



14th to 21st May 2022

CURRENT AFFAIRS FOR UPSC

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INTERNATIONAL

FINLAND'S BID TO JOIN NATO

The story so far: The strategic geopolitical ambiguity of Finland has finally come to a halt and taken a hard turn as Finland formally announced its intention of joining the North Atlantic Treaty Organization (NATO). This marks the culmination of a series of veiled comments by Finland hinting their intention of joining NATO. The Finnish President Sauli Niinistö along with the Ministerial Committee on Foreign and Security Policy announced their bid for NATO membership on Sunday. They would now send their recommendation to the Parliament where it is expected to pass through without any roadblocks.

The last two odd decades have seen Finland revise its outlook of global geopolitics and order but rarely have their different heads of state overtly signalled their shift. This ambiguity has allowed them to not only improve their ties with rest of the Europe post 2000 but also go back to increasing trade ties with Russia during the European economic slump. Their actions post the collapse of the Soviet Union and emergence of a more integrated European Union indicate their preference for having their cake and eating it too. This is set to change and has been brought about by Russia's actions in Ukraine. The Finnish security concerns began to heighten post the Russian annexation of Crimea in 2014 and have snow-balled now into an immediate existential crisis of sorts after the recent Russian assault on Ukraine.

What is happening?

The last joint statement by the Finnish President and Prime Minister Sanna Marin put it in no ambiguous terms that "Finland must apply for NATO membership without delay". This was followed by the official Finnish declaration of a NATO bid on Sunday. This tectonic shift is likely to have significant ramifications for the entire European continent. The last few days also saw Russian Defence Committee deputy chair, Aleksey Zhuravlyov, discuss Russia nuking Europe and question the very existence of Finland on Russian state television which bears similarities to their justification for the Ukrainian invasion. Mr. Zhuravlyov also threatened the Finns with the use of Kinzhal-class ballistic missiles boasting how it "will reach Finland in 20 seconds, or even 10 seconds". RAO Nordic (a subsidiary of Inter RAO which is a major energy company in Russia), citing delayed payments from Finland, cut off electricity supply to Finland. The Finns seem to be hopeful that Sweden, the Baltic nations, and their own energy sources can help fill the void. There also seems to be a concerted effort from sections of the western media to create a sense of panic in Finland which has been decried by Finnish nationals. Mr. Niinistö spoke with the U.S. President Joe Biden and the Swedish Prime Minister Magdalena Andersson discussing their "next steps towards NATO membership".

How has Russia responded to the announcement?

Official voices from within Russia give a sense of how they perceive the U.S's role as an agent provocateur trying to lure other countries towards NATO. The Russian state seems to be going through a sense of mania where officials talk about nuking countries, 'crushing bugs' (referring to the Baltic states), and invading countries in a bid to safeguard their security. Finland's formal declaration and Sweden's interest in joining NATO has aggravated their security dilemma. We see the manifestation of Waltzian realism unravelling in front of us as nations begin to grapple with their existential crises precipitated by the anarchic structure of the world and actions of other states aimed towards their security goals.



These states seek security guarantees through alliance formation as well. The risk of a new arms race cannot be entirely written off as we see strongman tactics from the Russian head of state and from different senior security officials of the Russian government which signal revanchist attitudes and a highly volatile method of engagement.

What does NATO membership achieve?

One would expect NATO membership to allay Finland and Sweden's security concerns to a reasonable degree as all the countries involved in the highly volatile region would, likely, reach an impasse until someone decides to break through the gridlock through a change in tactics.

However, the rational actor assumption has recently been on tumultuous grounds vis-à-vis Russia, and it would be difficult to predict its next set of actions as and when Finland and Sweden formally join NATO. Even the comments of a former Prime Minister of Denmark, Anders Fogh Rasmussen, on the NATO membership teaching Russian President Vladimir Putin the resolve of the West and the counterproductive nature of the war, are based on Mr. Putin following the supposed logic of a rational actor.

What lies ahead?

As Kremlin's rhetoric and threats against its neighbours continue to increase, it wouldn't be a flight of fancy to imagine that more of its neighbours, primarily the Baltic states, will firmly express their heightened security concerns and seek to remedy them. Those actions would then in turn further create a high security risk environment in the immediate periphery of Russia. NATO expansionism has been publicly cited multiple times by Russian Ministers and senior defence officers as a major reason for Russia's perceived security threat. Estonia has already asked NATO for local anti-Russia command centres and greater air defence systems citing Baltic security concerns.

The full-blown Russian invasion of Ukraine, which began almost three months back, has only resulted in isolating Russia from most countries in the world. They are losing a significant number of troops and scores of military equipment as the war continues. What seemed initially like a quick victory to the Russians is now spiralling into a nightmare for Kremlin. The propaganda can only cloak the reality for so long. The war is also taking an economic toll on Moscow as it is further impacted by the economic sanctions against them by the West. As multiple corporations leave the Russian space and countries continue to decrease their energy dependency on Russia, the road ahead for Moscow is most certainly a dark and long-winding one. As Finland joins NATO, Russia could seek to deploy more troops along the Russian-Finland border and further thin-out an already attenuated Russian army.

Finland and Russia share a 1,300 km border and Kremlin's actions against Finland's (and potentially Sweden's) NATO membership may heavily depend on the potential military asset deployment along the border on the Finnish, and potentially Swedish, side. The Finns may very well not opt for immediate asset deployment and perhaps would want to use their NATO membership as a signal to Russia but if they continue to feel sufficiently threatened, they may opt for exhaustive asset deployment. Russia's revanchist assault on Ukrainian sovereignty has cascaded into a nightmare for Russian security concerns, with NATO looking to be at their immediate doorsteps. Such actions would only further fuel already anxious and retaliatory minds within Russia and may cause things to spiral out of control. Constant communication from all sides is key to avoid a grim eventuality. The Finns understand this and have constantly been in touch with Kremlin updating them of developments. Sunday's announcement saw the Finnish President



reiterate that they don't see security as a zero-sum game (a comment aimed to quell anxious minds within Kremlin). The situation is also exacerbated by the political capital Mr. Putin continues to enjoy which makes it even more difficult for any significant political opposition to come to the fore. The only hope from within the Russian borders would be the collective conscience of the Russian public.

FALL OF MARIUPOL

The surrender of an estimated 1,000 defensive forces who were holed up in the sprawling Azovstal steelworks in Mariupol likely marks the end of fighting in the eastern Ukrainian city that has been under a long Russian siege. Russia had announced a few weeks ago of having taken over the city. But hundreds of fighters remained in the steel mill. With many of them ending the fight and allowing themselves to be evacuated to the Russia-controlled territories of Donbas, the whole city is now in the hands of the Russians. Kyiv also said it wanted to save the lives of its servicemen. Mariupol, with a pre-war population of half a million, most of them Russian-speaking, had been briefly taken over by pro-Russian separatists in 2014, immediately after Russia annexed Crimea. But Ukrainian nationalist forces, including the neo-Nazi Azov Battalion, took the city back and drove the separatists further towards east. Ever since then, the city, which hosted the headquarters of the Azov Battalion, has become a flashpoint in Ukraine's civil conflict — for Ukrainian nationalists, a symbol of resistance, but for Russia-backed Donbas militias, a part of their claimed territories. Now, with Mariupol's capture, the Russians can finally claim a major victory. But the fact that it took almost three months for Russia's better-equipped military to make this happen speaks a lot about Ukraine's resistance.

Russia has suffered several setbacks in its invasion of Ukraine. It started a three-front war but was met with fierce Ukrainian resistance in the north and east. Later, Russia gave up its attempts to envelope Kyiv in the northern front and, at least for now, retreated from Kharkiv, the northeastern city. Its battleground focus is now almost entirely on the Donbas region where Russian troops are making incremental advances. Now, with Mariupol under its control, Russia can free up resources to move to its next target, which suggests that the war could grind on. The tragedy of Ukraine is that it has got stuck in a larger power rivalry between the West and Russia. Despite the West's massive financial and military support, Ukraine keeps losing territories. On the other side, even as Russia is making slow battleground gains in Ukraine, it is facing bigger setbacks. The invasion has already prompted Finland and Sweden, which have historically stayed out of military alliances, to formally seek NATO membership. So, in less than three months since the invasion began, there are no clear winners — Ukraine is losing territories, Russia is witnessing another round of NATO's enlargement, and Europe, battered by inflation and an energy crisis, is likely to be facing prolonged instability and conflicts.

THE PPP LEADER HAS BECOME THE YOUNGEST FOREIGN MINISTER OF PAKISTAN

For any politician, their first press conference is a daunting task. For Bilawal Bhutto Zardari, then a 19-year-old whose mother had been assassinated just three days before, his first press conference to the entire national and international press at the Bhutto home in Pakistan's Naudero in December 2007 would have been much more so. Yet, the world saw the shy and bespectacled young man, who was still at college, come out to face the press, armed only with a big photograph of his mother, former Pakistan Prime Minister Benazir Bhutto, in his lap. When asked if the political career carved out for him that day, when he was declared the Chairperson of the Pakistan People's Party (PPP), was something his mother would have wanted, Mr. Bhutto said

her motto was “democracy is the best revenge”, a comment that seemed brave in the face of tragedy, but hard to follow through on for one so young.

Yet, a decade and a half later, Mr. Bhutto, whose Instagram account notes that he was the “youngest chairman of a political party at 19, youngest leader of a parliamentary party at 29 and youngest chair of the parliamentary committee on human rights at 30”, is now also Pakistan’s youngest Foreign Minister at the age of 33. While there is no question his family name and his party’s coalition agreement with the new Prime Minister, Shehbaz Sharif, have catapulted him there, these can only help him marginally as he prepares to handle one of the Pakistani Cabinet’s most difficult posts.



DreamIAS



NATION

WHO IS DEVASAHAYAM PILLAI, FIRST INDIAN LAYMAN TO BE DECLARED A SAINT BY VATICAN?

Devasahayam Pillai, who was born a Hindu in Kanyakumari district of Tamil Nadu and converted to Christianity in the 18th century, became the first Indian layman to be declared a saint by the Vatican on Sunday.

Pope Francis canonised Blessed Devasahayam during the Canonisation Mass in St Peter's Basilica, which was attended by over 50,000 faithful from all over the world, as well as government delegations honouring him and nine other new saints, PTI reported.

Besides Devasahayam, the Pope proclaimed five other men — Titus Brandsma, Cesar de Bus, Luigi Maria Palazzolo, Giustino Maria Russolillo, and Charles de Foucauld — and four women — Maria Rivier, Maria Francesca of Jesus Rubatto, Maria of Jesus Santocanale, and Maria Domenica Mantovani — as saints.

Life and death

Devasahayam was born on April 23, 1712 in Nattalam village in Kanyakumari district, and went on to serve in the court of Marthanda Varma of Travancore. After meeting a Dutch naval commander at the court, Devasahayam was baptised in 1745, and assumed the name 'Lazarus', meaning 'God is my help'.

"His conversion did not go well with the heads of his native religion. False charges of treason and espionage were brought against him and he was divested of his post in the royal administration," the Vatican said in a note in February 2020. According to the Vatican, "while preaching, he particularly insisted on the equality of all people, despite caste differences", which "aroused the hatred of the higher classes, and he was arrested in 1749".

On January 14, 1752, Devasahayam was shot dead in the Aralvaimozhy forest. He is widely considered a martyr, and his mortal remains were interred inside what is now Saint Francis Xavier's Cathedral in Kottar, Nagercoil.

Sainthood road

In 2004, the diocese of Kottar along with Tamil Nadu Bishops' Council and Conference of Catholic Bishops of India recommended Devasahayam for beatification. He was declared blessed by the Kottar diocese in 2012, 300 years after his birth.

During the midday 'Angelus' prayer in the Vatican that day, Pope Benedict XVI described Devasahayam as a "faithful layman", and urged Christians to "join in the joy of the Church in India and pray that the new Blessed may sustain the faith of the Christians of that large and noble country", the note from the Vatican said.

In 2014, Pope Francis recognised a miracle attributed to Devasahayam, clearing the path to his canonisation. He was approved for sainthood in February 2020 for "enduring increasing hardships" after he decided to embrace Christianity, according to the Vatican, which last November announced May 15, 2022 as the date for the ceremony.



While clearing Devasahayam for sainthood in 2020, the Vatican dropped 'Pillai' from his name, and referred to him as "Blessed Devasahayam".

CALL OF PORT

The story so far: Bangladesh Prime Minister Sheikh Hasina offered India the use of the Chittagong Port when External Affairs Minister S. Jaishankar called on her in Dhaka last month for an invite to New Delhi. Ms. Hasina said the port would be of benefit to India's north-eastern States, particularly Assam and Tripura. The two other north-eastern States bordering Bangladesh — Meghalaya and Mizoram — could also benefit from access to the port.

How did Partition affect business in the Northeast?

India's Northeast had easy access to the seaports, specifically Chittagong, in present-day Bangladesh via the Brahmaputra and Barak river systems before independence. The Partition in 1947 did not immediately affect the transportation of tea, timber, coal and oil through these rivers and local-level border trade, helping maintain undivided Assam's status as the State with the highest per capita income till the early 1950s. But the volume of trade began dipping with the souring of ties between India and Pakistan — Bangladesh was East Pakistan then — before the 1965 war cut the Northeast off. The movement of goods through the 'chicken's neck', a narrow strip in West Bengal, became a costlier alternative for the region after access to the river and land routes through East Pakistan was denied.

Did things change after Bangladesh was created?

The creation of Bangladesh with India's help in 1971 did not translate into the revival of the traditional river and land trade and communication routes for the Northeast. A degree of mistrust between the two countries, primarily because of the 'Bangladeshi' issue and camps established by myriad Northeast extremist groups in Bangladesh, did not help matters. Besides, the two countries did not look at trade and commerce opportunities more closely. The scenario began to change when Sheikh Hasina's Awami League government took charge in 2009 and the mistrust lessened after the dispute-ending land boundary agreement was signed in 2015. The two countries undertook efforts to improve capacity across waterways, roadways and railroads. From a bus service between Agartala and Kolkata via Dhaka to the movement of cargo on barges, trial runs and trans-shipments have been successfully conducted.

What does the Bangladesh PM's offer mean?

The Northeast has been the key to the increase in bilateral engagements between India and Bangladesh in the last five years. India's 'Act East' policy that focuses on the region and a new sense of cooperation between the two countries can help the Northeast, specifically four States, explore the potential of economic activities optimally. These States — Assam, Meghalaya, Tripura and Mizoram — share a 1,879 km border with Bangladesh. With a special focus on railways and waterways, many of the pre-Partition trade routes are being revived. Most of these roads lead to Chittagong port, which has historically been the largest and the most convenient for trade and commerce for the region. The importance of this port made the British administrators build the Assam-Bengal Railway route to ship goods from the Chittagong port to the remotest parts of the region such as the now-defunct Lekhapani station near the Arunachal Pradesh-Assam border.



Is there any action on the ground?

The need for connectivity between India's 'mainland' and the Northeast via Bangladesh through a multi-modal approach has been felt for a long time. It began translating into action on the ground in the last five years following the assessment that reopening the pre-Partition trade routes would reduce the cost and time of transportation for the Northeast and generate revenue for Bangladesh. India has been working on infrastructure on either side of the border. In March 2021, the Prime Ministers of the two countries inaugurated the Maitri Setu, a bridge built over the Feni river, which has reduced the distance between Sabroom in southern Tripura and the Chittagong port to just 111 km. The government is working on a multi-modal transit hub at Sabroom inclusive of road and rail connectivity that can help goods reach the Chittagong port in a few hours. Road connectivity in Meghalaya's Dawki, southern Assam's Sutarkandi and Tripura's Akhaura linking eastern and south-eastern Bangladesh is also being improved. Mizoram is keen on bridges across the Khawthlangtuipui river (Karnaphuli in Bangladesh) for faster access to the Chittagong port. Apart from the India-Bangladesh Protocol Route involving the Brahmaputra, cargo ships from Bangladesh have reached Tripura through the Gomati river and Assam's Karimganj via the Kushiara river.

SYMBOLISM AND BEYOND

India's current regime has a penchant for symbolism and optics, a tendency that becomes more pronounced when the symbolism is religious. So it was not a surprise that Prime Minister Narendra Modi made a short visit to Lumbini in Nepal on Buddha Jayanti. Lumbini, in Buddhist tradition, is the birthplace of Gautama Buddha and Mr. Modi along with his Nepali counterpart laid the foundation stone for the India International Centre for Buddhist Culture and Heritage in the Lumbini Monastic Zone. The Centre will play a role in challenging the preponderance of the Chinese sponsorship and patronage of the Buddhist festivals and institutions in the area. It could also be a harbinger of a focused development of the area into a tourist and cultural hub for pilgrims and other visitors. To that end, the PM's visit would have been welcomed by his Nepali counterpart. With the PM also unequivocally asserting that Lumbini was the birthplace of Gautama Buddha, who was born as Siddhartha, this should put to rest a needless irritant in the India-Nepal relations, with some hyper-nationalist Nepalis claiming that the Indian government had a different belief on the Buddha's origins. The visit also coincided with the signing of a few MoUs, the most prominent being the development and implementation of the Arun-4 hydropower project. The PM's visit followed his counterpart Sher Bahadur Deuba's trip to India in April, which thawed relations after a series of controversial steps (during the tenure of Mr. Deuba's predecessor, K.P. Oli) on the Kalapani dispute.

Mr. Modi's speech in Lumbini sought to highlight the strong cultural ties between the two countries, which already share a special relationship, cemented by the Treaty of Peace and Friendship signed in 1950. There are several irritants that have developed, straining this relationship, and for now there seems to be a concerted attempt by both regimes to return to bonhomie, with the Indian government seeking to utilise "religious diplomacy" as a means to emphasise the special relationship. But there have been significant changes in Nepal's political-economy, in particular a substantial reduction in the Nepali youths' dependence on the Indian economy as compared to the past. Beyond a soft power emphasis on cultural ties, India-Nepal relations need to graduate to a more meaningful partnership on economic and geopolitical issues, with the Indian government continuing to retain a substantial role in partnering the Nepali regime in development projects. The challenge is to utilise the return of bonhomie in ties to refocus on



work related to infrastructure development in Nepal, which includes hydropower projects, transportation and connectivity, and which could benefit the citizens of the adjoining States in India as well. Symbolism, after all, is useful only to a certain extent.

VADNAGAR'S TIES WITH BUDDHISM, AND GOVT'S PUSH TO MAKE IT A HERITAGE SITE

Prime Minister Narendra Modi said Monday in Lumbini, on the occasion of Buddha Purnima, that his birthplace Vadnagar in Gujarat's Mehsana district had been a great centre for Buddhist learning centuries ago.

"Even today, there are relics being recovered from there and the excavation work is still on," PM Modi had said.

Vadnagar's ties with Buddhism

The Gujarat state archaeology department began excavations in Vadnagar, a small town in Mehsana district of north Gujarat, in 2006, when Modi was chief minister.

In 2014, the excavation work was taken over by the Archaeological Survey of India (ASI), and the combined efforts have thrown up Buddhist relics and around 20,000 artefacts, some dating back to the 2nd century.

Among these, senior ASI officials revealed, are an elliptical structure and a circular stupa along with a square memorial stupa of 2x2 metres and 130 centimetres in height with a wall enclosure. "It is like a platform which has a chamber in the centre that resembles a pradakshina path," a senior ASI official told The Indian Express.

Further, bowls said to be used by monks have been found during the excavations, which have a terracotta sealing with inscriptions of namassarvagya and a face-shaped pendant with triratna symbol.

The excavation work is still underway at two sites in Vadnagar – Ambha Ghat, and the Anaaj or grain godown along the railway track, or near Ambaji Kotha Lake.

In Taranga, nearly 30 km from Vadnagar, the ASI has found around 64 natural rock shelters modified into a dwelling place for monks, around 40 votive stupa, a large stupa found on the top of a hill, and another six stupas found near Taran-Dharan Mata shrine.

In another excavation site in Vihar village in Mansa taluka, temple remains dating back to 10th-11th century have been found, revealed the senior ASI official privy to these developments.

According to the Gujarat Tourism website, "Vadnagar is mentioned often in the Puranas and even in the travelogue of the great Chinese traveler, Hiuen Tsang (7th century), as a rich and flourishing town". It adds how some of the names attributed to Vadnagar in history are Chamatkarpur, Anandpur, Snehpur and Vimalpur.

AG PERARIVALAN'S ROAD TO FREEDOM

A G Perarivalan alias Arivu, 50, was only 19 when he was arrested on June 11, 1991. He was accused of having bought two 9-volt 'Golden Power' battery cells for Sivarasan, the LTTE man who masterminded the conspiracy to assassinate Rajiv Gandhi. The batteries were used in the bomb that killed the former Prime Minister on May 21 that year.

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



Perarivalan was “set at liberty forthwith” on Wednesday by the Supreme Court, which used its extraordinary powers “for doing complete justice” under Article 142 of the Constitution. Perarivalan’s release marks the culmination of the legal battle he waged from his cells in Tamil Nadu’s Vellore and Puzhal Central prisons over three decades.

Perarivalan had filed a plea seeking release in accordance with the recommendation made by the Tamil Nadu government in September 2018. The Governor sat on the recommendation for two-and-a-half years before forwarding it to President Ram Nath Kovind in February 2021, and the delay continued.

On May 11, the SC completed the hearing and reserved its orders. On Wednesday, the court ruled that it is “well-settled that the advice of the State Cabinet is binding on the Governor in the exercise of his powers (to grant pardons, reprieves, respites or remissions) under Article 161 of the Constitution”, and that the “non-exercise of the power under Article 161 or inexplicable delay in exercise of such power not attributable to the prisoner is subject to judicial review”. It also said “the reference of the recommendation of the Tamil Nadu Cabinet by the Governor to the President of India two and a half years after such recommendation had been made is without any constitutional backing and is inimical to the scheme of our Constitution”.

Long legal battle

Perarivalan was sentenced to death by a TADA court in 1998, and the sentence was upheld by the Supreme Court in 1999. The sentence was commuted to life imprisonment by the Supreme Court on February 18, 2014, along with the death sentences awarded to other convicts in the case, Murugan and Santhan.

The case in the SC was part of a 2015 remission plea submitted by Perarivalan to the Tamil Nadu Governor, seeking release under Article 161 of the Constitution. He moved the Supreme Court after receiving no response.

He was granted parole for the first time in August 2017, to meet his ailing father, a Tamil poet and a retired school teacher.

The parole order said that he had completed the sentences awarded to him for various offences for which he had been convicted, and that he was now serving time in prison only under IPC Section 302 (punishment for murder). The order said it was open to the appropriate authority (the state government) to consider the case of the convict.

Hearing his plea on the delay in deciding his plea for remission, the SC had said in September 2018 that the Governor had the right to decide on his petition. Within days, the Tamil Nadu Cabinet, headed by then Chief Minister Edappadi K Palaniswami, had recommended the release of all seven convicts. But Raj Bhavan chose to sit on it.

The Governor faced strong remarks from the Madras High Court in July 2020. The HC reminded him that no time limit had been prescribed for the constitutional authority (Governor) to decide on such issues only “because of the faith and trust attached to the constitutional post”. The court added that “...If such authority fails to take a decision in a reasonable time, then the court will be constrained to interfere.”

In January 2021, the SC too expressed displeasure on the delay on the part of the Governor, and warned that the court may be forced to take a decision. The government counsel promised a



decision would not be delayed further. But taking everyone by surprise, the Governor's office forwarded the file to Rashtrapati Bhavan in February 2021.

Senior jurists described the Governor's action as "illegal", and the SC raised questions on the move in multiple hearings after that. But the matter continued to lie with Rashtrapati Bhavan.

In the meantime, the state government granted parole to Perarivalan on May 19, 2021. His parole was subsequently extended on "health grounds". The Supreme Court granted him bail on March 9, 2022.

Charges against him

"...Moreover, I bought two 9 volt battery cells (Golden Power) and gave them to Sivarasan. He used only these to make the bomb explode," said Perarivalan's confession statement taken under Section 15(1) of TADA. While the TADA court used the confession to establish his link with the assassins and his knowledge and role in the assassination, in multiple pleas before the Governor, President and the courts since his conviction in 1999, Perarivalan consistently claimed innocence.

Giving legitimacy to Perarivalan's claims, an IPS officer named V Thiagarajan revealed in 2013 that he had, in fact, altered the statement that was taken from Perarivalan while he was in custody. Thiagarajan revealed that Perarivalan had admitted to having purchased the batteries, but he did not know the purpose for which they would be used.

"As an investigator, it put me in a dilemma. It wouldn't have qualified as a confession statement without his admission of being part of the conspiracy. There I omitted a part of his statement and added my interpretation," Thiagarajan said.

Four witnesses were examined by the TADA court regarding the battery to corroborate Perarivalan's confession. Three of these witnesses were forensic experts who gave expert opinions on the battery and the bomb; the fourth was an employee of a shop in Chennai that claimed to have sold the battery.

In a 2017 interview with The Indian Express, Justice K T Thomas, who headed the SC Bench that awarded the final order in the Rajiv Gandhi assassination case, said Perarivalan's case had brought to the fore another aspect that generated intense debate — using the confession of one accused against another. "Under the conventional Evidence Act, a confession can be used only as a corroborative piece of evidence. But the two other judges on my Bench did not agree, they insisted that we should use it as substantive evidence. To prevent the laying of such a wrong law, I called them to my home where we had several rounds of debates in which I tried to convince them. But the majority view in the judgment considered the confession statement as substantive evidence as it was under TADA (Terrorist and Disruptive Activities (Prevention) Act). Later, many senior jurists called me to say that the majority order laid a wrong law in the case," he said.

Support for Perarivalan

Among the factors that sustained Perarivalan's long battle was the determination and commitment of his mother, Arputham Ammal, who emerged as the face of an anti-death penalty movement, and the sympathy and empathy that he received from people from all walks of life.

"His soul is precious, his values noble, his jail life has not made him a criminal," wrote the former SC judge, the late Justice V R Krishna Iyer, in 2006. He was in constant touch with Perarivalan until his death.



who had raised the question of 'double jeopardy' in 2013 in the case, which led to the SC order commuting the death sentences of three convicts in 2014, had pleaded with Sonia Gandhi to show magnanimity, and called the Governor's decision to pass the buck to the President "unheard and unconstitutional".

He cited the central government's decision in 1964 to set free Gopal Godse, brother of Nathuram Godse, who was charged with conspiracy in the Mahatma Gandhi assassination case after 14 years of imprisonment.

PARDON AND REMISSION: WHO GRANTS THEM?

The story so far: The Supreme Court has reserved orders on the question whether a Governor can refer the State government's advice for granting remission to life convicts to the President for a decision. The court is examining a petition from A.G. Perarivalan, one of the life convicts in the Rajiv Gandhi assassination case, questioning the delay in his release even after the Tamil Nadu government, in 2018, recommended the release of all seven convicts in the case under Article 161 of the Constitution. The Governor, instead of acting on the recommendation, referred it to the President. In the course of the arguments, the Additional Solicitor-General of India K.M. Nataraj contended that only the President, under Article 72 of the Constitution, could consider a claim for pardon or remission, and not the State Governor, if the offence involved was based on a parliamentary law.

What is the scope of the pardon power?

Both the President and the Governor have been vested with sovereign power of pardon by the Constitution, commonly referred to as mercy or clemency power. Under Article 72, the President can grant pardons, reprieves, respites or remissions of punishment or suspend, remit or commute the sentence of any person convicted of any offence in all cases where the punishment or sentence is by a court-martial, in all cases where the punishment or sentence is for an offence under any law relating to the Union government's executive power, and in all cases of death sentences. It is also made clear that the President's power will not in any way affect a Governor's power to commute a death sentence.

Under Article 161, a Governor can grant pardons, reprieves, respites or remissions of punishment, or suspend, remit or commute the sentence of anyone convicted under any law on a matter which comes under the State's executive power.

What is the difference between statutory power and constitutional power?

The Code of Criminal Procedure (CrPC) provides for remission of prison sentences, which means the whole or a part of the sentence may be cancelled. Under Section 432, the 'appropriate government' may suspend or remit a sentence, in whole or in part, with or without conditions. This power is available to State governments so that they may order the release of prisoners before they complete their prison terms. Under Section 433, any sentence may be commuted to a less one by the appropriate government. However, Section 435 says that if the prisoner had been sentenced in a case investigated by the CBI, or any agency that probed the offence under a Central Act, the State government can order such release only in consultation with the Central government.

In the case of death sentences, the Central government may also concurrently exercise the same power as the State governments to remit or suspend the sentence.



Even though they appear similar, the power of remission under the CrPC is different from the constitutional power enjoyed by the President and the Governor. Under the CrPC, the government acts by itself. Under Article 72 and Article 161, the respective governments advise the President/Governor to suspend, remit or commute sentences. Despite the fact that it is ultimately the decision of the government in either case, the Supreme Court has made it clear that the two are different sources of power.

In *Maru Ram etc. vs Union of India* (1980), the Supreme Court said: “Section 432 and Section 433 of the Code are not a manifestation of Articles 72 and 161 of the Constitution but a separate, though similar, power.” In this case, a Constitution Bench upheld the validity of Section 433A of CrPC, which was introduced in 1978, to prevent the premature release of some life convicts before they spend 14 years in jail. It said that in cases in which the death punishment was available in law, but a person was only given a life term, and in cases in which death sentences were commuted to life, such a prisoner cannot be released unless he had completed 14 years.

The court also reiterated that life sentence meant imprisonment for life until the last breath, unless remitted by the government. This was also a landmark decision in that it declared that the President and Governor do not independently exercise their power when disposing of mercy petitions or pleas for remission or commutation, but only on the advice of the appropriate governments. This principle was reiterated in *Kehar Singh* (1988).

What is the issue in the Rajiv Gandhi assassination case?

Seven persons were convicted by the Supreme Court in its May 1999 final verdict in the Rajiv Gandhi assassination case. Of these, four — Sriharan alias Murugan, Nalini, Perarivalan and Santhan — were given the death penalty. The other three — Robert Payas, Jayakumar and Ravichandran — were sentenced to life terms.

In 2000, the Governor commuted the death sentence of Nalini to one of life, based on a recommendation by the Cabinet. The remaining three remained on death row and their mercy petitions were pending with the President. In 2014, the Supreme Court commuted the sentences of Sriharan, Perarivalan and Santhan to life terms. Immediately, the then Chief Minister Jayalalithaa decided to remit their sentences. The State government wrote to the Centre, seeking its opinion within three days. It had to do so as under Section 435 of the CrPC, the State had to consult the Centre, as it was a case probed by the CBI.

However, the Centre challenged the State government’s decision in the Supreme Court and obtained a stay. Questions arising from the controversy were settled by a Constitution Bench, which said the State government could not release them without the Centre’s concurrence as the Union government’s opinion had primacy in the matter. Also, it made it clear that its opinion was limited to statutory remission proceedings under the CrPC, and that “the constitutional power under Articles 72 and 161 will remain untouched.” The Union Home Ministry formally rejected his plea for remission in June 2018.

In September 2018, the State government decided to invoke Article 161 of the Constitution.

It advised the Governor that the remainder of the life term of the seven convicts be remitted so that they could be released. However, in the absence of a time-frame for the Governor to act, nothing was known about it for a long time. Nearly three years later, it became known that the Governor has referred the question to the President. The immediate constitutional question is whether the Governor can make such a reference to the President. The other issue that arises is



whether the primacy accorded to the Centre's opinion under the CrPC in this particular case can be extended even to remission that may be granted by the Governor under Article 161.

WHERE COAL BLOCKS CASES STAND

The Supreme Court last week asked the Enforcement Directorate to file by July 15 a status report on the over 50 cases of money laundering it is probing in connection with the coal blocks allocation scam. The directions came in a case where the ED had pleaded that four officers be relieved since their tenure in the agency was complete.

Why has the court sought a report?

The coal scam cases are under strict monitoring of the Supreme Court, which periodically seeks status reports from the CBI and ED, the two agencies probing the cases. According to SC directions, officers associated with the coal blocks cases cannot be transferred without its permission and so agencies approach it whenever an officer has to be relieved.

During the latest hearing, lawyer Prashant Bhushan of NGO Common Cause had raised the issue of cases pending investigation for over a decade. In 2017 too, the SC had expressed concern over delay in investigation and observed that it appeared as if the investigation "would not come to an end".

Why has there been a delay?

Sources in the CBI and the ED cited the sheer enormity of the case, and alleged that the influence of corporates too delayed court proceedings.

"You have to understand that when the Supreme Court gave the investigations to the CBI in 2012, there were more than 300 preliminary enquiries conducted. Given the limited resources that the agency has, this itself took a few years to complete. Following this, more than 55 FIRs were registered. It was a massive task since records from as far back as 1993 had to be examined. Bureaucrats and officials then involved, had retired and they had to be traced and examined by teams going across the country," a senior CBI officer said.

Sources said the agency had put 33 officers on the job. "This was a complex case since a lot of angles were involved. There were cases which had (former CBI director) Ranjit Sinha's shadow over them which the SC asked us to probe. Then many cases came from the CVC after scrutiny. Then there are big corporates involved who hire the best of lawyers and proceedings are delayed," the CBI officer said.

Who were involved in the cases?

Some big names of the political and corporate world got embroiled in the coal blocks allocation controversy, including Congress politician and industrialist Naveen Jindal and Dasari Narayan Rao (now dead), RJD's Prem Chand Gupta and BJP's Ajay Sancheti. The CBI even examined former PM Singh at a later stage.

A special CBI court in 2020 convicted Dilip Ray, then Union Minister of State for Coal in the government under Atal Bihari Vajpayee of 1999-04, for his alleged involvement in the coal block allocation scandal. The court observed that Ray "abused his official position", as his decision of "relaxation of policy without any logical or legal basis amounts to gross abuse of his powers by the minister".



Last year, a Delhi court sentenced former Coal Secretary H C Gupta to three years imprisonment after convicting him in the Moira-Madhujore coal blocks allocation case. Former bureaucrats K S Kropcha and K C Samria were also handed three-year jail sentences in the case. Gupta has earlier been convicted in two other cases of coal blocks allocation.

What the coal blocks cases are about

In the early 1990s, the government decided to allocate to private companies coal blocks that were not part of the production plan of the public sector Coal India Ltd and the Singareni Collieries Company Limited (SCCL). A list of 143 coal blocks was prepared initially and inflated to 216 later.

At that time, there were no concrete guidelines for allocation of coal blocks as coal mining was largely restricted to PSUs and many geographic locations were seen as unsuitable for profitable mining. The guidelines were periodically revised through 1993, 1998 and 2003.

Between 1993 and 2005, a total of 70 coal mines were allocated. Then between 2006 and 2010, a further 146 blocks were allocated, but some blocks were also de-allocated owing to companies not starting work. The final list stood at 194.

In March 2012, a leaked draft report of the Comptroller and Auditor General (CAG) revealed irregularities in the allocation and pegged the loss to the exchequer at Rs 10.76 lakh crore. The CAG's final report as tabled in Parliament in August 2012, however, whittled down the loss to Rs 1.8 lakh crore. This was still the biggest scam India had seen.

The CAG argued that the government had the authority to auction the coal blocks but chose not to, and allottees as received a "windfall gain".

As the Opposition attacked the Manmohan Singh government on corruption, BJP leaders Prakash Javadekar and Hansraj Ahir approached the Central Vigilance Commission (CVC) with complaints. The CVC referred them to the CBI, which over the next few months registered over 40 FIRs.

Meanwhile, a Parliamentary Standing Committee report said coal blocks distributed between 1993-2008 were done in unauthorised manner, bringing even the NDA period under the scanner. The Supreme Court took cognisance of the case and directed the CBI to directly report to it, not the government. In 2014, it cancelled allocation of 214 coal blocks.

DELHI'S DOORSTEP RATION DELIVERY PLAN QUASHED

The Delhi High Court on Thursday set aside the State government's scheme for door-to-door delivery of ration, Mukhyamantri Ghar Ghar Ration Yojana.

A Bench of Acting Chief Justice Vipin Sanghi and Justice Jasmeet Singh said the Delhi government could bring another scheme but cannot use foodgrain supplied by the Centre for it.

The doorstep delivery of ration to beneficiaries has been a bone of contention between the Centre and the Aam Aadmi Party (AAP) government ever since it was announced by Chief Minister Arvind Kejriwal in his Republic Day address last year.

Under the scheme, items such as wheat, rice and sugar could be sent directly to the homes of the 17,54,863 ration card holders in the Capital instead of them having to line up before fair price shops.



The scheme was challenged by the Delhi Sarkari Ration Dealers Sangh. The Centre, too, opposed it on the ground that the State cannot mitigate the architecture of the National Food Security Act while implementing the scheme.

The High Court in its order said the Delhi government could not have rolled out the scheme when Lieutenant-Governor (L-G) Anil Baijal had expressed a difference of opinion on it. "In cases where differences arise between the Council of Ministers on the one hand and the Lieutenant-Governor on the other, the executive decision of the Council of Ministers is liable to be referred to the President for his decision," the Bench remarked.

L-G's objections

The L-G had recorded his objections on two occasions — March 20, 2018 and June 2, 2021 — proposing the adoption of direct benefit transfer of money to beneficiaries instead. He advised that the proposal be placed before the Government of India for approval.

However, the Council of Ministers headed by Mr. Kejriwal in a June 17, 2021 note observed that there appeared to be a serious misunderstanding and the matter before the L-G was not for approval of the scheme as it was already final.

"To us, it appears that the misunderstanding was not on the part of the Lieutenant-Governor but on the part of the Chief Minister himself," the court observed.

Reacting to the High Court order, the AAP government said on Thursday that it will study the judgment first before planning its future course of action.

POLICE ALLEGATIONS UNBELIEVABLE: SC PANEL

The Supreme Court-appointed Justice Sirpurkar Commission to inquire into the alleged encounter killing of four accused in the gang rape and murder case of veterinary doctor on December 6, 2019, in their 'sealed cover' report submitted to the apex court stated that the allegations that accused snatched pistols from policemen and fired at them was 'artificial' and 'unbelievable'.

It said there was no material evidence from the police to indicate that the deceased suspects – Mohammed Arif and Ch. Chennakeshavulu – who allegedly snatched two pistols from police were familiar with the operation of firearms. "On the directions of the commission, former ACP of Shadnagar division brought a pistol to the commission premises during the hearing and demonstrated the operation of the same. The process is complicated enough that a person unfamiliar with the use of firearms would not be able to operate the pistol easily and especially the operation of firearms would not be possible in the circumstances in which the deceased allegedly used them," the report read.

They also mentioned the specifications and operations of the pistols, the position of the safety switch, and even a ballistics expert's statement which stated 'it is not possible for an untrained person to identify the safety switch and thereafter fire the weapon.' It is also not conceivable that within a short span of time, as alleged by the police, the deceased suspects snatched the weapons, cocked the pistol and used it to fire, it read.

"For all these reasons, it has to be held that the deceased suspects could not have fired those pistols and in fact did not fire the pistols."



Moreover, once they escaped and started running, it would be highly improbable that they would fire at the police party while running. "They would either run away or start and fire at the police party," the report read.

It stated that a version was sought to be projected that Jollu Naveen and Jollu Shiva might have died from the indiscriminate firing by Arif and Chennakeshavulu. "This version is made untenable. The forensic reports show that the injuries were caused by 'high-velocity copper jacketed rounds' and the evidence of ballistics expert show that the bullets of 9mm pistols allegedly snatched by the deceased suspects are not 'high-velocity bullets whereas the bullets of AK-47 and two SLRs wielded by the police party are 'high-velocity' bullets," the committee said in its 383-page report.

On the intervening night of November 27-28, 2019, a 27-year-old veterinary doctor was allegedly whisked away by the suspects, who raped her near Shamshabad and later took her to Chattanpally near Shadnagar in Rangareddy district, in a lorry and burnt her on an underpass on NH-44. The suspects were arrested on November 29, 2019, and remanded in judicial custody. On December 6 morning, the four accused were taken to Chattanpally for collection of evidence and reconstruction of the crime scene.

There they allegedly snatched the firearms and escaped. Minutes later they died in an exchange of fire.

29 PHONES TESTED FOR PEGASUS SPYWARE: SC

The Supreme Court on Friday said its technical committee had so far received and tested 29 mobile devices suspected to be infected by Pegasus malware and gave it four weeks to submit a report to Justice R.V. Raveendran, a retired top court judge overseeing the panel's inquiry into reports that the government used the Israel-based spyware to snoop on journalists, parliamentarians, prominent citizens and even court staff.

Opening the interim report submitted by the committee in court, a Special Bench led by Chief Justice of India N.V. Ramana said the committee had developed its own protocol/software to test the devices for malware.

The panel recorded the statements of petitioners, who had approached the court. It has contacted experts and agencies, including those of the government.

The committee has further undertaken a "public consultation exercise" to invite comments on the subject of inquiry. The CJI read out the interim report to lawyers, including senior advocate Kapil Sibal, for the petitioners, and Solicitor General Tushar Mehta, for the Centre.

The interim report said the committee had got a "large number of responses". It was awaiting responses from the agencies.

The committee said its probe would be completed by the end of May. The interim report said the overseeing judge, Justice Raveendran, assisted by two experts, would then require another 15 days to study the panel's recommendations.

The interim report sought an extension till June 20 to complete the exercise and file a comprehensive report before the court. "We will give them time," the CJI told the lawyers, who agreed.



When the parties, including the Union, urged the court to make the interim report public, Chief Justice Ramana proceeded to summarise its contents.

He said the report had divided its court-appointed task into two areas. “One is regarding the inquiry itself. That is, the fact-finding report regarding the technical issues relating to the digital forensic aspects about the reported use of Pegasus malware to target mobiles of Indian citizens. Second is regarding recommendations about the enhancement of existing laws and procedures related to surveillance and securing rights including privacy, cyber security, etc.,” the CJI explained.

He said the first part of the task was being done by the committee under the supervision of the overseeing judge. The second part was being taken care of by the judge and two other experts assisting him. Once the technical committee submitted its report to the overseeing judge, he would add his own report on the laws to it.

Passing the order, the Bench, also comprising Justices Surya Kant and Hima Kohli, directed the technical committee to “expedite the examination of the mobile devices which they have received, preferably within a period of four weeks, and submit a report to the overseeing judge”.

The court posted the case for hearing in July.

TOUGH LOVE

Call it the grand-daddy of all ultimatums. A couple in Uttarakhand is suing their son and daughter-in-law for not giving them a grandchild after six years of marriage and is demanding Rs 5 crore as compensation if a baby is not produced within a year. A grandchild, the couple says, would be something in the nature of a payback for all the money that they “invested” in their son, including for his expensive education in the US and lavish wedding and honeymoon trip.

In the rest of the world, this lawsuit is making news. But as so many Indian children — both married and unmarried — would know only too well, this is just another example of classic, desi parent guilt-tripping. One of the most effective of parental tactics, guilt-tripping has, for generations, been used to decimate even the slightest hint of independent thought on the part of the offspring. Daughter wishes to study fashion design, instead of medicine? Remind her of how you used to ferry her on your Bajaj Chetak to and from coaching classes all day under the hot sun. Son wants to give up his unsatisfying, high-pressure corporate job to make and sell kombucha on the beaches of Goa? Make long, sobbing phone calls about how the neighbour’s cousin’s son is earning enough to gift his parents a round-the-world cruise. Clearly nothing, not even a choice as deeply personal as whom to marry and whether or not to procreate, is armoured against this deadliest of all arrows in the parental quiver.

Having characterised the non-issuance of, well, an issue, as “mental cruelty”, the Uttarakhand couple has significantly upped the stakes in the guilt-tripping game. Will other parents now employ similarly deadly manoeuvres? Can the present move even be topped? Beleaguered offspring all over the country await news of further development with bated breath.



BY THE BOOK

The Supreme Court has allowed Madhya Pradesh to implement 14% reservation for Other Backward Classes (OBCs) and notify the elections for nearly 23,263 local bodies within two weeks. The Court had on May 10 ordered the State to proceed with the elections without OBC quotas. The Court has since then reassured itself that the State has met the 'triple test' criteria it had established in 2010 for OBC reservation in local bodies — a commission that undertook contemporaneous empirical inquiry into the nature and implications of the backwardness in the context of local bodies, break-up of the reservation local body-wise, and adherence to the 50% ceiling on quotas. Madhya Pradesh had already provided for reservation for women besides Scheduled Castes and Scheduled Tribes, and its proposed quota for OBCs is 14%, to keep the aggregate within the 50% ceiling. The State has convinced the Court that it had indeed met the triple test, but the validity and accuracy of the commission report remain open to further judicial scrutiny. The Madhya Pradesh government and the Bharatiya Janata Party have welcomed the order which they publicise as their success; the Opposition Congress has said OBCs deserve 27% reservation, and blames the BJP government for its failure to impress upon the Court, on the quantum.

Madhya Pradesh and Odisha are also facing judicial scrutiny of their plans for OBC reservation in local bodies, and this remains a controversial question on which the law is still evolving and public opinion is fractious. The Court has held that the criteria for reservation in job and education, which is social and educational backwardness, need not be applied for reservation in local bodies. Backwardness to be established for political reservation can be of a different nature, it had held. OBCs collectively form more than half the population of India and many communities want to be included in the category. The politics of the country is largely litigated among this segment, and suggestions and demands are raised on a regular basis. There is demand for removing the 50% ceiling on quotas, a caste-based census that the Centre is opposing but clamour for which is growing, and reservation in the private sector. While quotas have proven to be an effective instrument of empowerment and justice, competitive politics around them often leads to a paralysis of politics and governance. Making the reservation regime fair, objective, and empirical is a major governance challenge, and the Court's attempts in that direction is welcome. Political parties and governments must act in tandem with the judiciary so that reservation programmes do not turn divisive but serve a development purpose.

SC DECLINES TO STAY J&K DELIMITATION REPORT

The Supreme Court on Friday directed the Centre to file an affidavit responding to a challenge to the delimitation exercise undertaken in Jammu and Kashmir following the withdrawal of special status granted to the State under Article 370 and its subsequent bifurcation.

However, the court did not accept an oral plea made by petitioners to stay the tabling of the final draft report of the Jammu and Kashmir Delimitation Commission in Parliament.

"Can we restrain them from tabling it in the Parliament? If that is so, why did you take two years to challenge the delimitation notification," a Bench led by Justice Sanjay Kishan Kaul asked the petitioners, Haji Abdul Gani Khan and Mohammad Ayub Mattoo, represented by senior advocate Ravi Shankar Jandhyala and advocates Sriram Parakkat and M.S. Vishnu Shankar.

The three-member Jammu and Kashmir Delimitation Commission led by a former Supreme Court judge, Justice Ranjana Prakash Desai, submitted the final draft report early in May, notifying the

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



new boundaries, names and number of Assembly seats, paving the way for the first Assembly election in the Union Territory. “Are you challenging the report or the formation of the commission...? You have come after the report has been filed,” Justice Kaul addressed Mr. Jandhyala.

The court ordered the government to file its affidavit in six weeks and gave the petitioners two weeks to submit their rejoinder.

The Election Commission has also been asked to respond. The case was posted for August 30. The petition also questioned why J&K has been “singled out” for delimitation when Article 170 of the Constitution said that such an exercise for the entire country was due only in 2026.

The petition argued that the Centre had usurped the jurisdiction of the Election Commission by notifying the delimitation of J&K. It highlighted how the Centre first issued a notification on March 6, 2020, constituting the commission led by Justice Desai to conduct the delimitation of the constituencies in J&K, Assam, Arunachal Pradesh, Manipur and Nagaland.

However, it issued a second notification on March 3, 2021 restricting the scope of delimitation to J&K alone.

The petition also alleged that the increase in the number of seats from 107 to 114 (including 24 seats in Pakistan-occupied Kashmir) in the Union Territory of Jammu & Kashmir was ultra vires the Constitution and the Jammu & Kashmir Reorganisation Act, 2019. The petition said any step to increase the number of seats in J&K would require a Constitutional Amendment besides changes in the Delimitation Act, 2002 and the Representation of People Act, 1950.

SOFT TARGET

The environment in the Valley is fraught, and the administration must not add to it, even if it can do nothing to provide a healing touch to those affected by the violence.

The killing of yet another Kashmiri Pandit in Budgam district of Kashmir Valley is a disturbing development, and further evidence that the J&K administration has been unable to prevent such targeted killings. Last month, a Kashmiri Pandit was injured when militants shot at him in Kulgam. Before that, another killing shook a small Rajput community that has been living in south Kashmir for years. On Thursday, the person targeted was Rahul Bhat, a young revenue department official, who had moved to the Valley under a two-decade old Central employment scheme for Kashmiri Pandits whose families had left during the 1990 exodus. Shockingly, he was shot by his two assailants in the government office where he worked. Last October, after a spate of attacks on Kashmiri Pandits and migrant workers, the J&K police had claimed to have killed the “masterminds” behind the attacks.

However, it has been clear for several years that a policy that focuses on “elimination” of militants alone is not working. Militancy in Kashmir is a revolving door that produces more recruits for each one that is killed in an encounter. That these killings are being carried out by local boys is well known. The police have said there is an increasing presence in the Valley of “foreign” militants — that usually means they are from Pakistan — and that they are pushing young Kashmiris to carry out these killings. Last month, after more such killings, the police said they would launch night patrols in remote villages where non-migrants lived in order to prevent attacks on soft targets. But how much protection can a stretched police force provide to individuals or groups is the question that Kashmiri Pandits who seek to return to the Valley have been asking.



Over the last nearly three years, the administration has silenced anti-government dissent in the Valley to such an extent by sheer diktat that it was clearly blindsided when a large number of Pandits, who like Bhat, are employed by the government in the Valley and live in “transit camps” in various districts, came out to protest the administration’s failure to protect members of the community. The J&K administration seems not to know that policing of such protests, routine in other states, does not require tear gassing or a baton charge. It should also be putting the lid on activities that seem to emphasise the divide between Muslims and Hindus. The environment in the Valley is fraught, and the administration must not add to it, even if it can do nothing to provide a healing touch to those affected by the violence.

‘GOOD NEWS’ AMID TURMOIL IN VALLEY

Bitterness between Kashmiri Muslims and Pandits may have aggravated in the recent past. However, a Kashmiri Muslim filmmaker, Danish Renzu, and a Kashmiri Pandit writer-producer, Sunayana Kachroo, have collaborated on a 10-minute movie titled The Good News to heal the wounds of the embittered communities by looking at their common past and sufferings.

The Good News, starring Salonie Patel and Gauri Batra as Hindu-Muslim friends, is scheduled to be premiered during the Tongues on Fire UK Asian Film Festival in London on Saturday.

Speaking to The Hindu ahead of the release, Renzu, who had earned applause for earlier movies, The Illegal and Half Widow, described The Good News as a project that was sparked by the killings of members of minorities by gunmen in 2021 in Kashmir.

“I was in Srinagar in 2021 when there were attacks on minority members in September-October. It was inhumane. Whoever is responsible for the heinous acts are trying to create divisions and a rift in the Valley. That is what led to this short film. It is based on true events. It’s aimed at bringing the people together,” said Mr. Renzu, who belonged to a Kashmiri generation that never got to see Kashmiri Pandits living in the neighbourhood.

“How does one justify such brutal killings of innocent human lives on the basis of religion, or even as simply as on the basis of what they wear? It’s sheer death of humanity and unacceptable. The dividing forces in the Valley are trying to upend the peace and pure Sufi Kashmiri culture,” he added.

Mr. Renzu believes that the time has come to see the two communities living together again.

“I have heard great things about how Muslims and Pandits would live together. And how Pandits left the Valley [in the 1990s] because of the violence against them. Today’s generation has an opportunity to not only touch upon these topics but also to respond and to bring people together,” he said.

Element of hope

Mr. Renzu said the film is not just talking about what is happening in the Valley but it also highlights the element of hope. “It’s my imperative to bring as a filmmaker different points of views and people’s plight,” he added.

For Kachroo, this film is a trip into how two friends shared their smallest joys.

It remains to be seen if The Good News will heal wounds and revive ties between communities.



ACT EARLY, DECISIVELY

It is a matter of great concern that laws are being used to rake up religious controversies to give a fig-leaf of legitimacy to a communal onslaught on the country's secular character. Obviously emboldened by the Supreme Court verdict handing over a disputed site in Ayodhya to Hindu claimants, determined and malicious efforts are being made by communal elements to capture sites in Varanasi and Mathura where the Gyanvapi mosque and Shahi Idgah Masjid are located. The idea that key places of worship among Muslims have been built after demolishing Hindu temples is beginning to take hold among sections of Indian society, with the active encouragement of politically affiliated religious groups. It was to prevent such attempts to change the character of places of worship in the name of correcting perceived historical wrongs that Parliament enacted the Places of Worship (Special Provisions) Act, 1991. It sought to freeze the status of places of worship as on August 15, 1947, so that existing suits and proceedings abate and new claims are not entertained. Yet, in flagrant violation of the law, courts are repeatedly allowing proceedings to be initiated. In Gyanvapi, not only has a civil judge entertained a suit but has also ordered a commission to videograph the mosque to ascertain its religious character. The Supreme Court has not been strong enough. Instead of putting an immediate halt to such proceedings aimed at creating a groundswell of opinion in favour of converting such sites into temples, it has only ordered some elementary measures to protect Muslim worshippers and their place of worship.

Anyone familiar with the history of the Ayodhya dispute, which led to the Babri Masjid's demolition, riots and bombings, will understand that all such attempts to change the character of places of worship have a motive of using religion for political ends and marginalising minorities. Yet, even the Supreme Court feels some inexplicable need to let procedural aspects of civil law to be gone through in such litigation. It has transferred the Gyanvapi suit to the District Judge and asked for priority to be given to the petition to reject the plaint — which will involve the question whether the suit is barred by the Places of Worship Act. As long as even one application is pending somewhere, revanchist groups will continue the relentless onslaught on minority places of worship. In Mathura, the District Court has overturned a lower court's order and ruled that the Act will not bar a suit aimed at removing a Masjid in the name of the site being the birthplace of Lord Krishna. The political atmosphere is conducive for such efforts, whose proponents will expect state backing. It is up to the courts to act early and act decisively to uphold the spirit of the Places of Worship Act and preserve communal peace.

GYANVAPI AND THE PLACES OF WORSHIP ACT

The story so far: The Supreme Court on Tuesday directed the District Magistrate of Varanasi to ensure protection of the area at the Gyanvapi mosque complex where a 'shivling' is said to have been found during the survey there. (The caretakers of the mosque said that the said object was not a 'shivling' but a part of a stone fountain in the wazu khana (ablution tank) of the mosque.)

While hearing the plea of the Anjuman Intezamia Masjid, which manages the affairs of Gyanvapi mosque in Varanasi, challenging the video survey a Bench comprising Justices D.Y. Chandrachud and P.S. Narasimha, ordered that Muslims could continue offering 'namaz' there without any impediment. The top court posted the plea of the mosque committee, which had invoked the Places of Worship Act while seeking a stay on the survey, for hearing on May 19.



What does the Places of Worship Act say?

In March 2021, the Supreme Court asked the Centre to respond to a petition that challenges the Places of Worship (Special Provisions) Act, 1991. The law was enacted to freeze the status of all places of worship in the country as on August 15, 1947. An exception was made to keep the Babri Masjid-Ramjanmabhoomi dispute out of its ambit as the structure was then the subject of litigation. The dispute ended after the court ruled that the land on which the Masjid stood should be handed over to the Hindu community for the construction of a Ram temple. The challenge to the Act questions the legality of the prohibition it imposes on any community laying claim to the places of worship of another.

The Act says that no person shall convert any place of worship of any religious denomination into one of a different denomination or section. It contains a declaration that a place of worship shall continue to be as it was on August 15, 1947. Significantly, it prohibits any legal proceedings from being instituted regarding the character of a place of worship, and declares that all suits and appeals pending before any court or authority on the cut-off date regarding the conversion of the character of a place of worship shall abate. In other words, all pending cases will come to an end, and no further proceedings can be filed. However, any suit or proceedings relating to any conversion of status that happened after the cut-off date can continue.

In which cases will the law not apply?

The 1991 Act will not apply in some cases. It will not apply to ancient and historical monuments and archaeological sites and remains that are covered by the Ancient Monuments and Archaeological Sites and Remains Act, 1958. It will also not apply to any suit that has been finally settled or disposed of, any dispute that has been settled by the parties before the 1991 Act came into force, or to the conversion of any place that took place by acquiescence.

The Act specifically exempted from its purview the place of worship commonly referred to at the time as Ram Janmabhoomi-Babri Masjid in Ayodhya. It was done to allow the pending litigation to continue as well as to preserve the scope for a negotiated settlement.

Anyone contravening the prohibition on converting the status of a place of worship is liable to be imprisoned for up to three years, and a fine. Those abetting or participating in a criminal conspiracy to commit this offence will also get the same punishment.

What has the Supreme Court said on the status freeze?

In its final verdict on the Ayodhya dispute, the Supreme Court had observed that the Act “imposes a non-derogable obligation towards enforcing our commitment to secularism”.

The court went on to say: “Non-retrogression is a foundational feature of the fundamental constitutional principles, of which secularism is a core component.”

The court described the law as one that preserved secularism by not permitting the status of a place of worship to be altered after Independence. In words of caution against further attempts to change the character of a place of worship, the five-judge Bench said, “Historical wrongs cannot be remedied by the people taking the law in their own hands. In preserving the character of places of public worship, Parliament has mandated in no uncertain terms that history and its wrongs shall not be used as instruments to oppress the present and the future.”



How is the Act likely to affect the Gyanvapi proceedings?

The lawyers for the Gyanvapi mosque administration argue that the ongoing civil cases filed by Hindu devotees constitute an attempt to change the status of the place of worship and violates the Act. From entertaining the litigation, to orders such as appointing a commissioner to conduct a survey, the survey itself and the latest order to seal off a portion following the claim that a 'shivling' has been found are all contrary to the 1991 Act.

The Vishwa Hindu Parishad, however, contends that the Places of Worship Act is not applicable to the Gyanvapi issue, as there was no change to the religious structure since 1947, and that Hindus have always been performing puja at the site.

The outcome of the case will depend on whether the courts deem the proceedings contrary to the Act, or rule that it is not applicable to the dispute in Varanasi.

THE KRISHNA JANMABHOOMI CASE IN MATHURA, AND THE CHALLENGE TO THE 1968 'COMPROMISE' BETWEEN THE HINDUS AND MUSLIMS

On Thursday, the same day when it emerged that a court-ordered videography survey of the Gyanvapi mosque complex in Varanasi had found debris of old temples and Hindu motifs on pillars, a district judge in Mathura allowed the reopening of a lawsuit on the ownership of a plot of land on which stands another mosque, built in the 17th century.

The Shahi Idgah mosque in Mathura was built on the orders of Emperor Aurangzeb adjacent to the Krishna Janmasthan — believed to be the place where Lord Krishna was born — after demolishing a temple.

What has the Mathura court ruled?

District and Sessions Judge Rajiv Bharti allowed an appeal by the Shri Krishna Janmabhoomi Trust and other parties seeking ownership of the land on which the mosque is built. The dispute involves ownership of 13.37 acres, which the petitioners claim belongs to the deity Lord Shri Krishna Virajman.

The plea was dismissed by a lower court earlier, and subsequently a revision petition was filed before the district judge. The civil suit will now be heard by a lower court.

Apart from looking into revenue records, the court will also have to decide the validity of a 1968 "compromise agreement" between the Shri Krishna Janmasthan Seva Sansthan — the temple management authority, a registered society under law — and the Trust Shahi Masjid Idgah. It was under this agreement that the temple authority had conceded the contentious portion of land to the Idgah on which the mosque stands.

What is the litigation so far?

At least a dozen cases have been filed in courts in Mathura by different petitioners. A common thread in all the petitions is a prayer for the removal of the mosque from the 13.77-acre complex, which it shares with the Katra Keshav Dev Temple.

Other pleas include a video survey of the mosque (which would be on the lines of the survey allowed by the Varanasi court at the Gyanvapi mosque), and the right to offer prayers on the premises.



The Allahabad High Court is hearing a public interest litigation by advocate Mehek Maheshwari demanding that the mosque be acquired by the government. Initially, the PIL was dismissed as the lawyer did not turn up for the hearing, but a Bench comprising Chief Justice Rajesh Bindal and Justice Prakash Padia revived it. It is expected to be heard on July 25.

In a separate case, the High Court on May 12 directed the Civil Judge (Senior Division), Mathura, to decide within four months cases on the Krishna Janmabhoomi issue. Justice Salil Kumar Rai was hearing a case filed by Manish Yadav, who claims to be next of kin to the deity, seeking a temporary injunction against the Shahi Idgah from entering the premises.

Who owns the land in question?

The mosque was built by Aurangzeb in 1670 on the site of an earlier temple. The area was regarded as nazul land — non-agricultural state land owned by the Marathas, and then the British. Before the mosque was built, Raja Veer Singh Bundela of Orchha had also built a temple on the same premises in 1618.

In 1815, Raja Patni Mal of Benaras bought the 13.77 acres in an auction from the East India Company. The Raja's descendants — Rai Kishan Das and Rai Anand Das — sold the land to Jugal Kishore Birla for Rs 13,400, and it was registered in the names of Pandit Madan Mohan Malaviya, Goswami Ganesh Dutt, and Bhiken Lalji Aattrey.

The Shri Krishna Janmabhoomi Trust was set up by Birla, and it acquired the ownership rights over the Katra Keshav Dev temple. In 1951, the 13.77 acres were placed in the trust, with the condition that the “trust property will never be sold or pledged.”

In 1956, the Shri Krishna Janmasthan Sewa Sangh was set up to manage the affairs of the temple. In 1977, the word ‘Sangh’ in the registered society’s name was replaced with ‘Sansthan.’

What is the petition on which Thursday’s order was issued?

In 2020, Lucknow-based advocate Ranjana Agnihotri, along with six others, filed a plea before the Civil Judge (Senior Division) seeking the removal of the Shahi Idgah mosque from the temple complex. Agnihotri — who, incidentally, wrote a book called SriRam Janmbhoomi Ayodhya Unpunished Conspiracy: Brutal Killing, Mischief and Interpolation in 2017 — claimed to be suing on behalf of Shri Krishna Virajman as “next of kin” to the deity.

The petitioners argued that the original kaaraagar (prison) where Lord Krishna is believed to have been born “lies beneath the construction raised by Committee of Management Trust Masjid Idgah” and that the “true fact will come out before the Court after excavation”. (According to legend, Lord Krishna’s parents Devaki and Vasudev had been imprisoned by the evil king Kansa, after it was prophesied that Devaki’s child would be his nemesis.)

In September 2020, Judge Chaya Sharma dismissed the plea on grounds of maintainability, holding that Agnihotri and the other petitioners did not have locus, and could not be “next of kin” of the deity when a temple management authority already exists.

The court also said that the temple and the Shahi Idgah had entered into a compromise in 1968, which had been subsequently formalised through a decree of the court.



What the 1968 compromise says

According to court records, prior to 1968, several hutments stood on the 13.77-acre plot. Following the settlement, tenants of the Idgah were asked to vacate so a new temple could come up. Boundaries were redrawn so both places of worship could operate simultaneously. A wall separated them; it was agreed that the mosque would have no window, door, or open drain facing the temple.

The petitioners say the agreement was made fraudulently, and is invalid in law. In any case, the deity was not part of the proceedings, and His rights cannot be extinguished by the agreement.

THE 22 LOCKED 'ROOMS' AT THE TAJ MAHAL, AND A MYSTERY THAT ISN'T

Allahabad High Court on Thursday (May 12) dismissed a petition seeking a “facts finding committee to study and publish the real History of Taj Mahal” and a “direction...to open the sealed doors (approx. 22 rooms) inside the Taj Mahal to rest to the controversy”.

A Bench comprising Justices Subhash Vidyarthi and Devendra Kumar Upadhyaya said the prayers were “non-justiciable”, and “such issues...should be left to be debated amongst the academicians, scholars and historians”.

No secret history

The so-called “22 rooms” in the basement of the Taj Mahal are not really rooms, rather a long arched corridor along which doors were fixed so the space could be utilised better, sources in the Archaeological Survey of India (ASI) who have seen the basement area on several occasions, said. The sources said ASI staff at the Taj clean the “rooms” weekly or fortnightly, and “There is nothing on the walls there.”

A retired ASI official who did not want to be identified said the area is not of tourist interest, and is therefore kept locked to prevent unnecessary movement of people at the protected World Heritage Site that gets up to 1 lakh visitors daily.

“There is no secret history in the basement, it is for security reasons only that the area is kept out of bounds for visitors,” the official said.

Architectural feature

The noted archaeologist K K Muhammed, who retired in 2012 as the ASI's Regional Director (North), told the Indian Express that he had seen no religious motifs inside the basement rooms of the Taj. Such rooms, he said, are not uncommon in other Mughal-era structures of a similar nature — in Agra, and at the Humayun's Tomb and Safdarjung's tomb in Delhi.

“The ASI maintains all these basement rooms. The walls are bare, there are no motifs; it's just a structural element to raise the plinth on which the main mausoleum and the minarets stand,” Muhammed said.

An official from the ASI's Agra Circle said: “For a structure of this size, once the foundation is done, arches are created to lift the platform and spread the load uniformly. Surveys are conducted from time to time by going to the basement to test the strength of the Taj Mahal.”



Claims of a 'temple'

Claims have been made over many years — and repeatedly rejected by historians, ASI officials, and courts including the Supreme Court — that the Taj is really a Hindu temple, and idols of gods and goddesses may be hidden in its basement.

Muhammed said the Taj was first mentioned in the Badshahnama, the official chronicle of Shah Jahan's reign — and that its architectural features are such that it could not have been built even 50 years before the time that is historically assigned to it, given the way Mughal architecture evolved. "It takes the double-dome, inlays, and jaalis from various Mughal structures that existed at the time it was commissioned," Muhammed said.

LUCKNOW'S LAXMAN CONNECTION, AND A LARGE MOSQUE BUILT IN THE REIGN OF AURANGZEB

A tweet by Uttar Pradesh Chief Minister Yogi Adityanath welcoming Prime Minister Narendra Modi to Lucknow, "the city of Laxman", on May 16 has triggered fresh reports of a possible change of the name of the state capital to "Laxmanpuri".

"Sheshavatar Bhagwan Shri Laxman ji ki paawan nagari Lucknow mein aapka haardik swaagat wa abhinandan (You are welcome in the sacred city of Lord Laxman, Lucknow)," he tweeted along with a picture of himself and Governor Anandiben Patel with Modi.

While there is no official proposal yet to change the name, the Chief Minister's tweet came three days after the Mayor of the city spoke about the Lucknow Municipal Corporation's plan to erect a 151-foot statue of Laxman on the bank of the Gomti. Both Mayor Sanyukta Bhatia and BJP leaders have said Lucknow's ancient connection with Laxman must be re-established.

While the city's name has long been associated with Laxman in the popular imagination, speculation about its possible renaming gained ground after the late BJP leader Lalji Tandon wrote a book, *Ankaha Lucknow*, in 2018, in which he lamented the loss of the city's connection with the brother of Lord Ram. Over the years, Lucknow's "Laxman ka tila" had been forgotten, Tandon wrote — and the only remaining association with the historic tila (mound) was the Tile wali masjid, a mosque built by a Mughal governor

Tandon's book

Two of the chapters in *Ankaha Lucknow*, launched by Vice President M Venkaiah Naidu in May 2018, are titled 'Laxman Tila' and 'Virasat ke saath chher-chhar' (Messing with heritage). Tandon wrote, "Purana Lucknow Laxman Tile ke aas paas basaa tha. Chaahe Mughal kaal ho, Aurangzeb ke samay ek masjid ka nirmaan ho, Mohammed Ali Shah ka mazaar ho, Naubat Khana ho, Itra Bagh ho, Alvida Ground ho, chaahe angrezon ka kaal ho, Nawabi kaal ho, aazaadi ke kuchh dashak baad ho... Laxman Tila hamesha Laxman Tila raha. Ab Laxman Tila ka naam poori tarah mitaa diya gaya hai aur yeh sthan aaj Tile wali masjid ke naam se jaana ja raha hai. (Old Lucknow was settled around Laxman Tila. During the time of the Mughals, the Nawabs, the British, and until a few decades after Independence; the construction of the mosque in Aurangzeb's reign, mazaar of Ali Shah, Naubat Khana, Alvida Ground, Itra Bagh, Laxman Tila remained Laxman Tila. But now its name has been removed, and that place is known by the name of Tile wali masjid.)"

The name of the city had changed from "Laxmawati to Laxmanpur to Lakhnawati to finally Lucknow", he wrote. He said the city had been given to Laxman by Ram, and Aurangzeb had built



the Tile wali masjid on the mound of the ancient settlement. The mound should be explored for archaeological remains, Tandon said.

Statue demand

In June 2018, BJP corporators Rajnish Gupta and Ram Krishna Yadav brought a proposal before the municipal board to erect a statue of Laxman near the site of the ancient Laxman ka tila. This faced opposition from non-BJP parties and Muslim clerics. A budget allocation was made, but the proposal was put on ice after the pandemic struck in 2020.

“We opposed the proposal saying there was already a statue of Laxman by the Gomti, which was not maintained well, so what was the need for another statue? We also said that sanatana Hindu dharma does not speak about installing statues of gods by the roadside, where they cannot be properly respected,” said Congress spokesperson Mukesh Singh Chauhan, who was a corporator at the time.

Mayor Bhatia has announced a 151-foot statue of Laxman would be built at Jhulewala Vatika near Hanuman Temple. The proposal has been sent to the government, and a budget of Rs 15 crore set aside, she said.

She told The Indian Express that Lucknow was originally called Laxmanpuri, and the proposed statue would be a prerna sthal and a gateway to Ayodhya puri, the city of Ram. A museum would tell the coming generations about Laxman’s contributions, she said.

Historian’s view

In his book Purana Lucknow, historian Abdul Halim Sharar wrote that while no one knows for sure who established the city and how it got its name, based on certain findings and ancient folklore, it can be surmised that after Lord Ram returned from exile, this land was given to his brother Laxman.

A hamlet was established around a tila, which came to be known as Laxmanpur, and the tila became popular as Laxman Tila, Sharar wrote. It was believed that a cave lay concealed within the depths of the tila, he wrote.

ASI SHUTS AURANGZEB’S TOMB IN AURANGABAD AFTER MNS COMMENTS

The Archaeological Survey of India (ASI) Thursday shut Mughal emperor Aurangzeb’s tomb in the Aurangabad district of Maharashtra for five days after a mosque committee in the area tried to lock the place Wednesday, officials said.

On Tuesday, the Maharashtra Navnirman Sena (MNS) spokesperson Gajanan Kale had in a tweet questioned the need for the monument’s existence in the state and said it should be destroyed.

Kale’s comment came after AIMIM leader Akbaruddin Owaisi’s visit to the tomb earlier this month was criticised by the ruling Shiv Sena as well as by the BJP and the Raj Thackeray-led MNS. While BJP leaders demanded Owaisi to be booked under sedition charges, NCP chief Sharad Pawar had wondered if such an act was aimed at creating a new controversy in Maharashtra which has been peaceful.



Subsequently, security at the ASI-protected monument site at Khuldabad in Aurangabad district was increased by the Aurangabad rural police and the ASI to avoid any kind of untoward incident and proper screening of every person was being done.

Milankumar Chauley, ASI's Aurangabad circle superintendent, confirmed that the tomb has been shut for five days from Thursday on the request of the mosque committee and the police.

An official of the Aurangabad rural police said, "The situation at the monument site is under control and no untoward incident has taken place. However, the tomb has been shut for tourists as a precautionary measure."

THE CONFUSION OVER THE STATUS OF THE ASSAM NRC

The story so far: A member of one of Assam's functional 100 Foreigners' Tribunals (FTs) had on May 10 written to Hitesh Dev Sarma, the State Coordinator of the National Register of Citizens (NRC), asking him to stop interfering in the lawful functioning of the tribunals. This letter was in response to Mr. Sarma's April 18 letter to all the FT members not to treat the NRC as "final" while judging the nationality of a person suspected to be a non-citizen.

What is the NRC and when did it start?

The NRC was born out of independent India's first census in 1951, entailing the transfer of data from the Census slips. All States were mandated to compile an NRC but it was done only in Assam. The intention behind such an exercise in Assam was to prepare a village-based inventory of residents in view of the resistance from the State — then undivided — to house post-Partition refugees. The fear of the indigenous people of being outnumbered by "illegal immigrants" during and after the 1971 Bangladesh War led to the Assam Agitation from 1979 to 1985. The demand for updating the 1951 NRC to eject foreigners from Assam was raised during the agitation.

The agitation ended with the signing of the Assam Accord in August 1985. The accord prescribed March 24, 1971, the eve of the Bangladesh War, as the cut-off date for detecting, detaining and deporting foreigners. This date was incorporated in the NRC updating exercise that began in 2014 under the supervision of the Supreme Court. People listed in the 1951 NRC and their descendants had a comparatively smooth inclusion in the complete NRC draft published on August 31, 2019. This draft excluded 19.06-lakh out of the 3.3 crore people who had applied for inclusion.

What was the trigger of the debate over its status?

In 2021, Mr. Sarma submitted an affidavit at the Gauhati High Court, referring to the August 2019 NRC as a "supplementary list" and not the "final NRC" and sought a re-verification. In September that year, an FT member in southern Assam's Karimganj district declared a doubtful migrant as Indian while observing that members of his family figured in the August 2019 list referred to as the "final NRC". The list was also being referred to as final at various fora. On April 18, Mr. Sarma wrote to the FTs asking them not to depend on the NRC to adjudicate cases of citizenship. "It has been observed that while disposing of FT cases, various documents relating to NRC are being called from the District Registrar of Citizens Registration (Deputy Commissioner) and the State Coordinator, NRC, Assam. In this regard, I am to inform you that the Final NRC is yet to be published by the Registrar General of Citizens Registration," he wrote. He also said that the NRC was erroneous due to wrong data entry and faulty process adopted in the updating exercise, as mentioned in the interlocutory application he had submitted before the Supreme Court, which is yet to hear the matter.



An FT member, choosing to be anonymous, insisted in his reply to Mr. Sarma on May 10 that the NRC published in accordance with relevant clauses of the Citizenship Rules of 2003, was final. The member also cited the official website where the NRC is mentioned as final and an August 2019 press communique by his predecessor, Prateek Hajela, “clearly mentioning” that the NRC was final. “The State Coordinator cannot propagate his wrong understanding of law, rules, notifications and orders of the Supreme Court about the finality of NRC... he should withdraw his letter and stop interfering in the lawful functioning of the Foreigners’ Tribunals which is beyond your jurisdiction and limits of power,” the FT member said. Judges, advocates and bureaucrats with judicial experience are appointed as members of the quasi-judicial body under the Foreigners’ Tribunal Act, 1941, and Foreigners Tribunal Order, 1964.

What, then, is the status of the NRC?

According to the State Coordinator, only the office of the Registrar General of India has the authority to publish the final NRC and a notification in this regard is yet to be issued. But the FT members, instead of looking at cases of people declared foreigners independently of the NRC, have been passing judgments by viewing the NRC as final, he said adding that Mr. Hajela’s statement was “misleading”. NRC officials also pointed out that the updating exercise still has some stages to go.

The next stage is the issuance of a rejection slip to each of the 19.06 lakh people excluded from the draft NRC. After receiving such a slip with an explanation of why he or she has been left out of the NRC, a person would have to approach the FT concerned within 120 days with documents to prove his or her citizenship. The FT would then adjudge the person as a ‘citizen’ or ‘foreigner’ for inclusion or rejection in the NRC.

What is the stand of the Assam government on the NRC?

The BJP-led Assam government has stuck to its stand that the NRC was erroneous. They have said that at least 20% of the enlisted names in districts bordering Bangladesh and 10% in the remaining districts need re-verification. The government has not accepted the list as final and has decided to approach the Supreme Court for a “corrected” NRC. The government, however, has decided to push for unfreezing the biometrics of 21 lakh people, collected during the updating exercise, to enable them to get Aadhaar cards, which can be locked again if a person is eventually marked as a non-citizen.

ACTIONS THAT CORRODE THE STEEL FRAME OF INDIA

A letter war between two sets of retired public officials (civil servants, judges and army officers), concerning the prevailing political and social situation in the country, has been widely reported in the media. In the last week of April 2022, a group of these retirees, calling themselves as the Constitutional Conduct Group (CCG) sent an ‘open letter’ to the Prime Minister. In the letter, they appealed to him to call for an end to the politics of hate and violence against the minorities, particularly Muslims.

Very soon thereafter, another rival group of Concerned Citizens (CC) surfaced and rubbished the allegations as a ‘false narrative’, inspired by western and international lobbies.

Unfortunately, in neither of the formulations, is there any reference to the role of the civil service (of which they all were distinguished members in the past) in whatever is happening or not happening in the country, concerning law and public order and the security of citizens. It is the



police and magistracy, judicial courts and other regulatory agencies — not politicians — which have been authorised and empowered by law to take preventive action against potential troublemakers, enforce the laws relating to criminal, economic and other offences, and maintain public order. In mature democracies, self-respecting public officials normally discharge their constitutional and legal responsibilities with honesty, integrity and their own conscience, firmly resisting the dictates of the vested interests. What is happening in our country?

Lessons from Partygate

Perhaps, a reference to the recent events in Great Britain will serve to clarify things, as the main features of our governance system — the cabinet system with accountability to Parliament and a permanent civil service with political neutrality as its hallmark — are patterned on the English constitutional model.

Recently, Britain's two top Ministers, Prime Minister Boris Johnson and the Chancellor of the Exchequer (Finance Minister), Rishi Sunak, were accused of violating their own lockdown regulations for COVID-19 by attending Christmas and other parties at 10, Downing Street, London (Prime Minister's residence) in the months of November to December 2020.

A career civil servant, Sue Gray, was asked to inquire into the veracity of the charges. Of Ms. Gray, it was said that she would never want to tarnish her reputation by claims of a cover-up or a shoddy investigation.

She came to the finding that against the background of the restrictions on all citizens, the gatherings held were inappropriate and represented a serious failure to observe the high standards expected from top public functionaries. The public and the political establishment accepted the integrity of the exercise. Then, another wing of the civil service, the London Metropolitan Police, imposed fines on the Prime Minister and the Chancellor of Exchequer for their misdemeanour, and again both the top Ministers accepted the penalty.

An erosion in India

Can this happen in India? It might have been possible in the early years when Sardar Vallabhbhai Patel created independent India's civil services, but no longer. The deterioration in standards was very visible during the National Emergency declared in 1975. The civil services, like other institutions including the judiciary, just caved in; the trend might have accelerated over the years; now, no one even talks of civil service neutrality, although there is the rare purist who could be sticking to the old standards of behaviour.

Earlier, during communal or caste riots, the Administration focused on quelling the disturbances and restoring peace in the affected locality, without ever favouring one group over the other. Now, there are allegations of local officers taking sides in a conflict. For civil servants who work with ruling politicians directly, following a political master's dictates and identifying with his interests, anticipating his views in official work and acting on them and pandering to his narrow political interests, often become easy options that put them out of harm's way.

The politician, lacking the vision and intellectual grasp of a Sardar Patel, could also reward a compliant bureaucrat by offering prized and lucrative assignments both within and outside the country. He could also have him placed in an inconvenient position or even punish him if he does not follow his line. This can happen despite the protection and safeguards in Article 311 of the Constitution. That a civil servant's pliant and submissive behaviour means an end to civil service



neutrality and the norms and values that this trait demands, does not seem to bother either the political or bureaucratic leadership.

Non-negotiable values

The norms that define neutrality are: independence of thought and action; honest and objective advice; candour and 'speaking truth to power' even if it is done in the privacy of a Minister's chamber. Associated with these norms are the personal values that a civil servant cherishes or ought to cherish, namely, self-respect, integrity, professional pride and dignity. All these together contribute to the enhancement of the quality of administration that benefits society and the people.

This objective may, however, be at a discount when politicians are eager to serve their personal and party interests, and overzealous and ambitious officials dance to their tune, thereby leading to a dilution of standards. It could also create favourable conditions for both political and bureaucratic corruption.

"Constitutional morality is not a natural sentiment," wrote B.R. Ambedkar, the architect of the Constitution and added, "It has to be cultivated. We must realise that our people have yet to learn it. Democracy in India is only a top dressing on an Indian soil which is essentially undemocratic."

MUNDKA ACCIDENT DRIVES HOME THE NEED TO CREATE SAFE WORKING CONDITIONS IN FACTORIES, END THE CULTURE OF IMPUNITY

Last week's blaze at a factory in outer Delhi's Mundka area that snuffed out at least 27 lives, 21 of them women, adds to the long list of avoidable fire tragedies that show the country's urbanisation story in poor light. The failings that have come to light in the four days since the incident evoke a sense of *deja vu*: The building did not have a no objection certificate from the fire department — more worryingly, the owners had not even applied for one — and it had only one escape route. The manufacturing unit's licence had lapsed. Though the North Delhi Municipality had cancelled the permission after it was found that the building did not meet the required criteria, the industrial activities went on with impunity even after a Supreme Court monitoring committee raised red flags. Such omissions invite questions about the municipality's enforcement mechanisms. It's also apparent that the authorities have not learnt any lesson from the Anaj Mandi fire that killed more than 40 people in December 2019 — as well as several other mishaps dating back to the Uphar Cinema Tragedy of 1997.

Localities such as Mundka and Anaj Mandi have become a prominent feature of Delhi's economic landscape — and that of several other parts of the country — in the aftermath of liberalisation. Factories exist cheek-by-jowl with warehouses, shops selling construction materials, banquet halls, and other multi-floor establishments. Largely unregulated, they are sources of livelihood for a substantial section of the city's population, many of whom live at its margins. At a time the pandemic-induced economic downturn has shrunk household incomes and the absence of social security has aggravated the difficulties of the working and lower-middle classes, many such manufacturing units offer hope of a semblance of relief from poverty. They also seem to buck the post-pandemic trend of a large number of women falling out of the labour force — as revealed by the CMIE data. However, with employers playing short shrift to basic safety codes, these workplaces turn out to be not only exploitative, they also add to the hardships faced by their employees — and their dear ones. Several families, for instance, lost their sole breadwinner in last week's fire tragedy.



Delhi's Lt Governor Anil Baijal has ordered a magisterial investigation into the accident. The probe must, of course, fix accountability at multiple levels. But much more needs to be done. For far too long, a network of complicity has led to safety codes being flouted and building by-laws being infringed. It's time such networks are taken apart.

CRUSHING LIVES

Working in hazardous sites such as quarries, where explosives and heavy machinery are deployed, is fraught with risks. But human casualties in accidents caused at such sites due to greed-induced exploitation, violation of safety and operational norms, and collusion with regulators, involve an element of culpability. The death of three workers at the privately owned Venkateshwara Stone Crusher Unit, at Adaimithippaankulam in Tamil Nadu's Tirunelveli district, bears tragic testimony to this. Here, a falling boulder trapped six workers and their heavy vehicles under debris in a 300-foot deep stone quarry on Saturday night. The management, according to the State Director of Mining and Geology, was served a closure notice last month and instructed to suspend operations, after violations. Yet, the operations went on illegally until the fateful night, which brought officials, politicians and rescuers to the site. Perhaps, a random inspection in the interregnum could have prevented the loss of lives. The preliminary inquiry suggests the crusher unit, which has facilities for the manufacture of M-Sand and blue metal, had compromised safety along the vehicle path. The breach in the mandated 10 feet distance between the upper vehicle path and the immediate lower path is believed to have caused the falling boulder to plunge deeper into the quarry, aggravating the tragedy.

The Revenue Secretary has announced a comprehensive safety audit exercise in all stone quarries. Given that a political nexus, quarry operations and the grant of licences are inseparable, such crackdowns have rarely been effective. The plundering of natural resources including in the ecologically sensitive Western Ghats due to excessive blasting and mining has been well documented by committees, either appointed by the government or by the courts. For instance, former IAS officer U. Sagayam, as the Madras High Court-appointed Legal Commissioner, had estimated ₹16,000 crore loss to the exchequer due to illegal granite mining in the Madurai region alone. There has been a mushrooming of unlicensed quarries too. Just last year the High Court had ordered the closure of 64 unlicensed stone quarries in Tiruppur district, based on the findings of an advocate-commissioner. The revenue loss aside, it is impossible to fix a cost to the resultant irretrievable damage to the environment and risk exposure to humans. The big sharks have been targeted mostly when a ruling party has an axe to grind. There is now a spurt in the quarrying volume in the Tirunelveli-Kanniyakumari region to meet the huge demand from Kerala, where an estimated 80% of quarried materials is transported. It calls for the enforcement of restrictions on such inter-State transport of minerals. Immediate responses to tragedies usually have a short life. Only a genuine administrative will to sustain the enforcement of rules in quarries is of real consequence.

CHIEF OF DEFENCE STAFF AND TOP-LEVEL MILITARY REFORMS

It's now over five months since the country's first Chief of Defence Staff (CDS) General Bipin Rawat was killed in a chopper crash in the Nilgris in Tamil Nadu along with his wife and 12 other military personnel onboard. The Government is yet to announce a successor to the country's top military post. The reason for the delay, official sources say, is because the Government is reassessing the concept of the post as well as the Department of Military Affairs (DMA) and is looking to streamline the setup.



What is the role of the Chief of Defence Staff?

The Government's decision in 2019 to create the post of a CDS, a long-pending demand to bring in tri-service synergy and integration, is the biggest top-level military reform since independence.

In December 2019, the Union Cabinet chaired by Prime Minister Narendra Modi had given approval to create the post of CDS in the rank of a four-star General with salary and perquisites equivalent to a Service Chief and then Army Chief Gen. Rawat was appointed to the post.

The CDS would also be the Principal Military Adviser to the Defence Minister and Permanent Chairman Chiefs of Staff Committee (CoSC).

In addition, the DMA was created as the fifth department in the Ministry of Defence (MoD) with the CDS functioning as its Secretary.

The broad mandate of the CDS includes bringing about jointness in "operations, logistics, transport, training, support services, communications, repairs and maintenance of the three Services, within three years of the first CDS assuming office."

He will act as the Principal Military Adviser to Defence Minister on all tri-Services matters. However, the three Chiefs will continue to advise the Defence Minister on matters exclusively concerning their respective Services," a Government statement had said while adding that the CDS will not exercise any military command, including over the three Service Chiefs.

The CDS is also meant to bring about synergy and optimise procurements, training and logistics and facilitate restructuring of military commands for optimal utilisation of resources by bringing about jointness in operations, including through establishment of joint/ theatre commands. The CDS will also evaluate plans "for 'Out of Area Contingencies', as well other contingencies such as Humanitarian Assistance and Disaster Relief (HADR)," officials had stated. The specialised tri-service divisions — special operations, defence cyber and defence space — were also brought under the ambit of the CDS.

Interestingly, while capital procurements are still with the DoD, the prioritisation is with the CDS. In the last three years, the Government had also announced a series of measures to cut down on defence imports and promote indigenous defence manufacturing.

Why the rethink?

Official sources said that with the experience of the last few years of having a CDS, there is a rethink that the appointment of a CDS in itself wasn't enough and there are several issues with respect to roles and responsibilities, issues of equivalence among others. "This made the Government pause, look back and reassess the entire reform process," one official said on condition of anonymity. There is also dichotomy in the roles and responsibilities with the several hats worn by the CDS and also overlap in responsibilities between the DMA and DoD, officials stated while also adding that there is also a rethink on the ambitious timelines set for the creation of theatre commands and also the number of commands and their envisaged format.

While several options are being looked at, one of the ways to go forward would be to have a CDS with operational powers who will after due legislative changes have theatre commanders report to him while the Service Chiefs will look after the raise, train and sustain functions of respective Services, an official said. In this direction, it is being looked at if the Chief of Integrated Defence



Staff to the Chairman, Chiefs of Staff Committee (CISC) can function as the Secretary DMA reporting directly to the CDS.

WHERE TWO NEW SHIPS WILL FIGURE IN THE NAVY'S OVERALL EXPANSION PLAN

Defence Minister Rajnath Singh on Tuesday (May 17) launched two different types of surface ships, which will be inducted into the Navy later.

What are the two ships?

Named Surat and Udaygiri, and both frontline vessels, the ships will go through rigorous sea trials before they can be commissioned into the Navy, after which they will add the INS prefix to their names.

Surat is a Visakhapatnam Class guided-missile destroyer, which has the capability to attack other ships. Udaygiri is a Nilgiri Class frigate, which are usually faster and more manoeuvrable.

During the launch, Singh said these warships will be among the most technologically advanced missile carriers in the world, and will cater to the present as well as future requirements. In the times to come, he said, India will not only fulfil its own needs, but also meet shipbuilding requirements of the world.

Under what projects are they built?

Both ships are designed by the Directorate of Naval Design.

Surat is the fourth ship built in India under Project 15B. The class gets its name from the first vessel commissioned under the Project, named INS Visakhapatnam, which was delivered to the Navy in October 2021. The second ship, Mormugao, is undergoing sea trials and the third, Imphal, is in advanced stages of outfitting and trials of various auxiliary equipment.

Visakhapatnam Class destroyers draw their lineage from the P15 Delhi class destroyers. Three such warships inducted between 1997 and 2001, until then the largest naval ships built within the country. The second series of vessels were P15A, Kolkata Class destroyers, under which three ships were inducted between 2014 and 2016.

Udaygiri is the second warship produced under Project 17A of the Nilgiri Class frigates. The first vessel under the project, INS Nilgiri, was launched in September 2019.

The Nilgiri Class follows the production of three Shivalik Class frigates commissioned between 2010 and 2012, which are "multi-role frigates and are the first-of-its kind warships built in India incorporating stealth features".

Ships under the P15B and P17A projects are being built at the Mazagon Dock Shipbuilders Ltd.

At the moment three guided-missile destroyers, four stealth frigates and two submarines are under various stages of construction at MDL.

What other shipbuilding projects of the Navy are ongoing?

At the moment, 39 ships and submarines are being built for the Navy, including 37 at various Indian shipyards, as per the Parliamentary Standing Committee's report submitted in March this



year. In addition, the Navy has got the Acceptance of Necessity (AoN) from the government for 43 ships and 111 Naval Utility Helicopters for to be built indigenously.

The first warship constructed in India for the Navy was in 1960, and since then 130 warships and submarines have been made in India. India's first indigenously built aircraft carrier, which will be called INS Vikrant, is expected to be commissioned later this year, and the Navy is trying to convince the government to approve the construction of a second one. The Navy's only aircraft carrier at present, INS Vikramaditya, commissioned in 2013, and is on lease from Russia.

What kinds of capability does the Navy have?

Its present fleet includes more than 130 ships and submarines and over 230 aircraft.

The Navy divides its combat capabilities under three large categories: Surface ships, Naval aviation; and sub-surface.

Surface ships form the largest part of the Navy's fleet. It includes corvettes, frigates, destroyers; amphibious warfare vessels like landing platform docks, landing ship tanks; amphibious boats like landing craft utility; large offshore patrol vessels; several types of auxiliary ships; small fighting ships; fast attack craft; survey ships and training vessels.

In aviation there are more than ten Naval Air Squadrons, flying aircraft and helicopters including MiG29K, Dorniers, surveillance and anti-submarine capable P-8I, Chetak, Dhruv, Seaking 42B and Kamov helicopters.

In underwater capacity, the Navy has 16 conventional diesel-electric submarines, which are classified as SSKs, with two more Kalvari Class subs launched but yet to be commissioned. India also has two nuclear ballistic submarines, classified SSBN, but these are under the Strategic Forces Command.

What future capabilities is it looking at?

The three main focus areas are unmanned aerial vehicles for surveillance, intelligence gathering and possibly even air dominance; unmanned underwater vehicles which are smaller unmanned submarines; and underwater domain awareness.

The kinds of equipment and vessels the Navy is looking for include next-generation missile vehicles; fleet support ships; high- and medium-altitude long endurance remotely piloted aircraft systems; multi-role carrier borne aircraft; a second indigenous aircraft carrier; next generation corvettes, fast-attack vessels, destroyers; extra large unmanned underwater vehicle; and various categories of missiles for them.

Why is modernisation of the Navy important right now?

While the Navy has always had a significant role for India, its importance is bound to grow in the coming years because of the over 7,500-km long coastline and the wide expanse of the Indian Ocean Region that it needs to look after to defend itself.

There are two main reasons. First, India is largely dependent on the Indian Ocean for most of its international trade, which includes getting oil and gas. The second is the modernisation of the People's Liberation Army Navy (PLAN) by China.



According to a report on China's military might released by the US Department of Defense in November, China has "numerically the largest navy in the world with an overall battle force of approximately 355 ships and submarines, including approximately more than 145 major surface combatants".

It noted that as of 2020 the PLAN is "largely composed of modern multi-role platforms" and in the near term it will have the capability to conduct "long-range precision strikes against land targets from its submarine and surface combatants using land-attack cruise missiles". It said China is also enhancing its anti-submarine warfare capabilities and competencies to protect the PLAN's aircraft carriers and ballistic missile submarines.

In comparison, as mentioned, the Indian Navy has just over 130 ships and submarines. As China develops a more aggressive stance, it is bound to increase its presence in the Indian Ocean, both military and civil. Strengthening of maritime capabilities in the Indian Ocean Region will bring China in the direct threat perception for India.

While the Indian Navy had earlier planned to have 170 ships, that number is likely to come down, given financial constraints, along with the gains made in technology. Former Navy Chief Admiral Karambir Singh had stated that to protect its growing interests, the Navy needs to become an outgoing force, and cannot remain tethered to the shore.

Days after he took over as the Navy Chief in December, Admiral R Hari Kumar noted that the Navy's "Mission Based Deployment" philosophy has "enhanced Indian Navy's presence across the region enabling rapid responses to emerging security challenges" and it has "established a persistent footprint in our areas of interest" and Navy's deployments also serve "as a deterrent to inimical interests, clearly signalling the Navy's reach, capability and intent".

Along with the direct threat from China, the Navy's role is also bound to grow as India projects itself as a preferred security partner in the Indian Ocean Region for countries such as the US, Japan, Australia, France, etc. All these nations have deep interests in the Indian Ocean Region, but none can have the presence that India has for a large swathe of that area.

As most of these countries try to contain China's increasing global footprint, India has to build its naval capability so that it can be responsible for the region from Malacca Straits in the east to Sudan in west. The navies are working together and conduct regular joint exercises to increase interoperability.

INDIANS' PREFERENCE FOR SONS, AND WHY MEGHALAYA WOMEN PREFER MORE DAUGHTERS

The newly released National Family Health Survey (NFHS-5) reconfirms that a large number of Indians have a preference for sons. The only exception is women in Meghalaya, among whom the preference for more daughters than sons is more prevalent than the preference for more sons than daughters. NFHS-5 covers the period 2019-21.

Broad takeaways

*The number of married people (age 15-49) who want more sons than daughters is several times the number who want more daughters than sons;



* A married person who has at least one son is less likely to want more children than another married person whose existing children do not include a son; and

* In spite of these preferences, most Indians still believe an ideal family should include at least one daughter.

The ideal family

The number of married men who want more sons than daughters (16%) is four times the number who want more daughters than sons (4%). Among women, the former preference is 5 times more prevalent than the latter, at 15% and 3% respectively.

That said, most of the respondents want at least one son and at least one daughter. About four-fifths of both men and women (81%) want at least one son while a similar proportion of women (79%) wants at least one daughter, compared to three-fourths of men (76%).

Men and women would both want to have an average of 2.1 children — 1.0 sons, 0.9 daughters, and 0.2 children of either sex. This, NFHS-5 notes, is almost the same as the current total fertility rate. In NFHS-4 (2015-16), the ideal family size was slightly larger, at 2.2.

Trends by state

Among the states and Union Territories, men in Mizoram (37%), Lakshadweep (34%) and Manipur (33%), and women in Bihar (31%) show the strongest preference for more sons than daughters. Compared to the corresponding preference for more daughters than sons, the difference is sharpest among Bihar's women — the 31% who want more sons are 16 times the 2% who want more daughters.

Across all states and both genders, Meghalaya women are the only section in which a higher proportion prefers more daughters than sons than the proportion that want more sons than daughter. In a state where the predominant tribes follow a matrilineal system of inheritance, 21% of women want more daughters, compared to 15% who want more sons.

Meghalaya also has the highest proportion of men in any state (11%) who want more daughters than sons. But as in other states, a higher proportion in Meghalaya too (18%) wants more sons than daughters.

The explanation for Meghalaya women's preference for daughters may be obvious — "We are a matrilineal society," said Shillong-based social activist Angela Rangad — but why should the state's men prefer more sons than daughters?

"Because, in their view of things, the things that matter, leading the darbars, it's all about men — and they are also very patriarchal. In fact, there is a whole section of men who think that we are being held back because we are matrilineal," she said.

Patricia Mukhim, Editor of The Shillong Times, raised questions about the sample size of the survey, the number of districts covered, and the educational level of the respondents. "In rural Meghalaya most women don't want to reveal anything about their families. Khasis believe in privacy and don't usually volunteer answers unless prodded or prompted," she said.

She noted that NFHS-5 refers to Meghalaya as a "matriarchal society". "Meghalaya is a matrilineal society where a deeper study on gender equality and equity will reveal a gender bias in traditional



institutions, where women are not allowed to hold office. Only lineage is from the mother's clan line. And women are perpetuators of the clan. Which also means that when a woman is abandoned by the husband/partner then the responsibility of looking after the children are solely hers. So defining Meghalaya society as matriarchal could mean that the survey itself is faulty," she said.

ALCOHOL CONSUMPTION IN INDIA: TRENDS ACROSS STATES, AGE GROUPS

Alcohol consumption among both men and women is higher in rural India than in urban India, the National Family Health Survey-5 (NFHS-5), 2019-21 has found. Overall, 1% of women aged 15 and over drink alcohol, compared to 19% of men in the same age group. This breaks up into 1.6% (rural) and 0.6% (urban) among women, and 19.9% and 16.5% respectively among men.

Of all states, Arunachal Pradesh has the highest proportion of both men (53%) and women (24%) who drink alcohol. Among women, Arunachal Pradesh is followed by Sikkim (16%); among men, it is followed by Telangana (43%). Besides Arunachal and Telangana, alcohol consumption among men is higher (40% and above) in upper Brahmaputra region of Assam, districts in Jharkhand and Bastar region of Chhattisgarh, and the Chhota Nagpur region of Jharkhand and Odisha.

The level of alcohol consumption among men is 30-40% in parts of Chhattisgarh, Uttarakhand, Manipur, Meghalaya, Tripura, and a few districts of Odisha. It is below 30% in the remaining parts of India, and the lowest in Lakshadweep (0.4%).

Alcohol consumption is more common among those from the Scheduled Tribes than from any other caste/tribe groups; this is true of both women (6% consumption among STs) and men (33%). Among religious groups, the proportion of men who drink alcohol is higher among those belonging to "other religions" (47%) than among those belonging to the Hindu (20%), Muslim (5%), Christian (28%), Sikh (23.5%), Buddhist/Neo-Buddhist (24.5%) and Jain (5.9%) religions.

NFHS DATA ON DIET PRACTICES SHOULD LEAD TO MORE INFORMED DEBATE ON NUTRITION, REMOVE BLINKERS OF POLICYMAKERS

Data from the recently-released National Health and Family Survey (NFHS-5) confirms the hypothesis of a sizeable section of nutrition scholars. The number of Indians who eat non-vegetarian food has been increasing steadily. More than two-thirds of people in the 15-49 age group eat non-vegetarian food daily, weekly or occasionally — a steady rise compared to NHFS-4 when the figure stood at a little over 70 per cent people. The survey's latest edition also shows that more people in the country eat meat at least once a week compared to 2015-16. The proportion of Indians who eat eggs too has gone up appreciably. The survey's data on dietary practices, however, shows a distinct gender skew: The increase in the number of men eating non-vegetarian food is far more pronounced compared to women. All this has significant implications for planning on nutrition-related matters — it is especially salutary for policymakers who obstinately hold on to the stereotype of India being a country of vegetarians.

In India, food practices have been, for long, informed by complex rules of religion and caste. In recent times, these habits have become part of the country's political discourses in ways that have bred acrimony between social groups and stoked violence against minorities. The myth of the vegetarian nation has also influenced policy matters such as serving eggs in the mid-day meal scheme for children attending government and government-aided schools. Barely a third of the states provide eggs to children under the scheme despite the Hyderabad-based National Institute of Nutrition — it works under the aegis of the Indian Council of Medical Research — certifying



that eggs are loaded with more nutrients and easier to procure compared to alternatives such as milk and bananas.

In 2011, the National Sample Survey data revealed the declining protein intake of Indians. This was confirmed, in 2019, by the EAT-Lancet Commission Study on Sustainable Food Systems, which pointed out that Indians consume more simple carbohydrates than proteins as well as less complex carbohydrates, fruits and vegetables. Given that non-vegetarian diets are protein-rich, it wouldn't be an overstatement to say that restrictions on eating meat and eggs could increase the nutritional deficits of a section of the country's population — a worrying proposition given India's poor report card in repeated Global Hunger Index surveys. In fact, the gender disparities in the consumption of non-vegetarian food, highlighted by the NFHS-5, should make policymakers revisit the debates on reducing the protein deficit of the country's women. Hanging on to facile stereotypes will do more harm than good.

THE OTHER MEAT

Connoisseurs of non-vegetarian food would swear by the lingering taste of Tamil Nadu's Ambur biryani filled with succulent pieces of meat that supposedly melts in the mouth. It is distinct and popular, just as Hyderabadi biryani is in the culinary world.

Naturally, when the Tirupattur district administration recently announced a three-day Ambur Biryani Thiruvizha (festival), the foodies were excited. So were the restaurateurs, keen on getting the Geographical Indication tag for the spicy dish.

Amidst the excitement a controversy erupted when Tirupattur Collector Amar Kushwaha mandated only chicken, mutton, fish and prawn biryani be served at the stalls and "banned" beef and pork. Stating he is personally not against any meat, Mr. Kushwaha contended he did not want to hurt Hindu or Muslim sentiments, as one group had represented in favour of pork biryani and another wanted beef.

Beef is on the menu in many restaurants in Ambur. While over 97% of Tamil Nadu's population consumes non-vegetarian food, beef remains a delicacy for a section of the population. As per the Household Consumption Expenditure Survey of the NSSO [three rounds spanning a decade until 2011-12], beef-consumers stood at 31.4 lakh, i.e over 5% of the State's population. Oxtail soup and beef pakoda are patronised in street-side stalls.

Alongside the emergence of cow vigilantism in India, the Dravidian State has witnessed incidents of "othering" beef. In 2015, the AIADMK government banned a beef banquet and a voluntary 'thali (mangalsutra) removal' event in Chennai organised by the Dravidar Kazhagam.

The Tirupattur Collector's ban on the poor man's meat at a government festival irked even the allies of the ruling DMK. Vanni Arasu of the Viduthalai Chiruthaigal Katchi, which predominantly represents the cause of the Scheduled Castes, argued that excluding the food of a particular community goes against Chief Minister M.K. Stalin's 'Dravidian Model' of governance.

Incidentally, five years ago against the backdrop of an attack on a Ph.D. scholar at IIT-Madras for partaking beef and the Centre's restrictions on cattle trade, Mr. Stalin had said the government could not deny the fundamental rights of people over choice of food. He rhetorically posed: "Are we supposed to eat only what [Prime Minister] Modi likes?"



The then State BJP president Tamilisai Soundararajan — now Telangana Governor — had challenged Mr. Stalin to consume beef, adding, “We will see what happens in Tamil Nadu.” Since the majority population does not consume beef, she was suggesting there could be electoral consequences for the DMK. The BJP, in its 2021 election manifesto, promised a ban on cow slaughter unaware that slaughtering cows is illegal in Tamil Nadu since 1976.

While the Chief Minister did not react to the latest controversy, the Collector at the eleventh hour put off the biryani festival citing forecast of rains.

The controversy remains alive. The Tamil Nadu State Commission for the SC/STs has asked Mr. Kushwaha to explain why his decision to “specifically” exclude beef biryani, “shall not be taken as a discrimination on a communal basis, and initiate action for such an official discrimination”. The Commission took up the matter for enquiry [deeming it] “as a practice of untouchability in the form of discrimination against SC/ST and the Muslim population”.

Mr. Kushwaha had told The Hindu since the event has been put off, the notice “is null and void”. It is doubtful if the Commission would endorse his interpretation. Meanwhile, it remains to be seen whether the Ambur Biryani Festival would be held on a later date as assured by officials. If so, would Mr. Stalin ensure there is no restriction on the choice of food?

INDIA TOPPED AIR POLLUTION DEATH TOLL IN 2019, SAYS REPORT

Air pollution was responsible for 16.7 lakh deaths in India in 2019, or 17.8% of all deaths in the country that year. This is the largest number of air-pollution-related deaths of any country, according to a recent report on pollution and health published in The Lancet Planetary Health.

Globally, air pollution alone contributes to 66.7 lakh deaths, according to the report, which updates a previous analysis from 2015. Overall, pollution was responsible for an estimated 90 lakh deaths in 2019 (equivalent to one in six deaths worldwide), a number that has remained unchanged since the 2015 analysis. Ambient air pollution was responsible for 45 lakh deaths, and hazardous chemical pollutants for 17 lakh, with 9 lakh deaths attributable to lead pollution.

Pollution in India

The majority of the 16.7 lakh air pollution-related deaths in India – 9.8 lakh — were caused by PM2.5 pollution, and another 6.1 lakh by household air pollution. Although the number of deaths from pollution sources associated with extreme poverty (such as indoor air pollution and water pollution) has decreased, these reductions are offset by increased deaths attributable to industrial pollution (such as ambient air pollution and chemical pollution), the report noted.

“The World Health Organization (WHO) has substantially tightened its health-based global air quality guidelines, lowering the guideline value for PM2.5 from 10 micrograms per cubic metre to 5. This means that there is hardly any place in India which follows the WHO norms,” Dr Sundeep Salvi, Chair for Chronic Respiratory Diseases of the Global Burden of Diseases study (GBD-19), told The Indian Express. He was not associated with the latest report in The Lancet Planetary Health.

According to the report, air pollution is most severe in the Indo-Gangetic Plain. This area contains New Delhi and many of the most polluted cities. Burning of biomass in households was the single largest cause of air pollution deaths in India, followed by coal combustion and crop burning.



The number of deaths remains high despite India's considerable efforts against household air pollution, including through the Pradhan Mantri Ujjwala Yojana programme. India has developed a National Clean Air Programme, and in 2019 launched a Commission for Air Quality Management in the National Capital Region. However, India does not have a strong centralised administrative system to drive its air pollution control efforts and consequently improvements in overall air quality have been limited and uneven, the report has said.

Professor Kalpana Balakrishnan, Dean (Research), Sri Ramachandra Institute of Higher Education and Research (Deemed to be University), Chennai, and one of the authors of the report, stressed the need for a radical shift in the approach to pollution management efforts.

"In India, we need integrated surveillance platforms for health and exposure surveillance. Population exposure surveillance via biological and environmental monitoring can inform risk attributions within health programmes already in place to reduce the burden of maternal and child health as well as non-communicable diseases. Impacts from lead as shown in the report, that impacts children's IQ, really drive home the point of irreversible long-term damage for multiple generations. Without surveillance at scale it is impossible to know what worked and what didn't," she told The Indian Express.

Lead pollution

Dr Salvi too cited the implications of lead pollution. "An estimated 9 lakh people die every year globally due to lead pollution and this number is likely to be an underestimate. Earlier the source of lead pollution was from leaded petrol which was replaced with unleaded petrol. However the other sources of lead exposure include unsound recycling of lead-acid batteries and e-waste without pollution controls, spices that are contaminated with lead, pottery glazed with lead salts and lead in paint and other consumer products," he said.

"Globally more than 80 crore children (India alone contributes to 27.5 crore children) are estimated to have blood lead concentrations that exceed 5 µg/dL — which was, until 2021, the concentration for intervention established by the US Centres for Disease Control and Prevention. This concentration has now been reduced to 3.5 µg/dL," he said.

ISRO TESTS BOOSTER FOR GANYAAN

The Indian Space Research Organisation (ISRO) has successfully carried out the static test of the HS200 solid rocket booster, taking the space agency one more step closer to the keenly awaited Gaganyaan human spaceflight mission.

The test was held at the Satish Dhawan Space Centre, Sriharikota, on Friday morning.

Designed and developed by the Vikram Sarabhai Space Centre (VSSC) in Thiruvananthapuram for over two years, the HS200 booster is the 'human-rated' version of the S200 rocket boosters used on the geosynchronous satellite launch vehicle Mk-III (GSLV Mk-III), also called the LVM3.

The GSLV Mk-III rocket, which will be used for the Gaganyaan mission, will have two HS200 boosters that will supply the thrust for lift-off.

The HS200 is a 20-metre-long booster with a diameter of 3.2 metres and is the world's second largest operational booster using solid propellants.



During Friday's test, about 700 parameters were monitored and the performance of all the systems were normal, ISRO said.

Loaded with 203 tonnes of solid propellant, the HS200 booster was tested for a total duration of 135 seconds.

ISRO Chairman S. Somanath and VSSC Director S. Unnikrishnan Nair were present during the test.

"The successful completion of this test marks a major milestone for the prestigious human space flight mission of ISRO, the Gaganyaan, as the first stage of the launch vehicle is tested for its performance for the full duration," ISRO said in a statement on Friday.

Since Gaganyaan is a manned mission, the GSLV Mk-III will have improvements to increase reliability and safety to meet the requirements of 'human rating.'

The control system used in the HS200 booster employs one of the world's most powerful electro-mechanical actuators with multiple redundancy and safety features, according to the VSSC.

Of the three propulsion stages of the GSLV Mk-III, the second stage uses liquid propellant while the third is a cryogenic stage.

IRON IN TAMIL NADU 4,200 YEARS AGO: A NEW DATING AND ITS SIGNIFICANCE

Carbon dating of excavated finds in Tamil Nadu pushes evidence of iron being used in India back to 4,200 years ago, the Tamil Nadu government announced this week on the basis of an archaeological report. Before this, the earliest evidence of iron use was from 1900-2000 BCE for the country, and from 1500 BCE for Tamil Nadu. The latest evidence dates the findings from Tamil Nadu to 2172 BCE.

Chief Minister M K Stalin said in the Assembly that it has been established that Tamils who lived 4,200 years ago were aware of iron. "Dense forests were converted into fertile lands only after humankind began realising the use of iron. This finding has answered questions relating to the start of agricultural activity in Tamil Nadu," Stalin said.

"The site is situated in the midst of several archaeological sites such as Togarapalli, Gangavaram, Sandur, Vedarthattakkal, Guttur, Gidlur, Sappamutlu and Kappalavadi... All these important archaeological sites lie within 10 km," said the report cited by Stalin, titled 'Mayiladumparai: Beginning of Agrarian Society 4200 years old Iron Age culture in Tamilnadu', and headed by archaeologist K Rajan.

Prof Rajan had discovered the site in the 1990s, and the first excavations from there were made in the 1990s. The results of dating, which used accelerator mass spectroscopy, came last week.

Timeline revisited

The dates when humans entered the Iron Age vary from one region of the world to another. In India, too, the date has been revised with successive findings over the decades.

In 1979, use of iron was traced to 1300 BCE at Ahar in Rajasthan. Later, samples at Bukkasagara in Karnataka, indicating iron production, were dated back to 1530 BCE. The date was subsequently pushed back to 1700-1800 BCE with excavations finding evidence of iron smelting at Raipura in the Mid-Ganga valley, and then to 1900-2000 BCE based on investigations in sites at



Malhar near Varanasi and Brahmagiri in North Karnataka. A series of dating results on finds from various parts in India have shown evidence of iron-ore technology before 1800 BCE.

Before the latest discovery, the earliest evidence of iron use for Tamil Nadu was from Thelunganur and Mangadu near Mettur, dating back to 1500 BCE.

Historical significance

Iron is not known to have been used in the Indus Valley, from where the use of copper in India is said to have originated (1500 BCE). “But non-availability of copper for technological and mass exploitation forced other regions to remain in the Stone Age. When iron technology was invented, it led to the production of agricultural tools and weapons, leading to production required for a civilisation ahead of economic and cultural progress,” said a leading scientist associated with the Mayiladumparai excavation.

While useful tools were made out of copper, these were brittle and not as strong as iron tools would be. It would have been difficult to use copper tools to clear dense forests and bring land under agriculture — which is why scientists infer that deforestation took place only after humans began using iron.

“With the latest evidence tracing our Iron Age to 2000 BCE from 1500 BC, we can assume that our cultural seeds were laid in 2000 BCE. And the benefit of socio-economic changes and massive production triggered by the iron technology gave its first fruit around 600 BCE — the Tamil Brahmi scripts,” the scientist said.

Culture and politics

The Tamil Brahmi scripts were once believed to have originated around 300 BCE, until a landmark finding in 2019 pushed the date back to 600 BCE. This dating narrowed the gap between the Indus Valley civilisation and Tamilagam/South India’s Sangam Age. This, and the latest findings, are politically significant.

The dating of the scripts, based on excavations from sites including Keeladi near Madurai, became controversial when the Archaeological Survey of India (ASI) did not go for advanced carbon dating tests, and an ASI researcher who had initiated the study was transferred out of the state. The 2019 findings came out of the state government’s efforts.

In the Assembly, Stalin said the goal of the state government is to establish through scientific methods that the history of India should be rewritten from the Tamil land. He said the state archaeology department would begin work on a comparative study of graffiti found in Keeladi and the signs of the Indus Valley civilisation.

INDIA’S VULNERABILITY TO DROUGHT

The story so far: A United Nations report has revealed that many parts of India fall under the list of regions that are vulnerable to drought globally. The report also stated that India’s Gross Domestic Product (GDP) reduced by 2 to 5% between 1998 and 2017 due to severe droughts in the country. Globally, droughts in the same period caused economic losses of approximately \$124 billion.

These and other global findings centred on drought were collated in the Drought in Numbers, 2022 report presented by the United Nations Convention to Combat Desertification (UNCCD).

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



What is the Drought in Numbers report?

The Drought in Numbers report is a collection of data on the effects of droughts on our ecosystem and how they can be mitigated through efficient planning for the future. The report also helps inform negotiations surrounding key decisions by the UNCCD's 197 member parties at the 15th Conference of Parties (COP15), currently underway in Abidjan, Côte d'Ivoire. Drought, land restoration, and related aspects such as land rights, gender equality and youth empowerment are among the top considerations at COP15.

The number and duration of droughts around the world has increased by an alarming 29% since 2000.

UNCCD Executive Secretary Ibrahim Thiaw said that there has been "an upward trajectory in the duration of droughts and the severity of impacts, not only affecting human societies but also the ecological systems upon which the survival of all life depends, including that of our own species,"

What is COP15?

UNCCD's COP15 focuses on desertification, land degradation, and drought, with the theme for the conference being "Land. Life. Legacy: From scarcity to prosperity." The conference has brought together government representatives, private sector members, and civil society stakeholders to ensure that land continues to benefit present and future generations.

What does the report entail?

According to World Bank estimates, drought conditions can force up to 216 million people to migrate by 2050. Other factors at play along with drought could be water scarcity, declining crop productivity, rise in sea levels, and overpopulation.

Weather, climate and water hazards have accounted for 50% of all disasters and 45% of all reported deaths since 1970, the World Meteorological Organisation data has revealed. Nine in ten of these deaths have occurred in developing countries.

Between 2020 and 2022, 23 countries have faced drought emergencies. These are Afghanistan, Angola, Brazil, Burkina Faso, Chile, Ethiopia, Iraq, Iran, Kazakhstan, Kenya, Lesotho, Mali, Mauritania, Madagascar, Malawi, Mozambique, Niger, Somalia, South Sudan, Syria, Pakistan, the U.S., and Zambia. According to the report, climate change alone will cause 129 countries to experience an increase in drought exposure in the next few decades.

More than a billion people around the world were affected by drought in 2000-19, making it the second-worst disaster after flooding. Africa was the worst hit, with 134 droughts, of which 70 occurred in East Africa. The World Health Organization has noted that globally, approximately 55 million people are directly affected by droughts annually, making it the most serious hazard to livestock and crops in almost every part of the world.

The impact of drought is, however, not uniform across genders. Research shows that women and girls in emerging and developing countries suffer more in terms of education levels, nutrition, health, sanitation, and safety as a result of droughts.

The burden of water collection also disproportionately falls on women (72%) and girls (9%). The report notes that they may spend up to 40% of their caloric intake fetching water.



In 2022, over 2.3 billion people are facing water stress. Almost 160 million children are exposed to severe and prolonged droughts.

What are the environmental aspects?

According to the report, if predictions are correct and global warming reaches 3°C by 2100, drought losses could be five times higher than today's levels. The largest increase in drought losses is projected in the Mediterranean and the Atlantic regions of Europe.

Australia's megadrought in 2019-2020 contributed to "megafires" resulting in one of the most extensive losses of habitat for threatened species. About three billion animals were killed or displaced in the Australian wildfires. On a related note, 84% of all terrestrial ecosystems are threatened by changing and intensifying wildfires.

According to a 2017 report by the Food and Agriculture Organisation, the percentage of plants affected by drought has more than doubled in the last 40 years. Around 12 million hectares of land are lost each year due to drought and desertification.

'ONSET' OF THE MONSOON, AND WHAT IT DOES NOT FORETELL

The southwest monsoon is likely to set in over Kerala on May 27, well ahead of its normal date of June 1. What does the 'onset of monsoon' mean? Is it unusual for the monsoon to hit the Kerala coast early? Does an early onset foretell a good monsoon?

The southwest monsoon is likely to set in over Kerala on May 27, well ahead of its normal date of June 1, the India Meteorological Department (IMD) announced on Friday (May 13). If the forecast turns out to be accurate, this will be the earliest onset of the monsoon over Kerala since at least 2009. There can be "a model error of four days on either side", the IMD said.

What does the "onset of monsoon" mean?

The onset of the monsoon over Kerala marks the beginning of the four-month, June-September southwest monsoon season over India, which brings more than 70 per cent of the country's annual rainfall. The onset of the monsoon is a significant day in India's economic calendar.

According to the IMD, the onset of the monsoon marks a significant transition in the large-scale atmospheric and ocean circulations in the Indo-Pacific region, and the Department announces it only after certain newly defined and measurable parameters, adopted in 2016, are met. Broadly, the IMD checks for the consistency of rainfall over a defined geography, its intensity, and wind speed.

Rainfall: The IMD declares the onset of the monsoon if at least 60% of 14 designated meteorological stations in Kerala and Lakshadweep record at least 2.5 mm of rain for two consecutive days at any time after May 10. In such a situation, the onset over Kerala is declared on the second day, provided specific wind and temperature criteria are also fulfilled.

The 14 enlisted stations are: Minicoy, Amini, Thiruvananthapuram, Punalur, Kollam, Alappuzha, Kottayam, Kochi, Thrissur, Kozhikode, Thalassery, Kannur, Kasaragod, and Mangaluru.

* **Wind field:** The depth of westerlies should be upto 600 hectopascal (1 hPa is equal to 1 millibar of pressure) in the area bound by the equator to 10°N latitude, and from longitude 55°E to 80°E.



The zonal wind speed over the area bound by 5-10°N latitude and 70-80°E longitude should be of the order of 15-20 knots (28-37 kph) at 925 hPa.

* Heat: According to IMD, the INSAT-derived Outgoing Longwave Radiation (OLR) value (a measure of the energy emitted to space by the Earth's surface, oceans, and atmosphere) should be below 200 watt per sq m (wm²) in the box confined by 5-10°N latitude and 70-75°E latitude.

In general, the Andaman and Nicobar Islands start receiving monsoon rainfall between May 15 and May 20 every year, and it usually starts raining along the Kerala coast in the last week of May. However, the onset is not officially declared until the prescribed conditions (above) are met.

Is it unusual for the monsoon to hit the Kerala coast early?

Neither early nor late onset of the monsoon is unusual, even though the forecast for this year is for earlier than would be usually expected.

In 2018 and 2017, the onset over Kerala occurred on May 29 and May 30 respectively. In 2010, onset was realised on May 31. In 2020 and 2013, the monsoon was exactly on time, hitting the Kerala coast on June 1.

In the rest of the years going back to 2010, the onset was delayed. In 2019, the IMD had announced a delay of six days, and predicted the onset for June 6. The monsoon finally set in over Kerala on June 8, 2019.

Does an early onset foretell a good monsoon?

No, it does not — just as a delay does not foretell a poor monsoon. The onset is just an event that happens during the progress of the monsoon over the Indian subcontinent.

A delay of a few days, or perhaps the monsoon arriving a few days early, has no bearing on the quality or amount of rainfall, or its regional distribution across the country, during the four-month monsoon season. In a recent year, the onset of the monsoon occurred two days in advance of the normal date, and it rained heavily for about 10 days after that — however, the season as a whole ended with 14% less rain than normal.

On April 14 this year, the IMD released its first Long Range Forecast (LRF) for this year, in which it predicted a “normal” monsoon — which means rainfall is likely to be in the range of 96% to 104% of the long period average (LPA) of the 1971-2020 period. The average annual rainfall for the country as a whole in the southwest monsoon season during this period was 87 cm.

And does a delayed onset mean cascading delays across the country?

A delay in onset over Kerala can potentially delay the arrival of the monsoon in other parts of the country, especially in the southern states, which normally start getting rain within days of the monsoon reaching the Kerala coast.

But again, a delayed onset over Kerala does not automatically or invariably mean delays in the arrival of the monsoon over the entire country.

The northward progression of the monsoon after it has hit the Kerala coast depends on a lot of local factors, including the creation of low pressure areas. It is possible that despite a late onset over Kerala, other parts of the country start getting rain on time.



After its onset over Kerala, the monsoon spreads over the entire country by July 15.

EACH FOR ALL

Sport is not just about individual excellence; it is also about the collective joy gleaned from a team's success when different individuals offer their varied skills and win together for the larger cause as representatives of a nation. India has always had iconic athletes with their fabulous milestones, but when it comes to team success in global events, the examples dwindle. To that limited cupboard displaying Olympic gold winning hockey squads featuring Dhyan Chand, the triumphant 1975 World Cup hockey team, the victorious 1983 cricket World Cup outfit led by Kapil Dev and the 2011 champion unit under M.S. Dhoni, Indian badminton added its golden chapter when the men's team won the Thomas Cup at Bangkok on Sunday. This was a feather touch that would be felt all through India's sporting history. Besides winning its maiden title, India also stunned fancied opponents Malaysia and Denmark, and defeated 14-time champion Indonesia in the summit clash. Previously, Indian badminton had offered sporadic joy starting from Prakash Padukone's magnificent All England victory in 1980. P. Gopichand emulated Padukone in 2001 and just as another drought loomed, first Saina Nehwal and then P.V. Sindhu proved that they could do far better than their male counterparts, winning titles and medals. Finally, the men joined the winning bandwagon with their blend of aesthetics, control and athleticism on the courts.

Be it 20-year-old Lakshya Sen, the seasoned Kidambi Srikanth, the combative H.S. Prannoy and the doubles team of Chirag Shetty and Satwiksairaj Rankireddy, India had men who believed that winning the title was in the realm of possibility. In the final, both Lakshya and the doubles duo lost the opening games, and yet they dug deep to hoodwink the Indonesians. Once a 2-0 lead was secured, history beckoned and with remarkable fluency, former world number one Srikanth got past Jonatan Christie at 21-15, 23-21 as India clinched a team triumph for the ages. It was not easy, Lakshya had a stomach bug, and he and others had to cope with the constant pressure of expectations at every hurdle. The coaching staff deserve credit and so do the inspiring footprints left by Padukone and Gopichand, through their achievements and their inputs to their successors. When the Indians infused magic into the feathery shuttlecock, they also gifted an enduring memory to a country forever yearning for collective wins. In the past, Indian tennis had its moments in the Davis Cup but team achievements were often linked to cricketers and hockey stars of a distant era. Srikanth and company have ensured that Dhyan Chand, Kapil and Dhoni's units will not remain lonely at the top. This surreal win could truly alter the badminton landscape across India.

SC APPOINTS A PANEL TO RUN INDIAN FOOTBALL, BUT A TURNAROUND IN THE FIELD WILL TAKE MUCH MORE

After dodging elections for almost two years, citing a pending court case, Praful Patel, the president of the All India Football Federation, has been red-carded by the Supreme Court. The apex court, on Wednesday, appointed a three-member Committee of Administrators (CoA) comprising retired SC judge A R Dave, ex-Chief Election Commissioner S Y Quraishi and former India captain Bhaskar Ganguly to run the federation's day-to-day affairs and finalise a constitution which will enable them to conduct fresh elections. The move effectively ends Patel's stint as the head of Indian football, which lasted for more than 10 years.



Two politicians, Priya Ranjan Dasmunsi and Patel, have ruled Indian football for the last 34 years and neither can claim to have taken the sport forward. During his high-flying yet controversial tenure, Patel's personal stature in world football grew — he rose to become a member of world football's highest decision-making committee, the FIFA Council — but Indian football fell behind. The national team still huffs and puffs its way to beat the South Asian rivals, struggles to qualify for the Asian Cup, let alone the World Cup, and the domestic league for women and men isn't as robust as one would like it to be. Indeed, the football infrastructure has improved during the last 10 years and the sport doesn't depend solely on government grants but on most other counts, precious little has been achieved.

While it is expected that the CoA will set AIFF's house in order, the recent instances do not inspire confidence. The courts, in the recent years, have appointed administrators for multiple sports federations, including cricket, archery, table tennis and equestrian while the Indian Olympic Association, which is battling a similar case over tenure of elected officials, could go the same way as well. Despite this, there has been no marked improvement in the governance of any of these federations. Patel might no longer be the football chief but any hopes of an immediate change must be tempered.

NORMS EASED FOR GM CROP RESEARCH

The Department of Biotechnology (DBT) has issued guidelines easing norms for research into genetically modified (GM) crops and circumventing challenges of using foreign genes to change crops profile.

The 'Guidelines for Safety Assessment of Genome Edited Plants, 2022' exempt researchers who use gene-editing technology to modify the genome of the plant from seeking approvals from the Genetic Engineering Appraisal Committee (GEAC), an expert body of the Environment Ministry. The GEAC evaluates research into GM plants and recommends, or disapproves, their release into farmer fields. The final call, however, is taken by the Environment Minister as well as States where such plants could be cultivated. The Environment Ministry too has sanctioned this exemption.

The GM plants that usually come for such scrutiny are those that involve transgenic technology or introducing a gene from a different species into a plant, for instance BT-cotton, where a gene from soil bacterium is used to protect a plant from pest attack.

The worry around this method is that these genes may spread to neighbouring plants, where such effects are not intended and so their applications have been controversial.

The DBT says the document is a "... road map for the development and sustainable use of genome editing technologies in India, specifying the biosafety and/or environmental safety concerns, and describing the regulatory pathways to be adopted while undertaking the genome editing of plants."

Several approaches

Genome editing involves the use of technologies that allow genetic material to be added, removed, or altered at particular locations in the genome. Several approaches to genome editing have been developed.

A well-known one is called CRISPR-Cas9, which is short for clustered regularly interspaced short palindromic repeats and CRISPR-associated protein 9.

Gene editing can be used to make plants express properties not native to them.

Environmental groups have opposed this exception for gene-edited crops.

“Gene editing is included in genetic engineering. Therefore, there is no question of giving exemptions to particular kinds of genome edited plants from the regulatory purview,” said a letter from Coalition for a GM-free India to Environment Minister Bhupender Yadav.

Gene editing techniques, the letter alleges, involves altering the function of genes and can cause “large and unintended consequences” that can change the “toxicity and allergenicity” of plants.



DreamIAS



BUSINESS & ECONOMICS

GOVT FLAGGED LOW SCORE IN WORLD BANK'S GOVERNANCE INDICATORS

IN AN analysis of the World Bank's World Governance Indicators, a key input for India's sovereign ratings, a presentation by the Ministry of Finance's Economic Division found that India's scores were "much below" its peers on all counts. It also said factors noted in the Freedom House report also led to the country receiving the largest score decline among the world's 25 largest democracies in 2020.

The Indian Express had on May 9 reported that the Finance Ministry's economic division was drafting a strategy to counter the "negative commentary" on India by global think-tanks, indices and media, amid worries this could lead to downgrading of sovereign rating to "junk". In June 2020, then Principal Economic Advisor in the Ministry of Finance, Sanjeev Sanyal, prepared a presentation — "Subjective Factors that impact India's Sovereign Ratings: What can we do about it?" — for internal circulation within the government.

The World Bank's World Governance Indicators provide a ranking of 215 countries territories based on six dimensions of governance: 'Voice and Accountability'; 'Political Stability and Absence of Violence'; 'Government Effectiveness'; 'Regulatory Quality'; 'Rule of Law' and 'Control of Corruption.'

Sanyal's presentation showed the government felt there was a danger India may witness a drop in WGI scores "due to the latest negative commentary on India by think tanks, survey agencies and international media," it had noted.

The presentation noted India's WGI score is much below the BBB Median on all six indicators. While BBB is an investment-grade rating issued by global rating agencies such as S&P and Fitch, a WGI score below BBB Median would suggest that India falls below the middle when the scores of countries are arranged in a descending order. A sovereign credit rating is an independent assessment of the creditworthiness of a country or sovereign entity. It can give investors insights into the level of risk associated with investing in the debt of a particular country, including any political risk.

An eye on image

World Bank's World Governance Indicators rank 215 countries and territories based on these: 'Voice & Accountability'; 'Political Stability & Absence of Violence'; 'Government Effectiveness'; 'Regulatory Quality'; 'Rule of Law' & 'Control of Corruption.' The govt noted that the WGI mattered more than Ease of Doing Business Index.

It also noted that Kashmir went from "partly free" since 2017 till 2019 to "not free" in 2020 scoring 8 (out of 40) in Political Rights, 20 (out of 60) in Civil Liberties. Its total score was 28 (out of 110) compared with 50 (out of 100) in 2017, 49 in 2018 and 49 in 2019.

On one of the governance indicators of the WGI, the Cingranelli Richards Human Rights Database & Political Terror Scale (HUM), the government noted that Amnesty International did not publish its full report and had no data on India.

Notably, it said that the US State Department mentioned the following: "In 2018, the BJP-led government harassed and at times prosecuted activists, lawyers, human rights defenders and



journalists for criticising authorities. Draconian sedition and counterterrorism laws were used to chill free expression. Foreign funding regulations were used to target NGOs critical of government actions or policies...”

Recently, the Supreme Court put on hold pending trials under the sedition law, till the government completes the promised exercise to reconsider and re-examine the provision.

Its analysis of the Economic Intelligence Unit (EIU) showed India’s rank in the EIU’s democracy index fell from 27 in 2014 to 51 in 2019. On “What does EIU say about India in its Democracy Index?”, it noted that India slipped to the 51st place from 42nd on EIU’s 2019 Global Democracy Index and remains classified as ‘flawed democracy’. India’s overall score fell to 6.90 in 2019, lowest since the index was first published in 2006. The score has been continuously declining since 2014, when it was 7.92.

In the Bertelsmann Transformation Index (BTI), the government noted that under ‘Political Transformation’: “From being in the top category of ‘Democracies in consolidation’ in 2014 we have fallen to ‘Defective Democracy’.”

It also noted foreign NGOs have been further curtailed in their activities. It added that ABVP created a climate intimidation at university campuses, for example at JNU in New Delhi.

“Freedom of expression has been severely curtailed, while traditional media and especially journalists critical of the government have been openly persecuted. Freedom of Expression score has worsened from 8 in 2015/16 to 6,” it said.

Even in the analysis of the Heritage Foundation Index of Economic Freedom, the presentation noted “India’s Economic Freedom Score has been “Mostly Unfree” since Heritage Foundation started publishing data in 2008.”

WHY LUNA CRASH HAS RAISED QUESTIONS ABOUT STABILITY OF CRYPTO ASSETS

The sharp crash in Luna, the sister cryptocurrency of algorithmic stablecoin Terra, which has rendered it almost worthless, has sent shockwaves throughout the cryptocurrency market, with experts likening the crash in the crypto market to be as severe as the big financial crisis of 2008. The near-collapse of these stablecoins, considered to be comparatively safer investment bets within the crypto universe, has also prompted regulators and authorities to call for stricter laws governing these financial assets.

What has happened?

Stablecoins are tokens pegged to the value of a government-backed currency such as the US dollar or commodities like gold or silver. Tether (USDT) and USD Coin (USDC) are the two leading stablecoins. The value proposition of these tokens is that they largely trade around \$1 per token, which gives investors some security in highly volatile market situations.

TerraUSD, or UST, is different from Tether in that it is not backed by a fiat currency or other commodities, but instead relies on a complex mix of code and a sister token called luna to stabilise its price. Terra is referred to as an algorithmic stablecoin, meaning that its value is not determined by the financial collateral in the traditional markets but by lines of complex computer code.

In order to maintain its dollar peg, Terra’s algorithm, which is a set of well-defined instructions, incentivises investors to take advantage of price changes between Terra and its sister token Luna,



meaning that UST is heavily dependent on the Luna token. In simple terms, it means that on paper, if Terra's price falls below \$1, traders can "burn" the coin, or permanently remove it from circulation in exchange of the Luna cryptocurrency, and conversely, if Terra's value climbs over \$1, investors can burn Luna and create new Terra, making gains in the process and keeping the value of the coin close to a dollar.

What is the near-term impact of the crash?

The severe crash could deplete investors' trust in the crypto market. As investors lost almost all the value of their investments in Terra and Luna, exchanges, including Indian ones like WazirX and CoinDCX, have delisted the currencies from their platforms so that new investors don't end up buying them. The crash also sent ripples throughout the crypto market, which fell more than 16 per cent on Thursday. Bitcoin, the most popular cryptocurrency, saw its value fall below \$27,000 amid the bloodbath in the crypto market, its lowest since December 2020. However, since then, it has shown tepid signs of stability.

What does it mean in the big picture?

Regulators could sweep in to tighten norms around investments in stablecoins. Gary Gensler, the chair of the US Securities and Exchange Commission, who has previously likened stablecoins to poker chips, has renewed calls for regulations around the crypto asset class. Amid the Terra and Luna crash, she said, "I think that simply illustrates that this is a rapidly growing product and that there are risks to financial stability". According to a WSJ report, US Treasury Secretary Janet Yellen reiterated calls for the US Congress to authorise regulations for stablecoins. Commenting on the Terra developments, Yellen said: "I think that simply illustrates that this is a rapidly growing product and that there are risks to financial stability. We really need a consistent federal framework". The report noted that a Treasury-led panel of regulators recommended last year that Congress write legislation that would regulate stablecoin issuers similarly to banks.

WHY TEXTILE AND GARMENT INDUSTRIES WANT BAN ON COTTON EXPORTS

On Wednesday, May 18, Union Textiles Minister Piyush Goyal convened a meeting of cotton traders, millers and garment manufacturers. The topic: Spiralling prices of cotton, resulting in demands by the textile and garment industries to ban exports of the fibre. This comes days after the government on May 13 banned wheat shipments in response to rising prices due to a heat wave-induced production shortfall. Is there a case for similar restrictions on cotton exports?

How much have cotton prices gone up?

They have nearly doubled compared to last year. The average modal or most-quoted price of kapas (raw un-ginned cotton) at Rajkot APMC (Agricultural Produce Market Committee) mandi was Rs 12,250 per quintal on Thursday, as against around Rs 6,300 this time last year. This was also way above the government's minimum support price of Rs 6,025 per quintal for long-staple cotton varieties.

Prices have been rallying since November, when they crossed Rs 8,000 per quintal before scaling the Rs 10,000 mark for the first ever time in many markets by early-January. The marketing season for cotton extends from October to September, with more than 90% of crop arrivals already taking place by May end.



Why have prices risen so much?

Basically three reasons. The first is lower production. In 2020-21, India's total cotton lint fibre output was 353 lakh bales (lb) of 170 kg each. For the current year, the Cotton Association of India (CAI), a Mumbai-based trade body, has estimated production at 323.63 lb. This figure, released on May 14, is lower than its previous estimates of 335.13 lb (made on April 9), 343.13 lb (February 25), 348.13 lb (January 18) and 360.13 lb (October 30).

The second reason is international prices. The Cotlook 'A' Index price – an average of representative quotes in the Far East destination markets – is currently ruling at 167 cents per pound, up from 92 cents a year ago. India is the world's second largest cotton producer (after China) and third largest exporter (after the US and Brazil). High global prices have made exports attractive. Also, they have pushed up domestic prices closer to export parity levels, while simultaneously making imports more expensive.

The third reason is consumption. The state-owned Cotton Corporation of India (CCI), in March, projected total domestic consumption for 2021-22 at 345 lb, compared to 334.87 lb, 269.19 lb and 311.21 lb in the preceding three marketing years. "Demand has significantly increased, as mills and other users were operating at sub-optimal levels in the past few years. Even during the pandemic, demand for bed-sheets and towels had zoomed, translating into higher consumption of cotton and yarn," said S K Panigrahi, chief general manager (marketing) of CCI.

But the pressure on availability from lower production has already led CAI to revise downwards its estimates of domestic consumption to 320 lb, from its earlier January 18 estimate of 345 lb. CCI is expected to follow suit soon.

Why has production fallen so much?

The area sown under cotton in India has reduced from 134.77 lakh hectares (lh) in 2019-20 to 132.85 lh in 2020-21 and 123.5 lh in 2021-22. This has been largely due to the diminishing benefits from the genetically-modified Bt cotton, which helped almost treble the country's production from 136 lb to 398 lb between 2002-03 and 2013-14. Over a period, Bt cotton has become increasingly susceptible to pink bollworm and white-fly insect pest attacks, making it riskier for farmers to grow the crop. Besides, the government does not permit testing or commercialisation of next-generation transgenic breeding technologies.

This time, the crop was also affected by unseasonal rains in November-December, which affected yields as well as quality of the bolls from the second and third "flushes" (cotton is generally harvested over three or even four pickings, with the first one in October-November and the subsequent ones every following 20-30 days).

How justified is the demand for a ban on exports?

India's cotton exports are actually projected at 40 lb this year, down from the 78 lb of 2020-21. At the same time, imports are likely to be higher, at 15 lb, from last year's 10 lb. Moreover, on April 13, the Centre slashed the import duty on cotton from 11% to nil. Given the anyway lower exports and duty-free imports – which have for now been allowed until September 30, before the next marketing season – there may be no strong case for an outright ban on shipments.

Further, with domestic prices already rising to international parity levels, exports would slow down in the natural course. Advocates of an export ban say it would not impact farmers, as they



have already sold their crop. However, a ban can also send wrong signals ahead of the planting season, which will take off next month with the arrival of the southwest monsoon rains.

Who are the main players in the cotton value chain?

Lint, the white fibre that mills spin into yarn, constitutes only about 34% of kapas. The balance is seed (65%) and moisture. The seed further yields both oil (used for cooking) and de-oiled cake (used as a protein ingredient by livestock feed manufacturers). Kapas rates have firmed up not only because of export and domestic demand for lint, but also due to rising vegetable oil prices. Cotton seed oil is, in fact, India's third largest domestically produced vegetable oil. Its estimated output, at 12.49 lakh tonnes (lt) in 2020-21, was next only to mustard (27.39 lt) and soybean (13.29 lt), out of a total 93.18 lt, according to the Solvent Extractors' Association of India.

Kapas is mostly bought by traders and ginning units that separate the cotton fibre from the seeds. The fibre is sold to spinning mills and seed to oil mills for crushing and producing vegetable oil. From every one kilo of lint, mills obtain 700-800 grams of yarn. The yarn is further woven or knitted into fabric and garments. India in 2021-22 not only exported raw cotton valued at \$2.8 billion, but also cotton yarn worth \$5.5 billion and fabrics and made-ups worth \$8.2 billion. Every part of the value chain, thus, involves exports.

GOVERNMENT BAN ON WHEAT EXPORTS HURTS FARMERS AND TRADERS, DENTS INDIA'S IMAGE AS A RELIABLE GLOBAL SUPPLIER

Last July, the Narendra Modi government imposed stockholding limits on pulses, going against the farm reform laws it had enacted only in September 2020 and before their formal repeal in November 2021. That move, and the latest decision banning wheat exports, constitutes not just a knee-jerk reaction to inflationary pressures. Of more concern is their long-term impact on the farm trade and policy credibility. Building export markets, establishing warehousing infrastructure and creating supply chains take both time and money. Investments in these — whose necessity for Indian farmers and consumers alike is not in doubt — are predicated on a stable policy framework. Which agri-business will have the confidence to put up large processing and storage facilities or search for new buyers for Indian produce if the government does abrupt policy about-turns — by telling them they cannot stock more than 200 tonnes of pulses or contract fresh exports?

The flip-flops in government actions is evident from the department of commerce, on May 12, issuing a statement about the Centre sending trade delegations to nine countries “for exploring possibilities of boosting wheat exports from India” and, a day later, prohibiting shipments “with immediate effect”. True, the country's wheat production has fallen due to the sudden spike in temperatures from mid-March, resulting in premature ripening and shrivelling of the grains. But this was known by early April, when most ground reports pointed to farmers harvesting 15-20 per cent less yields compared to last year. How was the Minister of Commerce Piyush Goyal, then, talking about Indian farmers “feeding the world” and projecting exports of 10-15 million tonnes (mt) in 2022-23, breaking last year's record 7 mt, even in mid-April? This was indicative of either poor crop intelligence — inability to gauge yield losses from the heatwave — or refusal to admit that production has been significantly lower than the “record” 111.32 mt estimate made in mid-February.

The ban on exports has apparently been prompted by wheat procurement plunging to around 18 mt, from last year's all-time-high 43.3 mt, and the resultant depletion in public stocks seen as



threatening “food security”. But if that was so, what stopped the government to pay a bonus above the minimum support price, incentivising farmers to sell to it rather than private traders and exporters? Nor was there any need to continue with supplying free wheat, apart from the regular quota of ration cardholders. If at all exports were to be discouraged in order to contain inflation, a better way would have been to impose a tariff or a minimum price below which shipments aren’t permitted. A blanket ban is like breaking the knees of farmers and traders, from which they will find it difficult to recover — leave alone helping India’s emergence as a reliable global supplier.

WHAT IS FAIR AND AVERAGE QUALITY WHEAT, THE NORMS FOR WHICH HAVE BEEN RELAXED BY GOVT?

The Centre on Sunday (May 15) relaxed the Fair and Average Quality (FAQ) norms for wheat in the ongoing rabi marketing season in Punjab, Haryana, and Chandigarh by a factor of three, raising the permissible limit of “shrivelled and broken grains” to 18% from the existing 6%.

Unseasonal heat in March, when the rabi crop goes through its grain-filling stage, has led to shrivelling, making the grain unfit for procurement as per the usual quality norms.

Procurement norms

Every year, before procurement begins in this region in April, the Storage and Research (S&R) division of the Department of Food & Public Distribution in the Union Ministry of Consumer Affairs, Food & Public Distribution, notifies specifications to ensure the quality of the procured wheat. This year, wheat containing up to 0.75% foreign matter, 2% damaged grain, 4% slightly damaged grain, 6% shrivelled and broken grain, and 12% moisture was cleared for procurement.

The specifications are implemented at the time of procurement by qualified personnel from the quality control wing of the central government’s nodal agency for procurement, the Food Corporation of India (FCI). According to FCI, fair and average quality (FAQ) wheat is one that meets all all-down specifications.

Grain that looks good

FAQ wheat is fully developed, and has a proper shine or lustre. The main varieties are golden or pale yellow in colour, the grain is not dark, and does not have any streaks. It is properly dry, and meets all nutritional conditions, the values of which are tested in the lab in case of doubt.

“If a layman takes a handful of wheat and finds the grain is shiny and beautiful, it would usually mean that the wheat meets FAQ,” an FCI quality control inspector said.

The inspector added that FCI’s QC wing conducts physical and chemical analyses during the procurement process, and on the stored crop to ensure quality standards and parameters are met.

Previous relaxations

The government has in the past relaxed norms for moisture content and loss of lustre following heavy rain during the harvesting season, when ripe crops were flattened, and the grain turned blackish. This is for the first time, however, that such a major relaxation has been allowed for shrivelled grain, FCI officials said. The officials said they could not recall a previous relaxation for the shrivelled grain of more than perhaps 1-2%.



Is the wheat bad?

The relaxation of procurement parameters to “reduce the hardship of farmers and avoid distress sale of wheat” does not mean the quality of the grain is bad. “The grains are smaller in size, but there is no loss of quality. The quality control wings of both FCI and the government have carried out several tests on the shrivelled grain, and found only weight loss, not a loss of quality,” a senior FCI officer said, adding that this wheat will now be called “Under Relaxed Specifications (URS) wheat” instead of FAQ.

Several senior scientists at Punjab Agricultural University (PAU), Ludhiana, also said the shrivelling has caused only loss of yield and lower milling recovery, not deterioration of quality or nutritional value, and the protein content of the grain remains intact.

FERTILISER SUPPLY DISRUPTED, HOW DOES GOVERNMENT PLAN TO MEET SHORTFALL?

Ahead of kharif sowing, due to begin next month, India faces the challenge of meeting its requirement of fertilisers, supply of which has been disrupted in the wake of Russia’s invasion of Ukraine. While the government has maintained that there will be no fertiliser shortage for the upcoming season, the challenges include securing supply from new sources, costlier raw material, and logistics.

How have the pandemic and the war impacted the supply of fertilisers?

The pandemic has impacted fertiliser production, import and transportation across the world during the last two years. Major fertiliser exporters such as China have gradually reduced their exports in view of a dip in production. This has impacted countries such as India, which sources 40–45% of its phosphatic imports from China. Besides, there has been a surge in demand in regions like Europe, America, Brazil and Southeast Asia. While the demand has increased, the supply side has faced constraints.

At the Kharif Conference on April 19, Fertilizer Secretary Rajesh Kumar Chaturvedi said Morocco procures ammonia from Russia for manufacturing DAP (diammonium phosphate), supply of which has been affected in the wake of the “current geopolitical scenario”.

How much fertiliser does India require?

The kharif season (June–October) is very crucial for India’s food security as it accounts for almost half the year’s production of foodgrains, one-third of pulses and about two-thirds of oilseeds. Therefore, a sizeable quantity of fertiliser is required.

Every year, before the start of the cropping season, the Department of Agriculture and Farmers Welfare assesses the requirement of fertilisers and informs the Ministry of Chemical and Fertilizers to ensure the supply. For kharif 2022, the Centre has pegged the requirement at 354.34 LMT, of which urea accounts for 179 LMT, DAP for 58.82 LMT, muriate of potash (MoP) for 19.81 LMT, NPK (nitrogen, phosphate, potash) for 63.71 LMT, and SSP for 33 LMT.

The requirement varies each month according to demand, which is based on the time of crop sowing, which again varies from region to region. For instance, demand for urea peaks during the June–August period. The requirement is relatively low in March and April, and the government uses these two months preparing to ensure the supply of fertilisers for the kharif season.



How much is available?

As per data shared by Chaturvedi, the opening stock of fertiliser available for the kharif season is 125.5 LMT, or 35% of the requirement. Among individual fertilisers, the urea stock is 34.62% of the total requirement, DAP stock is 41.65%, MoP stock is 30.29%, NPK stock is 25.33% and SSP stock is 51.52%.

How much can be produced domestically?

The government estimates domestic production of fertilisers during the kharif season to touch 254.79 LMT, including 154.22 LMT of urea, 27.92 LMT of DAP, 48.65 LMT of NPK and 24 LMT of SSP.

Theoretically, the opening stock and the “expected” domestic production would be sufficient to meet the requirement. However, the war in Ukraine has disrupted the supply of raw materials that Indian companies import, which is expected to impact domestic production. In view of this, the government expects to import 104.72 LMT of fertilisers, most of it urea and DAP.

The “anticipated total availability” — opening stocks, domestic production and imports — will be 485.59 LMT.

Chaturvedi said at the conference: “Kharif me hamen koi dikkat aane ki sambhavna nahin hai. (We are unlikely to face any problem during the kharif season.)”

For domestic production of urea, the government is focusing on the Matix (West Bengal), Ramagundam (Telangana) and Gorakhpur (UP) plants, and is reviving two other units, at Sindri and Barauni. India has also clinched a long-term supply deal with Oman to get 10 LMT of urea per year, according to the source.

India depends on imports for potash, which is used for manufacturing fertilisers. In the wake of sanctions on Belarus and Russia, international prices of potash have increased from \$445 per metric tonnes in December 2021 to \$600 per MT last month.

With supply of potash from Belarus affected, India has now secured supply of 12 LMT potash from Canada, the Fertilizer Secretary said.

An additional quantity of 8.75 LMT was secured from alternative sources — Israel and Jordan — on March 21.

Sources said the government is exploring the option of domestically mining raw materials such as rock phosphate. The Centre has begun an inter-ministerial consultation to explore this option.

What does the Centre expect of the state governments?

Ahead of the start of kharif sowing, the Centre has asked the states to ensure “micro-planning” of fertiliser movement as per requirement. It has asked them to ensure timely unloading of rakes for better utilisation of the rolling stock, to promote use of alternative fertilisers such as nano urea, and to take “strict” action against diversion, hoarding and black marketing of fertilisers.



LOGISTICS OVERHANG: RUPEE FALL UNLIKELY TO BOOST EXPORTS

The rupee's depreciation against the US dollar may hold little upside for India as exports seem unlikely to benefit, amid global supply chain constraints and fall in currency values of competitors, even as imports are set to become more costlier.

The rupee has depreciated by 4.18 per cent since the beginning of the year and closed Friday's trading session at 77.44 against the greenback.

Experts said the depreciation in the value of the rupee was likely to add to India's burgeoning import bill but may not have the traditionally expected impact of making exports more competitive as high commodity prices and global supply chain issues are impacting global trade.

"Global supply chains are facing headwinds due to problems in China. All this is adding to pressures on the cost side, so I don't think we can expect an impact on exports because of the currency depreciation that is going on," said Biswajit Dhar, trade expert and professor at Jawaharlal Nehru University. Lockdowns in China aimed at containing the Covid spread have slowed operations at key ports and affected global supply chains.

"There is an acute shortage of containers and the supply chain is completely stretched," said Sumit Goyal, president of Kolkata-based Patton International, which exports engineering goods. Goyal added international buyers often included expected price reductions in line with currency depreciation in contracts. Inflation was also putting upward pressure on the cost of inputs, he noted.

Experts said since there was a secular strengthening of the dollar against most currencies, the depreciation would not offer an advantage to most exporters relative to competitor countries.

"It is not only the rupee that has depreciated, almost every currency including the pound and the euro have depreciated against the dollar. Most of our competing export nations are in South Asia or Southeast Asia and their currencies have also depreciated," said Sunil Kumar Sinha, principal economist at India Ratings, adding this may mean that exports do not become more competitive as a result of currency depreciation.

Imports, on the other hand, are likely to be impacted significantly by the rupee's depreciation, with India's import requirements growing rapidly — including increased demand for imported coal despite high international prices as thermal power plants are facing low coal inventories.

India's merchandise trade deficit hit an all-time high of \$192.4 billion in FY22 on the back of record high imports worth \$610.2 billion and exports worth \$417.8 billion. High growth in exports and imports has continued in this fiscal, with inbound shipments growing about 31 per cent year-on-year in April, boosted by high prices of commodities such as crude oil and coal.

The depreciation of the rupee is also set to make outward remittances, including those to students in the US, more expensive. Experts said the depreciation might impact the decision of students planning to study in the US going forward.

Experts noted that the rupee was unlikely to see further depreciation against the dollar for a sustained period in the first half of this fiscal. "As far as the rupee is concerned, we believe that with foreign exchange reserves still being large, it's unlikely to be a situation of disorderly depreciation. So, we now feel that for the rest of this half would be Rs 75-79 (against the dollar),"



said Aditi Nayar, chief economist at Icra, adding that she expected that the rupee might fall below its recent low but was unlikely to remain there for a long period.

THE REPO RATE IN INDIA

The story so far: On May 4, the Reserve Bank of India, in a surprise move, announced that the bank's Monetary Policy Committee (MPC) had held an 'off-cycle' meeting at which it had decided unanimously to raise the "policy repo rate by 40 basis points to 4.40%, with immediate effect". Citing 'inflation that was rising alarmingly and spreading fast' globally, amid geopolitical tensions, RBI Governor Shaktikanta Das said that the MPC had judged that the 'inflation outlook warranted an appropriate and timely response through resolute and calibrated steps to ensure that the second-round effects of supply side shocks on the economy were contained and long-term inflation expectations were kept firmly anchored'. Mr. Das added that the RBI's monetary policy response would help preserve macro-financial stability amid increasing volatility in financial markets.

What is the repo rate?

The repo rate is one of several direct and indirect instruments that are used by the RBI for implementing monetary policy. Specifically, the RBI defines the repo rate as the fixed interest rate at which it provides overnight liquidity to banks against the collateral of government and other approved securities under the liquidity adjustment facility (LAF). In other words, when banks have short-term requirements for funds, they can place government securities that they hold with the central bank and borrow money against these securities at the repo rate. Since this is the rate of interest that the RBI charges commercial banks such as State Bank of India and ICICI Bank when it lends them money, it serves as a key benchmark for the lenders to in turn price the loans they offer to their borrowers.

Why is the repo rate such a crucial monetary tool?

According to Investopedia, when government central banks repurchase securities from commercial lenders, they do so at a discounted rate that is known as the repo rate.

The repo rate system allows central banks to control the money supply within economies by increasing or decreasing the availability of funds.

How does the repo rate work?

Besides the direct loan pricing relationship, the repo rate also functions as a monetary tool by helping to regulate the availability of liquidity or funds in the banking system. For instance, when the repo rate is decreased, banks may find an incentive to sell securities back to the government in return for cash. This increases the money supply available to the general economy. Conversely, when the repo rate is increased, lenders would end up thinking twice before borrowing from the central bank at the repo window thus, reducing the availability of money supply in the economy.

Since inflation is, in large measure, caused by more money chasing the same quantity of goods and services available in an

What impact can a repo rate change have on inflation?

Inflation can broadly be: mainly demand driven price gains, or a result of supply side factors that in turn push up the costs of inputs used by producers of goods and providers of services, thus



spurring inflation, or most often caused by a combination of both demand and supply side pressures.

Changes to the repo rate to influence interest rates and the availability of money supply primarily work only on the demand side by making credit more expensive and savings more attractive and therefore dissuading consumption. However, they do little to address the supply side factors, be it the high price of commodities such as crude oil or metals or imported food items such as edible oils.

What other factors influence the repo rate's efficacy?

There is also another aspect to consider. Repo rate increases impact the real economy with a lag. In February 2021, the RBI in its annual 'Report on Currency and Finance' observed that "the challenge for an efficient operating procedure [of monetary policy] is to minimise the transmission lag from changes in the policy rate to the operating target", which in this case is the mandate to keep medium-term inflation anchored at 4%, and bound within a tolerance range of 2% to 6%.

RBI CUTS FY22 DIVIDEND PAYOUT TO CENTRE TO ₹30,307 CRORE

The Reserve Bank of India (RBI) on Friday said its board had approved the transfer of ₹30,307 crore as surplus to the Union government for the fiscal year 2021-22, while deciding to maintain the Contingency Risk Buffer at 5.50%. The RBI did not specify the buffer amount.

The RBI had previously transferred ₹99,122 crore for the nine months ended March 31, 2021 (July 2020-March 2021). It moved to an April to March accounting year from 2021/22.

"The amount of surplus to be transferred by the RBI to the Government appears to be modestly lower than the budgeted amount," said Aditi Nayar, Chief Economist, ICRA Ltd. "However, the tax receipts are expected to substantially surpass the budgeted level, absorbing the impact of the former," Ms. Nayar added.

The 596th meeting of the RBI's central board was chaired by Governor Shaktikanta Das.

"The Board in its meeting reviewed the current economic situation, global and domestic challenges and the impact of recent geopolitical developments," the RBI said in a statement. "The Board also discussed the working of the Reserve Bank during the year April 2021 – March 2022 and approved the Annual Report and accounts of the Reserve Bank for the accounting year 2021-22," the central bank added.

Deputy Governors Mahesh Kumar Jain, Michael Debabrata Patra, M. Rajeshwar Rao, T. Rabi Sankar and other Directors of the Central Board namely Satish K. Marathe, S. Gurumurthy, Revathy Iyer and Sachin Chaturvedi attended the meeting, the RBI said.

Ajay Seth, Secretary, Department of Economic Affairs and Sanjay Malhotra, Secretary, Department of Financial Services also attended the meeting.

WHY ARE INDIA'S FOREIGN EXCHANGE RESERVES FALLING?

The story so far: The Indian rupee hit an all-time low against the U.S. dollar this week weakening past the 77 rupees to a dollar mark and selling at 77.63 against the dollar on Thursday. Many



analysts expect the rupee to weaken further in the coming months to hit the 80 rupees to a dollar mark. In fact, the International Monetary Fund expects the rupee to weaken past the 94 rupees to a dollar mark by FY29.

What is happening?

The Indian rupee has been witnessing a steady decline this year, losing almost 4% against the U.S. dollar since the beginning of 2022. India's forex reserves have also dropped below \$600 billion, plunging by about \$45 billion since September 3, 2021, when forex reserves stood at an all-time high of \$642 billion. According to Reserve Bank of India data released on Friday, India's forex reserves dropped by \$1.774 billion for the week ended May 6 to \$595.954 billion. The drop in India's forex reserves is believed to be largely due to steps taken by the Reserve Bank of India to support the rupee. RBI officials, however, have noted that the drop in forex reserves is due to a fall in the dollar value of assets held as reserves by the RBI. For instance, if a portion of the reserves are in euros and the euro depreciates against the dollar, this would cause a drop in the value of forex reserves.

It should be noted that, as a matter of policy, the Indian central bank has usually tried to slow down or smoothen, rather than reverse or prevent, the fall in exchange value of the rupee against the U.S. dollar. The aim of the RBI's policy is to allow the rupee to find its natural value in the market but without undue volatility or causing unnecessary panic among investors. State-run banks are usually instructed by the RBI to sell dollars in order to offer some support to the rupee. By thus selling dollars in the open market in exchange for rupees, the RBI can improve demand for the rupee and cushion its fall.

What determines the rupee's value?

The value of any currency is determined by demand for the currency as well as its supply. When the supply of a currency increases, its value drops. On the other hand, when the demand for a currency increases, its value rises. In the wider economy, central banks determine the supply of currencies, while the demand for currencies depends on the amount of goods and services produced in the economy.

In the forex market, the supply of rupees is determined by the demand for imports and various foreign assets. So, if there is high demand to import oil, it can lead to an increase in the supply of rupees in the forex market and cause the rupee's value to drop. The demand for rupees in the forex market, on the other hand, depends on foreign demand for Indian exports and other domestic assets. So, for instance, when there is great enthusiasm among foreign investors to invest in India, it can lead to an increase in the supply of dollars in the forex market which in turn causes the rupee's value to rise against the dollar.

What's causing the rupee to lose value against the dollar?

Since March this year, the U.S. Federal Reserve has been raising its benchmark interest rate causing investors seeking higher returns to pull capital away from emerging markets such as India and back into the U.S. This, in turn, has put pressure on emerging market currencies which have depreciated significantly against the U.S. dollar so far this year. Even developed market currencies such as the euro and the yen have depreciated against the dollar and the dollar index is up more than 8% so far this year. In fact, some analysts believe that the RBI's surprise decision to raise rates earlier this month may have simply been to defend the rupee by preventing any rapid outflow of capital from India. In 2013, the rupee fell 15% against the dollar in about three months



after investors were spooked by the U.S. Federal Reserve's decision to trim down its bond purchase programme that had helped keep long-term interest rates low.

Moreover, India's current account deficit, which measures among other things the gap between the value of imports and exports of goods and services, is expected to hit a 10-year high of 3.3% of gross domestic product in the current financial year as predicted by Morgan Stanley. This means that India's import demand amid rising global oil prices is likely to negatively affect the rupee unless foreign investors pour sufficient capital into the country to fund the deficit. But foreign investors are unlikely to plough capital into India when investment yields are rising in the U.S. Yields on U.S. 10-year Treasuries, for instance, have risen from around 0.5% in mid-2020 to over 3% earlier this month.

The rupee, it should also be noted, has consistently lost value against the U.S. dollar for several decades now. A major reason for this has been the consistently higher domestic price inflation in India. Higher inflation in India suggests that the RBI has been creating rupees at a faster rate than the U.S. Federal Reserve has been creating dollars. So, while capital and trade flows gain a lot of attention in discussions on the rupee's value, the difference in the rates at which the U.S. Federal Reserve and the RBI regulate the supply of their currencies may play a much larger role in determining the value of the rupee over the long run.

What lies ahead?

Analysts believe that, over the long run, the rupee is likely to continue to depreciate against the dollar given the significant differences in long-run inflation between India and the U.S. At the moment, as the U.S. Federal Reserve raises rates to tackle historically high inflation in the country, other countries and emerging markets in particular will be forced to raise their own interest rates to avoid disruptive capital outflows and to protect their currencies. It should be noted that inflation in the U.S. hit a 40-year high of 8.5% in March. The RBI too has been trying to rein in domestic consumer price inflation, which hit a 95-month high of 7.8% in April, by raising rates and tightening liquidity. As interest rates rise across the globe, the threat of a global recession also rises as economies readjust to tighter monetary conditions.

UNDERSTANDING INDIA'S ETHANOL BLENDING POLICY

The story so far: The Union Cabinet on Wednesday approved amendments to the National Policy on Biofuels, 2018, to advance the date by which fuel companies have to increase the percentage of ethanol in petrol to 20%, from 2030 to 2025. The policy of introducing 20% ethanol is expected to take effect from April 1, 2023.

What is the history of ethanol-blending in India?

Since two decades, India has been moving towards putting in place an ecosystem to have more ethanol blended into petrol for use vehicles, particularly two and four wheelers. Government records suggest about 75% of India's 220 million vehicles are two wheelers and 12% four wheelers. Ethanol, or ethyl alcohol, is a hydrocarbon that when burnt can generate heat and power engines.

However, it takes much more ethanol to power a vehicle's engine than petrol. It also leaves residual by-products that can corrode and damage the vehicle which is why, while vehicles can be run on ethanol, they need to be tuned accordingly so that they don't compromise on efficiency and usability. On the other hand, the gains are potentially significant as ethanol can be sourced from



sugarcane, molasses, maize, which given India's agricultural base, can substantially reduce India's dependence on petroleum.

Since 2001, India has tested the feasibility of ethanol-blended petrol whereby 5% ethanol blended petrol (95% petrol-5% ethanol) was supplied to retail outlets. In 2002, India launched the Ethanol Blended Petrol (EBP) Programme and began selling 5% ethanol blended petrol in nine States and four Union Territories that was extended to twenty States and four UTs in 2006. Until 2013-14, however, the percentage of blending never crossed 1.5%.

In 2015, the Ministry of Road Transport and Highways notified that E5 [blending 5% ethanol with 95% gasoline] petrol and the rubber and plastic components used in gasoline vehicles produced since 2008 be compatible with the E10 fuel. In 2019, the Ministry notified the E10 fuel [blending 10% ethanol with 90% gasoline]. The rubber and plastic components used in petrol vehicles are currently compatible with E10 fuel. Financial incentives for distilleries coupled with policy support has seen average blending touch 5%. Standards for E20, E85 and even E100 fuel have already been laid. This includes standards for ethanol blended diesel. Since 2020, India has been announcing its intent to achieve 10% blending by the end of 2022 and 20% blending by 2030. The Centre has also targeted 5% blending of biodiesel with diesel by 2030.

What does switching to E20 entail?

A NITI Aayog Committee report of June 2021 lays out a comprehensive picture of ethanol blending, the challenges and a roadmap. India's net import of petroleum was 185 million tons at a cost of \$55 billion in 2020-21. Most of the petroleum is used by vehicles and therefore a successful 20% ethanol blending programme could save the country \$4 billion per annum, or about ₹30,000 crore. To achieve such savings, the committee estimates an ethanol demand of 1,016 crore litres based on expected growth in vehicle population. Because electric vehicles are also likely to increase, this should partially offset demand for ethanol leading to a requirement of 722-921 crore litres in 2025.

This however is an "optimistic" projection as the NITI report itself notes. India's current ethanol production capacity consists of 426 crore litres from molasses-based distilleries, and 258 crore litres from grain-based distilleries. This is expected to increase to 760 crore litres and 740 crore litres respectively and would suffice to produce 1016 crore litres of ethanol required for EBP and 334 crore litres for other uses. This will require six million tonnes of sugar and 16.5 million tonnes of grains per annum in ESY 2025.

How does this affect engines?

When using E20, there is an estimated loss of 6-7% fuel efficiency for four wheelers which are originally designed for E0 and calibrated for E10, 3-4% for two wheelers designed for E0 and calibrated for E10 and 1-2% for four wheelers designed for E10 and calibrated for E20. Car makers have said that with modifications in engines (hardware and tuning), the loss in efficiency due to blended fuel can be reduced. To compensate the consumers for a drop in efficiency from ethanol blended fuels, tax incentives on E10 and E20 fuel may be considered. The test vehicles worked well in several test-situations, the report noted.

What is the international experience?

Flex Fuel Engine technology (FFE), or vehicles that run entirely on ethanol, are popular in Brazil and comprise nearly 80% of the total number of new vehicles sold in 2019. The cost of flex fuel



vehicles (four-wheelers) could cost about ₹17,000 to ₹25,000 more than the current generation of vehicles.

The two-wheeled flex fuel vehicles would be costlier by ₹5,000 to ₹12,000 compared to regular petrol vehicles. The global production of fuel ethanol touched 110 billion litres in 2019, or about an average growth of 4% year per year during the last decade. The U.S. and Brazil make up 92 billion litres, or 84% of the global share, followed by European Union (EU), China, India, Canada and Thailand.

The prices of ethanol produced in India are higher compared to U.S. and Brazil, because of the minimum support prices that the government provides.

What are the environmental costs of ethanol blending?

Because ethanol burns more completely than petrol, it avoids emissions such as carbon monoxide. However, tests conducted in India have shown that there is no reduction in nitrous oxides, one of the major environmental pollutants. A report by the Institute for Energy Economics and Financial Analysis (IEEFA) says that for India to meet its target of 20% ethanol blended in petrol by the year 2025, it will need to bring in 30,000 additional sq km of land to come under maize cultivation. Half that land can be used more efficiently to produce clean electricity from solar energy, they contend.

For India, sugarcane is the cheapest source of ethanol. On average, a ton of sugarcane can produce 100 kg of sugar and 70 litres of ethanol but that would mean 1,600 to 2,000 litres of water to produce 1 kg of sugar, implying that a litre of ethanol from sugar requires about 2,860 litres of water.

INFRA FOR 5G ROLLOUT: GATISHAKTI SANCHAR FOR ROW NOD LAUNCHED

Union Minister Ashwini Vaishnaw on Saturday said that legal backing for right of way (RoW) for telecom infrastructure projects will be put in place by December this year, as he launched the GatiShakti Sanchar portal that aims to accelerate approvals for laying of fibre and tower installations, ahead of the 5G roll-out in the country.

The GatiShakti Sanchar portal will enable centralised right of way (RoW) approvals for telecom infrastructure projects and can be used by industry players to apply for RoW approvals, including for 5G services.

The portal has been adopted by all central ministries, state governments and union territories, the Telecom Minister said.

He added that the current process for RoW approvals is handled administratively and giving it a legal backing would help officials at the local levels to approve RoW requests quicker, bring clarity on the fee structure and fix accountability.

Vaishnaw also said that the portal has already brought down the time taken for such approvals from nearly 100 days to around 22, and legal backing would further bring that time down to close to a week.

“The timely disposal of RoW applications of various service and infrastructure providers shall enable speedy infrastructure creation which would be an enabler for timely rollout of 5G networks,” Vaishnaw said. The integration of the portal with the Geographic Information System



(GIS) will also give state governments and various agencies added visibility into the optical fibre mesh and digital networks that are in place, he further said.

The launch of the portal comes on the heels of the draft policy guidelines to bring consistency in RoW-related procedures across states that were released in April. The Department of Telecommunications (DoT), in the draft, has proposed a methodology for calculating RoW area, establishment of poles for the deployment of small cells, and usage of street furniture for the deployment of small cells, among other things.

The Centre also plans to link various other portals handled by railways, highways, and waterways, among others to the GatiShakti Sanchar portal,

“Work has already started on interlinking these portals and it should be completed in the next 3-4 months,” Vaishnav said.

The portal, built by the Madhya Pradesh State Electronics Development Corporation, includes a dashboard for tracking applications, and has already received more than 50,000 RoW applications, out of which around 28,000 have been approved.

The industry has welcomed the portal. “The GatiShakti Sanchar portal is an important step towards making a robust mechanism to achieve the goal of ‘Broadband for All’, as envisaged in the National Digital Communication Policy, 2018,” said SP Kochhar, director general. Cellular Operators Association of India (COAI).

JOBS SCHEME WILL NOT OFFER A LONG-TERM SOLUTION TO URBAN UNEMPLOYMENT. SAFETY NETS NEED TO BETTER CONCEIVED

A few days ago, the Economic Advisory Council to the Prime Minister released a report on the state of inequality in India. The report, prepared by the Institute of Competitiveness, provides a detailed examination of the existing disparities in society. Based on wage data from the periodic labour force surveys, it has pegged the share of the top 1 per cent at around 6-7 per cent in total income, with the top 10 per cent estimated to earn around 30 per cent. In comparison, the report has pegged the bottom 50 per cent to hold only 22 per cent of income. Alongside, it has also explored inequities in access to health and education facilities. While this is rather commonplace, the more concrete suggestions of the report to tackle the issue of rising inequality in India — these range from putting in place an urban equivalent of MGNREGA to introducing universal basic income — require careful consideration.

The proposal to introduce an urban employment guarantee scheme comes in the backdrop of the pandemic exposing the precarious position of workers, especially those employed in the informal sector in urban areas. Proponents of this idea have argued that not only would this provide employment during times of distress, but this would also serve as a channel to push funds through quickly in periods of stress. Several states have in fact been experimenting with this concept. Recently, the Rajasthan government announced a scheme for urban areas — the Indira Gandhi Shahri Rozgar Guarantee Yojana — on the lines of MGNREGA. However, there are several problems with replicating the rural employment guarantee programme in urban areas. First, such a scheme may simply encourage migration, which without the creation of the attending infrastructure, will only exert further pressure on the crumbling facilities of these cities. Second, demand for work under MGNREGA tends to move in line with the agricultural cycle. As such it is seasonal in nature. However, in urban areas, there is no such seasonality in either work demanded

or unemployment, complicating the design of such a scheme. And moreover, many of the migrant workers are unlikely to have the requisite skills needed for regular jobs in cities. Third, it is also debatable whether the educated but unemployed workers will take up these jobs. Fourth, there are capacity constraints with the urban local bodies, which are likely to be the implementing agencies. More critically, what are the kinds of public works in urban areas? Lastly, there is also the question of financing such a scheme at the national level.

The proposal seeks to address the continuing employment and inequality crisis that plagues India. However, India's job challenge is structural in nature, owing in part to the absence of a labour-intensive manufacturing sector. A more prudent approach would be for economic policy to focus on boosting growth, lowering inequalities in opportunities, improving access to education and health, and providing pathways for upward mobility.



DreamIAS



LIFE & SCIENCE

LUNAR REGOLITH

Scientists have grown plants in soil from the Moon, a first in human history. University of Florida researchers showed (Communications Biology) that plants can successfully sprout and grow in lunar soil. Their study also investigated how plants respond biologically to the Moon's soil, also known as lunar regolith, which is radically different from soil found on Earth.

This work is a first step toward one day growing plants for food and oxygen on the Moon or during space missions. In future, longer space missions might use the Moon as a hub or launching pad. It makes sense that we would want to use the soil that's already there to grow plants. Then began a simple experiment: plant seeds in lunar soil, add water, nutrients and light, and record the results. But the scientists only had 12 grams of lunar soil collected during the Apollo 11, 12 and 17 missions to the Moon.

To grow their tiny lunar garden, the researchers used thimble-sized wells in plastic plates normally used to culture cells. Each 'pot' was filled with nearly a gram of lunar soil, the soil was moistened with a nutrient solution and a few seeds from the Arabidopsis plant was added. The plants were grown in non-lunar soils as a control group.

All the seeds planted in the lunar soils sprouted but plants were smaller, grew more slowly or were more varied in size than their counterparts. These were all physical signs that the plants were working to cope with the chemical and structural make-up of the Moon's soil, Anna-Lisa Paul, one of the study's authors, says in a release.

PAST SEVEN YEARS WARMEST: WMO

The past seven years were the warmest on record, and 2021 did not see record-breaking temperatures because of a La Niña event at the start and end of the year, according to a report by the World Meteorological Organisation (WMO) on Wednesday.

La Nina is a cooling of surface temperatures in the Central Pacific. While this had a temporary cooling effect, it did not reverse the overall trend of rising temperatures. The average global temperature in 2021 was about 1.11 (± 0.13) degrees Celsius above the pre-industrial level.

Record heat

The report comes even as north, central and western India reel under an onslaught of pre-monsoon heat waves, with temperatures in March breaching century-old records.

Four key climate change indicators — greenhouse gas concentrations, sea-level rise, ocean heat and ocean acidification — set new records in 2021, according to the report. Extreme weather led to economic damage estimated at hundreds of billions of dollars and triggered shocks for food, water security and displacement that worsened in 2022.

"Renewables are the only path to real energy security, stable power prices and sustainable employment opportunities. If we act together, the renewable energy transformation can be the peace project of the 21st century," said Antonio Guterres, Secretary-General of the United Nations.



The world must act in this decade to prevent ever worsening climate impacts and to keep temperature increase to below 1.5 degrees Celsius above pre-industrial levels, he said.

“It is just a matter of time before we see another warmest year on record,” said WMO Secretary-General Petteri Taalas.

“Our climate is changing before our eyes. The heat trapped by human-induced greenhouse gases will warm the planet for many generations to come. Sea-level rise, ocean heat and acidification will continue for hundreds of years, unless means to remove carbon from the atmosphere are invented. Some glaciers have reached the point of no return and this will have long-term repercussions in a world in which more than 2 billion people already experience water stress.”

The WMO report added that ocean surface temperatures were at a record high. The upper 2,000-metre depth of the ocean continued to warm in 2021 and would continue to do so in the future — a change which is irreversible on centennial to millennial time scales.

GOOGLE'S NEW SKIN TONE SCALE FOR REFINED SEARCH RESULTS AND MORE

Among the multiple artificial intelligence (AI) and machine learning (ML) initiatives announced by Google last week at its annual I/O developer conference, there were a number of projects to train the internet company's AI platforms. One such development was the introduction of a 10-shade Monk Skin Tone (MST) Scale — something that could have a broader sociological significance as technology platforms witness deeper intersections with society at large. In Google's words, the MST Scale will “support inclusive product and research across the industry”.

What is the Monk Skin Tone Scale?

Developed in partnership with Dr Ellis Monk, associate professor of sociology at Harvard University, the Monk Skin Tone (MST) Scale is a tool that will be primarily incorporated by Google into computer vision, which is a type of AI that allows computers to see and understand images. It has been found that computer vision systems often do not function as efficiently for people of darker skin as they do for those with fairer complexion. Using the MST Scale, Google and the tech industry are aiming to build more representative datasets so that such AI models can be trained to identify a wider range of skin tones in images.

How will it work?

According to Google, the scale will “make it easier for people of all backgrounds to find more relevant and helpful” search results. For instance, users who search for makeup or beauty tutorials in Google Images will see an option to refine search results further by skin tone. Going ahead, Google will utilise the MST Scale to better detect and categorise images to give a larger range of results.

The tech giant plans to further expand the use of this schema – the structure of the database created based on different skin tones – so that creators and online businesses may label their content or products based on other attributes, such as hair colour and hair texture. Google has openly released the scale so that anyone can use it for research and product development.

Why the MST Scale?

According to Dr Courtney Heldreth, a social psychologist and user experience (UX) researcher at Google's Responsible AI Human-Centered Technology UX department, “persistent inequities exist

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



globally due to prejudice or discrimination against individuals with darker skin tones, also known as colourism”. And AI not accurately seeing skin tone, which could further lead to existing inequities, is a type of colourism.

To bridge this gap, a Google research team including Heldreth and Xango Eyeé, a product manager working on Responsible AI, focused on bringing more skin tone equity to AI development. The team last year partnered with Monk, whose research has centred on how factors like skin tone, race and ethnicity affect inequality.

The foundation for the MST scale was laid upon the existing Fitzpatrick scale, developed by American dermatologist Thomas B Fitzpatrick in 1975, which classified human skin type into seven broad colours. The Google team and Monk arrived at a scale composed of 10 shades – a range pegged to be not too limiting but also not too complex – and surveyed thousands of adults in the US who felt more represented with the new methodology.

Are there similar developments elsewhere?

Several large corporations stepped up their efforts towards colour-based inclusiveness in light of the 2020 Black Lives Matter protests, which had happened in aftermath of police brutality and the killing of 46-year old African American George Floyd. In 2020, Johnson & Johnson-owned Band-Aid launched a new range of adhesive bandages in different shades of black and brown to make its products more inclusive for people of colour. In India, after backlash and strong public feedback over discrimination against people with darker skin tones, the Advertising Standards Council of India (ASCI) in 2014 released guidelines for the advertising of skin lightening and fairness products. More recently, in 2020, Hindustan Unilever-owned cosmetic brand Fair & Lovely was renamed Glow & Lovely, after criticism for promoting colourism in its advertisements and marketing campaigns.

WHAT IS APPLE’S NEW ‘DOOR DETECTION’ FEATURE AND HOW DOES IT WORK?

iPhone maker Apple has unveiled a set of new software features combined with the hardware capabilities on some of its high-end devices to help users with certain physical disabilities. These features include Door Detection on the iPhone and the iPad; live captions on iPhone, iPad and Mac, and more. These features, Apple said, will be available later this year through software updates on Apple devices.

What is Door Detection and how does it work?

Apple said in a statement that this feature can help users, who are blind or have low vision, locate a door upon arriving at a new destination, understand how far they are from it, and describe door attributes — including if it is open or closed, and when it’s closed, whether it can be opened by pushing, turning a knob, or pulling a handle. Door Detection can also read signs and symbols around the door, like the room number at an office, or the presence of an accessible entrance symbol, the company claimed. This feature uses LiDAR, camera, and on-device machine learning, and will be available on iPhone and iPad models with the LiDAR Scanner.

WHAT A CHILD’S TOOTH TELLS US ABOUT OUR ANCIENT COUSINS

Scientists have long assumed that Southeast Asia was once home to Denisovans, those ancient cousins of modern humans about whom much remains to be known. Now, the first physical



evidence has emerged and been verified: the wisdom tooth of a child, most likely a girl, discovered in a cave in Laos, where it was likely deposited 1,60,000 to 1,30,000 years ago.

The findings, published in Nature Communications, throw new light on the regions inhabited by Denisovans, and their interbreeding with the ancestors of modern humans.

Who were the Denisovans?

They lived lakhs of years ago, coexisting with Neanderthals in some regions, and interbreeding with early modern humans in some cases. They were first identified as a separate species in 2010, following the discovery of a fragment of a finger bone and two teeth, dating back to about 40,000 years ago, in the Denisovan Cave in Siberia. In 2019, another fossil — a mandible with a set of teeth — was found on the Tibetan plateau.

Once these samples were analysed and their characteristics identified, traces of Denisovan DNA have been identified in certain indigenous groups in the Philippines and other regions. But further fossil finds remained elusive. “Until we find more Denisovan material, we cannot begin to understand their full genome in the way that we can study Neanderthals,” the Smithsonian Institute said in a post on its website in December 2020.

One reason why Denisovan fossils are so rare is that their population was smaller than that of Neanderthals — “plus the fact that they are certainly a number of fossils attributed to the ‘archaic humans’, a group we put fossils into when we don’t really know where to put them”, Dr Fabrice Demeter, palaeoanthropologist at the University of Copenhagen’s Globe Institute, and one of the senior authors of the study, told The Indian Express by email.

“This is the case for several fossils from China such as Maba or Harbin that are certainly Denisovans. We should also consider that Neanderthals are adapted to Western Eurasia and to cold regions, whereas Denisovans originated from Far East Asia with certainly less favourable climate conditions to preserve the bones,” said.

So, what has been found now?

The team that has reported the Laos finds has been working in the region for over 20 years, and in 2009 found some of the oldest modern humans in Northern Laos. “Then in 2018, we found that new cave, Cobra Cave, about 100 m from the previous one,” Demeter said.

In the cave were skeletal remains of various animals — and the tooth that turned out to be of a Denisovan child.

“We microCT-scanned the tooth, did geometric analysis, we extracted the proteins that could tell us the individual belonged to genus Homo and was female. The morphology of the crown tells us it was a young individual of 5-7 years old... The tooth is closer to Neanderthals and Denisovans. But as Neanderthals are only adapted to Western Europe and to cold regions, the best option is that the tooth is Denisovan,” Demeter said.

The DNA has not been extracted for analysis. “DNA doesn’t preserve well in tropical regions, but we will attempt soon,” he said.



Why is the finding important?

So far, it was known that Denisovans were only found in cold and high-altitude regions such as in Siberia and the Himalayas. “Our discovery proves that they were also adapted to a warm environment. Meaning that they had very large flexibility of adaptation,” Demeter said.

It also confirms recent genetic findings “that some populations (Negrito from Philippines, Papuans and Australian Aborigines) have 3 to 5% of Denisovan genes compared to us with 0.001%. Meaning that at some point, their ancestors interbred with some Denisovans in Southeast Asia. Our discovery can now prove it,” he said.

BURKINI ALLOWS MORE WOMEN TO PARTICIPATE IN AN ACTIVITY THAT THEY WOULD OTHERWISE BE EXCLUDED FROM. THAT’S HOW IT SHOULD BE

The great burkini debate is once again set to roil France. The city of Grenoble has decided to allow the garment — as well as long shorts for men and topless bathing for women — in state-run swimming pools “for all men and women to be able to dress as they want”. The move was, predictably, met with a slew of protestations, describing the burkini as a “symbol of Islamic extremism” and “enslavement of women” that is harmful to France’s “Republican values”.

There are echoes here of the arguments made in 2016, when a number of French cities, had banned the burkini. A court overturned the bans citing “violation of fundamental freedoms” but that did little to change the popular perception of the burkini as standing for the failure of Muslim migrants to integrate into secular society.

But it was for precisely the opposite reason that Aheda Zanetti had created the burkini. Hereafter, Muslim women could participate in an activity that they would otherwise be excluded from. Not surprisingly, when it was first introduced in 2002, the burkini became a huge hit — not only with its target consumers, but also other women who are, for various reasons, far more comfortable in the full-body coverage that it offers compared to more conventional swimwear. For those who see a red rag in the burkini — or indeed, other modest garments, such as the burqa and the hijab — surely there’s a lesson here in accommodation.

THE BLOOD GROUPS OF HUMANS AND PRIMATES

We know about how people donate their body after death to hospitals and health research centres for possible use of the healthy organs to the needy ones.

And a very common such donation is the cornea of the eye. But even when one is alive, he/she can donate blood.

Many cities across India have what are called ‘blood banks’, where blood gathered by donation from blood donors is saved and preserved for later use in blood transfusion.

How much blood can one donate? Blood in a healthy human body is about 7% of the total body weight (the average body weight being 55-65 kg), or 4.7 to 5.5 litres (1.2 to 1.5 gallons).

In a regular donation, the donor gives about 500 ml of blood, and this is replaced in the body within a day or two (24-48 hours).



Blood types are determined by the presence (or absence) of certain antigens (molecules that can trigger an immune response), if they are foreign to the body of the recipient.

Thus, a matching of the blood type of the donor with that of the receiver is necessary.

Blood types

What are these blood types? They are classified as antigens A and B in our red blood cells.

Landmark research on these was done by a medical doctor, Dr. Karl Landsteiner of the University of Vienna in Austria.

He collected blood samples from several of his staff members and found that the serum of some of them led to the clumping together (or precipitation), while others had no problem with the donor serum.

Using this information, he defined three acceptable types of blood cells which he called as A, B and O blood types.

We still use these classifications to this day.

Dr. Landsteiner received the Nobel Prize in physiology/medicine in 1930.

A very informative review on Dr. Landsteiner's work has been published by two Iranian scientists, Dr. Dariyush D. Farhud and Marjan Zarif Yeganeh in Iranian Journal of Public Health, Vol. 42, No. 1, Jan. 2013, pp. 1-6., wherein they estimate that the blood group A in India to be about 40%, blood group B between 25-35% and group O to be 40-50%.

A recent detailed paper by two scientists from All India Institute of Medical Sciences (AIIMS), New Delhi, Dr. G.K. Patidar and Dr. Y. Dhiman (ISBT Science Series (2020) O, 1-12) has analysed several reports on the distribution of A, B, O and AB blood groups in India to be 23%, 34%, 35% and 8%, respectively, and that the Southern States have higher O group, about 39%.

The Neandertals

In 1964, the Italian population geneticist Dr. Cavalli-Sforza worked not only with his colleagues to check on the prevalence of blood groups A, B, O and AB in Italy and its neighbours, but also contacted several colleagues across the world, and together published a phylogenetic tree of 15 human populations, and the prevalence of blood groups distributed across the continents of North and South America, South Africa, and Polynesia in the far East.

In addition, he was also able to obtain fossils of Neandertals and Denisovs, from heritage sites in Europe, roughly between 40,000 to 1,00,000 years ago. His group could then classify these populations with blood groups A, B, O and AB.

And the latest paper by Silvana Condemi et al., in PLOS One, July 28, 2021, titled, "Blood groups of Neandertals and Denisova decrypted" point out that blood group systems were the first phenotypic markers used in anthropology to decipher the origin of populations across the world, as aboriginal humans migrated to various parts of the world (Eurasia, Sub-Saharan Africa, Australia and Papua, and other places). Analysis of the blood group markers of some Neandertals and Denisovans showed the presence of the ABO group, and some other markers that are used today in blood transfusion.



Primate monkeys

Interestingly in their paper, Dr. Farhud and Dr. Yeganeh also quote a report published by Dr. P. Kramp in *Primatologia III* (1960) Basel which reports that primates (chimpanzee, gorilla, orangutan, gibbons) also have blood groups containing AB, A, B and O, just as we humans have. Indeed, we owe our blood types (A, B, O, AB), thanks to what our primate monkey ancestors had millions of years ago. Just think about it. Our blood is our heritage, just as our genes are — from monkeys to archaic humans and our ancestors to today.

Hanuman of Ramayana not only helped Goddess Sita by bringing her to the safety of her home, but has also blessed us with our blood group

VACCINE AGAINST 3 ENCEPHALITIS VIRUSES FOUND SAFE, EFFECTIVE

A vaccine for eastern equine encephalitis virus (EEEV), western equine encephalitis virus (WEEV), and Venezuelan equine encephalitis virus (VEEV) was found to be safe, well-tolerated and induced a neutralising antibody response in adult volunteers, according to results from a phase 1 clinical trial, published in *The Lancet Infectious Diseases*.

EEEV, WEEV and VEEV are spread to humans through the bites of infected mosquitoes. Horses are also susceptible to infection, but horses cannot transmit the viruses directly to humans. Infections in humans are rare but can lead to flu-like symptoms and, in some cases, severe neurological damage or death.

Researchers designed a virus-like particle (VLP) vaccine candidate that uses proteins from the outer shells of the viruses, the US National Institutes of Health said in a media release. VLPs do not contain the genetic material that the viruses need to replicate inside cells, so VLPs cannot cause infection. In trials on 30 candidates, the vaccine was safe, well-tolerated and induced durable immune responses against all three viruses, the release said

CCMB DEVELOPS INDIAN MRNA VACCINE PLATFORM

The Centre for Cellular and Molecular Biology (CCMB) here has established the “proof of principle” of the first indigenous mRNA vaccine technology coming from a scientific institution in India, Vinay K. Nandicoori, Director of the Council of Scientific and Industrial Research institution, said on Friday.

Dr. Nandicoori said “robust immune response” had been observed against the COVID-19 spike protein in mice upon administration of two doses of the mRNA vaccine. “The anti-spike antibodies generated were found to be more than 90% efficient in preventing the human ACE2 receptor binding to the coronavirus,” Rajesh Iyer, scientist, said.

The mRNA vaccine candidate is now undergoing pre-clinical hamster challenge studies to evaluate the efficacy to protect against live virus infection.

While vaccines work by training the immune system to identify disease-causing micro-organisms and eliminate them quickly when they encounter them, in the mRNA technology, the host cell’s immune system is trained to evade the real infection. This is done by introducing mRNA of the micro-organism of concern into the host.



The home-grown mRNA vaccine platform holds promise to deal with other infectious diseases such as TB, dengue, malaria, chikungunya, rare genetic diseases and others. “The beauty of this technology is in its rapid turnaround times, which means vaccines can be developed for other diseases or a pan-COVID vaccine covering different variants,” the CCMB Director said.

The scientists said the technology was ready to be transferred to any interested firm to take it to the next level of human trials and bring out the vaccine into the market after approval of the regulatory authorities.

“We have been having discussions with a few private firms to scale up to the next level of trials and commercial production,” a scientist added.

UNDERSTANDING LONG COVID AND ITS EFFECTS

The story so far: Months after the first cases of COVID-19 were detected in the world outside China, concerns about persistent symptoms post infection cropped up. Systems were then set up to study this phenomenon and provide possible solutions to those suffering from sequelae related to their COVID infection. The Lancet’s May 11 publication has provided more grist to the mill for those calling for greater attention to Long COVID, establishing that the burden of symptomatic sequelae remained fairly high even two years after COVID. Pandemic survivors also had a remarkably lower health status than the general population at two years, it said.

What is long COVID?

With the ongoing COVID-19 pandemic, evidence showed that a considerable proportion of people who have recovered from COVID-19 continue to face long-term effects on multiple organs and systems. These sequelae have also been noticed in people who did not exhibit any symptoms during their infection stage. In the absence of a universally-accepted definition, post-COVID Syndrome, by consensus, is defined as signs and symptoms that develop during or after an infection consistent with COVID-19 which continue for more than 12 weeks and are not explained by alternative diagnosis. Technically, post-COVID defines symptoms that persist four weeks after infection and Long COVID, 12 weeks past a COVID-19 infection.

The effects range from skin rash, sleep difficulties, fatigue or muscle weakness, hair loss, joint pain, palpitations, dizziness, cough, headache, sore throat, chest pain, smell and taste disorders, anxiety disorders and mobility issues.

How long does long COVID last for?

The study, perhaps for the first time, described Long COVID for the longest time possible — two years. It characterises the longitudinal evolution of health outcomes in hospital survivors with different initial disease severity throughout the two years after an acute COVID-19 infection. A matched control group of adults without a COVID-19 infection were studied against patients who tested positive for SARS-CoV-2, and had been discharged from Jin Yin-tan Hospital in Wuhan, China, between January 7 and May 29, 2020. Health outcomes were measured at six months, 12 months and two years after symptom onset.

The study did note that the proportion of individuals with at least one sequelae symptom decreased significantly from 68% at six months to 55% at two years, (with fatigue or muscle weakness being the most frequently reported symptom throughout follow-up). The scene continued to improve in almost all domains, especially in terms of anxiety or depression, with the



proportion of participants reporting symptoms of anxiety or depression dropping significantly from 23% at six months to 12% at two years. About 89 % of those who had been hospitalised for COVID had returned to their regular work at the end of two years. At the two-year follow-up, notably, long COVID symptoms were related to a decreased health-related quality of life and exercise capacity, psychological abnormality, and increased use of health care after discharge.

COVID-19 survivors still had more prevalent symptoms and more problems with pain or discomfort, as well as anxiety or depression, at two years, than did the control group, as per the study. Additionally, a significantly higher proportion of survivors who had received higher-level respiratory support during hospitalisation continued to have lung issues. The study findings indicate that there was an urgent need to explore the pathogenesis of Long COVID and develop effective interventions to reduce the risk of such side effects.

What is the status in India?

The government of India developed its own National Comprehensive Guidelines for the management of post-COVID sequelae. This document sets out detailed techniques to treat post-COVID complications affecting cardiovascular, gastrointestinal, nephrological, neurological and respiratory systems. Several hospitals set up COVID wards to treat persons who complain of what seemed like post-COVID symptoms.

In January 2022, Indraprastha Apollo Hospital, New Delhi, reported that people infected in the second wave of COVID have experienced four times more Long COVID conditions than those from the first wave. According to doctors at the hospital, people who contracted the virus in the second wave showed multiple symptoms including high grade fever, diarrhoea and severe lung infection. They added that even after a year of testing positive, the road to recovery for patients had been very difficult, with acute weakness and fatigue plaguing their everyday lives.

Chandrakanth Lahariya, epidemiologist and public policy and health systems specialist, said it appeared that both Post COVID and Long COVID had fewer numbers in India. “We need to remember,” he hastened to explain to this correspondent, “Post COVID and Long COVID are realities. A small proportion of people will continue to have symptoms, beyond four weeks, and beyond 12 weeks.” The broader principles of immunology — how the immune system works, how vaccination helps — are universal principles — they worked the same way, largely, in any part of the world, Dr. Lahariya explained. This was not the same for Long COVID, because these were health conditions, and these need not necessarily be the same across the world.