of students have graduated, can apply. The accreditation is valid for five years. Aspiring institutes need to be recognised by the UGC and have regular students enrolled in their full-time teaching and research programmes. There are only 19 universities and 121 colleges that have been reviewed by the NAAC four times, with a gap of five years between each grading. When an institution undergoes the accreditation process for the first time it is referred to as Cycle 1, and the subsequent five-year periods as Cycles 2, 3 and so on.

Why are so few institutes accredited?

According to current and former officials of the NAAC, the fear of obtaining a poor grade or no accreditation at all holds back higher education institutes from voluntarily applying for evaluation. This is despite accreditation having been made mandatory through the UGC (Mandatory Assessment and Accreditation of Higher Educational Institutions) Regulations, 2012.

Earlier this year, NAAC explored the possibility of a new system of Provisional Accreditation for Colleges (PAC) under which even one-year-old institutions could apply for accreditation. The provisional certificates would be valid for two years, it suggested. But the committee that drew up the white paper, which also underwent multiple rounds of revisions, observed that such a system can lead to compromise with quality. “The PAC proposal implies a lowering of standards so that a greater number of colleges can gain Provisional Accreditation. Instead, it would be wiser on the part of NAAC to help the colleges improve the quality of education they provide, such that they can be successful in meeting the standards that NAAC accreditation calls for,” it said.



THE LUMPY SKIN DISEASE

The story so far: The Mumbai Police have ordered the prohibition of cattle transportation in the city to prevent the spread of the lumpy skin disease (LSD). This means cattle cannot be moved out of the place they are being raised or transported to marketplaces. The order came into force on September 14 and will stay in place till October 13. The disease has killed 127 cattle in Maharashtra, having spread to 25 districts. The contagious viral infection has spread in cattle in more than 10 States and Union Territories so far. Prime Minister Narendra Modi informed last week that the Centre and States are working together to control the spread of the disease, which has emerged as a concern for the dairy sector.

What is the lumpy skin disease and how does it spread?

Lumpy skin disease is caused by the lumpy skin disease virus (LSDV), which belongs to the genus capripoxvirus, a part of the poxviridae family (smallpox and monkeypox viruses are also a part of the same family). The LSDV shares antigenic similarities with the sheeppox virus (SPPV) and the goatpox virus (GTPV) or is similar in the immune response to those viruses. It is not a zoonotic virus, meaning the disease cannot spread to humans. It is a contagious vector-borne disease spread by vectors like mosquitoes, some biting flies, and ticks and usually affects host animals like cows and water buffaloes. According to the United Nations Food and Agriculture Organisation (FAO), infected animals shed the virus through oral and nasal secretions which may contaminate common feeding and water troughs. Thus, the disease can either spread through direct contact with the vectors or through contaminated fodder and water. Studies have also shown that it can spread through animal semen during artificial insemination.

LSD affects the lymph nodes of the infected animal, causing the nodes to enlarge and appear like lumps on the skin, which is where it derives its name from. The cutaneous nodules, 2–5 cm in diameter, appear on the infected cattle's head, neck, limbs, udder, genitalia, and perineum. The nodules may later turn into ulcers and eventually develop scabs over the skin. The other symptoms include high fever, sharp drop in milk yield, discharge from the eyes and nose, salivation, loss of appetite, depression, damaged hides, emaciation (thinness or weakness) of animals, infertility and abortions. The incubation period or the time between infection and symptoms is about 28 days according to the FAO, and 4 to 14 days according to some other estimates.

The morbidity of the disease varies between two to 45% and mortality or rate of date is less than 10%, however, the reported mortality of the current outbreak in India is up to 15%, particularly in cases being reported in the western part (Rajasthan) of the country.

What is the geographical distribution and how did it spread to India?

The disease was first observed in Zambia in 1929, subsequently spreading to most African countries extensively, followed by West Asia, Southeastern Europe, and Central Asia, and more recently spreading to South Asia and China in 2019. As per the FAO, the LSD disease is currently endemic in several countries across Africa, parts of the West Asia (Iraq, Saudi Arabia, Syrian Arab Republic), and Turkey.

The spread in South Asia first affected Bangladesh in July 2019 and then reached India in August that year, with initial cases being detected in Odisha and West Bengal. The FAO points out: "The long porous borders between India, Nepal and Bangladesh allow for a significant amount of



bilateral and informal animal trade, including cattle and buffaloes.” This, the UN body says, may have contributed to the spread of LSD in July-August 2019 between Bangladesh and India. While the 2019 outbreak later subsided, the recent spread in India began in June this year.

Is it safe to consume the milk of affected cattle?

Studies say that it has not been possible to ascertain the presence of viable and infectious LSDV virus in milk derived from the infected animal. FAO notes, however, that a large portion of the milk in Asia is processed after collection and is either pasteurised or boiled or dried in order to make milk powder. This process ensures that the virus is inactivated or destroyed.

Notably, Joint Director at the Indian Veterinary Research Institute (IVRI) told PTI that it is safe to consume milk from cattle infected by LSD, as it is a non-zoonotic disease. “It is safe to consume milk from the infected cattle. There is no problem in the quality of milk even if you have it after boiling or without boiling,” Mr. Mohanty said.

What are the economic implications?

The spread of the disease can lead to “substantial” and “severe” economic losses according to FAO and the World Organisation for Animal Health (WOAH). The disease leads to reduced milk production as the animal becomes weak and also loses appetite due to mouth ulceration. The income losses can also be due to poor growth, reduced draught power capacity and reproductive problems associated with abortions, infertility and lack of semen for artificial insemination. Movement and trade bans after infection also put an economic strain on the whole value chain. A risk assessment study conducted by the FAO based on information available from 2019 to October 2020 revealed that the economic impact of LSD for South, East and Southeast Asian countries “was estimated to be up to \$1.45 billion in direct losses of livestock and production”.

The current outbreak in India has emerged as a challenge for the dairy sector. India is the world’s largest milk producer at about 210 million tonnes annually. India also has the largest headcount of cattle and buffalo worldwide. In Rajasthan, which is witnessing the worst impact of LSD, it has led to reduced milk production, which lessened by about three to six lakh litres a day. Reports indicate that milk production has also gone down in Punjab owing to the spread of the disease. According to FAO, the disease threatens the livelihoods of smaller poultry farmers significantly. Notably, farmers in Uttar Pradesh and Punjab have incurred losses due to cattle deaths and are seeking compensation from their State governments.

How bad is the current spread in India and what is the government doing?

The current outbreak started in Gujarat and Rajasthan around July and had spread to Punjab, Himachal Pradesh, Andaman & Nicobar and Uttarakhand by early August. It then spread to Jammu and Kashmir, Uttar Pradesh and Haryana. In recent weeks, it was reported in Maharashtra, Madhya Pradesh, Delhi, and Jharkhand. The virus has infected over 16 lakh cattle in 197 districts as of September 11. Of the nearly 75,000 cattle that the disease has killed, more than 50,000 deaths, mostly cows, have been reported from Rajasthan.

The FAO has suggested a set of spread-control measures for LSD, which involves vaccination of susceptible populations with more than 80% coverage, movement control of bovine animals and quarantining, implementing biosecurity through vector control by sanitising sheds and spraying insecticides, strengthening active and passive surveillance; spreading awareness on risk



mitigation among all stakeholders involved, and creating large protection and surveillance zones and vaccination zones.

The Union Ministry of Fisheries, Animal Husbandry and Dairying informed that the 'Goat Pox Vaccine' is "very effective" against LSD and is being used across affected States to contain the spread. As of the first week of September, 97 lakh doses of vaccination have been administered. The affected States have put movement bans in place and are isolating infected cattle and buffaloes, spraying insecticides to kill vectors like mosquitoes, with some affected States such as Maharashtra, Rajasthan, Delhi, and Uttar Pradesh also setting up dedicated control rooms and helpline numbers to guide farmers whose cattle have been infected.

In a major breakthrough, two institutes of the Indian Council of Agricultural Research (ICAR) have developed an indigenous vaccine for LSD, which the Centre plans to commercialise and roll out in the next three to four months. The vaccine is based on LSD virus samples from cattle in Ranchi afflicted in the 2019 outbreak and experimental trials conducted on animals afflicted in the ongoing 2022 outbreak with the vaccine have revealed encouraging results, ICAR and the Ministry of Agriculture have stated.

HOW AMBEDKAR CIRCUIT IS GOOD TOURISM AND GOOD POLITICS FOR THE BJP

Union Tourism and Culture Minister G Kishan Reddy on Sunday announced a special tourist train to cover the "Ambedkar Circuit". The modalities — such as the date of journey, ticket price, number of passengers — are still in the works.

The Ambedkar Circuit

The government had first proposed the Ambedkar Circuit, or Panchteerth, in 2016. Prime Minister Narendra Modi had said the Panchteerth would include Janma Bhoomi, Ambedkar's birthplace in Madhya Pradesh's Mhow; Shiksha Bhoomi, the place in London where he stayed while studying in the UK; Deeksha Bhoomi in Nagpur where he embraced Buddhism; Mahaparinirvan Bhoomi or the place of his demise in Delhi; and Chaitya Bhoomi, the place of his cremation, in Mumbai.

With a special AC train, the government is looking to trace the footsteps of Ambedkar in India by giving better connectivity to four of these spots.

The idea is to attract tourists beyond the Dalit community, who mostly visit these places as a pilgrimage. The journey will include meals, ground transportation, and entry to the sites.

Focus on tourism circuits

The government had identified 15 tourist circuits under the Swadesh Darshan scheme in 2014-15.

Besides the Ramayana and Buddhist Circuits, others include Coastal Circuit, Desert Circuit, Eco Circuit, Heritage, North East, Himalayan, Sufi, Krishna, Rural, Tribal, and Tirthankar Circuits. In terms of train collaboration, the Ramayana, Buddhist, and North East Circuits are already active, while Ambedkar will be fourth.

As far as circuit development is concerned, until March 2022, 76 projects had been sanctioned in these 15 circuits at an estimated cost of Rs 5,445 crore.



As per government officials, the creation of special circuits allows them to focus better on the comprehensive development of all sites related to the theme, including infrastructure, road and rail connectivity, and visitor facilities. However, from the tourist's point of view, not everyone visits all the sites related to a circuit in one go. It is to change this travel pattern that train collaborations have been devised, so that people come on board to make the entire journey in one go.

Officials in the Ministry of Tourism said that since every circuit involves more than one state, they look at data on the number of tourists visiting specific places on a circuit from time to time.

How train collaborations work

The Union Ministry of Tourism has reserved 3,000 special railway coaches with the Ministry of Railways for the promotion of these theme-based tourism circuits.

Earlier this year, a special 14-coach train was run on the Ramayana Circuit by IRCTC, with air conditioned three-tier

coaches for tourists, along with a pantry car, a restaurant car, and a separate coach for the train staff.

The all-inclusive tour came at a cost of Rs 62,000 per person, and took almost 500 people on board for 17 days. Before that, special trains were sent for the Buddhist Circuit, covering destinations associated with the life of Buddha, and also the Northeast Circuit.

Gradually, the Ministry is devising newer, sought-after routes for these trains. Ambedkar Circuit is one such circuit which has been considered by the government for one of these journeys.

Eyeing Ambedkar's legacy

Over the last eight years, the Narendra Modi government has hailed and celebrated Ambedkar in multiple ways in an attempt to stake claim to his legacy.

Last week, ahead of the Prime Minister's birthday, a book titled Ambedkar and Modi: Reformer's Ideas Performer's Implementation was launched, comparing Ambedkar's vision with Modi's policies.

At the event, Union Minister Anurag Thakur claimed that Ambedkar had been ignored by earlier governments, and that it had taken the BJP-supported V P Singh government to accord him the Bharat Ratna.

Besides announcing the Circuit, the Modi government has also unveiled a portrait of Ambedkar in Parliament's Central Hall, while also developing Deeksha Bhoomi as an international tourist centre.

COMING SOON: RELIEF FROM SPAM CALLS AND FRAUDULENT MESSAGES

In a move that could offer mobile phone users a big relief from spam calls and fraudulent messages, the government has proposed to make it mandatory that the identity of a person sending a message or calling should be visible to the receiver irrespective of the platform used for communication.



“All of you know that there has been a rise in cases where people get a call saying I am calling from XYZ bank seeking financial details leading to fraud... or you get threats from unknown numbers... so we have introduced a lot of points for user protection and to prevent cyberfraud...,” Telecom Minister Ashwini Vaishnaw said on Friday.

He said the focus of the proposed telecom Bill was to ensure protection of users. He said protection of users would not be limited to calls made via landline or normal voice calls, but all types of calls such as those made on WhatsApp, Zoom calls and FaceTime.

The draft Bill enables a legal framework for preventing harassment of users from unsolicited calls and messages and states that “the identity of a person sending a message using telecommunication services shall be available to the user receiving such message, in such form as may be prescribed”.

Speaking to reporters, the Minister stressed that the government envisaged a light touch regulatory environment that would not stifle innovation or increase regulatory burden.

The draft Bill, which was released earlier this week inviting comments from stakeholders, seeks to replace the existing legal framework comprising the Indian Telegraph Act, 1885, the Wireless Telegraphy Act, 1933 and the Telegraph Wires (Unlawful Possession) Act, 1950, that currently govern the telecommunication sector in the country.

New provisions

It includes provisions such as waiving dues for financially stressed operators, bringing over-the-top platforms (such as WhatsApp, Zoom, Netflix) within the ambit of telecom services that require a licence to operate and provisions for message interception in case of public emergency.

Replying to a query on licensing of OTT apps, the Minister said these were already included under regulation as an interpretation of ‘telegraph’ under the Indian Telegraph Act. “Already by interpretation of what is a telegraph – the service which you use today... is it telegraph? It is not... but... over a period of time all the services that you use are already interpreted under telegraph... We are in 2022...the construct that we take in 2022, we need to consider the reality of 2022...With interpretation there is confusion... law should be certain and clear. To bring that clarity this has been done.”

The Minister said this draft would go through a transparent consultation process and only then the final draft would be made on the basis of inputs received. The Minister said he expected the new telecom Bill to be converted into a law in the next six to 10 months.

IN ODISHA’S NAYAGARH, A DATA-DRIVEN SOLUTION TO CHILD MARRIAGE

With the aim of eradicating child marriage, Nayagarh, a tiny Odisha district, has adopted a unique initiative by scrupulously recording information on all adolescent girls in the district.

From birth registration date to Aadhaar number, from family details to skill training, information of 48,642 adolescent girls can be found in registers named Aliva.

Nayagarh, with a population of 9,62,789, has a skewed sex ratio at 855. Child marriages the district are still considered a part of their social life.



Observing that child marriages are solemnised in the age group of 14-19 and dropouts among girls' students continued to be high, the district administration launched the Aliva programme in January this year. Anganwadi workers had been asked to identify every adolescent girl in their jurisdiction and keep tabs on them. There are 1,584 registers available in 1,584 Anganwadi centres of the district.

The 100-page register maintains a record of the girl, along with the name of her father. From the third page onwards, each page contains data of the adolescent girl, including address, education status, birth registration date, Aadhaar Card Number, contact details and family details. The age of the girl is approved by the local school headmaster, father, supervisor and child marriage prohibition officer (CMPO). Towards the end of the register, information about child marriage, educational progress, skill training status and health issues of the adolescent girls is available. Nayagarh district has decided to maintain the record for a period of 10 years — 2020 to 2030. As per Odisha's child marriage prevention strategy, the State aims to eradicate child marriage by 2030.

The register has been useful for law enforcement agencies, as parents lie about the age of their girls. "When tipped off, district administration and the police refer to registers for ascertaining proof of girls' age," said Ipsita Agarwal, district coordinator of ActionAid, a non-government organisation, which works closely with district administration to prevent child marriages. Though different districts have come up with other innovative ideas, the Aliva registers are by far the most comprehensive ones that keep tabs on girls' lives. Ganjam district is maintaining register of every marriage to prevent child marriages.

ISRO SUCCESSFULLY TESTS HYBRID PROPULSION SYSTEM, TO AID FUTURE TECHNOLOGIES

The Indian Space Research Organisation (ISRO) said on Wednesday that it successfully demonstrated a hybrid propulsion system that used a solid fuel and liquid oxidiser. The hybrid motor was tested at the ISRO Propulsion Complex, Mahendragiri, on Tuesday evening. The hybrid system is more efficient, "greener" and safer to handle, and paves the way for new propulsion technologies for future missions, the Vikram Sarabhai Space Centre (VSSC), which tested it with support from the Liquid Propulsion Systems Centre (LPSC), said.

In the ground-based test, the flight equivalent 30 kN hybrid motor used HTPB-based (hydroxyl-terminated polybutadiene) aluminised solid fuel and liquid oxygen (LOX) as oxidiser. The test was performed for 15 seconds on a 300-mm sounding rocket motor. Conventional HTPB-based solid propellant motors used in rockets use ammonium perchlorate as oxidiser. In rocket engines, oxidisers supply the oxygen needed for combustion.

While both HTPB and LOX are green, the cryogenic LOX is safer to handle. And unlike conventional solid motors, the hybrid technology permits restarting and throttling capabilities on the motor. The use of liquids facilitates throttling and control over the flow rate of LOX.

HAS THE EMISSIONS DEADLINE BEEN EXTENDED?

The story so far: On September 5, the Ministry of Environment, Forests and Climate Change (MoEF&CC) extended the deadline for installing pollution control technologies in the country's thermal power plants (TPPs). This was the third time that the Ministry has extended the deadline for installation of pollution control technologies. The country's first emission norms for control of sulphur dioxide (SO₂), nitrogen oxides (NO_x) and mercury (Hg) from coal-fired power plants



were notified in December 2015, and the thermal plants were given a timeline of December 2017 to comply.

What does the notification say?

In the notification, the Ministry set up three different timelines for three categories of thermal power plants for ensuring installation of pollution-control technologies. The categorisation of power plants was done in April 2021 on the basis of an amendment to The Environment (Protection) Act, 1986.

For power plants within a 10 km radius of Delhi-NCR and million plus cities, the deadline has been extended to December 31, 2024 from the earlier deadline of December 2022. In case of power plants within a 10 km radius of critically polluted cities, the deadline has been extended to December 31, 2025 from the earlier December 31, 2023. For all other power plants across the country which had an earlier timeline of December 31, 2024, the new deadline stands at December 31, 2026. The notification also extends the timeline until 2027 for retiring units (power plants which are over 25 years old or more) and 2026 for non-retiring units.

This extension comes alongside two dilutions granted to thermal power plants for water and NOx norms. In June 2018, water norms for units installed post-January 2017 were diluted from 2.5 cubic metres per megawatt-hours to three cubic metres per megawatt-hours. Similarly, in May 2019, NOx norms for units installed between 2004 and 2016 were diluted from 300 milligrams per cubic metres to 450 milligrams per cubic metres.

What are the concerns?

Environmentalists have raised red flags over the deadline extensions and the dilutions. According to Anjal Prakash, Research Director and Adjunct Associate Professor with the Bharti Institute of Public Policy at the Indian School of Business (ISB) and Intergovernmental Panel on Climate Change (IPCC) author, the manner in which the extensions have been made since 2015 across parameters including sulphur dioxide, nitrogen oxides and mercury, act as a roadblock. "It could potentially dent India's emission targets. The deadlines needed to be met earlier as the further increase in SO₂ emissions will further dampen the current air pollution scenario, resulting in a double whammy with current climate catastrophes being witnessed across our cities at the moment," he added.

A thermal power plant converts heat energy into electric power by burning fossil fuels (coal) and pumps out a lot of gases which are by-products of the burning. Along with carbon dioxide, thermal power plants release SO₂ (sulphur dioxide) which is a major contributor to particulate matter in air pollution. The process of eliminating sulphur compounds from the exhaust emissions of fossil-fuelled (coal-fired) power plants is known as flue gas desulfurisation (FGD). This is accomplished by including absorbent materials, which can eliminate up to 95% of the sulphur from the flue gas by scrubbing.

Seven years since the first notification for thermal power plants to control the emission level of SO₂ within prescribed standards, the percentage of plants that have installed FGDs remains negligible.

How many plants have installed desulfurisation units?

Data from Central Electricity Authority (CEA) points out that till February 2021, of the total thermal power of 211.6 GW (giga watt) across 600 units installed in the country, only 8.2 GW



(across 20 units) have installed FGDs. Installation of FGDs is a time-consuming process and takes a minimum of 36-42 months for commissioning from the date of award. Data by CEA till February 2021 show bids for installation of FGDs have been awarded to power plants generating 85.7 GW (across 190 units). Environmentalists argue that going by the pace at which bids are being awarded for FGDs' installation, a majority of power plants are most likely to miss the new deadline too.

What are the challenges?

The Ministry of Power and Renewable Energy has often referred to constraints in the implementation of FGD technology at thermal power plants. In response to a question in the Lok Sabha in August 2022, the Ministry pointed out that alongside the minimum time period required for FGD commissioning of 36-42 months there is limited availability of vendors and that there is a price escalation factor too due to the limited supply of components. According to the Ministry, the COVID-19 pandemic had an impact on the supply chain and manpower availability. Two years ago, an association of power producers had written a letter to the Prime Minister's Office seeking more time for installation of FGDs and raised the issue of supply disruptions in China, pointing out that only 20-30% of emissions-reducing components are manufactured in India and the country is dependent on China.

In another reply in December 2021, the Ministry informed the House that the FGD system to control pollution was installed for 1,340 MW of coal-fired thermal power capacity of the National Thermal Power Corporation (NTPC). With 24 coal-based power stations, NTPC is the largest thermal power generating company in the country which has an installed capacity of 48,720 MW.

Despite the push for alternative sources of power, major production of electricity in India is achieved through coal-based thermal power plants which accounts for 75% of the country's total power generation. With severe levels of air pollution recorded in the past few years in the Delhi-NCR region and other cities, the cost of installing FGDs, say experts and environmentalists, should not come in the way of the benefits a clean-up will provide for air quality and health.

What lies ahead?

Going by Prime Minister Narendra Modi's commitment made at the 2021 UN Climate Change Conference, India proposes to achieve the goal of 500 GW of non-fossil fuel by the year 2030 and will achieve the net zero emission target by 2070. Environmentalists argue that if the MoEF&CC, which should have penalised power plants for not switching to pollution-control technologies, keeps extending the deadline, the transition to cleaner sources of power will take much longer. According to Ritwick Dutta, environmental lawyer and founder of Legal Initiative for Forest and Environment, India's National Clean Air Programme's target of reducing air pollution by 20-30% by 2024 will never be achieved if the government gives repeated leeway to violators. "With this extension, a clear message has gone from the Central Government to all power companies that they should not take environmental norms seriously," he contended.

DGCA RAISES CONCERN OVER 5G ROLLOUT, WRITES TO TELECOM DEPARTMENT

AS INDIA'S telecom operators prepare for rollout of 5G services, the country's aviation safety regulator has written to the telecom department flagging concerns over the likely interference of 5G C-Band spectrum with aircraft radio altimeters, The Indian Express has learnt.



A radio altimeter is an instrument that provides direct height-above-terrain information to various aircraft systems. The primary concern of the Directorate General of Civil Aviation (DGCA) emerges from the fact that these altimeters as well as a part of the 5G telecom services operate in the C-Band.

For telecom service providers, the C-Band presents a sweet spot for rolling out 5G services, ensuring coverage as well as high bandwidth, resulting in faster internet speeds. For aircraft operations, the use of altimeters in this band ensures highly precise measurements of the plane's altitude. "The DGCA is working in close coordination with the Department of Telecommunications (DoT) and has apprised it of its concerns over likely interference of 5G C-Band spectrum with aircraft radio altimeters," said a senior government official.

These red flags are based on concerns raised by the US Federal Aviation Administration (FAA) over the last one year since telecom operators in the US, such as AT&T, Verizon and T-Mobile etc, began rolling out 5G services. In the US, an agreement between the FAA and the telecom operators resulted in a delay in rollout of 5G services in the C-Band near airports that were assessed to be difficult for pilots to make visual approaches. "The radio altimeters pick up the faintest signals reflected off the ground in the assigned frequencies to achieve highly accurate results. This makes it possible for the instruments to pick up what are known as 'out-of-band' signals. These out-of-band signals could significantly impair functions of a radio altimeter," said another official.

A third official at the DoT, however, played down the impact. "We have auctioned C-Band spectrum in the frequency ranging from 3.3 GHz to 3.6 GHz (in India). Aircraft radio altimeters mainly use frequencies ranging from 4.2-4.4 GHz. So, there is a significant 500 MHz gap between the two frequency ranges. Having said that, the telecom department has taken note of the concerns flagged by DGCA, and we are working together," said the official.

The official said the issue in the US became significant because operators there are deploying 5G services in the 3.7-3.98 GHz frequencies, which is closer to the radio altimeter frequencies. The DGCA and DoT did not respond to e-mails sent by The Indian Express, seeking their comments.

Earlier this year, Air India had to cancel some of its flights to the US as airlines globally scrambled to reschedule flights amid concerns that the rollout of 5G mobile services in the US could potentially interfere with aircraft navigation systems. Even at the time, the DGCA had coordinated with Indian carriers on the issue.

Over the last year, the FAA has issued several directives to airlines to install certain filters or modify their equipment to ensure that 5G airwaves do not interfere with their navigation systems.

WHAT IS THE DRAFT TELECOM BILL, AND WHAT CHANGES IT AIMS TO BRING

In a bid to do away with British-era laws governing the telecom sector, the Department of Telecommunications (DoT) issued the draft Indian Telecommunication Bill, 2022. The proposed Bill aims to bring in sweeping changes to how the telecom sector is governed, primarily by giving the Centre more powers in several areas to do so.

Why has the government issued a draft Telecommunication Bill?

Through the Indian Telecommunication Bill, 2022, the Centre aims to consolidate and amend the existing laws governing the provision, development, expansion and operation of telecommunication services, telecom networks and infrastructure, in addition to assignment of



spectrum. The draft Bill, which was published by the DoT late on Wednesday night, consolidates three separate acts that govern the telecommunications sector — Indian Telegraph Act 1885, Indian Wireless Telegraphy Act 1933, and The Telegraph Wires, (Unlawful Protection) Act 1950.

What are some of the key amendments to existing telecom laws?

One of the key changes is inclusion of new-age over-the-top communication services like WhatsApp, Signal and Telegram in the definition of telecommunication services.

As per the draft law, providers of telecommunication services will be covered under the licensing regime, and will be subjected to similar rules as other telecom operators. This issue has been under contention for several years now with telecom service providers seeking a level-playing field with OTT apps over communication services such as voice calls, messages, etc. where operators had to incur high costs of licences and spectrum, while OTT players rode on their infrastructure to offer free services.

Are there other areas where the government has proposed to increase its powers?

The Centre is also looking to amend the Telecom Regulatory Authority of India Act (TRAI Act) to dilute the sectoral watchdog's function of being a recommendatory body. The current TRAI Act mandates the telecom department to seek the regulator's views before issuing a new licence to a service provider. The proposed Bill does away with this provision. It has also removed the provision that empowered TRAI to request the government to furnish information or documents necessary to make this recommendation. Additionally, the new Bill also proposes to remove the provision where if the DoT cannot accept TRAI's recommendations or needs modification, it had to refer back the recommendation for reconsideration by TRAI.

Does the proposed Telecom Bill also look to address issues being faced by the telecom industry?

The DoT has also proposed that if a telecom entity in possession of spectrum goes through bankruptcy or insolvency, the assigned spectrum will revert to the control of the Centre. So far, in insolvency proceedings, there has been a lack of clarity on whether the spectrum owned by a defaulting operator belongs to the Centre, or whether banks can take control of it.

The draft Bill also accords the Centre powers to defer, convert into equity, write off or grant relief to any licensee under extraordinary circumstances, including financial stress, consumer interest, and maintaining competition, among other things. It also proposes to replace the Universal Service Obligation Fund (USOF) with the Telecommunication Development Fund (TDF). USOF is the pool of funds generated by the 5 per cent Universal Service Levy that is charged upon all telecom fund operators on their Adjusted Gross Revenue. The USOF has largely been used to aid rural connectivity. However, with the TDF, the objective is also to boost connectivity in underserved urban areas, R&D, skill development, etc.

APPLE IPHONE 14 SERIES AND ESIMS: HOW DO THEY WORK, AND EVERYTHING ELSE ANSWERED

With the iPhone 14 series, Apple has made a big change to the devices being sold in the US. These come without a physical SIM slot and a user will have to rely on an eSIM in order to access mobile networks. eSIMs are not something new, they have been around for a while. Nor is Apple the first company to remove the physical SIM slot from its phones. Samsung Galaxy Z Fold, and Z Flip series do not have a physical SIM slot, including the units sold in India and require only an eSIM in order



to work. Apple has supported eSIMs for a while (since iPhone XS and above), though dual eSIM support started with the iPhone 12 series. Till now users in the US had the option of using a regular SIM and an eSIM, but now they will have to stick to an eSIM. But what does it mean for users, and is it a bad idea to get an iPhone 14 from the US where the prices are much lower? Well, Apple has answered some of the questions in a detailed FAQ page. Here's a quick look at what the company is saying.

Apple eSIM: How does it work?

Apple notes that an “eSIM is an industry-standard digital SIM supported by carriers”. It also goes on to add that eSIM will offer more benefits, especially when travelling abroad because if your iPhone is stolen. That's because the thieves cannot remove the SIM and access that, especially if your iPhone is locked. Apple also notes on another page, that for models bought in the US, the iPhone activates with an eSIM.

Apple eSIM: How many can you store on iPhone 14 series?

Apple says customers can store eight or more eSIMs on an iPhone 14 series. But a user can have two eSIMs active on supported iPhone models at the same time. So you can store multiple eSIMs but only use two of these at any given time.

Users will be able to swap between active eSIMs by changing selections in Settings. This will be useful when travelling abroad.

Apple eSIM: What about activating eSIMs when travelling abroad?

This is where the convenience of a physical SIM might be missed. For those travelling abroad, figuring out how to obtain a local eSIM could be a problem. While the existing carrier will likely have international roaming, it will come with extra fees and sometimes the plans might be too expensive. In such cases, a physical SIM appears to have some advantages.

But Apple says that users can purchase an eSIM from a local carrier in the country or region where they are travelling and set it up as well. It adds that some “carriers offer prepaid options that you can purchase from the carriers' websites or apps before you arrive, or in person after you've arrived, through a carrier kiosk at the airport, carrier store or other locations.”

The steps to activate the new eSIM will likely be the same, such as scanning the QR code provided by the carrier or using the carrier's app. But yes, if you have an iPhone 14 brought from the US, you will need to get a local eSIM when travelling abroad.

Apple also says users can activate two eSIMs at the same time, including the one bought in their country and the other bought abroad. Further, users can ensure that when travelling abroad, one eSIM is limited to a data-only mode. This could be useful if you don't want to use your home SIM for data browsing since the charges could be higher.

Users can also turn data roaming on and off on their home eSIM in Settings > Cellular > Cellular Data Options.

Apple eSIM: You bought the iPhone 14 in the US, but plan to use it in India. Will this eSIM be an issue?



If you purchased an unlocked iPhone 14 model in the United States, it will work fine in India. But you will need to put a request for an eSIM at the time of setting up the iPhone and make sure you have the QR code ready to scan. Remember the iPhone 14 series from the US requires an eSIM for activation.

In India, Jio, Airtel and Vi all support eSIM so you are covered. You will need to send a message to the carrier asking them to activate eSIM and they usually send a code which has to be scanned via the new device on which you intend to use the eSIM. Once done, the eSIM should work.

A CENTURY LATER, NIZAM'S SWORD SET TO RETURN TO INDIA

While the objects were described as stolen, the acquisition document for the sword says it was purchased from Maharaja Kishen Pershad.

Bought in 1905

Jonathon Reilly, communications officer of Glasgow Life, said: "The tulwar (sword) was purchased in 1905 by General Sir Archibald Hunter, Commander-in-Chief, Bombay Command (1903-1907), from Maharaja Sir Kishen Pershad Bahadur Yamin us-Sultanat, the Prime Minister of Hyderabad. The tulwar was donated by Sir Hunter's nephew, Mr. Archibald Hunter Service, to Glasgow Life museums' collections in 1978."

The sword, shaped like a snake, has serrated edges and a damascene pattern, with gold etchings of an elephant and tigers.

According to the museum documentation, the sword was "exhibited by Mahbub Ali Khan, Asaf Jah VI, Nizam of Hyderabad (1896-1911) at the 1903 Delhi or Imperial Durbar, a ceremonial reception held to commemorate the coronation of King Edward VII and Queen Alexandra as Emperor and Empress of India".

"The Salar Jung Museum in Hyderabad is the perfect repository for the sword as it is from this region. However, we are yet to get intimation about the repatriated object," says SJM director A. Nagender Reddy. The SJM has a gallery dedicated to arms and armoury that has swords, knives, and battle axes belonging to the Mughals, Nizams and other rulers of India.

How this ceremonial sword exhibited by Nizam Osman Ali Khan was later sold by his prime minister Maharaja Kishen Pershad remains a mystery. "The affection Mahbub Ali Khan had for Maharaja Kishen Pershad is well known. The Maharaja was wealthy. He might have gifted the sword to the British officer," says historian Sajjad Shahid.

Kishen Pershad hailed from the family of Maharaja Chandoo Lal, who was the prime minister for Nizam Sikander Jah twice. Kishen Pershad was known for his munificence where he was known to throw out coins to people chasing his motorcar.

CHEETAH'S COMEBACK TO INDIA HAS LED TO IMPORTANT DEBATES; POLICYMAKERS MUST USE THIS TO REFLECT ON LONGSTANDING ISSUES

Cheetahs are back in India for the first time in more than 70 years. They are, however, not the Asiatic variety that once roamed large parts of the country — the species was declared extinct in India in 1952, a victim of unchecked hunting and habitat loss. Less than 100 of these animals survive in Iran today. On Saturday, Prime Minister Narendra Modi released eight cubs of the



African species at the Kuno sanctuary in Madhya Pradesh. The animals were flown in from Namibia, which today has the highest cheetah population. The translocation has triggered a debate amongst conservation scientists with a section amongst them arguing that the 750 sq-km national park could limit the movement of the animals that prefer a much larger range. But others do not take such a pessimistic view and point to the cheetah's adaptability across a range of habitats. PM Modi referred to the African big cats as the country's guests. It's up to the wildlife authorities to help these cheetahs make Kuno their home.

One of the spinoffs of this debate is the spotlight wildlife-related issues have received in the past few days. The introduction of the new species has led to conversations on human-animal conflict — a problem that doesn't always get the attention it requires. Some of the successes of India's wildlife protection programme have come at a cost. In several parts of the country today, humans and protected species live in proximity. Crop depredations and attacks on livestock — even humans — have become common. Only recently have studies begun to be undertaken on the carrying capacity of national parks and sanctuaries. They are yet to be used in a meaningful manner to restore a semblance of harmony between wildlife and people living in the vicinity of the protected areas (PAs). The problem gets compounded because developmental projects such as highways fragment the PAs, increasing the precarity of the animals who find it difficult to respect the new boundaries. A growing number of protected animals live in shrinking habitats with a dwindling prey base. This ecological imbalance requires redressal.

Kuno was originally earmarked for relocating lions from the Gir forests. But even as the Gujarat PA faces constant pressure on its carrying capacity, the state has obstinately refused to relinquish its status as the Asiatic lion's sole habitat. Experts also say that confining the animal to one PA increases its vulnerability to epidemics. Wildlife protection must not be hostage to unscientific attitudes. The introduction of the cheetah is a moment that must be seized upon by policymakers to evolve solutions to such longstanding issues.

TAMIL NADU FOREST OFFICIALS LEARN THE 'LANGUAGE OF ELEPHANTS', THANKS TO CALF RESCUE MISSIONS

Also, these efforts were helping them to better understand elephant behaviour and their complex social structures. In October 2021, a young calf that got stuck inside an illegal gold mine in Devala was rescued by the staff, who walked with the animal to find the herd from which it got separated. This year, a calf that got separated from its mother when the Sigurhalla river was in spate due to heavy rain was reunited after a mammoth, three-day effort by the Forest Department, while earlier this week, another calf was reunited with its mother in the Gudalur division.

"There are multiple factors which dictate whether an operation to reunite a calf with its mother turns out to be a success," said N. Kalaivanan, former wildlife veterinarian and currently a veterinary assistant surgeon in Theni. "If a calf is separated from its mother accidentally, be it due to a flood, or while escaping from a predator, then there is a higher chance of the animal being reunited with its herd. However, if the mother abandons the elephant due to it being weak, or due to other factors, then it obviously becomes almost impossible to reunite it with its herd," said Dr. Kalaivanan.

The seasoned veterinarian, who has assisted the department in many such operations, including the most recent one at the Mudumalai Reserve, said adult elephants can communicate over large distances using chemical signals from dung and urine left behind by members of the group, and by using infrasonic communication.



Infrasonic method

“Adult elephants can communicate for anywhere between four and five kilometres using infrasonic sound waves. However, as the sensory organs of calves are much less developed, the mother elephant comes to rely on visual and auditory cues to try and find its lost calf, so they need to be quite close if there is to be any chance of success,” he said.

SOUTHWEST MONSOON BEGINS EARLY WITHDRAWAL IN RAJASTHAN

The southwest monsoon rainfall, 7% more than normal, has started to withdraw. The India Meteorological Department (IMD) said on Tuesday that the system had begun retreating from parts of southwest Rajasthan and Kutch.

The “normal” or average date of withdrawal from southwest Rajasthan was September 17. The withdrawal of the monsoon was based on meteorological conditions such as an anti-cyclonic circulation (dry air that is the opposite of a cyclone), the absence of rain in the past five days and the water vapour imagery indicating dry weather conditions over the region.

The monsoon withdrawal is a long-drawn process and extends into mid-October, though the IMD considers September 30 to be the final day of the season over India. The rain after that is categorised as “post-monsoon” rainfall.

The September rainfall so far has been 11% more than usual, following a trend in recent years that is seeing excess rainfall in a month that marks the waning of the monsoon. Most of the rain, however, has been in the southern peninsula and central India, which have seen 29% and 33% more rain than what is usual for these regions in September.

India has so far recorded 7% more rain than what is normal for the period from June 1 to September 20. The surplus is due to excess rain in central and southern India. The northwest, eastern and northeastern parts of the country have registered a deficit of 4-17% of their normal rainfall.

HOW CLIMATE CHANGE IS ALTERING INDIAN MONSOON

Monsoon in India has undergone several changes over the years, especially on account of climate change. A shift in the track of monsoon systems, like low pressure and depression travelling south of their position and flash floods are a result of this change. And these changes spell intense and frequent extreme unprecedented weather events over the places which once struggled to record even normal monsoon rains. With this looming threat having a bearing on food security, it is only a matter of time before it has socio-economic impact.

“It has been very complex to understand the rainfall variability and how monsoon patterns have been behaving of late, especially this year. The problem is that it is very challenging for us to understand the situation, which calls for a lot more research. Persistence of intense La Nina conditions, the abnormal warming of East Indian Ocean, negative Indian Ocean Dipole (IOD), southward movement of most of the monsoon depressions and lows and pre-monsoon heating over the Himalayan region are melting glaciers. This is a very complex mix,” said Dr. R. Krishnan, Executive Director, Centre for Climate Change Research, Indian Institute of Tropical Meteorology (IITM).



The Indian Meteorological Department (IMD) has clearly sighted that 2022 has seen the second highest extreme events since 1902. An alarming case as incidents of floods and droughts have increased, there is more evidence coming our way on how global warming has been impacting the Indian monsoon.

“There is no doubt about the fact that most of the monsoon weather systems have been travelling across central parts of the country, changing the area of rainfall. Climate change is definitely behind these changes and thus, it calls for more research on the changes in the behavioural pattern of these systems,” said G.P. Sharma, President, Meteorology and Climate Change, Skymet Weather.

Excess and deficit

As a result, States such as Madhya Pradesh, Gujarat, Rajasthan and parts of Maharashtra have been recording excess rainfall this season. Usually, monsoon systems move across Northwest India giving rains over the region there. Experts believe that these changes are here to stay, which would continue to propel extreme weather events over the entire South Asian region.

During the last six months, entire South Asia has been reporting a series of extreme weather events. While Bangladesh, Pakistan and India have battled severe floods, China is reeling under massive drought conditions. “Slow onsets can still be taken care of through adaptation and resilience ideas but these kinds of big events are very difficult to cope with. That is where the main issue lies as the country would then have to divert development money to climate finance to combat climate change.” said Dr. Anjal Prakash, Research Director, Bharti Institute of Public Policy, Indian School of Business and IPCC lead author.

After a weak onset, monsoon went into a lull and so no thumping activity was seen in Kerala and adjoining parts of Karnataka. By June, monsoon had reached the plains but the onset was not a strong one. This resulted in West Bengal, Jharkhand and Bihar not receiving normal rains. Back-to-back active monsoon systems in the Bay of Bengal in July led to excess rainfall to the tune of 8% — actual rainfall recorded was 472.8 mm as against the normal of 437.2 mm.

“August too saw two back-to-back depressions forming in the Bay of Bengal and travelling across Central India. These intense systems in quick succession kept the monsoon trough well south of its normal position for most of August,” explains Mahesh Palawat, Vice President, Meteorology and Climate Change, Skymet Weather.

Rice production

“Monsoon each year is unique, but we did see a large regional and temporal variability in rainfall this year. Our research shows that global warming increases the fluctuations in the monsoon, resulting in both long dry periods and short spells of heavy rains. This year, the monsoon was potentially influenced by La Nina also — the cooler than usual Pacific conditions,” said Dr. Roxy Mathew Koll, Climate Scientist, Indian Institute of Tropical Meteorology.

One of the major impacts of changes in track of monsoon systems can be seen on kharif crops, particularly rice production. They form a significant share of more than 50% of total food grain production during this period.

“Arrival of monsoon and whether onset would be strong or weak will always continue to dodge us. Due to southward movement of majors, all main monsoon low pressure areas and depressions, rice producing States such as West Bengal, Bihar, Jharkhand and east Uttar Pradesh have been



deficit by large margins. This would straight away have an impact on the quantity as well as the quality of the crop,” said Mr. Palawat.

Bihar, West Bengal and Uttar Pradesh, which account for a third of the country’s total rice production, have been highly deficit despite an active monsoon current in July and August.

These uneven distribution rains along with increasing temperatures and humidity give rise to pest attacks and diseases. This will, in turn, impact the quality of the grain as well as the nutrition value may vary. According to a study, ‘Climate change, the monsoon, and rice yield in India’, very high temperatures (> 35°C) induce heat stress and affect plant physiological processes, leading to spikelet sterility, non-viable pollen and reduced grain quality. Drought, on the other hand, reduces plant transpiration rates and may result in leaf rolling and drying, reduction in leaf expansion rates and plant biomass, immobilisation of solutes and increased heat stress of leaves.

Recent research indicates that monsoon rainfall became less frequent but more intense in India during the latter half of the 20th century. Scientists and food experts believe that a better rainfall scenario could have helped increase the harvest. However, India’s hundreds of millions of rice producers and consumers are being affected negatively with these unprecedented changes which are also raising concerns over food security.

MANAGING SPORTS

When sports administrators make news, it is often not for the right reasons. These past few months, India’s sports administrators have been in the news far too frequently. Rarely does a day end before one of them is pulled up by the court, another is forced to resign or yet another stakes claim to a post. In the latest instance, the sports official to hit the headlines has been Anil Khanna, who resigned on Wednesday as the acting-president of the Indian Olympic Association (IOA). He had assumed charge after Narinder Batra was forced to quit in July. The International Olympic Committee (IOC) has made it clear that it would not recognise any acting/interim president of the IOA. The IOC is not pleased that the long-pending elections to the IOA have not been held and has even threatened India with serious consequences. The IOC could ban India if the elections are not held by December. Then, Indian athletes would not be able to represent the country in events, including the Olympic Games, and India would not be able to receive funds from the IOC. Only a month ago, the Gokulam Kerala football team found out what happens when such a ban is enforced. The players had to return from Uzbekistan, where they had gone to take part in the AFC Women’s Club Championship. That was because the world football governing body FIFA had banned the All India Football Federation (AIFF).

The ban has since been lifted and the AIFF has conducted its elections. But there are other sports, such as hockey and table tennis, that continue to be run by the court-appointed committees of administrators. The main reason behind the messy state of affairs in India’s sports administration at the moment is the reluctance of the officials, across sports bodies, to accept the National Sports Development Code of India, introduced by the central government in 2011. Its intention was noble. By putting a limit to the tenure and age of an administrator, it had the potential to stop sports federations from remaining as the personal fiefdoms of a few, many of them politicians. At a time when Indian sport is showing more promise than it ever did before — the Tokyo Olympics, the Birmingham Commonwealth Games, the Thomas Cup and the Chess Olympiad have shown that the country has more to offer than just cricket — the administration needs to get its act together. The incumbents should gracefully make way for new administrators with fresh ideas and also allow more former international sportspersons in key administrative posts.



BUSINESS & ECONOMICS

CURRENCY PRESSURE

The rupee is yet again facing renewed pressure, along with major peers, as the dollar continues to strengthen in the wake of the Federal Reserve's latest jumbo 75 basis points interest rate increase and the U.S. central bank's unequivocal message that it remains squarely focused on taming inflation. The Indian currency weakened past the 81-mark against the dollar for the first time ever in Friday's intraday trade, before ending the week at a new record closing low. The rupee's slide was softened by the Reserve Bank of India's intervention to smoothen volatility; the cumulative impact of such interventions over the 12 months through September 16 have shrunk the RBI's war chest of foreign exchange reserves by almost \$94 billion to \$545.65 billion. The fact that the rupee is not alone in depreciating against the dollar can be of little comfort to Indian companies reliant on imports of raw materials or services for the smooth functioning of their businesses. They are struggling to contend with rising costs at a time when domestic demand is still to regain a durable post-pandemic footing. The higher import bill is also bound to add inflationary pressures to an economy already beset by persistently elevated inflation and further complicates monetary policymakers' efforts to rein in the price gains.

The rupee's more than 8% depreciation against the dollar so far in 2022, with almost all of the weakening having occurred in the wake of Russia's invasion of Ukraine on February 24, has also largely offset whatever gains that may accrue from the fact that the price of the Indian basket of crude oil has now retreated substantially and is close to its pre-war levels. Overseas portfolio investors too have once again turned net sellers of Indian stocks and debt in the last two sessions after having resumed their purchases of local assets in August and for most of this month. As a result, so far in 2022, FPIs have in total dumped \$20.6 billion of Indian equity and debt following three straight years of net investments. And the Fed's projection of further steep monetary tightening, of at least another 125 basis points, is only likely to lead to more outflows over the last quarter of this year. With the rupee's real effective exchange rate (REER), or trade-weighted average of its value, also signalling that the Indian currency is still overvalued, the RBI's rate setting panel will have a fine tightrope to walk next week as it battles to restore a semblance of price stability without choking growth and by ensuring the rupee does not weaken too sharply.

BE IT FOREX OR FOOD, HAVING A WAR CHEST HELPS IN DIFFICULT TIMES

In 2013, between May 1 and August 28, the rupee plunged from 53.67 to 68.81 to the US dollar — a 22% depreciation in four months. During this period, the country's foreign exchange reserves fell from \$294.31 billion to \$275.49 billion, even as the Reserve Bank of India (RBI) hiked its benchmark lending rate by 300 basis points, from 7.25% to 10.25%.

Cut to the last one year. Since October 29, 2021, the rupee has depreciated hardly 6% (from 74.94 to 79.69 to the dollar), and the RBI's repo rate has gone up only 140 basis points (4% to 5.4%). However, this has come with a larger forex reserve depletion — from a peak of \$642.02 billion to \$550.87 billion as on September 9 this year.

What happened then...

2013 was a crisis year and so is 2022. But the current crisis is worse than nine years ago.



During 2013, the United States Federal Reserve kept its funds rate unchanged at 0-0.25%. The European Central Bank (ECB) even slashed its main refinancing rate from 0.75% to 0.25% between May and November of that year. Consumer price inflation in 2013 averaged 1.47% in the US and 1.35% in Europe.

The 2013 crisis was largely triggered by the US Fed proposing a phased reduction (“taper”) in its purchases of bonds and other assets amounting to \$85 billion a month. While the plan was revealed by then Fed chairman Ben Bernanke on May 22, 2013, actual tapering did not start until the end of that year.

Yet, that announcement — which was only about a gradual unwinding of monetary stimulus (read the printing of dollars) as opposed to tightening — had a huge impact on India, basically due to the large current account deficits (CAD) in its external balance of payments. These touched record levels of \$78.16 billion in 2011-12 and \$88.16 billion in 2012-13 (April-March). As the “taper tantrum” led to capital flows drying up — and with forex reserves already dwindling from the previous high of \$320.79 billion attained on September 2, 2011 — it created doubts over the country’s ability to finance its massive CADs.

The result: a run on the rupee. The RBI was forced to defend the currency against speculative attacks by selling dollars from its reserves, as well as by jacking up interest rates.

What is happening now

In 2013, the big central banks were only phasing out monetary stimulus or slowing the rate of injecting liquidity into their economies. Today, they are tightening by reducing money supply and raising interest rates.

since mid-March, the US Fed has increased its funds rate from 0-0.25% to 2.25-2.5%, and is expected to take this further up to a 3-3.25% target range on September 20-21. The ECB has also hiked its key refinancing rate from 0 to 1.25%. They are unlikely to stop — for the simple reason that annual retail inflation is now ruling at 8.3% in the US and 10.1% in the European Union. These are price increases that people in those countries last saw in the early 1980s. The commitment of their central banks to target inflation at 2% would entail real monetary tightening and high interest rates for a sustained time — unlike in 2013.

That has obvious implications for capital inflows into India. Rising interest rates in the US and Europe are, if anything, sucking away capital from emerging markets. This isn’t helped by India’s CAD, which is projected to top \$120 billion in 2022-23, surpassing even the levels of 2011-12 and 2012-13. The situation is thus worse on both counts — external capital flows and CAD.

India’s war chest

But despite the far more hostile external environment, the rupee hasn’t been in free fall, and the RBI has not had to resort to exceptional monetary measures like it did during the taper tantrum period. It may still raise rates, but more to control inflation than depreciation. In other words, to defend the rupee’s “internal” rather than “external” value.

The primary reason why things have been different is that India entered this crisis with a much bigger war chest than it had in 2013. The forex reserves of \$642.02 billion on October 29 last year was sufficient ammunition to deter any speculator from taking short positions on the rupee — selling expecting it to fall against another currency and booking profits by repurchasing later at a



lower exchange rate — including through “non-deliverable forward contracts” in offshore markets such as Singapore and Hong Kong.

Accumulating large forex stockpiles is a strategy many countries have employed, especially after the lessons learnt from the 1992 “shorting” of the pound by the currency speculator George Soros, the 1997-98 Asian financial crisis, and the 2013 taper tantrum.

It is true that India’s forex reserves have suffered a drawdown of over \$91 billion from its peak of less than 11 months ago. But reserves are meant for use in a crisis, like arms and ammunition in war. And it makes a difference when one starts with a nearly \$650-billion stockpile than with under \$300 billion.

The other ‘F’: food

A parallel can be drawn here with food, where stocks of rice and wheat in government godowns scaled an all-time-high of 109.47 million tonnes (mt) on July 1, 2021. They have since dropped to 60.11 mt on September 1, while at a five-year-low on a like-period comparison (see table).

In this case too, the Food Corporation of India’s grain mountain came useful precisely during a crisis. The public distribution system (PDS) not only delivered, but turned out to be the only effective social safety net in the wake of the Covid-induced economic disruptions. The value of that surplus grain is also being realised now, when stocks are at barely comfortable levels; one more bad harvest could well do to cereal prices what the taper tantrum did to the rupee.

That said, there are costs involved in accumulating reserves of both food and foreign exchange. In food, it is essentially the cost of holding and maintaining stocks above the operational requirement for the PDS. This buffer “carrying cost” was estimated at Rs 5.6 per kg for 2021-22. Given that the FCI’s average stocks during the year were about 60 mt more than necessary, it would have translated into roughly Rs 33,600 crore.

It’s more complicated in forex reserves, where the RBI’s purchase of excess dollars leads to a corresponding issuance of domestic currency. The need to mop up (“sterilise”) this rupee liquidity (in order to prevent inflation) then, results in its selling government bonds. If the interest payable on these exceeds what the RBI earns from deploying its forex assets in overseas securities and banks, there is a fiscal cost to reserve build-up.

But the cost of holding forex and food reserves is similar to spending on defence and having a standing army. Their utility is proved only in economic crises or when war breaks out. Whether, and how much, governments would bear these costs is both a fiscal and strategic calculation.

The unresolved ‘F’

India’s economic growth has traditionally been hobbled by the three ‘Fs’: forex, food and fuel. The first two were the bugbears in the 1960s, the third in the 1970s, and the first and third in the run-up to the 1991 payments crisis. Stockpiling has helped mitigate problems from the first two, but there’s no solution yet to the vulnerabilities from oil, gas, and coal.

SHRINKFLATION

Shrink inflation is when a product downsizes its quantity while keeping the price the same. For example, reducing the scoops of ice cream in a container or reducing the number of chips in a packet would count as shrinkflation. In other words, shrinkflation occurs when goods shrink in

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



size but consumers pay the same price. It occurs when manufacturers downsize products to offset higher production costs but keep retail prices same.

The effect of inflation

The effects of inflation on consumers' daily lives are numerous. Rent, food, gas, and other living expenses are some of the ways inflation negatively impacts consumers. Shrinkflation deceives consumers into believing that the brands they buy are not affected by inflation, since container and vessel sizes are reduced by very small amounts, saving manufacturers more money in the long run. From toilet paper to yogurt and coffee to corn chips, manufacturers worldwide are quietly shrinking package sizes without lowering prices.

Shrinkflation occurs when materials or ingredients used to make products become more expensive and when there is intense competition in the market. As a result, instead of raising prices, they might just give you less of the product so as to maintain their profit margins. Companies think that they can keep profits rolling in by keeping the change under the radar — all while the consumer is unaware.

Shrinkflation can occur in different ways. It's not just the weight that will be compromised as it is not uncommon for companies to look for alternative options. If consumers are aware that the quantity is constantly declining, they would switch or change brands. To prevent this, a product can reformulate or remove ingredients while maintaining its price. For example, Cadbury Dairy Milk stopped using foil which it used to prevent chocolate from losing its quality and flavour in order to save expense. Though downsizing products reduces costs for manufacturers, it is an unfair practice toward consumers. It can lead to a loss of trust if companies fail to properly communicate with them. Shrinkflation can lead to customer frustration and deterioration of consumer sentiment towards a producer's brand. However, it is quite common nowadays for producers to practise shrinkflation.

Various implications

In the event of shrinkflation, it is more difficult to accurately measure price changes or inflation. Price points become misleading when the basket of goods cannot always be measured by considering the product size. Tackling shrinkflation means tackling inflation. In India especially, inflation is a complex phenomenon caused by several factors, such as demand-pull factors, cost-push factors, and structural factors. Therefore, we need a mix of macroeconomic policies to manage demand and supply, as well as address structural rigidities in the economy. In India, the Right to Information has been recognised as a consumer right under the Consumer Protection Act, 2019. This means that the consumer has the right to know the quality, quantity, potency, purity, standard, and price of goods. Therefore, the Central Consumer Protection Authority needs to bring some guidelines to inform consumers when the weight of a product is reduced, instead of letting consumers be fooled by companies.

TRADE TACTICS

The Government will release a new foreign trade policy in the coming week, that could include measures to help push up goods and services exports as well as rein in the runaway import bill. The current trade policy was introduced in 2015. When its five-year term ended a week after the national lockdown to curb the pandemic, it was extended for a year considering the extenuating circumstances. However, the old policy's extensions beyond March 2021, especially the current



six-month stretch that drags its end-date to September 30, are not as understandable. Beginning the new policy in the middle of a financial year, unlike the traditional clean slate in a new fiscal year, is not ideal. Moreover, exports have been one of the few growth engines firing up the post-COVID recovery, so putting off a policy to bolster outbound shipments was baffling. Enunciating India's strategy to cash in on a world seeking to become less dependent on China would also enable exporters (and importers) to plan their investments ahead. Last January, a WTO-compliant export incentive scheme was kicked off to refund domestic taxes to exporters, but the rates were only notified months later with a few sectors left out. Despite this completely avoidable uncertainty, goods exports touched a record \$422 billion in 2021-22.

This year, the Government expects goods exports to hit at least \$450 billion, but growth has slipped to the low single digits over July and August, while imports have been over \$60 billion each month since March. A global growth slowdown and recession fears in Europe and the U.S. do not augur well; and though order books are still full, many buyers are seeking to defer deliveries. The new policy will have to find ways to provide a leg-up to exports and address some of industry's key concerns, including a buffer against rising interest rates. With revenues buoyant, it is also time to reconsider the stance to exclude key growth sectors such as pharma, chemicals, and iron and steel from the duty remission scheme. Having decided to keep away from the trade track of the Indo-Pacific Economic Framework for now, assertions that the Government has 'no bandwidth' left for new free trade pact negotiations though more countries are wooing it, and is seeking to slow talks with the Gulf Cooperation Council, are unnecessary. If there is a genuine constraint, a solution must be sought, perhaps, by roping in economic policy makers with residual bandwidth. But surely, there are better ways to drive home India's rising clout than by driving away potential partner countries, however small.

WHAT BANKING SYSTEM LIQUIDITY GOING INTO 'DEFICIT MODE' MEANS

For the first time since May 2019, the banking system liquidity situation turned into a deficit mode of Rs 21,873.4 crore on September 20, 2022. By comparison, the liquidity surplus was to the tune of Rs 8 lakh crore in November 2021 as the Reserve Bank of India (RBI) was providing liquidity support to the economy, which was dealing with the after-effects of the Covid pandemic.

On September 20, 2021, the liquidity surplus was Rs 6.7 lakh crore. Multiple factors are at play here: an uptick in the bank credit, advance tax payments by corporates, and also incremental deposit growth not keeping pace with credit demand.

What is banking system liquidity?

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 can be said to be in deficit and if the banking system is a net lender to the RBI, the system liquidity can be 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.

What has triggered this deficit?

Economists say that there are various factors over the last few months that have led to the current situation. If an improvement in demand for credit has led to the same, the recent advance tax outflow, which is a quarterly phenomenon, has further aggravated the situation.



Besides, there is the continuous intervention of the RBI to stem the fall in the rupee against the US dollar.

“The deficit in the liquidity situation has been caused by an uptick in the bank credit, advance tax payments by corporates, intervention of the RBI into the forex market, and also incremental deposit growth not keeping pace with credit demand,” said D K Pant, chief economist, India Ratings.

According to the latest RBI data, the outstanding bank credit stood at Rs 124.58 lakh crore as on August 26, 2022 and has increased by 4.77% (Rs 5.7 lakh crore) from Rs 118.9 lakh crore as on March 25, 2022. However, deposit growth was just 3.21% (Rs 5.3 lakh crore) at Rs 169.94 lakh crore as on August 26, 2022, from Rs 164.65 lakh crore as on March 25, 2022.

How can a tight liquidity condition impact consumers?

A tight liquidity condition could lead to a rise in the government securities yields and subsequently lead to a rise in interest rates for consumers too. The 10-year government bond yield increased to 7.23% on September 21, 2022, from 7.18% on August 20, 2022. Bank of Baroda’s economist Dipanwita Mazumdar said the short-term rates would increase at a faster pace as the direct reflection of tighter liquidity and RBI’s rate hike would be on these papers.

“We expect another 50 basis points (bps) rate hike by the RBI in the current cycle with terminal repo of around 5.9-6%,” she said.

A rise in the repo rate will lead to a higher cost of funds. Banks will increase their repo-linked lending rates and the marginal cost of funds-based lending rate (MCLR), to which all loans are linked to. This rise will result in higher interest rates for consumers.

What can RBI do to deal with this situation?

Experts feel that RBI’s actions will depend upon the nature of the liquidity situation. If the current liquidity deficit situation is temporary and is largely on account of advance tax flow, the RBI may not have to act, as the funds should eventually come back into the system. However, if it is long-term in nature then the RBI may have to take measures to improve the liquidity situation in the system.

NEW ACCOUNT SETTLEMENT SYSTEM FROM OCTOBER 1: WHAT CHANGES

Beginning October 1, the new account settlement system for the stock broking industry will kick in. Under the new guidelines issued by the Securities and Exchange Board of India (SEBI) in July and effective from October 1, the trading members will have to settle the accounts on a monthly or quarterly basis on the first Friday of the month or quarter.

What is settlement of accounts?

The market regulator mandates stockbrokers to settle i.e., transfer the available credit balance from trading account to bank account, at least once in a quarter (90 days) or 30 days. The process of transferring the unutilised funds back into the bank account is called ‘Running Account Settlement’ or ‘Quarterly Settlement of Funds’ and the funds are transferred back to the primary bank account of the customer that is linked to the trading account.



As per the latest guidelines, the settlement will now be done on the first Friday of the quarter or the month depending upon the option selected by the customer.

What are SEBI's new settlement guidelines?

On July 27, market regulator SEBI issued new guidelines on running accounts of client funds and securities lying with the broker. As per the new guidelines, with effect from October 1, 2022, the settlement of running account of clients' funds will be done by the trading members after considering the end of the day (EOD) obligation of funds as on the date of settlement across all the exchanges on the first Friday of the quarter (i.e., Apr-Jun, Jul-Sep, Oct-Dec, Jan-Mar) for all the clients. It further said that if the first Friday of the quarter is a trading holiday, then "such settlement shall happen on the previous trading day".

In cases where the client has opted for a monthly settlement process, then the running account shall be settled on the first Friday of every month.

Why are market participants concerned?

October 7 will be the first Friday when the new system will become operational. As it will be the first Friday for the industry, brokers are anxious as they feel that bunching of all settlements on one day (as against individual settlement dates for different clients in 30 or 90 days) may create challenges for the industry as a whole.

"Brokers will have to organise cash which could otherwise be in their working capital. It will also lead to a decline in volumes in the following trading session as clients will have to transfer funds from their bank accounts to their trading accounts in order to trade," said the head of a leading financial services firm.

How will it impact investors and traders?

Changes in settlement brought in by SEBI over the last few years have had the aim of protecting the investor and preventing the misuse as money lying in trading accounts of investors for long periods.

SEBI's move will give certainty to investors and trading members.

Industry experts say that it will help brokers develop a system just like banks, which credit interest in the accounts of their customers at the end of the quarter.

Another advantage would be that if a customer has more than one demat account with different brokers, having one settlement date for the entire industry will make it easier for her to keep track of her funds in all accounts as they would all get settled on the same day.

THE BAN ON THE EXPORT OF BROKEN RICE

The story so far: On September 9, the Centre instituted a ban on the export of broken rice. Additionally, it mandated an export duty of 20% on rice in husk (paddy or rough), husked (brown rice) and semi-milled or wholly-milled rice. The measures do not affect export of basmati or parboiled rice. The Secretary at the Department of Food and Public Distribution Sudhanshu Pandey stated that the measures would ensure adequate availability of broken rice for consumption by the domestic poultry industry and for other animal feedstock. Additionally, it would sustain production of ethanol that would further assist the successful implementation of



the Union government's Ethanol Blending Programme (EBP). However, the measures may affect countries dependent on Indian food exports in the face of a lost 'breadbasket' in Ukraine owing to the Russian conflict.

What does it have to do with inflation?

The lower the supply of a commodity, the higher would be the price of a product, which results in inflationary pressures. The adequacy of rice stocks in the country would ensure that markets do not experience excess demand and thus, trigger an abrupt price rise. For seven consecutive months, inflation has been above the Reserve Bank of India's 6% tolerability threshold. The Consumer Price Index (CPI), or retail-based inflation, stood at 7% in August this year with rural and urban inflation scaling 7.15% and 6.72% respectively. This was furthered by an uptick of 7.62% in food prices during the same period.

The COVID-19 pandemic also had an impact on India's previously held surplus. As a reaction to the distresses caused by the pandemic to the vulnerable sections the Union Cabinet had introduced a food security program, called the Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY) in March 2020. The scheme provisions an additional 5kg ration per person each month in addition to their normal quota of foodgrains under the National Food Security Act. In March, the scheme was extended for another six months until September 2022.

The Hindu Businessline had reported this week that foodgrain stocks (including rice, wheat and unmilled paddy) in the Food Corporation of India (FCI)'s central pool had dropped 33.5% on a year-over-year basis to 60.11 million tonnes as of September 1 — prompting doubts on the continuation of the scheme. Research analysts at Nomura observe that on the whole, though rice stocks should remain above buffer levels, the current export restrictions may not necessarily improve the demand-supply situation materially, implying, that there remains an upside risk to the price of rice. "As such, we believe there is a risk that further curbs on rice exports could be imposed, particularly in categories still exempted," it states.

What happened to rice production?

The major rice cultivation season in India is the Kharif season, that entails sowing the crop during June-July and harvesting them in November-December.

It is imperative to note that rice is a water-intensive crop which also requires a hot and humid climate. Thus, it is best suited to regions which have high humidity, prolonged sunshine and an assured supply of water. It is for this reason that the eastern and southern regions of the country, with sustainable humidity and suitable mean temperatures are deemed favourable for the crop. While the two regions are able to grow paddy crops throughout the year, higher rainfall and temperature prompt the northern regions to grow only one crop of rice from May to November. Andhra Pradesh, Telangana, Punjab, Haryana, Chhattisgarh, Odisha, Madhya Pradesh, Tamil Nadu, Maharashtra, Uttar Pradesh and Bihar are among the rice producing States in India.

A perusal of Indian Meteorological Dept's data, between June 1 and September 14 illustrate that Uttar Pradesh, Jharkhand, Punjab and Bihar have experienced deficient rainfall. The latter refers to rainfall being 20-59% below normal in a particular region. Although West Bengal, the country's largest producer, has overall experienced a normal rainfall, its major productivity areas such as Nadia, Burdwan and Birbhum have had deficient rainfall. This indicates a potentially lower produce this year.



What are the concerns on ethanol blending?

Ethanol is an agro-based product, mainly produced from molasses, which is a by-product of the sugar industry. The EBP endeavours to blend ethanol with vehicular fuels as a means to combat the use of fossil fuels and in turn, rising pollution. As per the government, sugar-based feed stocks alone would not be able to meet its stipulated target of 20% ethanol blending by 2025.

In the 2018-19 Ethanol Supply Year (ESY), the government had allowed the FCI to sell surplus rice to ethanol plants for fuel production. The idea was to have in place an insurance scheme and an emergency provision for distillers.

However, in the ongoing ESY, because of supply constraints there has been an uptick in the procurement of rice from the FCI. The total ethanol produced from rice lifted from the FCI stood at 26.64 crore litres whereas that from damaged food grains outside the FCI purview stood at 16.36 crore litres. This means that the production accruing from FCI rice has increased 10-fold from the 2.2 crore litres used in a full ESY. At the same time, production from damaged foodgrains stands at half.

Thus, the export ban would endeavour to catch-up with this supply and additionally, unburden the FCI from provisioning to distillers.

What are the likely after-effects of the ban?

Geopolitical tensions between Russia and Ukraine have unsettled global food supply chains. With trade disrupted in the Black Sea region, Bloomberg reported in March that prices of rice are surging because traders are betting it will be an alternative for wheat which is becoming prohibitively expensive.

India accounted for 41% of the total rice exports in the world in 2021, larger than the next four exporters (Thailand, Vietnam, Pakistan and United States) combined.

As for broken rice, the United States Department of Agriculture (USDA) states that India accounted for more than half of the commodity's global exports in the first half of 2022. As per government figures, between April and August this year, broken rice's share in the overall rice export mix (of India) was 22.78% compared to 18.89% in FY 2021.

In descending order, China, Senegal, Vietnam, Djibouti and Indonesia are the biggest importers of India's broken rice.

Senior Executive Director at the All-India Rice Exporters Association Vinod Kumar Kaul told The Hindu, "Thailand, Vietnam and Pakistan would gain should we happen to lose this market. Once lost, regaining the market would be a task."

POWER GAMES: PLANS TO SHIFT TO A CENTRALISED MARKET IN POWER SECTOR MUST TAKE INTO ACCOUNT CONCERNS OF ALL STAKEHOLDERS

The power sector in India is increasingly becoming a site of contestation between the Centre and the states. Much of the recent confrontation between the two can be traced to the distribution segment — the weakest link in the power chain. Over the years, the central government has formulated various schemes to turn around the financial and operational position of state power distribution companies (discoms). But despite these multiple attempts, the financial position of discoms continues to be precarious. Their mounting losses have increased the fiscal risks at the

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



general government level (Centre and states). As per a recent study by the RBI, a bailout of discoms in 18 large states is likely to impose a burden equivalent to around 2.3 per cent of the GSDP of these states. Considering that their weakening finances pose a threat to the entire power chain, the government has, of late, been increasingly adopting a tough stance. Earlier, the Power System Operation Corporation, the national grid operator, had asked power exchanges to restrict buying and selling by discoms from 12 states and Jammu and Kashmir on account of their dues to power generating companies. Now, another site of confrontation has opened up.

The Union government plans to shift to a market-based economic dispatch (MBED) mechanism. This shift to a centralised framework marks a radical departure from the current decentralised, voluntary pool-based electricity market. The arguments in favour of the move are straightforward. Under the MBED framework, the cheapest power from across the country will be dispatched to meet the system wide demand. The architecture would also lead to a “uniform clearing price”. Sellers and buyers will place their bids for the day ahead market, and an outcome of this will be the discovery of the market clearing price. This process is expected to generate significant savings for consumers.

However, as reported in this newspaper, the shift to this new framework is creating apprehensions that it could “strip states of their freedom”. Some analysts have also argued that as “inefficient plants” are likely to be adversely impacted by this move, it may impact state generators disproportionately. Moreover, as an official said, the market trends “necessitate greater decentralisation of markets and voluntary pools for efficient grid management and operations”. Considering the system-wide ramifications of this move, the changes to the operations, systems and infrastructure of the players involved, and that this framework is under scrutiny around the world, there is need to tread cautiously. All stakeholders — from state governments to load dispatch centres to power exchanges and others — need to be consulted at each step in this process. Their comments/suggestions must not only be sought, but the desirability of the policy itself needs to be discussed threadbare.

WITH ₹19,500-CRORE PLI PLAN, SUN SHINES ON SOLAR CELL UNITS

The Cabinet on Wednesday cleared a ₹19,500-crore production-linked incentive (PLI) scheme to incentivise manufacture of domestic solar cell modules to reduce the industry’s reliance on Chinese-made panels. This follows the ₹4,500-crore tranche cleared in November 2020.

Bidders for projects will be given PLI to set up and run manufacturing facilities that will span the entire production cycle of modules from making the polysilicon cells, ingots, wafers and panels to assembling modules that are used to produce electricity.

The PLI will be disbursed to firms after they set up their manufacturing units and the money disbursed over five years.

Officials from the Ministry of New and Renewable Energy, the nodal body tasked with administering the programme, estimate manufacturing capacity worth 65,000 MW of fully and partially integrated solar PV modules to be installed over five years.

The bulk of the allocation, of nearly ₹12,000 crore, is to incentivise the setting up of integrated manufacturing facilities because there is no installed capacity in India to manufacture polysilicone and wafers (the raw material for solar panels).



This would bring in a direct investment of around ₹94,000 crore, directly employ about 1,95,000 persons and indirectly around 7,80,000 persons. It would save India close to ₹1.37 trillion in imports, they estimated.

India has committed, as part of climate commitments, to a target of installing 5,00,000 MW of electricity capacity from non-fossil fuel-based sources by 2030 and this translates to 280,000 MW to 300,000 MW from solar electricity alone. “We would need nearly 30-35 GW (1GW = 1000 MW) of modules. With these schemes, we expect to have 70-80 GW of capacity, which would take care of our domestic requirements as well as exports,” Indu Shekhar Chaturvedi, Secretary, MNRE said.

THE SIGNIFICANCE OF ETHEREUM’S MERGE FOR THE FUTURE OF CRYPTOCURRENCIES

The story so far: On September 15, the Ethereum blockchain fully transitioned to a new way of processing transactions. This is an important day for crypto trackers as the Ethereum’s Merge event, as it is known, could change the nature of crypto and Web3 itself. Developers say the transition to what is called a ‘proof-of-stake’ consensus mechanism will cut Ethereum’s energy consumption by 99.95%. The switch happened after months of delay and shifting timelines.

What is Ethereum?

Ethereum is one of the most used platforms by developers to build decentralised apps (dApps), smart contracts, and even crypto tokens. The platform’s currency, Ether is only second to Bitcoin (BTC) in terms of market capitalisation. The change in the way Ethereum builds the blockchain comes with not just environmental consequences, but also major cyber and financial security implications.

What is the importance of consensus mechanisms? Why is there a need for a new mechanism?

Decentralised transactions are processed on blockchains using consensus mechanisms. Ethereum’s former method, ‘proof-of-work’, which is also used by Bitcoin, needs powerful mining hardware that consumes a lot of electricity and generates enormous amounts of heat. This energy is then used to process extremely difficult mathematical puzzles, the solution of which would let new transactions be added to the blockchain so as to reward the miners with crypto.

Many environmentalists, policy makers, and regulators have strongly criticised the impact of Bitcoin mining on local communities. Common centres for mining included China (before a near total crypto ban), the U.S., Russia, and Kazakhstan — countries with cheap electricity rates and colder climates. Ethereum’s website admitted that their crypto’s total annualised power consumption nearly matches that of Finland while its carbon footprint is comparable to Switzerland. For some time, European countries even mulled a crypto mining ban, while China actually carried out a nationwide crackdown on crypto miners, sending them fleeing overseas.

Probably as a response to the backlash, Ethereum has decided to switch to a ‘proof-of-stake’ consensus mechanism, where Ether owners will stake their own coins in order to serve as collateral and help process new blockchain transactions, in return for rewards. Crypto experts are divided as to which consensus mechanism offers better protection from hackers. Theoretically, there are ways to hack both verification methods. But Ethereum claims the proof-of-stake consensus mechanism offers better security.



Will Bitcoin switch to a proof-of-stake consensus mechanism?

Bitcoin switching to a proof-of-stake consensus mechanism seems highly unlikely. To understand why, we need to look at how Bitcoin and Ethereum are different, in spite of both dominating the crypto space. Satoshi Nakamoto, the pseudonymous creator of Bitcoin, authored a white paper in the late 2000s that explicitly stresses on the importance of the “proof-of-work” mechanism to secure the blockchain. (Till date, no one knows who Nakamoto is or even if they are a person or an organisation)

The paper insists that it's essential for honest actors to control a majority of the Central Processing Unit (CPU) power to keep transactions safe from illicit actors. Bitcoin has been praised by decentralisation advocates for its non-interfering founder (or founders) and largely unregulated structure.

Switching to a proof-of-stake consensus mechanism would violate the principles of decentralisation outlined in the Bitcoin white paper. It would also represent losses in millions of dollars for individual miners and companies trying to solve the puzzles that would reward them with BTC.

Some Bitcoin supporters go so far as to say that miners' activities, though harmful to the environment now, will help bring about an energy revolution and the faster adoption of solar, wind, gas, and nuclear energy. However, consequences of crypto mining across the globe have included mass electricity blackouts, fire accidents, overburdened grids, struggles between locals and crypto miners for more control over the energy supply, and even crypto mining on indigenous land.

Ethereum, on the other hand, was co-founded by Vitalik Buterin, who has an active presence on Twitter. He has also attended various international crypto events. The blockchain is backed by a powerful non-profit organisation to support its activities — the Ethereum Foundation.

Therefore, as far as the Ethereum community is concerned, miners will no longer produce valid blocks for the Ethereum blockchain. In the coming days, the Ethereum community and the media will be tracking how former Ether miners cope with the transition.

Which other cryptocurrencies are changing to proof-of-stake now?

For now, no other top coin is planning an Ethereum-style Merge. After Bitcoin, Dogecoin [DOGE] is the largest proof-of-work based cryptocurrency. It was initially created as a joke by its founders. After that comes Ethereum Classic [ETC], formerly part of Ethereum before a community schism. Ethereum Classic has made it clear that it is loyal to the proof-of-work mechanism. It has invited miners to mine ETC and has said that stakers are free to choose ETH2.

“May both chains co-exist in their own right providing options for stakers and miners,” Ethereum Classic tweeted on Thursday. Traders are also watching the markets and charts to see if other proof-of-work coins experience a price lift from new investors who don't want to support a proof-of-stake Ethereum.



LIFE & SCIENCE

USING 'SPOOKY ACTION AT A DISTANCE' TO LINK ATOMIC CLOCKS

An experiment carried out by the University of Oxford researchers combines two unique and one can say even mind-boggling discoveries, namely, high-precision atomic clocks and quantum entanglement, to achieve two atomic clocks that are “entangled.” This means the inherent uncertainty in measuring their frequencies simultaneously is highly reduced.

While this is a proof-of-concept experiment, it has the potential for use in probing dark matter, precision geodesy and other such applications. The two-node network that they build is extendable to more nodes, the researchers write, in an article on this work published in Nature recently.

Atomic clocks grew in accuracy and became so dependable that in 1967, the definition of a second was revised to be the time taken by 9,19,26,31,770 oscillations of a cesium atom. At the start of the 21st century, the cesium clocks that were available were so accurate that they would gain or lose a second only once in about 20 million years. At present, even this record has been broken and there are “optical lattice clocks” that are so precise that they lose a second only once in 15 billion years. To give some perspective, that is more than the age of the universe, which is 13.8 billion years.

Mundane uses

The more mundane uses to which these clocks can be put include accurate time keeping in GPS, or monitoring stuff remotely on Mars.

“If you can measure the frequency difference between these two clocks that are in different locations, that opens up a host of applications,” says Raghavendra Srinivas, from the Department of Physics, Clarendon Laboratory, University of Oxford, U.K., who is an author of the Nature paper.

Their work is a proof-of-principle demonstration that two strontium atoms separated in space by a small distance, can be pushed into an “entangled state” so that a comparison of their frequencies becomes more precise. Potential applications of this when extended in space and including more nodes than two, are in studying the space-time variation of the fundamental constants and probing dark matter — deep questions in physics.

In quantum physics, entanglement is a weird phenomenon described as a “spooky action at a distance” by Albert Einstein. Normally, when you consider two systems separated in space that are also independent and you wished to compare some physical attribute of the two systems, you would make separate measurements of that attribute and this would involve a fundamental limitation to how precisely you can compare the two — for two separate measurements have to be made.

On the other hand, if the two were entangled, it is a way of saying that their physical attributes, say spin, or in this case, the frequency, vary in tandem. Measuring the attribute on one system, tells you about the other system. This in turn improves the precision of the measurement to the ultimate limit allowed by quantum theory.



Proof of concept

Quantum networks of this kind have been demonstrated earlier, but this is the first demonstration of quantum entanglement of optical atomic clocks.

Dr. Srinivas says, “The key development here is that we could improve the fidelity and the rate of this remote entanglement to the point where it’s actually useful for other applications, like in this clock experiment.”

For their demonstration, the researchers used strontium atoms for the ease in generating remote entanglement. They plan to try this with better clocks such as those that use calcium.

“We showed that you can now generate remote entanglement in a practical way. At some point, it might be useful for state-of-the-art systems,” says Dr. Srinivas.

THE TINIEST SPECKS OF PLASTIC CAN ENTER THE HUMAN FOOD CHAIN, FINDS STUDY

There is growing concern about the environmental and health impact of plastic pollution, especially since it breaks down into smaller pieces that begin to accumulate in the environment. Now, researchers from the University of Eastern Finland have found that small pieces of plastic called nanoplastics can travel up the human food web, through plants, insects and even fish. Nanoplastics are tiny plastic debris particles smaller than 1,000 nanometre (1 nm is equal to one billionth of a metre).

How the study was conducted

According to findings published in the journal *Nano Today* on September 12, the team of researchers developed a new, metallic fingerprint-based method to detect and measure the amount of nanoplastics in organisms.

For their study, they applied the technique to a model food chain that contains three trophic levels (trophic level is the position an organism occupies in the food chain) — lettuce, which was the primary producer, black soldier fly larvae, the primary consumer, and insectivorous fish (roach) as the secondary consumer.

For the study, the researchers exposed lettuce plants to nanoplastics from commonly found plastic waste in the environment — polystyrene (PS) and polyvinyl chloride (PVC) nanoplastics — through contaminated soil for 14 days. They were then harvested and fed to black soldier fly larvae, insects that are used as a source of protein in many countries, and are also used as feed for chickens and cattle.

After five days of feeding them the lettuce, the insects were then fed to the fish (roach) for five days. The roach, (*Rutilus rutilus*) is widely found in fresh and brackish water and is sometimes eaten and used as bait.

Traveling up the food chain

By using scanning microscopy, the researchers examined the dissected plants, insect larvae and fish. Images showed that the nanoplastics from the soil were taken up the roots of the plants and accumulated in the leaves. Subsequently, the contaminated lettuce transferred the nanoplastics to the insects. Imaging of the black soldier fly digestive system showed that both PS and PVC nanoplastics were found in the mouth and gut, despite allowing them to empty their guts for 24



hours. Both the lettuce and insects, however, contained a lower amount of PS particles, as compared to the PVC nanoplastics.

In the fish that had fed on the contaminated insects, particles were detected in the gills, liver and intestine tissues. The liver contained the highest concentration of nanoplastic, indicating that it is the primary target tissue for nanoplastics entering vertebrates, the study claimed.

No barriers against nanoplastics?

Due to their small size, nanoplastics can likely pass through physiological barriers and enter organisms. The researchers note that the measurement of the absorption of nanoplastics from the soil by vegetables and fruits, will help tell us whether and to what extent nanoplastics can enter our food chain and then our own bodies.

“Our results show that lettuce can take up nanoplastics from the soil and transfer them into the food chain,” said lead author, Dr Fazel Monikh of the University of Eastern Finland. “This indicates that the presence of tiny plastic particles in soil could be associated with a potential health risk to herbivores and humans if these findings are found to be generalizable to other plants and crops and to field settings. However, further research into the topic is still urgently needed,” Dr Monikh said.

STAYING UP LATE? YOU MAY BE MORE PRONE TO HEART DISEASE AND DIABETES, SAYS STUDY

If you are addicted to binge-watching late at night, then know that it can be bad for your heart and push you towards diabetes because you are not able to burn enough fat for energy. US researchers at Rutgers University in New Jersey have found that “night owls” are more likely to develop Type 2 diabetes or heart disease than people who get to bed and wake up early.

They found that early risers rely more on fat as an energy source and their activity spans a larger arc of diurnal hours, meaning fat may build up more easily in late-nighters, the scientists found. Not only did they discover that night owls are less active than early birds, they found they are less sensitive to insulin — which both act as predictors for Type 2 diabetes and cardiovascular disease.

The study becomes relevant as it explains why night owls are at greater risk of Type 2 diabetes and cardiovascular disease and can help doctors circle off a group which is at potential risk.

“This could help medical professionals consider another behavioural factor contributing to disease risk,” Prof Steven Malin, a senior author on the study and expert in metabolism at Rutgers University, was quoted as saying.

“There are a lot of studies on diet, weight loss, sleep pattern, but heart diseases are multi-factorial. We cannot say doing any one thing will be beneficial for our patients. Having said that, if we look at the conclusions logically, then a person who stays up late at night is likely to snack more and if a person wakes up early, is much more likely to go for a walk or do yoga in the morning. All the factors such as diet, exercise, obesity, diabetes, hypertension, family history and other reasons together impact heart health,” said Dr VK Bahl, Principal Director of Cardiac Sciences at Max Healthcare and former head of the Department of Cardiology at the All India Institute of Medical Sciences.



The researchers divided 51 obese middle-aged adults into two groups, depending on their answers to a questionnaire on sleeping and activity habits. They monitored the volunteers' activity patterns for a week and tested their bodies' energy threshold at rest and while performing moderate or high-intensity exercise on a treadmill. Early birds were found to be more sensitive to insulin and burned more fat than night owls while at rest and during exercise. The night owls were less sensitive to insulin and their bodies favoured carbohydrates over fat as an energy source. "Night owls are reported to have a higher risk of obesity, Type 2 diabetes and cardiovascular disease when compared with early birds. A potential explanation is they become misaligned with their circadian rhythm for various reasons. If a person is a night owl, they may prefer to go to bed late but still have to get up early to go to work or to look after children, and this may force them to be out of alignment with their body clocks when they would rather be sleeping," Prof Malin was quoted as saying.

"The differences in fat metabolism between 'early birds' and 'night owls' shows that our body's circadian rhythm (wake/sleep cycle) could affect how our bodies use insulin. A sensitive or impaired ability to respond to the insulin hormone has major implications for our health," Prof Malin said in a media release. "This observation advances our understanding of how our body's circadian rhythms impact our health. Because chronotype appears to impact our metabolism and hormone action, we suggest that chronotype could be used as a factor to predict an individual's disease risk. Further research is needed to examine the link between chronotype, exercise and metabolic adaptation to identify whether exercising earlier in the day has greater health benefits," Prof Malin added.

Earlier research in 2018, which was published in the journal *Advances in Nutrition*, had found that eating late was also found to be linked to an increased risk of Type-2 diabetes because the circadian rhythm influences the way glucose is metabolised in the body. Glucose levels should naturally decline throughout the day and reach their lowest point at night. However, as night owls often eat shortly before bed, their glucose levels are increased when they are about to sleep, which could negatively affect metabolism as their bodies do not follow the normal biological process.

DreamIAS