# CURRENT AFFAIRS FOR UPSC 16TH TO 22ND JULY 2023

DREAMIAS



# INTERNATIONAL

## WHAT IS NATO'S STAND ON UKRAINE'S ENTRY?

#### The story so far:

The North Atlantic Treaty Organization (NATO) sought to put up a united face at its two-day summit in Vilnius, Lithuania, on July 11-12, at a time when it's deeply involved in the Russia-Ukraine war. Right before the summit opened, Turkey, the second largest military force of NATO after the U.S., lifted its opposition to the accession of Sweden to the alliance. The summit also approved new spending goals for member countries and offered to provide long-term support to Ukraine. Yet, the one issue that overshadowed the Vilnius summit was Ukraine's promised membership in the alliance on which there was no clarity or time frame.

#### What did Ukraine achieve from the summit?

In the Bucharest summit of 2008, NATO had offered eventual membership to Ukraine and Georgia, two Black Sea basin countries that share land borders with Russia. The alliance said then that both countries "will become members of NATO". Fifteen years later, ahead of the Vilnius summit, Ukraine President Volodymyr Zelenskyy demanded a more concrete commitment from NATO for his country's membership. But the Vilnius communique stated, "We will be in a position to extend an invitation to Ukraine to join the alliance when allies agree and conditions are met". So, Ukraine hasn't gained much over the past 15 years in its push for NATO membership. But in 2008 when the membership was offered, several countries, including France and Germany, were opposed to Ukraine joining the alliance out of fears that such a move would poke the Russian bear. But now, in the midst of Russia's ongoing invasion of Ukraine, more member countries agree to the idea of Ukraine joining NATO, which is a marked change. Ukraine would continue its cooperation with NATO through the Ukraine-NATO Council. The Group of Seven (G-7) advanced industrialised economies have pledged to support Ukraine's defence base, which has been battered by the war, by providing military training and institutional support for attaining NATO membership. Ahead of the summit, France agreed to send its SCALP long-range missiles to Ukraine; Germany announced a new military aid package and other NATO members would be providing combat aircraft training. Ukraine may not have got a time frame on membership, but it has got assurances on military supplies from NATO members.

#### Why is Ukraine still not a part of NATO?

According to Jake Sullivan, the U.S. National Security Adviser, admitting Ukraine now "would have meant NATO is at war with Russia". The reason is NATO's "collective security" formula, rooted in its Article 5. The Article states that, "The Parties [members] agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all and consequently they agree that, if such an armed attack occurs, each of them... will assist the Party or Parties so attacked by taking... such action as it deems necessary, including the use of armed force..." As collective security is at the heart of NATO, if Ukraine is admitted now, the Ukraine war by default becomes NATO's war— in other words, the third World War. NATO, and particularly the U.S., does not want to take that risk. The position they have taken is to keep arming Ukraine, which suffered huge losses in the past 16 months of the war, and letting them continue to fight the Russians inside Ukrainian territories. NATO wants to defeat or weaken Russia in Ukraine without directly committing itself to the war. This has left Mr. Zelenskyy disappointed as he wanted firmer commitments from NATO on membership and a time frame.



#### How NATO has expanded over the years?

When the alliance was formed in 1949, it had 12 members from Europe and North America. Since then 19 more countries have joined the alliance through nine rounds of expansions. In the Soviet Union's dying years, the U.S. and the U.K. had promised Russia that the alliance would not expand east (towards Russia's borders) "by an inch". But in 1999, the Czech Republic, Hungary and Poland, all former Soviet allies, joined NATO. In 2004, seven more East European countries joined the alliance, including the Baltic republics of Estonia, Latvia and Lithuania, all sharing borders with Russia. NATO expanded further in 2009, 2017, 2020 and 2023, taking in countries including Croatia, Montenegro and Finland. Sweden is set to be its 32nd member.

## What is Russia's response?

In 2008, when Ukraine and Georgia were offered membership in the Bucharest summit, Vladimir Putin was there as an invitee. He called it a "direct threat" to Russia. Boris Yeltsin, Mr. Putin's predecessor, had warned against NATO's expansion towards the east in the 1990s. The Russian state has taken a consistent position over the years that NATO expansions pose a security threat. Four months after the Bucharest summit, Russia sent troops to Georgia to support two breakaway regions — South Ossetia and Abkhazia. Six years later, when a pro-Russian elected government of Ukraine was toppled by West-backed protesters, Russia moved swiftly to annex Crimea, the peninsula which hosted Russia's Black Sea fleet from the time of Catherine the Great. Russia also supported the Russian-speaking rebels in Ukraine's Donbas region, which escalated into a full-scale war in 2022. NATO wants to take Ukraine into the alliance, but won't do so now. The flip side is that the Russians might continue fighting the war — unless, of course, they are defeated — to prevent Ukraine being accessed into NATO, as Kyiv's NATO membership remains a red line for Moscow.

## WHY IS KERCH BRIDGE ATTACK SIGNIFICANT?

#### The story so far:

The Kerch Bridge, which links the Russian mainland to the Crimean Peninsula in the Black Sea, came under attack last week. One section of the bridge was damaged in what the Russians called an attack by two Ukrainian sea drones. Ukraine hasn't taken direct responsibility for the attack, but its security services SBU said details of what happened to the bridge would be revealed after "Ukraine has won the war". In retaliation, Russia carried out a massive airstrike at the southern Ukrainian port city of Odesa. Russia also announced, hours after the attack, that it was withdrawing from an UN-brokered deal that allowed Ukraine to export its grain via the Black Sea, where Russia has enforced a naval blockade.

#### What happened to the Kerch Bridge?

According to Russian authorities, one of the sections of the bridge was blown up killing two people and injuring a child. A video footage released by local media showed a portion of the bridge tilted and hanging down. The Kerch bridge, across the Kerch Strait, is 19 km long and has two parallel rail and roadways. It was opened in 2018 by Russian President Vladimir Putin with great fanfare, four years after Russia annexed Crimea from Ukraine through a contested referendum. Six hours after the attack, the rail service was restored, but the road remains shut. This is not the first time the bridge is being targeted. Last October, a massive truck bomb damaged the bridge and killed three people. Ukraine President Volodymyr Zelenskyy later termed the attack on the bridge one of the successful operations of the Ukrainian forces.



## Why is this bridge so important?

The bridge is important for Russia for symbolic, administrative and operational reasons. When Russia swiftly moved to annex Crimea in 2014, after a pro-Russian elected government in Kyiv fell amid West-backed anti-regime protests, there was no direct connectivity between the Russian mainland and Crimea. Mr. Putin immediately ordered the construction of the bridge. But the bridge remained a weak link as Ukraine grew in military strength, backed by the West, in the subsequent years. When Mr. Putin ordered a full-scale war on February 24, 2022 (what the Russians still call a 'special military operation'), one of the military objectives, according to experts, was to secure a "land bridge" from mainland Russia to Crimea. Russia now has the land bridge extending from northeastern Ukraine through the Donbas and Kherson to Crimea, but it is not far from the frontline and well within the range of Ukrainian fire. So, the Kerch Bridge remains a critical logistical supply link for the Russian troops in the south. Last year, Ukraine targeted the Kerch Bridge when it was planning an offensive to retake kherson. The plan was to disrupt the supplies when Ukrainians attacked Russian troops on the western bank of the Dnieper River. The Russian troops withdrew from the kherson city in November to the eastern bank of the river. Last week's attack came at a time when a Ukrainian counteroffensive was under way. One of the key goals of the counteroffensive, which began in early June, was to destroy Mr. Putin's land bridge, according to the Western officials. Ukrainian troops want to make deep thrusts into the Russianheld territories of the southeast reaching the Sea of Azov coast, which would leave Crimea further vulnerable to future Ukrainian attacks, leaving the Kerch Bridge the only link between mainland Russia and the peninsula. Ukraine also wants to disrupt Russian supplies to southern Ukraine, which is the focal area of the counteroffensive.

## Where does Ukraine's counteroffensive stand?

Ukraine launched the counteroffensive with advanced weapons supplied by the West. Over the past several months, Mr. Zelenskyy has consistently campaigned for more advanced weapons from the West to fight the Russians. The U.S. and its European allies have supplied armoured vehicles, long range rockets, cruise missiles, main battle tanks and missile defence systems, besides artillery shells and ammunition. They also provide training to Ukrainian troops at different facilities in Europe and in the U.S. The U.S. alone has announced 42 aid packages for Ukraine since the Russian invasion began. In the latest package, the U.S. announced its decision to send cluster munitions, which have been banned by over 100 countries for the indiscriminate harm they cause to civilians, to Ukraine. Allies wanted Ukraine to make swift battlefield gains agains<mark>t Ru</mark>ss<mark>ia in the counteroffensive to p</mark>ut pressur<mark>e on</mark> Mr<mark>. Pu</mark>tin. But after six weeks of fighting, Ukraine hasn't taken any breakthrough victory. Kyiv says its troops have recaptured some 210 sq. km of territories since the counteroffensive began, mostly in the southeast. But these were ghost villages along the frontline. Ukraine made these limited gains at a high cost. According to an NYT report, which cites American and European officials, Ukraine lost 20% of the weaponry it sent to the battlefield, including West-supplied main battle tanks and armoured vehicles, in the first two weeks of the counteroffensive.

The battle lines moved substantially only twice this year — first in January when the Russians took Soledar and then in May when the Russians took Bakhmut. The Russians have built huge fortifications along the over 1000-km long frontline, with mines and tank traps, which seem to have slowed down the much-expected Ukrainian counteroffensive. This puts Ukraine under pressure. In the recently concluded NATO summit in Vilnius, Lithuania, Ukraine got guarantees from its Western allies for more weapons and training. Kyiv also said the major thrust of the counteroffensive was yet to begin. Then came the attack on the Kerch Bridge.



# WHY PUTIN WON'T GO TO SOUTH AFRICA FOR THE BRICS SUMMIT IN AUGUST

South Africa has said that President Vladimir Putin of Russia will not attend a scheduled summit of the BRICS grouping in Johannesburg from August 22-24. The decision has been taken by "mutual agreement", South Africa, which has the BRICS presidency, said.

#### What is the significance of this development?

A difficult situation has been resolved for South Africa, which would have been theoretically obligated to arrest Putin for alleged war crimes if he had arrived in its jurisdiction.

South Africa had earlier sought an exemption from the obligation, arguing that arresting Putin would amount to a declaration of war, and could potentially scupper the efforts to end the fighting in Ukraine, a Reuters report said.

## But why would South Africa be obligated to arrest Putin?

On March 17, the International Criminal Court (ICC) had issued "warrants of arrest for two individuals in the context of the situation in Ukraine: Mr Vladimir Vladimirovich Putin and Ms Maria Alekseyevna Lvova-Belova". Lvova-Belova is the "Commissioner for Children's Rights in the Office of the President of the Russian Federation".

The ICC, which is headquartered in The Hague, Netherlands, is an independent judicial body that began functioning on July 1, 2002, to prosecute the most heinous offences where a country's own legal machinery failed to act — like in Rwanda and erstwhile Yugoslavia.

Unlike the International Court of Justice (ICJ), which deals with countries and inter-state disputes, the ICC prosecutes individuals — it "investigates and, where warranted, tries individuals charged with the gravest crimes of concern to the international community: genocide, war crimes, crimes against humanity and the crime of aggression". South Africa has said it is neutral in the war in Ukraine. But as a member of the ICC, it is in theory obligated to execute the warrant for arrest.

#### What has Putin done for the warrants to be issued against him?

According to a press release issued by the ICC at the time, Putin, 70, and Lvova-Belova, 38, are "allegedly responsible for the war crime of unlawful deportation…and unlawful transfer" of children from occupied areas of Ukraine to the Russian Federation", for which they have been charged under "Articles 8(2)(a)(vii) and 8(2)(b)(viii) of the Rome Statute".

The Rome Statute, adopted in 1998, is the international treaty that established the ICC. According to the ICC, "the crimes were allegedly committed in Ukrainian occupied territory at least from 24 February 2022", the day Russian forces invaded Ukraine.

#### But does the ICC have the authority to prosecute President Putin?

Russia has repeatedly said that it does not. The ICC's jurisdiction is limited to offences that occurred after it came into existence on July 1, 2002, and were committed either in a country that has ratified the agreement, or by a national of a country that has ratified the agreement.

Russia is not one of the 123 States Parties to the Rome Statute that recognise the authority of the ICC. The United States isn't a signatory either, and it has over the years repeatedly and aggressively denounced the ICC. China and India too do not recognise the ICC's jurisdiction.



Even Ukraine is not a State Party to the Rome Statute. However, in 2014, it accepted "the jurisdiction of the Court over alleged crimes committed on its territory from 21 November 2013 to 22 February 2014" and then, in 2015, accepted the ICC's jurisdiction "from 20 February 2014 onwards, with no end date".

## So is there a risk of arrest for Putin outside Russia?

Only if he travels to a State Party to the ICC — like South Africa — and only in theory.

This is the first time that the ICC has issued an arrest warrant against the head of one of the five permanent members of the UN Security Council. Sudan's former President Omar al-Bashir and Libya's Muammar Gaddafi are the only other leaders to have been indicted by the ICC while serving as head of state, a Reuters report said.

The charges against Gaddafi were dropped after he was overthrown and killed in 2011. Bashir, who was indicted in 2009, remained President until 2019 and travelled to many ICC Member States during this period. Out of power, he has been tried in Sudan, but he has not been handed over to the ICC.

The ICC charged Kenya's William Ruto and Uhuru Kenyatta before they became President of their country, but subsequently dropped the charges.

## THE CONSENSUS MAN

Mark Rutte hardly lets ideology stand in the way of a good deal. The Dutch Prime Minister has, in the course of his 13 years in the top office, aligned with parties from across the political spectrum. He has been described as 'Teflon Mark', capable of emerging from sticky situations with no grime on him, and as "something of a chameleon", sniffing out the prevailing opinion and not just making it his own but championing it.

His ability for political survival is also what makes his decision to quit office, and active politics, surprising. On July 8, he announced that his entire Cabinet was resigning over "irreconcilable differences" in the ruling four-party coalition on the issue of asylum seekers. He will stay on as caretaker PM till a new government takes shape after elections in November. His current term — his fourth as PM — was to end only in 2025.

Many analysts have expressed surprise that Mr. Rutte proved intractable on the issue of asylum. His conservative People's Party for Freedom and Democracy (VVD), along with the Christian Democrats, held fast to a proposed tightening of asylum rules, while their coalition partners Centre-Left D66 and ChristenUnie opposed rules that would differentiate between refugees fleeing conflict and those fleeing persecution. This impasse should not have been unbreakable for Mr. Rutte, a master of the months-long negotiations for coalition building that follow Dutch elections. In the four coalition governments that Mr. Rutte cobbled together, he has managed to garner support from those in the political extremes such as anti-Islam Geert Wilders and has aligned his centre-right party with the centre-left Labour Party.

His third coalition collapsed following a massive scandal over racial profiling by the Income Tax department and false accusations of childcare fund fraud, but Mr. Rutte emerged unscathed in the 2021 general elections, and went on to form the fourth coalition after about 10 months of negotiations. Recently, his party faced setbacks in local elections at the hands of an upcoming



populist party and, as per political observers, it would have made sense for the PM to hold on to power till the end of the term.

## The refugee question

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However, his decision to resign rather than compromise on the refugee question might be another example of Mr. Rutte reading the room right on an issue. Popular opinion in Europe on refugees and national identities have hardened since the 2015 ISIS days and right-wing politics have been ascendant in many countries. While the Netherlands has not faced as much of an influx of asylum seekers as some other countries, the sentiment among the population is not radically different.

We might not have seen the last of Mark Rutte the politician. The 56-year-old veteran of European politics has often been touted as a potential NATO Secretary-General or as in line for a top EU job. However, Mr. Rutte himself has stayed clear of confirming any such ambitions, saying he is happy to continue taking social studies classes at a local high school in The Hague. A single man, Mr. Rutte still lives in a house from his younger days when he was a Human Resources manager with Unilever. He entered active politics in 2002. He cycles to work, giving a sense of frugality that the Dutch see as setting them apart from the more "financially careless" south European nations.

This Dutch sense of frugality has also been a defining principle of Mr. Rutte's interactions with the EU. In the wake of the 2008 financial crisis, he was one of the champions of austerity. Mr. Rutte earned the moniker of 'Mr. No, No, No', fighting larger contributions to the EU during negotiations for a common European post-COVID recovery package. At the EU, the Netherlands, along with Austria, Denmark and Sweden, formed the "frugal four" that advocated thrift and tight budgets. However, even as he played hardball on EU finances, Mr. Rutte was far from being a Eurosceptic. It remains to be seen whether his exit paves the way for right-wing forces to gain power in the Netherlands.

# OIL TO BE PUMPED FROM DECAYING YEMEN TANKER

After years of tense diplomacy between the United Nations, Yemen's Houthi rebels and the internationally recognised government, the Nautica will soon moor alongside the FSO Safer, a rusting super-tanker in the Red Sea.

The delicate operation to transfer 1.14 million barrels of Marib Light crude to the Nautica, bought by the United Nations for the operation, is expected to begin in the coming days.

"The risk is high. The risk is very high," said Mohammed Mudawi, the UN Development Programme (UNDP) project manager for the ship Safer.

"But we are hoping with the completion of the project that this will be eliminated."

Maintenance operations on the Safer were suspended in 2015 because of Yemen's war, and the UNDP has for years warned it could "explode at any time".

A major spill could result in ecological disaster, devastate Yemeni fishing communities, and close lifeline ports and desalination plants.

The potential spill — which could cost more than \$20 billion to clean up — would possibly reach Saudi Arabia, Eritrea, Djibouti and Somalia.



NATION

## SOMETHING SPECIAL

Celebrating 25 years of the India-France strategic partnership was at the top of the agenda during Prime Minister Narendra Modi's two-day visit to France and his meetings with French President Emmanuel Macron last week, which ended with a number of agreements and a slew of defence deals. Mr. Modi's visit, just months before Mr. Macron is in Delhi for the G-20 summit, was a special one, as he was invited to be the chief guest at the Bastille Day parade — it saw Indian tri-service participation — and was the second time that an Indian Prime Minister has been extended the invitation (Manmohan Singh was the first in 2009). Chief among the agreements was the strategic road map for the next 25 years — "Horizon 2047" — which includes cooperation in defence, space, nuclear energy, climate change and green transitions as well as education and people-to-people ties. Another road map was released on how to cooperate further in the Indo-Pacific region, which includes military and naval exchanges and a trilateral development fund to help countries in the region. There were also the decisions, in principle, to buy 26 more Rafale fighter jets off-the-shelf (Rafale-M), this time for the Indian Navy; three more Scorpene submarines in continuation to the purchases of 2008, and an agreement between Hindustan Aeronautics Limited and Safran for helicopter engines.

In the broader picture, the France-India strategic relationship is built on a respect for each other's strategic autonomy. France has remained steadfast in its refusal to comment on India's internal affairs or its foreign policy choices. While France has taken a leading role in the western pushback to Russia's war in Ukraine, it has not joined other western countries in publicly exhorting India to change its stand. In 1974, and in 1998, France did not join the western push to sanction India for its nuclear tests either; it even stepped in with uranium supplies to power the Tarapur reactors. Mr. Modi's visit was also at around the same time that the European Parliament decided to adopt a resolution criticising his government for the violence in Manipur and alleged violations of human rights and freedom of religion issues. Yet, none of these issues was discussed or brought up. India too, made no mention of the violence in France after the killing of a teenager belonging to the Algerian immigrant community. Further, neither country has any desire to pull the other into a coalition, grouping or alliance the other is a part of, and both seem content with the success in forging the relationship bilaterally. In this and many other ways, their relationship has proven itself to be different from the other major partnerships that India has built across the world, explaining both the symbolism and the substance of the Prime Minister's visit.

## INDIA CLIMBS SEVEN POINTS TO 80 ON PASSPORT INDEX; SINGAPORE AT TOP POSITION

The Henley Passport Index is the ranking of all the world's passports according to the number of destinations their holders can access without a prior visa. The index includes 199 passports and 227 travel destinations.

The index is brought out by Henley and Partners.

In 2014, India ranked 76 with 52 countries allowing Indian passport holders visa-free access, but its performance has not been linear. It ranked 88 in 2015 (visa-free access to 51 countries), 85 in 2016, 87 in 2017, 81 in 2018, 82 in 2019 and 2020, and 81 in 2021.

Japan, which occupied the top position on the Henley Passport Index for five years, dropped to the third place. It was replaced by Singapore, which is now officially the most powerful passport in the world, with its citizens able to visit 192 travel destinations out of 227 around the world visa-free.

Germany, Italy, and Spain occupied the second place. Alongside Japan at the third position are Austria, Finland, France, Luxembourg, South Korea, and Sweden. The U.K. climbed two places to occupy the fourth place, while the U.S. continued its decade-long slide down the index, dropping two places to the eighth spot. Both the U.K. and the U.S. jointly held the first place on the index nearly 10 years ago in 2014.

Henley & Partners also conducted an exclusive new research resulting in the Henley Openness Index which measures how many nations does a country allow visa-free access to. Here, India was ranked 94 out of a total of 97 ranks for allowing only four countries visa-free access. At the bottom of the Index were four countries for scoring zero for not permitting visa-free access for any passport — namely, Afghanistan, North Korea, Papua New Guinea, and Turkmenistan.

# G-20 SHERPA MEET ENDS WITH HOPES OF A JOINT DECLARATION IN SEPTEMBER

As the third G-20 Sherpa meet before the September summit came to a close in Hampi, officials said they are "confident" of being able to forge a compromise between the G-7 countries and the Russia-China combine in order to hammer out a joint declaration. For now, officials have prepared the rest of the G-20 draft, including the "development agenda", leaving a blank place-holder for the two contentious paragraphs on Ukraine to be dealt with at the fourth and final Sherpa meeting beginning September 3 in New Delhi.

Sources said the new confidence follows support from other countries during bilateral meetings and the informal "sofa talks" as well as from possible compromise language suggested by countries including Brazil and Russia. A senior U.S. official also indicated that while G-7 countries would like to see the formulations on Ukraine to repeat those used in last year's G-20 summit at Bali, they were willing to discuss and negotiate a new text as well to describe the war in Ukraine.

"Several proposals are with us," G-20 Sherpa Amitabh Kant confirmed in response to a question from The Hindu, during a briefing for presspersons at the end of the three-day Sherpa meeting in Hampi.

According to the sources, Brazil, which will host next year's G-20 meet and has a high stake in a successful outcome and a consensus document at the summit on September 9-10, had proposed one alternative paragraph last month that was circulated to all. The proposal sought to recognise that while the Ukraine conflict had been discussed last year, members had agreed to disagree on the issue, and the development forum should not discuss security issues. However, this formula was not acceptable to all, as the U.S.-led G-7 countries believe that the security issues in Ukraine have become development challenges due to the rise of inflation and food, fuel and fertilizer shortages.

A Russian proposal to discuss not just the war in Ukraine but also the impact of U.S. and European sanctions on the global economy, as well as a statement on the increased supply of military hardware to Ukraine in the midst of the conflict, was not acceptable to the G-20 bloc.



# EXPRESS VIEW ON CRIMINALISATION OF ROMANTIC RELATIONSHIPS: LOVE & PUNISHMENT

The Bombay High Court recently said that the "criminalisation of romantic relationships has overburdened the criminal justice system by consuming significant time of the judiciary, police and the child protection system". The court was hearing an appeal against a trial court judgment that had convicted a 25-year-old man and sentenced him to 10 years in jail for sexually assaulting a 17-year-old despite the girl saying that they were in a consensual relationship. The High Court quashed the trial court finding, distinguishing between child abuse and criminalisation of consensual adolescent sexual activity. Several high courts have flagged this issue and in December last year, Chief Justice of India DY Chandrachud called for legislative reform to address the gaps in law vis a vis consensual sexual activity of teenagers.

The law prescribes that the minimum age for sexual consent is 18 years, but the reality is that sexual activity among adolescents begins earlier. In India, the legal regime on age of sexual consent began in 1860 with the Indian Penal Code prescribing it at 10 years. In 1889, it was raised to 12 years, in 1925 to 14 years and to 16 years in 1949. For over six decades, the law continued until the POCSO Act was brought in in 2012. In several countries, western and South Asian, 16 years is the benchmark for recognising sexual agency. The 2013 JS Verma Committee report also recommended lowering the age of consent under the POCSO Act to 16 years. Apart from tackling child sexual abuse, a minimum age of consent also regulates maternal mortality and early childbirth. But shorn of nuance, criminal law simply ends up policing sexuality. Apart from overburdening an already clogged justice system, these cases push teenagers into grey zones of criminality.

A 2019 study by Partners for Law and Development on "why girls run away to marry" highlights that the special "zero tolerance laws" largely clash with "self-arranged" relationships as opposed to those sanctioned by family. It is more likely that adolescent girls seeking to escape family control are caught in the legal web. It is also not a coincidence that the age of consent and the minimum age of marriage for women are the same. The law must delink the two and take into account sexual activity outside the realm of marriage. Else, the long hand of criminal law will only stigmatise safe sex for teenagers. Parliament must also weigh in on the debate on age of consent.

## THE RIGHT APPROACH

Courts should adopt a clear-headed and common sense approach while considering the grant of bail, and should eschew the tendency to keep someone in prison merely because the police oppose bail with great vehemence. In granting regular bail to activist Teesta Setalvad, the Supreme Court of India has effectively rebuffed the Gujarat police stand that the purported gravity of the offence she is accused of is enough to deny her bail. As the case depends mainly on documentary evidence, all of it forming part of the charge sheet filed in the case, the Court really saw no need for her to be in judicial custody. Further, Ms. Setalvad had been subjected to custodial interrogation during a seven-day police remand shortly after her arrest in June 2022, and she was not called in for any further questioning ever since she was given interim bail by the Supreme Court in September. In effect, the three-judge Bench headed by Justice B.R. Gavai saw no real need to imprison someone during trial solely because the police strongly argued that she had allegedly fabricated evidence and goaded victims of the 2002 pogrom in Gujarat to level false charges against political leaders in a bid to implicate them in the communal carnage.



The Court posed some pertinent questions to the Gujarat police. The case of forgery and fabrication of evidence was registered shortly after the Supreme Court, while rejecting a riot victim's plea, had observed that those who had sought to malign the State government and its functionaries should be put in the dock. Ms. Setalvad had been arrested within a day, and the Court had questions about what investigation it had conducted within such a short time to justify her arrest. Notably, the apex court Bench was of the view that the High Court order refusing bail to her contradicted itself, as it had initially observed that it cannot go into the existence of a prima facie case, but had gone on to consider statements of witnesses against her. The ruling is yet another reminder that an order of bail must be the norm after considering whether the accused is likely to flee justice or will be available for trial, and if, once freed, will be in a position to influence witnesses or tamper with evidence. While the gravity of the offence is a factor, it need not be the sole consideration. The trial in this case is set to begin soon in a Sessions Court in Ahmedabad. One hopes it will settle the question whether activists assisting victims ought to have been proceeded against on the charge of trying to implicate innocent political leaders.

## WILL NOT NOTIFY FACT-CHECKING UNIT TILL SEPTEMBER 4, CENTRE TELLS BOMBAY HC

The Centre on Friday informed the Bombay High Court that it will not notify till September 4 the fact check unit (FCU) under the recently amended Information Technology (IT) Rules to identify fake social media content on the government.

Solicitor-General Tushar Mehta requested a Division Bench of Justices Gautam Patel and Neela Gokhale to adjourn the hearing as he has to appear before the Supreme Court.

On April 21, the Ministry of Electronics and Information Technology had said it will not notify the FCU till July 5. This deadline has been extended time and again.

#### Concerns

The court was hearing a petition filed by political satirist Kunal Kamra, the Editors Guild of India and the Association of Indian Magazines and regional channels. They are all challenging the constitutional validity of the IT (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2023.

The new rules require social media intermediaries to censor or otherwise modify content that relates to the Union government, if the government-mandated FCU directs them to do so.

Under the new rules, the content marked by the FCU as "fake or misleading" will have to be taken down by online intermediaries if they wish to retain their "safe harbour".

The FCU will flag online posts about the "business of the Central government" that are false or misleading. The HC had voiced doubts about the assumption of a "true/false binary" and asked why the unit's scope was limited to "government business".

## RULE 176 VS RULE 267: WHAT GOVT AGREES TO, WHAT OPP DEMANDS

The opening day of the Monsoon Session of Parliament was disrupted on Thursday after the government and the Opposition differed on the format of the discussion on the Manipur situation. While the government agreed for a short-duration discussion, the Opposition insisted that the Prime Minister make a suo motu statement followed by a discussion, suspending all business under Rule 267.



## What is Rule 267, and Rule 176

According to the Rules of Procedure and Conduct of Business in the Council of States, Rule 267 relates to suspension of rules. It says, "Any member, may, with the consent of the Chairman, move that any rule may be suspended in its application to a motion related to the business listed before the Council of that day and if the motion is carried, the rule in question shall be suspended for the time being: Provided further that this rule shall not apply where specific provision already exists for suspension of a rule under a particular chapter of the Rules."

Short-duration discussion, on the other hand, is a brief discussion not exceeding two-and-a-half hours under Rule 176.

It says that "any member desirous of raising discussion on a matter of urgent public importance may give notice in writing to the Secretary-General specifying clearly and precisely the matter to be raised: Provided that the notice shall be accompanied by an explanatory note stating reasons for raising discussion on the matter in question: Provided further that the notice shall be supported by the signatures of at least two other members."

Once the Chairman admits the notice, the rules say he, in consultation with the Leader of the Council, will fix the date on which such matter may be taken up for discussion and allow such time for discussion, not exceeding two and a half hours.

It means that a short-duration discussion under Rule 176 can be taken up immediately, a few hours later, the next day or can be fixed for a later date and time. But the rule says there shall be no formal motion or voting under a short duration discussion. "The member who has given notice may make a short statement and the Minister shall reply shortly," the rule says.

## What experts say

Experts say opposition parties had been mistakenly using Rule 267 as an equivalent to the adjournment motion in Lok Sabha. In case of adjournment motion, governed by Rules 56-63 of the Rules of Procedure and Conduct of Business in Lok Sabha, the discussion is based on a motion. The rule defines adjournment motion as "a motion for an adjournment of the business of the House for the purpose of discussing a definite matter of urgent public importance may be made with the consent of the Speaker".

And th<mark>e rules say</mark> "no<mark>t m</mark>ore than one such motion shall be made at the same sitting.

Former Lok Sabha secretary general P D T Achari said: "Rule 267 is to suspend a particular rule in relation to a business which is listed in the agenda. For instance, if a Bill is to be introduced...it would be listed..but if a rule is coming in the way...267 is aimed at suspending the rule. That is the real purpose of Rule 267." This rule is being "used wrongly" as a substitute to the provision of adjournment motion in Lok Sabha," he said.

"Adjournment motion is to take up for discussion a subject of urgent nature...not just discussion; the adjournment motion has an element of censure. That is the privilege of Lok Sabha because LS can bring down a government which the RS cannot do..that is why there is no adjournment motion in Rajya Sabha. There is no rule in Rajya Sabha which has an element of censure...so the Opposition has always been using Rule 267..." he said.



"The practice of the Opposition parties in Rajya Sabha for some time had been to give notice under Rule 267...but what rule is to be suspended.... They have been using it as an equivalent to the adjournment motion that is there in Lok Sabha," he said.

# BELATED OUTRAGE

After two and a half months of widespread and continuing violence in Manipur, which included a conflagration in early May, Prime Minister Narendra Modi finally broke his silence, after video images of tribal women being paraded naked in Thoubal district on May 4 once again showed up the heinous nature of the conflict in the State. But Mr. Modi is yet to acknowledge the causes and the consequences of the conflict that is threatening to spiral out of control. The Supreme Court of India's suo motu cognisance of the sexual assault seen in the video and its issuance of ultimatums to both the Union and the State governments to bring the perpetrators to book or to step aside and let the judiciary take action are a stinging indictment of their failure in restoring normalcy in Manipur. After outrage expressed by Members of Parliament and political representatives cutting across party lines, Mr. Modi, who has maintained a conspicuous and unexplained silence on the raging violence in Manipur, weighed in on the crime and promised punishment of the guilty. For a leader who has always sought the limelight and the need to dominate the airwaves, Mr. Modi's stand on the Manipur violence till now had betrayed an insouciant attitude towards the crisis in the State. The renewed attention on the Manipur conflict has finally led the State government to promise that it will bring the perpetrators to book, but the events of the last two and a half months reveal a significant gulf between the Meitei and the Kuki-Zo communities. Steps towards reconciliation would require much better leadership than what the much touted "double engine" government of the Bharatiya Janata Party (BJP) has offered so far.

Despite Home Minister Amit Shah's visit to Manipur in late May in the aftermath of the conflagration, there has been little movement on getting the displaced people back to their homes or ensuring a reduction in ethnic hostility; sporadic incidents of violence continue to roil the State. Manipur Chief Minister N. Biren Singh's policies and utterances have shown that he is unable to rise above identitarian politics. The Kuki community sees him as part of the problem. The BJP too is divided on ethnic lines. If the sequence of events leading up to this situation and the festering ethnic hostility are anything to go by, it should be clear that Mr. Singh's continuation as the Chief Minister is untenable. But the BJP seems loath to antagonise Meitei majoritarians whose support allows Mr. Singh to retain power. While Mr. Singh's government has finally sought to take action against the crime committed on May 4, by arresting four men following the outrage, more needs to be done to reverse the hostile situation. Replacing Mr. Singh with a less controversial leader would allow for civil society representatives from the different ethnicities to begin reconciliation and peace initiatives in earnest.

## A LOT IN A NAME

The acronym, INDIA or Indian National Developmental, Inclusive Alliance, that 26 Opposition political parties devised as the name for their joint platform, signifies several attributes of the collective. It can be claimed as a sign of the determination to work towards a predetermined goal. It can also be found to be a laboured and unsteady stretch — of language and politics. In naming itself after the country, the alliance is trying to confront the Bharatiya Janata Party (BJP) on its turf of nationalism. It hopes the name will convey to voters what it wants to — that the BJP is antagonistic to an inclusive vision of India. The parties are united in their opposition to the BJP for both tactical and ideological reasons, and the sheer birth of INDIA has been found disturbing



by the ruling party. These parties have been at the receiving end of a hostile campaign by the BJP using state power. The Congress, by stating that it has no claim for the post of Prime Minister in the event of a victory in the general election in 2024, has made it easier for the alliance to take shape. The birth of INDIA marks the best coordinated effort by the Opposition to challenge the dominance of the BJP since 2014.

The Congress is the axis of INDIA, but several constituents of the formation are in direct contest with the party in many regions. In West Bengal, Punjab and Kerala, constituents of INDIA continue to fight one another. The claim of it being an alliance is unrealistic, for this and more reasons. The realisation among these parties that there is a larger political battle to fight is the strength of INDIA right now. Seat sharing among partners is going to be an extreme challenge, even as they swear by a shared vision of a pluralistic India. Several parties and leaders in the partnership face corruption investigations and trials, which make them vulnerable to enticement and pressure from the BJP. There are already reports of bruised egos and shattered ambitions among the leaders who had gathered in Bengaluru this week, but they have resolved to convene again in Mumbai. Many of these parties have a shifting approach towards the BJP and face a challenge of public credibility. Though the BJP's moral high ground has considerably eroded through its years in power, the party will continue to question its opponents on the question of dynastic politics and corruption. While the case that the Opposition is building against the BJP is intrinsically strong, there are barriers to be overcome before it appeals to a large enough segment of the public to emerge victorious.

# UNIFORM CIVIL CODE: WHY IT CAN IMPACT HINDU UNDIVIDED FAMILY'S TAX BENEFITS

The Law Commission of India has initiated fresh deliberation on a Uniform Civil Code (UCC), which has triggered discussion on the institution of Hindu Undivided Family (HUF) and its separate treatment under tax laws.

## Genesis and structure

The existence of HUF as a legal entity is based on an acknowledgment of customs by the Raj in India. It was seen as an institution that operated on a strong sense of blood ties and kinship to jointly exercise control over property in Hindu families, and led to business arrangements based on Hindu personal laws rather than contractual arrangements.

As a legal entity, HUF always portrayed a dual identity of a family-backed institution and an income-generating entity solely for the maintenance of the family. Such an arrangement probably played a part in the tax treatment that came to be incorporated in Indian law.

For income tax purposes, an HUF consists of all persons lineally descended from a common ancestor, and includes their wives and unmarried daughters. An HUF has its own Permanent Account Number (PAN) and files tax returns independent of its members. An HUF has a karta who is typically the eldest male person in the family, and manages its day-to-day affairs. Other members are coparceners; children are coparceners of their father's HUF.

#### The historical view

The Indian Income Tax Act of 1886 recognised HUF under the term "person". In an effort to shore up finances for World War I, the British introduced the Super Tax Act, 1917, which recognized HUF as a separate entity for tax purposes for the first time. Super tax was levied in addition to income tax.

The idea of HUF as a distinct category of taxpayer was incorporated in the Income Tax Act, 1922, which formed the basis of the post-independence Income Tax Act, 1961. The law currently in force recognizes HUF as a person under Section 2(31)(ii).

Between the pre- and post-Independence laws, government-instituted committees critically examined the preferential tax treatment for HUFs. The Income Tax Enquiry Report of 1936 flagged the substantial revenue loss owing to the special exemptions for HUFs. The Taxation Enquiry Commission of 1953-54 acknowledged the anomalies created by the preferential tax treatment for HUFs. But since the treatment of HUF under tax law was tied to the legal position of HUF under Hindu personal law, and owing to the pendency of the Hindu Code Bill during that period, the Commission decided not to change the tax position of HUF.

The Justice Wanchoo Committee Report of 1971 explicitly stated that the institution of HUF was being used to avoid tax. In 2018, a Law Commission consultation paper declared that "it is high time that it is understood that justifying this institution on the ground of deep-rooted sentiments at the cost of the country's revenues may not be judicious".

## The tax treatment

From 1922 onward, additional exemption limit was allowed to HUFs compared to other taxpayers, including individuals, which allowed HUFs to pay lesser tax than other similarly placed taxpayers, despite earning the income in the same manner. This preferential exemption regime was done away with under the Income Tax Act, 1961.

However, HUF as a separate tax entity provides another avenue for Hindu families to reduce their tax burden. Consider: Ram Kumar earns a salary income of Rs 5,00,000 per year, and a rental income of Rs 2,50,000 per year from his ancestral property. The basic exemption of Rs 2,50,000 available to an individual taxpayer is also available to an HUF. Ram Kumar can offer Rs 7,50,000 as his total income to tax, which, after the basic exemption works out to a net taxable income of Rs 5,00,000.

However, Ram Kumar has the option of creating an HUF along with his son and wife. The ancestral property will be treated as HUF property, and any income derived from it will be taxed separately in the hands of the HUF, and not Ram Kumar. This means Ram Kumar will now offer only his salary income of Rs 5,00,000 to tax, and reduce (after the basic exemption of Rs 2,50,000) his net taxable income to Rs 2,50,000 (as against Rs 5,00,000 in the previous option). Further, the HUF will claim a basic exemption of Rs 2,50,000 on its rental income of the same amount, thereby reducing net taxable income to nil.

The creation of the HUF thus results in a legitimately tax-free income of Rs 2,50,000, and a lower effective tax rate for Ram Kumar owing to his net taxable income now being in a lower tax bracket.

Finally, Section 10(2) of the Income Tax Act, 1961 provides that any sum received by an individual as a member of HUF out of the HUF income is not to be included in her total income. This effectively means that Ram Kumar can receive a share of the rental income earned by his HUF but not pay tax on it. This is in contrast to the first option in which Ram Kumar ended up bearing the tax burden of receiving rental income in his own name. Hence, the benefit is not only at the HUF level but also at an individual member level.

Additionally, the HUF is entitled to claim expenses, exemptions, and several deductions from its taxable income, which further reduces the tax burden of a Hindu family.



## Not available to all

The concept of HUF is closely tied to the concepts of joint family & coparcenary. This is unique to Hindu personal law (deemed to include Jains, Buddhists & Sikhs).

Interestingly, Kerala abolished the joint family system in 1975 by enacting the Kerala Hindu Joint Family (Abolition) Act, 1975. The Supreme Court adjudicated on the interplay of this abolition with the Income Tax Act, 1961 in CIT vs. N. Ramanatha Reddiar (HUF) (1996) by holding that once the entity of joint family and HUF has been abolished by a competent legislature, the Tax Department can no longer make an assessment on an HUF assessee. As a corollary, the individual taxpayer also can't avail of tax benefits by creation of an HUF.

However, this benefit of statutory tax planning is not available to a taxpayer for other religions, such as Muslims, Christians, Parsis, etc., which raises concerns over the lack of uniform application of tax laws. De hors the issue of UCC, it can be argued that granting an additional treatment that lowers the tax burden only on the basis of religion is arbitrary, and may fall foul of Article 14 of the Constitution.

Given the above discussion, if and when the issue of UCC is taken up for deliberation, the beneficial tax treatment of HUF will occupy considerable space under the lens of equality before and of tax law, as well as uniformity in application of the tax laws across religions.

## IN J&K, LAND IS AGAIN THE CENTRE OF DEBATE

Land and its ownership have been at the centre of a debate in Jammu and Kashmir (J&K) since August 5, 2019, when the Centre revoked the special status granted to the erstwhile State under Article 370 of the Constitution. The special status contained protective provisions for land, housing, and jobs for State Subjects (locals).

Over the last few weeks, the debate has become more intense with the Lieutenant Governor's administration introducing a slew of schemes for homeless and landless people, and migrant workers. Regional parties have expressed concern that these schemes will open doors for outsiders to settle in J&K.

A week ago, Lieutenant Governor Manoj Sinha announced a scheme to grant five marlas (252 square feet) of land to the landless population under the Pradhan Mantri Awas Yojana-Gramin (PMAY-G). Around 2,711 households have been designated as "landless" in the first phase. Besides this, the Union Ministry of Rural Development has set a target to grant 1.99 lakh houses to the homeless population in J&K by 2024.

Weeks earlier, Mr. Sinha had announced the Affordable Rental Housing Complexes (ARHC) scheme, which provides rental housing for Economically Weaker Sections (EWS) and Low-Income Groups (LIGs). The scheme covers urban migrants including labourers, street vendors and rickshaw pullers working in the Union Territory. Laying the eligibility criteria for this scheme, the J&K Housing Board said it would accept applications "from any citizen of India who migrated to Jammu from any part of India temporarily or permanently, for employment, education, long-term tourist visit, etc." It is likely that migrant workers and their children would become eligible for domicile in J&K with this scheme. They can apply for land and jobs if they have lived in the UT for 15 years or have studied for seven years or appeared in the Class X or Class XII examination, as per the new domicile laws passed after 2019.



Regional parties are also concerned about constant amendments to laws. J&K has recorded the highest number of amendments to land laws and re-allocations in the past four years. The administration amended the rules of the J&K Industrial Policy 2021-30, the J&K Industrial Land Allotment Policy 2021-30, and the J&K Private Industrial Estate Development Policy 2021-30 to make make available 30,000 kanals (3,749.9 acres) for industries to woo outside investment. In 2021, amendments were made to land laws passed after 2019 to further liberalise the conversion of agricultural land for industrial purposes.

Even political parties which operate from the Jammu division, where the Bharatiya Janata Party (BJP) has significant support, have been critical of the latest moves. Various parties have pledged to oppose any move that seeks to provide land to outsiders. Peoples Democratic Party president Mehbooba Mufti quoted the Ministry of Housing and Urban Affairs which said that 19,045 people were homeless in J&K in 2021. She said that there was a glaring mismatch between the official figure for the homeless and the target to grant 1.99 lakh houses to the homeless. She said that the administration's intent seemed to be to "settle outsiders" and "import slums" to J&K. Omar Abdullah from the National Conference and Sajad Lone from the Peoples Conference warned the eligibility criteria.

According to the Lieutenant Governor's administration, those residing on forest land, Rakhs, farmland and the Dachigam National Park, where construction is not allowed, will be provided land in the first phase. However, the administration remained silent on whether there would be evictions. It has also considered designating as landless those people who are occupying custodian land — pockets of land left behind by those who migrated from J&K to Pakistan or Pakistan-occupied Kashmir in 1947. Mr. Sinha has defended the PMAY-G saying it would enable the landless poor to own land and raise their standards of living.

However, faced with a public outcry, the administration hastened to clarify that only 2,711 landless families which were part of the 2018-19 Permanent Wait List of Homeless Persons of J&K (before the Centre ended special status) would be provided land under the scheme. The controversy reflects the growing chasm between the J&K political class and the BJP-ruled Centre.

# THE RISK OF SMALL STATES' HEAVY RELIANCE ON THE UNION GOVERNMENT

The fiscal situation of India's States has garnered significant attention in recent times. Despite ample data on State finances, most of the analysis is centred around larger States. There needs to be more discussion on the fiscal position of small States (i.e. States with a population of less than 1 crore). Most of these small States have distinctive characteristics that limit revenue mobilisation. Recognising these disabilities, the Constitution has provided mechanisms to address them. But these States continue to rely heavily on the Union government for revenue. This dependence creates vulnerabilities for the States as well as the Union.

The total revenue receipts for a State constitute transfers from the Union government such as the State's share in Union taxes including income tax, corporation tax, and grants, and the State's own revenues from tax and non-tax sources. The State can raise its own taxes (own tax revenue or OTR) from professions, property, commodities, etc. It can mobilise non-tax revenue (own non-tax revenue or ONTR) from social and economic services, profits, dividends, etc.

The revenue receipts of each of the small States have increased. For six of the nine States, they have grown faster than the gross state domestic product (GSDP). But these increases are primarily



due to Union transfers rather than States' own revenues. In other words, dependence on the Union has not decreased. For three States — Mizoram, Sikkim and Tripura — the revenue receipts have grown slower than the State GSDP implying limited fiscal space to operate.

While the share of Union transfers in the revenue receipts of all States combined hovers between 40% and 50%, the ratio is quite large for the small States. Except for Goa, the Union's share in all the other small States' revenue receipts is more than 60% (2022-23 Budget Estimates). For five States, the share is around 90%. The States' economies have grown over time, but this has not necessarily translated into higher revenue mobilisation capacities. It is best reflected in the continued dominance (2014-2023) of current transfers in the revenue receipts.

The capacity of small States to raise their own taxes continues to be limited. Eight out of nine States fare worse than the all-State average OTR-GSDP ratio. The distinctive characteristics of these States restrict economic activity and consequently make it challenging to generate tax revenue. However, what is particularly concerning is that the States' ability to mobilise taxes has yet to show significant improvement over time. At best, it has fluctuated, with several States experiencing a peak in their OTR-GSDP ratio around 2017-18. The small States do relatively better in mobilising their ONTR, with six States performing better than the all-State average. However, States such as Manipur, Tripura, and Nagaland have consistently struggled in terms of their ONTR-GSDP ratio, performing poorly in comparison.

The limited capacity of small States to generate their own revenues results in a heavy dependence on the Union government, exposing the States to various vulnerabilities. First, the States rely on the Union governments' political goodwill. A sudden decline in Union transfers can adversely affect the States' expenditures. In the last few years, there have been increasing disagreements concerning resource sharing (for example, GST compensation) between the Union and the States. Second, high dependence on the Union might imply less fiscal freedom for the States. A significant portion of the funds transferred by the Union is tied to specific purposes, limiting the States' flexibility. In some instances, given their existing revenue situation, the States might be unable to match the transfers. Third, the lack of their own revenues can lead to weakened State capacity, affecting the delivery of social, economic, and general services. This situation becomes even more critical as many small States share international borders. The developmental concerns in these States can have implications for national security.

To mitigate these vulnerabilities, the States must prioritise identifying new sources of tax revenue or explore ways to leverage existing ones more effectively. A study by Manipur University evaluating the State finances of Manipur identified how its liquor prohibition policies have led to substantial revenue losses without significantly reducing the negative consequences of drinking. Another study of Arunachal Pradesh's finances identified the potential to generate more revenue from transactions on land and sales tax.

Additionally, there is a need to improve the tax administration in the States. Not only will this lead to higher resource mobilisation, but it will also reduce the deviation of actual from budgeted tax revenues. The States can boost their collection of non-tax revenues by revising the existing charges and rates for various services and enhancing administrative revenue collection efficiency. Many state public sector enterprises in these States are not in good shape and do not contribute enough revenue. The States must consider revitalising and corporatizing these enterprises to improve their revenue performance. Some States such as Mizoram have closed down loss-making public sector enterprises, recognising that these entities are a liability.



COMPLAINTS LODGED AGAINST ASSAM CM FOR 'HATE SPEECH' AGAINST 'MIYA' MUSLIMS

Several police complaints were lodged against Assam Chief Minister Himanta Biswa Sarma on Monday for his alleged hate speech against Bengali-speaking Muslims, often referred to as 'Miya' in the State.

This followed the Chief Minister's statement a few days ago reportedly blaming the skyrocketing prices of vegetables on the monopoly of 'Miya' cultivators and traders while urging the Assamese youth to take up farming and other commercial activities to push the 'Miyas' out of business.

The first complaint was lodged by the Asom Sankhyalaghu Sangram Parishad at the Nagaon Sadar police station in central Assam. The minority organisation said the Chief Minister was promoting hatred between the 'Miya' and the Assamese communities with his controversial remarks. Assam's Rajya Sabha member, Ajit Kumar Bhuyan lodged a complaint against Mr. Sarma at the Dispur police station. The Assembly and Secretariat falls within the jurisdiction of this police station in Guwahati. "The Chief Minister has targeted a particular community. There is a stringent law in Supreme Court against those making communal remarks," Mr. Bhuyan said, demanding Mr. Sarma's arrest. The Assam State Committee of the Communist Party of India (Marxist) also lodged a complaint against the Chief Minister for hate speech at the Latasil police station in central Guwahati.

#### Judicial action sought

The Assam unit of the Trinamool Congress wrote to the Chief Justice of the Supreme Court requesting judicial action against Mr. Sarma for violating its April 28 order related to hate speech. The party also sought the initiation of Suo-motu contempt proceedings against the Assam government.

## SELECTIVE PROSECUTION

Politics and law may be inseparable, but the first may sometimes overshadow the second, especially when it comes to prosecution of political leaders. An ongoing example is the spike in the activity of the Enforcement Directorate (ED) in Tamil Nadu. Close on the heels of the arrest of V. Senthilbalaji, now a Minister without portfolio in the DMK regime, and the legal wrangling over the legality of his arrest and remand, another high-profile Minister, K. Ponmudy, is under the ED's investigation. While the agency may have good reason to investigate and prosecute them, it does appear that they have been chosen for such action from among many political functionaries in the State who have pending probes against them. Both Mr. Senthilbalaji, who has now been shifted from a private hospital to a prison in Chennai, and Mr. Ponmudy, the Minister for Higher Education, face serious charges. Mr. Senthilbalaji was embroiled in a cash-for-jobs scam during his stint as Transport Minister in an earlier AIADMK regime, and had tried to wriggle out of it after money allegedly collected from job aspirant candidates by intermediaries was "returned" to them. However, court orders have kept the investigation alive. In the case of Mr. Ponmudy, he is accused of allowing red sand quarrying in excess of permissible limits as a Minister for Mines and Mineral Resources between 2007 and 2011; and granting quarrying licences to his son, friends and relatives.

The ED entered the picture to probe possible money laundering in handling the proceeds of the crimes. The agency has successfully warded off a stiff challenge to the legality of Mr. Senthilbalaji's



arrest and remand, but it must do more to put all facts in the public domain to show that its actions are justified. However, except for some court-ordered CBI probes and income-tax proceedings, central agencies appear to be doing little by way of pursuing allegations against members of the erstwhile AIADMK regime. The issue of granting sanction to the CBI to prosecute former AIADMK Ministers is "under legal consideration", according to the Tamil Nadu Governor, even while the Union Home Ministry has accorded sanction in respect of two former IPS officers in the same case. It will be difficult to credit central agencies with taking timely action against corruption, if only parties identified with the Opposition are brought under their investigative ambit. Venality among political leaders is a fact in respect of some and a perception suffered by all those in public life. Therefore, agencies statutorily empowered to investigate and prosecute them must demonstrate their fairness and impartiality, if their searches, raids and arrests are to command credibility among the public.

## MENTAL HEALTH, FINANCIAL LITERACY PROGRAMMES ON CRPF AGENDA

TAKING NOTE of the rise in suicide cases in the Central Reserve Police Force (CRPF) – 54 deaths in 2020, 57 in 2021, 43 in 2022 – the DIG (Welfare) has sent an action plan to all sector headquarters which includes conducting programmes on mental health awareness, financial literacy and appointing a family liaison officer in each unit/ company.

The DIG's letter followed a meeting with the CRPF Director General Dr Sujoy Lal Thaosen last month, where the welfare branch also discussed a medical support system for families at home and special care and treatment for psychiatric disorders. In the three years from 2020-2022, 463 personnel died by suicide in the Central Armed Police Forces (CAPFs) and Assam Rifles, of which the CRPF accounted for 154 deaths.

The Indian Express had reported earlier that discrimination among sub-groups, bullying at the workplace, fear of initiation of disciplinary or legal action, lack of communication between company commander and the personnel were some of the reasons cited by a task force set up to look into suicide and fratricide cases in the CAPFs.

## A FLIGHT TO THE MOON

Predictably, India's third lunar mission, which got off to a thrilling start from the Satish Dhawan Space Centre, Sriharikota, on Friday afternoon, has captured the imagination of the public as did the two earlier ones. The Chandrayaan-3 mission, launched aboard the Indian Space Research Organisation's (ISRO) hefty Launch Vehicle Mark-3 (LVM3), is a follow-up mission to Chandrayaan-2, which it resembles in many ways. Once the spacecraft is safely in orbit around the moon in late August, ISRO will attempt to soft-land the lander and deploy the six-wheeled, boxshaped rover, which it failed to do with the Chandrayaan-2 mission in 2019. 'Vikram', the Chandrayaan-2 lander, had crashed on the lunar surface.

This time, the mission is better designed to withstand the challenges of a robotic moon landing near the south pole, according to S. Somanath, Chairman, ISRO. The propulsion module will carry the lander-rover configuration to a 100-km circular polar orbit around the moon. All three, the propulsion module, the lander and the rover, carry scientific payloads designed to further our knowledge of the earth's lone natural satellite.

The lander has four payloads: ChaSTE, designed to measure the thermal properties of the lunar regolith near the polar region; the RAMBHA, a Langmuir Probe, for measuring near-surface



plasma density and how it changes with time; the Instrument for Lunar Seismic Activity (ILSA) for measuring seismicity; and the LASER Retroreflector Array (LRA), a passive experiment to understand the dynamics of the moon. On board the rover are the LASER Induced Breakdown Spectroscope (LIBS), and the Alpha Particle X-ray Spectrometer (APXS), designed respectively to study the chemical and mineralogical composition of the lunar surface and to measure the elemental composition of the lunar soil and rocks around the landing site. The Propulsion Module has one payload, the Spectro-polarimetry of HAbitable Planet Earth (SHAPE), which will study Earth from lunar orbit.

If it succeeds with the moon landing in August, India will become only the fourth nation to have done so; after the U.S., Russia and China. Moreover, a successful mission will be a major fillip for the space agency as it prepares for another tough enterprise — the manned Gaganyaan mission to space. Major improvements have been made to the lander to guarantee a safe touchdown, Mr. Somanath had explained during a recent visit to Thiruvananthapuram ahead of the launch. Safeguards include stronger 'legs' for the lander and the ability to withstand a higher descending velocity. "We have increased the quantity of the propellant, and solar panels cover a larger area. New sensors too have been added," he said.

## The journey begins

But before all this happens, the Chandrayaan-3 spacecraft has to make it safely to the moon, some 3.84 lakh km away. On Friday, after the LVM3-M4 / Chandrayaan-3 Mission lifted off from the second launchpad at the Sriharikota Range, the tension which gripped the Mission Control Centre began to thaw and smiles began to appear.

After orbit raising manoeuvres in the days ahead, ISRO is expected to perform the spacecraft's translunar injection — when the spacecraft will be set on a trajectory for its late-August rendezvous with the moon — sometime around July 31-August 1. Many who watched on television the LVM3 (formerly the Geosynchronous Satellite Launch Vehicle Mk-III) climb to the sky on Friday may find it hard to believe that Moon and Mars missions were once the farthest things from the minds of the visionaries who shaped India's space programme. The priorities and anxieties of a young nation were such that it could not have been otherwise. Indeed, Vikram Sarabhai famously remarked, "There are some who question the relevance of space activities in a developing nation.... But we are convinced that if we are to play a meaningful role nationally, and in the comity of nations, we must be second to none in the application of advanced technologies to the real problems of man and society, which we find in our country."

## PSLV-C56 TO LIFT OFF WITH SEVEN SATELLITES

The Polar Satellite Launch Vehicle-C56 (PSLV-C56) mission is expected to lift off from the Satish Dhawan Space Centre on July 26, as per the latest updates. The ISRO will be using a "core alone" variant of the PSLV for this mission, S. Unnikrishnan Nair, Director of the Vikram Sarabhai Space Centre (VSSC), ISRO's lead facility for launch vehicles, told The Hindu.

A commercial mission, the PSLV-C56 will have seven payloads in all including the 351.9-kg earth observation satellite DS-SAR (short for Synthetic Aperture Radar) from Singapore. The others are Arcade (23.58 kg), Velox-AM (23 kg) and Orb-12 Strider (12.8 kg). The remaining three are nanosatellites weighing less than 10 kg each. They are Galassia-2 (3.84 kg), SCOOB-II (4.1 kg) and NuLIon (3.05 kg), the VSSC said. These satellites will be placed in a low earth orbit.



# STORY OF BUZZ ALDRIN'S WATCH: HOW THE OMEGA SPEEDMASTER REACHED THE MOON

Almost 60 years ago, NASA put chronographs built by three top watchmakers through a series of tests to check how they coped with extreme variations of temperature and pressure. Omega's Speedmaster 'Moonwatch' won the contest.

On Sunday (July 16), Buzz Aldrin, the second human to set foot on the Moon, posted a picture of himself having a celebratory meal on Twitter. Aldrin was the pilot of Eagle, the lunar module of NASA's Apollo 11 mission, which lifted off from Kennedy Space Center on Merritt Island, Florida, on July 16, 1969.

Around 110 hours later, mission commander Neil Armstrong made the iconic announcement, "The Eagle Has Landed" — and took his "giant leap for mankind" by setting foot on the surface of the Moon. He was followed by Aldrin, who went by the first name of Edwin at the time. The third astronaut on the mission, Michael Collins, flew the command module Columbia around the Moon as the lunar module made a touchdown.

But this story is not about the Apollo 11 mission. It is about the picture that Buzz Aldrin, now 93, and the lone surviving member of the mission, posted on the 54th anniversary of their historic take-off for the Moon. Or rather, one curious feature of that picture. Aldrin is sitting in an Apollo 11 T-shirt with a large plate of steak and eggs. But he is wearing not one, but three wristwatches — two on his left hand, the third on his right. The watches are all different models of the Omega Speedmaster.

It was an Omega Speedmaster that Aldrin was wearing when he set foot on the Moon, which subsequently earned the instrument the moniker 'Moonwatch'. Although the specific timepiece that Aldrin had on his wrist on the mission went missing, its legacy has endured over the years. Today, the Omega Speedmaster remains in production, and its variants are some of the most coveted watches among aficionados.

### JOURNALISTS DON'T SPREAD NEGATIVITY, THEY PROVIDE A REALITY CHECK

"Why so negative?" Journalists are often asked this question by online bullies or others with low tolerance to a reality that isn't theirs. Stories of distress and deprivation apparently spoil their day. Agreed, reading about someone's misery is hardly reassuring. And if you're a politician holding power, and tasked with ensuring people's well-being, it can be a nuisance to have stories that challenge the good news narrative.

Overzealous sidekicks are quick to launch social media attacks on journalists who "project a negative image" of their land or leader. They attribute motives, deny the reports, or question the reporter's sources. All the same, they don't hate all stories. News reports of their leaders' rhetoric-heavy statements with flattering pictures, the government's plans and proposals, or its claim of rapid economic growth are all welcomed wholeheartedly as long as they don't point to contradictions, scrutinise official data, or highlight gaps in the implementation of a programme. Those are annoying details, spoiling the flow and spirit of their story. Context and history are equally detested.

In reality, reporters do not pick stories based on whether they are "positive" or "negative". We go by whether a story is newsworthy. And that means thinking about why it is important to report that story at that point in time, what the peg should be, and how to go about it.

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A conflict situation is a particularly good barometer of the state's willingness to take hard questions and criticism. The already efficient propaganda machinery works overtime to project peace, calm, and stability, when in reality, those living in the area are on the edge. Despite the best attempts of the state to underplay a crisis, information eventually comes out. Those expecting us to tell only good news stories are basically telling us, "Don't do your job". If reading about gruesome violence faced by some people in our society or the state's abject failure to contain it bursts you little bubble of contentment, we are terribly sorry. To tell you "all is well" every morning, there are sparkly WhatsApp forwards. But for a reality check, there's only journalism.

## HOW GAPS IN CLOUD SYSTEM CONFIGURATION COULD EXPOSE SENSITIVE USER DATA

## The story so far:

According to a 2023 survey by Thales Cloud Security, which included responses from nearly 3,000 IT and security professionals across 18 countries, 35% of organisations in India note that their data was breached in a cloud environment last year. Moreover, 68% of businesses in India, and 75% globally, say that more than 40% of data stored in the cloud is classified as sensitive.

## Have there been breaches?

In June, a bot on the messaging platform Telegram allegedly returned the personal data of Indian citizens who registered with the CoWIN portal. The country's Health Ministry denied reports of any data leak and said that the Indian Computer Emergency Response Team (CERT-In) was reviewing the existing security infrastructure of the portal.

Earlier, in January, reports emerged that HR management portal myrocket.co allegedly exposed personal information of employees and job candidates. Later, in separate breaches, in April and May, the ICICI Bank's and university admission platform Leverage EDU's data were also allegedly leaked. While these breaches were fixed after the organisations and authorities were notified, even momentary exposure of personal user data can have far-reaching consequences. In particular, personally identifiable information can be used by threat actors to target individuals' financial assets and online accounts.

## What is cloud storage and why do companies use it?

Cloud storage is a method through which digital data, including files, business data, videos, or images, are stored on servers in off-site locations. These servers may be maintained by the companies themselves or by third-party providers responsible for hosting, managing, and securing stored data. These servers can be accessed either by the public or through private internet connections, depending on the nature of the data. Companies use cloud storage to store, access and maintain data so that they do not need to invest in operating and maintaining data centres. An added advantage of cloud storage is its scalability — organisations can expand or reduce their data footprint depending on its needs. Most cloud providers offer security features like physical security at data centres, in addition to zero-trust architecture, identity and access management, and encryption to ensure the security of data on their servers.

## What are the risks associated with cloud storage?

The risks arise from the deployment of incompatible legacy IT systems and third-party data storage architecture. Additionally, the use of weak authentication practices and easily guessable passwords can allow unauthorised individuals to access sensitive data. Data stored in the cloud

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also faces the risk of exposure due to insecure APIs, poorly designed or inadequate security controls, internal threats due to human error and inadequate encryption during transfer or storage, Jaydeep Singh, General Manager for India, Kaspersky told The Hindu.

#### How do legacy systems weaken cloud storage setup?

Though cloud security may appear similar to legacy IT security, the difference in their architecture necessitates different strategies, Mr. Singh explained. Due to the lack of support or upgrades, legacy IT security may have known vulnerabilities that are yet to be fixed. Such vulnerabilities make them an appealing target for hackers who may use the gaps to gain unauthorised access to cloud resources connected with these legacy systems. Additionally, legacy systems may not be capable of supporting more advanced encryption techniques such as secure boot methods or hardware-based encryption, which increases the risks to cloud infrastructure. Therefore, updating and auditing legacy systems when used in tandem with cloud infrastructure is important.

## NO QUICK FIX

Among the most important pieces of legislation slated to be tabled in the current monsoon session of Parliament is the National Research Foundation (NRF) Bill, 2023. While a draft is not in the public domain, it envisages a new, centralised body to fund research, with a budget of ₹50,000 crore, over the next five years. The NRF draws on models such as the United States's National Science Foundation whose nearly \$8 billion budget is the major source of funding for college and university research, and the European Research Council, which funds basic and applied research. However, the NRF's plan, going by public statements of administrators, is to draw the bulk of its budget — ₹36,000 crore — from the private sector. For many years, India's spending on research has lagged between 0.6%-0.8% of GDP, or lower than the 1%-2% spent by countries with an economic base reliant on science and technology. In countries such as China, the U.S. and Israel, the private sector contributed nearly 70% of the research expenditure whereas in India, this was only about 36% of India's total research expenditure — roughly ₹1.2 lakh crore — in 2019-20. Therefore, the Centre reasons, the way to galvanise university research in India would be to attract more private money. While that is a reasonable expectation, it is unclear how such a proposal can be executed. One of the suggestions is to have the funds private companies allot, as part of their annual corporate social responsibility (CSR) obligations, directed to the NRF. Data from the Ministry of Corporate Affairs show that during FY-2022, companies spent ₹14,588 crore as part of their CSR obligations. CSR trends suggest that nearly 70% of such funds were spent in education, health care, and sanitation projects. Moreover, many of the companies spend this on initiatives that are located within their own communities, with the government not having a say on how this must be spent. Whether the government can force, or offer tax benefits, to coax some of these funds into the NRF remains to be seen.

The relatively greater contribution of private sector research in many countries is because of sustained government support to universities and research institutions, that have then encouraged individuals to build companies, and institutions that saw value in investing in research and development. The challenge in India is not the absence of such companies but the fact that there are too few of them. Organisations such as the NRF should work to create conditions which incentivise the development of private sector organisations that see value in invention and developing proprietary technology. Philanthropy is unlikely to be the panacea.



# NCERT ALL SET TO PRODUCE TEXTBOOKS IN 22 INDIAN LANGUAGES; DELHI SCHOOL PRINCIPALS WELCOME MOVE

The National Council for Educational Research and Training (NCERT), under directions of the Ministry of Education, has started gearing up to produce textbooks in 22 scheduled Indian languages to initiate teaching-learning through Indian language medium in addition to English medium in CBSE schools.

An official circular by the CBSE Friday stated, "... the Ministry of Education, Government of India, has taken several measures to actualise education through Indian languages medium on ground. One of the major steps taken now is the direction by the Ministry of Education to NCERT for preparing new textbooks (in) 22 scheduled Indian languages. The NCERT has taken this serious task on highest priority so that textbooks in 22 scheduled languages can be made available to all students from next sessions."

# PORTAL LAUNCHED TO REPORT VIOLATION OF BAN ON E-CIGARETTES

Despite the ban imposed by the Union government in 2019, e-cigarettes continue to be sold on ecommerce sites, even to children below 18, warn experts working in the area of tobacco control. Now to curb this, the Health Ministry has launched an online portal to facilitate reporting of violations under the Prohibition of Electronic Cigarettes (Production, Manufacture, Import, Export, Transport, Sale, Distribution, Storage and Advertisement) Act (PECA).

The portal, www.violation-reporting.in, will allow faster action against any reported violations, the government said.

The Ministry had earlier cautioned all States and Union Territories about the weak implementation of PECA, leading to easy availability of e-cigarettes through online, retail, convenient stores, stationery shops and near educational institutions. The States were also directed to review the compliance of PECA and issue necessary instructions for effective implementation of the provisions of the Act, through special drives and random checking.

## EXPRESS VIEW ON AYUSHMAN BHARAT: A HEALTH WARNING

The stated objective of the Ayushman Bharat scheme is to "reduce out of pocket expenditures on healthcare". One of the main reasons behind the conceptualisation of the scheme was the recognition that medical emergencies often drive families to poverty. Since coming into effect five years ago, Ayushman Bharat has recorded more than 5 crore hospitalisations. The share of out-of-pocket expenditure in the total health expenses incurred in the country has also fallen appreciably — from 62 per cent in 2015 to about 47 per cent in 2020. But this progress should not detract from the loopholes in implementation of Ayushman Bharat. An investigation by this newspaper has revealed that critically-ill patients were cheated out of availing the benefits of the scheme by a neurosurgeon at Safdarjung Hospital in Delhi. The doctor is now in judicial custody and is being probed by the CBI. The racket he ran from a premier government hospital in the capital has aggravated the financial troubles of his patients and their families. This defeats the very purpose of the government's flagship healthcare project.

In recent months, the health ministry has used digital aids, including AI, to unearth cases of impersonation and non-genuine claims under Ayushman Bharat. But the Safdarjung Hospital fraud points to a deeper problem with the country's healthcare system. The doctor has a near-3<sup>RD</sup> FLOOR AND 4<sup>TH</sup> FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



divine status amongst a large section of patients, especially those from underprivileged sections. Medical ethics require healthcare providers to communicate to the patients the details of their ailments and treatment protocols. But this rarely happens, further skewing the asymmetrical relation between the two. Most hospitals are in any case not very assuring places for families of the seriously ill, especially if they are financially stressed. For medical migrants who can be seen squatting or sleeping on the pavements outside several hospitals, the long wait for beds and critical care can mean temporary homelessness. The Ayushman Bharat scheme offers a way out of this distressful situation. But when unscrupulous doctors — like the neurosurgeon at the Safdarjung Hospital — inform families of the grievously ill that availing benefits under the scheme could take two to three months they have little recourse other than to take up the expensive alternative.

The system could become more patient-friendly if patients at empanelled hospitals are counselled by a professional about the benefits under Ayushman Bharat. The scheme needs a human touch. The Safdarjung Hospital case should be an eye-opener.

## FLOOD FEUD

The devastating floods across North India have renewed attention on the dynamic between climate change, urbanisation and the infrastructural lacunae that bedevil India's large cities. India is now right in the middle of the monsoon and it is only to be expected, given the topography of the hill States, that extended rains will cause landslips, landslides and pose extreme threats to life and property. Himachal Pradesh, Punjab, Haryana and Delhi are among the States that have reported record rainfall and at least 60 deaths have been confirmed though the actual toll may be higher. However, it is the inundation of Delhi, a city that is not usually associated with rains, that has brought to national focus the disasters that lie in store.

In the terminology of the India Meteorological Department, Delhi received 'excess' and 'large excess' rain on five out of eight days, from July 3-10. On July 9, it recorded 221.4 mm of rain, more than the 209.7 mm that is the average for all of July. While this contributed to the flooding, rainfall in the last few days has dramatically reduced. And yet, large parts of the city which include iconic landmarks such as the Red Fort and the Supreme Court, continue to be flooded. Delhi's officials have attributed this to the flooding of the Yamuna in upstream States, particularly at Yamunanagar in Haryana, with the barrages in Delhi unable to effectively regulate and redirect the river's flow. This however elides the role of Delhi's infrastructural development that through the years has given short shrift to restricting construction on the Yamuna's floodplains, failed to prioritise the desilting of drains ahead of the monsoon, and scrimped on steps to avoid the largescale concretisation of the city. Though there is the case that even upstream of Delhi, riverbed mining has meant that huge amounts of silt from Haryana block the natural flow of the river, blame games and pointing to "record rains" are unhelpful. The increased probability of spells of extreme rain, given warming trends in the Arctic as well as the Arabian Sea, means that there will be several more instances of flooding in the future. While urban flooding is far more frequent in Bengaluru, Chennai and Mumbai, Delhi should no longer consider itself immune given that its population and infrastructural needs are only going to expand. Much like the National Capital Territory evolved a joint management strategy to tackle air pollution, on realising that clean air is interdependent on action by all cities, these States must set aside their differences and evolve a joint strategy on countering future floods.



# LIGHTNING NOT A NATURAL DISASTER, SAYS CENTRE

The Union government is not in favour of declaring lightning a natural disaster as deaths caused by it can be avoided through education and awareness, according to a senior government official who spoke on the condition of anonymity. India is among the only five countries in the world with an early warning system for lightning and the forecast is available from five days to up to 3 hours.

The Union government is not in favour of declaring lightning a natural disaster as deaths caused by it can be avoided through education and awareness, according to a senior government official who spoke on the condition of anonymity. India is among the only five countries in the world with an early warning system for lightning and the forecast is available from five days to up to 3 hours.

There have been demands by States such as Bihar and West Bengal that deaths due to lightning be covered as a natural disaster. The victims will be entitled to compensation from the State Disaster Response Fund (SDRF) once this is notified. As much as 75% of funds to SDRF are contributed by the Centre.

According to present norms, cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves are considered disasters that are covered under the SDRF.

Bihar's Disaster Management Minister Shahnawaz Alam told *The Hindu* that Bihar is one of the most vulnerable States and as many as 107 have died after being struck by lightning till July 6 this year.

According to the National Crime Records Bureau (NCRB), in the year 2021, as many as 2,880 people died due to lightning. The deaths comprised 40% of all accidental deaths caused by "forces of nature".

While 2,862 people died in 2020, the number stood at 2,876 in 2019. There has been an increase in the proportion of such deaths compared to the total accidental deaths caused by events related to nature.

For instance, in 2003, deaths due to lightning comprised just 0.2% of the total deaths caused by forces of nature.

According to a presentation made by Director-General, India Meteorological Department (IMD) at the National Platform for Disaster Risk Reduction Conference (NPDRR) in March, the frequency of lightning was maximum in northeast States and in West Bengal, Sikkim, Jharkhand, Odisha and Bihar but the number of deaths is higher in central Indian States of Madhya Pradesh, Maharashtra, Chhattisgarh and Odisha.

## SOW LOCAL, EAT LOCAL

A native seed festival, held every year in Tiruvarur district in Tamil Nadu, seeks to revive traditional varieties and promote organic farming practices

The native seed festival was first introduced in South India at Thiruthuraipoondi in Tiruvarur district in Tamil Nadu in 2006 by the late Nel Jayaraman (nel means paddy in Tamil). Since then it has grown from strength to strength, drawing a large number of organic farmers and promoters of traditional seed varieties every year. This year, the event was held in June.

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The annual two-day festival is patronised by not only those from Tamil Nadu but also neighbouring States. As many as 200 native varieties of grain are showcased. Mapillai samba, thanga samba and kichili samba were some of the varieties on display. Native seeds are more genetically diverse and are resilient to harsh climate conditions.

Members of the public can also attend the event and partake of the traditional snacks on sale. To encourage farmers and entrepreneurs, the Dr. Namalvar and Nel Jayaraman awards for the best organic farming practices are presented.

A highlight of the show is that two kg of native seeds are given to farmers who can pledge that they will return with four kg the next year. In 2018, 8,200 farmers came to the festival to collect seeds. The pandemic had pressed pause on the festival but the farmers are back this year, in even larger numbers.

# WHY IS THERE A CONTROVERSY ON THE FOREST BILL?

## The story so far:

The Forest (Conservation) Amendment Bill, 2023 is likely to be tabled in the monsoon session of Parliament which is slated to begin from July 20. A Joint Parliamentary Committee (JPC) which was looking at amendments to the Bill has approved the version sent by the government with almost no comment, revisions or suggestions.

## What is the Forest (Conservation) Amendment Bill?

The Bill seeks to amend the Forest Conservation Act, 1980. This is the legislation enacted to protect India's forests and empowers the Central government to regulate the extraction of forest resources — from timber and bamboo to coal and minerals — by industries as well as forestdwelling communities. A separate Act, the Forest Rights Act, protects the rights of tribals and forest-dwellers dependent on forests for their livelihood. From 1951-1975, about four million hectares of forest land has been diverted for various non-forestry purposes. From 1980 to 2023, under the purview of the Act, only a million hectares have been diverted — a sign of its impact in reducing the pace of forest appropriation. However, such protection was only available for areas already marked out as 'forest' in Central or State government records. A Supreme Court judgment in 1996, in the Godavarman Thirumulpad case, expanded the scope of such protection. Under it, even areas not formally notified as 'forests' but conforming to the 'dictionary' meaning of forests were protected. There is no all-encompassing definition of a 'forest' and the Thirumalpad judgment directed States to define and demarcate forests using their own criteria. Not all States did, and over the years there has been considerable debate over the extent to which the judgment abetted forest conservation. India's forest policy of 1988 prescribes a third of the country's geographical area to be under forests. Realistically, only 21% is under such cover and it is about 24% if one also accounts for tree cover outside areas under recorded forest, plantations, orchards. It is to address this latter issue, the Environment Ministry says, that amendments were required to the Act.

#### What do these amendments say?

The key changes to the Act include inserting a 'preamble' that underlines India's commitment to preserving forests, their biodiversity and tackling challenges from climate change and amending the name of the Act to Van (Sanrakshan Evam Samvardhan) Adhiniyam (translated as Forest Conservation and Augmentation) from the existing Forest (Conservation) Act. The amendments



also say that the Act would only apply to lands notified in, any government record, as 'forest' on or after 1980. If notified forest land was legally diverted between 1980 and 1996, for non-forest use, the Forest Conservation Act would not apply.

Forest land situated 100 km away from international borders and to be used for "strategic projects of national importance" or land ranging from 5-10 hectares for security and defence projects would also be exempted from the Act's stipulations. These amendments were necessary, in the Environment Ministry's view, because private parties who wanted to develop plantations in degraded forests or restore tree patches were disincentivised to do so. A private plantation, or a reforested piece of land that wasn't officially marked out as forest could be retrospectively earmarked — under the provisions of the Act — as such, forcing the developer of such a plantation to lose rights associated with that patch. This was an 'impediment' to India's plans of developing a 'carbon sink' of three billion tonnes by 2030 in line with its commitments under the Paris Agreement.

On the other hand, States were also apportioning forest tracts meant for plantations to companies for mining operations — a contravention of the Act's intent. The amendments, thus were necessary, in the Centre's view, to craft new solutions beyond the Act's original intent of only keeping forests from being exploited for industrial uses and, to aid reforestation.

## What are the objections to the changes?

The JPC consists of 31 members, 18 of whom are from the Bharatiya Janata Party. Usually bills that are sent to the Standing Committee or Select Committees of Parliament are thoroughly investigated by members who in their report present their own independent assessment of views put forth by multiple stakeholders. While a final report is yet to be a tabled, a draft version viewed by The Hindu suggests that the committee has made no collective, independent assessment. There are dissent notes filed by six members — all incidentally from Opposition parties including the Congress, the Trinamool Congress and the Dravida Munnetra Kazhagam. The amendments have been in the public domain since June 2022 and has invited thousands of comments from nongovernmental organisations, think tanks and tribal communities. The key objections are that the exemptions could be detrimental to significant forests in the Himalayan, trans-Himalayan and northeastern regions. Clearing such forests without an appropriate "assessment and mitigation plan" will threaten the biodiversity of "vulnerable ecological and geologically sensitive areas" and trigger extreme weather events. Other objections are that restricting the legislation's ambit only to areas recorded as forests on or after October 25, 1980 would mean leaving out significant sections of forest land and many biodiversity hot spots to be potentially sold, diverted, cleared, and exploited for non-forestry purposes. There is also dissent against the move to rename the bill as Van (Sanrakshan Evam Samvardhan) Adhiniyam, on the grounds that it was "sanskritik (sic) terminology...and untenable." Some objections have come in from experts invited to depose before the committee who have said that the Act waters down the Godavarman judgment and a few State governments have said that forest conservation comes under the domain of both the Centre and States, which means it is in the Concurrent List, and the amendments tilted the balance towards the Centre.

#### How has the Ministry responded?

After the JPC tables its report in Parliament — expected to be in the beginning of the Monsoon session — the Bill is likely to be placed for debate. The Environment Ministry has submitted detailed explanations to the Committee, trying to address concerns that have been raised. It

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emphasises that the new amendments do not dilute the Godavarman judgment and that there are provisions in place to ensure that land will not be "misused." It underlines that proposed exemptions along the international borders are not generic exemptions and would be restricted to "specific linear projects of strategic importance" identified by the Central government. These exemptions wouldn't be available to private entities.

## HOW ARE CHEETAHS FARING IN INDIA?

#### The story so far:

As more deaths of cheetahs have been reported last week from the Kuno National Park (KNP), Madhya Pradesh, an expert committee charged with managing the Project Cheetah programme has recommended that all animals undergo a thorough medical review.

## What is Project Cheetah?

Project Cheetah is India's cheetah relocation programme and is perhaps among the most ambitious of its kind in the world. The attempt is to, over the next decade, bring in 5-10 animals every year until a self-sustaining population of about 35 cheetahs is established. Unlike cheetahs in South Africa and Namibia that are living in fenced reserves, India's plan is to have them grow in natural, unfenced, wild conditions.

As of today, 11 of the translocated cheetahs are in the true wild with four in specially designed one-square-kilometre enclosures called 'bomas,' to help the animals acclimatise to Indian conditions. Five of the translocated animals and three of four cubs born in India have died.

#### Why the need for a medical review?

One of the cheetahs, nicknamed Surya, was found dead in KNP last week. Veterinarians examining the animal saw a wound on its neck, infected with maggots. The larvae of the maggots were also found on the radio-collar fitted onto the cheetah's neck. There was a chance that chafing from the collar may have indirectly sickened the cheetah. The collars that the cheetahs wear are made from polystyrene and equipped with a radio-frequency tracking chip that helps monitor the animals. While ideally expected to not interfere with the animal's movement, it is known to pose obstructions. Coupled with the moisture from the monsoon season — something that South African cheetahs aren't acclimatised too — the animal may have been unable to lick itself clean which allowed parasites to fatally lodge inside the wound. There are veteran forest officers who say that radio-collaring is an extremely common practice in India among lions, tiger, leopards, elephants and never have they been linked to any such infections.

There is also a hypothesis that via the wound the African animal may have been exposed to parasites that Indian big-cats are usually resistant too. However, the Environment Ministry in a note on July 16 dismissed these suggestions as "hearsay...in the absence of scientific evidence." To investigate these points, the expert committee has recommended that all surviving animals be subject to a thorough physical examination. This will involve removing their collars, taking tissue samples and checking for parasites. This will mean getting all the free-ranging animals back and subjecting them to an investigation — a long, laborious exercise — that will, at the end, significantly influence the future of the cheetah project.



## Are the cheetah deaths unusual?

Two days before Surya, another cheetah, Tejas, was reported dead after being attacked by a female cheetah. This happened within the enclosure. While the official version goes that the cheetah died immediately after being fatally wounded, there are reports that Tejas, too, may have sustained an infection. In May, three of four cubs — the first litter born in India — died from heat and malnourishment. An adult female, Daksha, died following injuries involving a skirmish among the animals that same month. Two other animals, Sasha and Uday died in February and April from a renal infection and cardiovascular problems, respectively. Alarming as this may seem, experts say that cheetah cubs, in the wild, have a very high mortality rate relative to tigers and lions. Cheetah cubs, in the wild, reportedly have a survival rate of only 10% and roughly the same fraction make it to adulthood, a press release from the Environment Ministry noted. However, all the deaths in Kuno, save for Surya, have occurred among the cheetahs in the boma.

## How successful has Project Cheetah been so far?

In September 2023, it will be one year since a batch of eight cheetahs from Namibia arrived in India. They were followed by 12 others from South Africa in February 2023. While conceived as an experiment that is susceptible to failure in the initial years, independent critics have argued that there are some basic flaws in the project.

For one, it is a mistake to have had all 20 cheetahs in KNP as it's too little space and prey, given that the animal is a courser and needs large distances. Moreover, having cheetahs for extended periods in quarantine have affected their adaptive capabilities and caused them to have psychological adjustment problems, making them more vulnerable. Unlike tigers and leopards, cheetahs are relatively delicate animals and are more likely to be fatally injured in the wild. Currently, Indian cheetahs face no competition from other comparable predators such as lions and leopards. So, it remains to be seen if the animals can successfully establish themselves in India, over time.

While officials say that there is enough space and prey in the Kuno reserve, there are plans to develop a second reserve in Gandhisagar, Madhya Pradesh and also establish a cheetah rehabilitation centre.

## SC URGES CENTRE TO TRANSFER CHEETAHS TO ANOTHER LOCATION

The Supreme Court (SC) on Thursday told the Union government that the deaths of 40% of the 20 cheetahs brought from South Africa and Namibia to the Kuno National Park (KNP) within a year does not present a good picture.

A Bench headed by Justice B.R. Gavai urged the government to move the big cats to a more conducive environment, if required, and not make it a "prestige issue".

"Eight cheetahs dying out of a total 20 brought here in just one year does not present a good picture. Last week alone, two died. You should look at other possibilities, like transferring them to other sanctuaries irrespective of which State government is running them. Why are you making this a prestige issue," the court asked the government.

Additional Solicitor-General Aishwarya Bhati, for the Centre, said the deaths, though unfortunate, were expected. She said there were several reasons leading to the deaths. The cheetah project was prestigious and the authorities are exploring various options for the well-being of the animals.

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The court asked the law officer to file a detailed affidavit on the circumstances leading to the deaths and posted the case for further hearing on August 1.

## CHINA EVENT RAISES CONCERN OVER INDIA'S ONLY APE

The conservation status of India's only ape was a cause for concern at a global event on gibbons held a week ago in China.

Gibbons, the smallest and fastest of all apes, live in tropical and subtropical forests in the southeastern part of Asia. The hoolock gibbon, unique to India's Northeast, is one of 20 species of gibbons on Earth.

The estimated population of hoolock gibbons is 12,000.

"Like all apes, they are extremely intelligent, with distinct personalities and strong family bonds. Unfortunately, the current conservation status of gibbon species is alarming – all 20 species are at a high risk of extinction. Since 1900, gibbon distribution and populations have declined dramatically, with only small populations in tropical rainforests," the Global Gibbon Network (GGN), which had its first meeting at Haikou in China's Hainan province from July 7-9 said.

Dilip Chetry, a senior primatologist who heads the primate research and conservation division at Aaranyak, an Assam-based non-profit conservation organisation, gave an account of the conservation status of the hoolock gibbon in India.

The hoolock gibbon faces threat primarily from the felling of trees for infrastructure projects.

"GGN was founded with a vision to safeguard and conserve a key element of Asia's unique natural heritage – the singing gibbon and their habitats, by promoting participatory conservation policies, legislations, and actions," Dr Chetry said.

Aaranyak, he said, is one of the 15 founding organisations of the GGN from seven countries.

#### One species, not two

American naturalist R. Harlan was the first to describe the hoolock gibbon, characterised by their vigorous vocal displays, from Assam in 1834.

Over the decades, zoologists thought the Northeast housed two species of the ape – the eastern hoolock gibbon (Hoolock leuconedys) found in a specific region of Arunachal Pradesh and the western hoolock gibbon (Hoolock hoolock) distributed elsewhere in the northeast.

A study led by Hyderabad-based Centre for Cellular and Molecular Biology (CCMB) in 2021 proved through genetic analysis that there is only one species of ape in India. It debunked earlier research that the eastern hoolock gibbon was a separate species based on the colour of its coat.

## COMMONLY FOUND CICADA SPECIES SHEDS FOREIGN TAG TO EMBRACE INDIAN IDENTITY

The insect species that has now been named Purana cheeveeda (after its Malayalam name Cheeveedu) used to be mistaken for Purana tigrina, a species that was first described in Malaysia in 1850. In view of the differences in their morphological characteristics, the Association for Advancement in Entomology has corrected the long-standing error in taxonomic identification and has excluded the Malaysian species from the South Indian cicada fauna.

## 3<sup>RD</sup> FLOOR AND 4<sup>TH</sup> FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

**Telegram:** <u>http://t.me/DreamIAS\_Jamshedpur</u>



The 'discovery' that involved correcting the mistaken identity was undertaken by a research team led by Travancore Nature History Society research associate Kalesh Sadasivan and including independent researchers Jebine Jose, Bernad M. Thampan, P.V. Muralimohan, Baiju Kochunarayanan, Anzil Shereef and Mick Webb of the National History Museum in the U.K.

The researchers in Kerala chanced upon the 'discovery' after observing differences in the structure of the male genitalia and operculum.

Once a common sight in homesteads, their gradual disappearance could be an indicator of the deteriorating quality of soil and vegetation, they cautioned.

# WHEN THE SOUTH WAS INAUSPICIOUS

North India has been the traditional home of the Hindu gods: Shiva atop mount Kailash, Ram in Ayodhya, Krishna in Mathura. The South has been the home of Sugriva, king of monkeys (vanara) and Ravana, king of demons (rakshasa). The journey of Hinduism from the north to the south has been full of trepidation, as revealed in stories and temple rituals. And the reason for this may have something to do with the fact that the Tropic of Cancer separates the north from the south. Shadows start falling in the southern direction south of the latitude, a sinister phenomenon for many, not seen in the north. This mystical divide seems to be reinforced by the Vindhya mountains and the Narmada river, which run parallel to the Tropic of Cancer.

Vedic scriptures have always considered the south to be inauspicious. When the rising sun drifts in the southern direction, after the summer solstice, the rains start, travel stops, gods sleep, days get shorter and colder, and demons rise. This is when you worship ancestors, as the land of the dead comes closer to the land of the living. Even today, Hindus face the south when performing rituals of feeding the dead. Yama, the god of death, is the guardian of the southern direction. It is quite easy for people to confuse the metaphorical south with the geographical south.

Those who read the original manuscript of the Ramayana notice that Valmiki does not really describe lands south of the Godavari. The land he describes, including Lanka, is full of sal trees, which grow only in North and Central India. South in the Valmiki Ramayana is effectively the dreaded land beyond the Tropic of Cancer. India and Egypt are the only two ancient cultures traversed by the Tropic of Cancer. And so, like the Egyptian temple of Abu Simbel, many Hindu temples have been built at or close to this latitude: the Jain temple of Ranakpur in Rajasthan, the Sun Temple of Modhera in Gujarat and the Mahakaleshwar Shiva temple of Ujjain in Madhya Pradesh. Gaya, the spot where Hindus go to perform final rituals of the ancestors, is located a few kilometres north of the Tropic of Cancer, and this is no accident.

When Ram journeys south and travels back, he is greeted with lamps, symbols of auspiciousness. Even today people believe that the lamps lit during Diwali help ghosts leave the earth and return to the land of the dead.

## A river is born

After the Gupta period, one finds rapid expansion of Hindu ideas, and Hindu artwork in the south, in the Deccan plateau and beyond, along the coasts. Puranic literature was composed between the 5th and 10th centuries. They tell stories of Rishi Gautama accidentally killing a cow and begging Shiva to let the Ganga flow in the south. That is how Godavari is born and is called 'Dakshina Ganga'. Then we hear of Agastya moving south on Shiva's orders to balance the world. To help him pass, the Vindhya mountains, said to be tall enough to block the sun's path, bows and bends.

Agastya travels with a pot of Ganga water. It overturns, and the Kaveri flows out. Kaveri is also called 'Dakshina Ganga'.

Also travelling south is Shiva's son Kartikeya, who hurls a lance and causes the Krauncha mountain to split. This is located in Karnataka. Kartikeya's mother feels her son will miss the mountains and so asks the asura Hidimba to carry mountain peaks to the South. He ties them to a bamboo pole that he slings over his shoulder, giving rise to the ritual of Kavadi.

# Abode of the goddess

Kanyakumari, goddess of the southern tip of India, wanted Shiva to travel south to marry her. Ravana, king of Lanka, wanted to bring Shiva to the south. His brother, Vibhishana, wanted to bring Vishnu to the south. The gods were alarmed. They wanted this southern migration to stop.

So the gods got a rooster to crow at midnight confusing Shiva who turned back and returned to the north, fearing he had missed the auspicious hour of marriage. Kanyakumari therefore remained a virgin goddess in the south. Both Ravana and Vibhishana experienced a terrible urge to urinate and so placed the images of Shiva and Vishnu on the ground to relieve themselves. The images anchored themselves on the spot where they were left, and are still worshipped there, at Gokarna in southern Udupi, and at Srirangam island of Kaveri. Devotees say that the image of Ranganatha at Srirangam faces south, instead of east, for the benefit of Vibhishana. The dancing Shiva of Chidambaram faces south too. The leaf-shaped trough of every Shiva-linga in the world, however, continues to point north.

In South Indian temples, Shiva is Dakshinamurti, the teacher who faces south. South is the abode of the goddess, 'Dakshina Kali'. She always faces north, especially when her image is set up in homes during Bengal's Durga Puja. Her worship during Dasara and Diwali marks the end of the rainy season, the retreat of demons and ghosts, and the protection of the earth until the winter solstice, when the rising sun starts moving north.

# U.S. HANDS OVER 105 ANTIQUITIES TO INDIA FOLLOWING AGREEMENT

The United States on Monday handed over 105 trafficked antiquities to India.

The repatriation ceremony was held at the Indian Consulate in New York and the antiquities would soon be transported to India, a statement from the consulate said.

The restitution of the artefacts is a follow-up of an agreement to the effect during Prime Minister Narendra Modi's state visit to the U.S. last month. India and the U.S. have also agreed to work for a Cultural Property Agreement that would help prevent illegal trafficking of cultural artefacts in future during the visit, a statement from the Indian Consulate said.

Such an understanding would add further value to the dynamic bilateral collaboration between Homeland Security and law enforcement agencies of the two countries, Ambassador of India to the United States Taranjit Singh Sandhu said, adding "For the people of India, these were not just pieces of art but part of their living heritage and culture".

## From across India

The 105 artefacts represent a wide geographical spread in terms of their origin in India – with 47 from eastern India, 27 from southern India, 22 from central India, six from northernIndia and three from western India.

3<sup>RD</sup> FLOOR AND 4<sup>TH</sup> FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

**Telegram:** <u>http://t.me/DreamIAS\_Jamshedpur</u>

Spanning a period from 2nd-3rd century CE to 18th-19th century CE, the artefacts are made of terracotta, stone, metal and wood. Around 50 of them have religious significance.

During Mr. Modi's 2016 visit to the U.S., 16 artefacts were handed over by the U.S. side while in 2021, the U.S. government handed over 157. In 2022, the U.S. authorities formally handed over 307 antiquities, estimated to be worth nearly \$4 million to Indian officials.

Addressing the Indian diaspora in June during his visit to the U.S., the Prime Minister had said: "I am happy that the American government has decided to return more than 100 antiquities of India that were stolen from us. These antiquities of Indian origin had reached the international market through right or wrong paths, but America's decision to return them to India shows the emotional bond between the two nations".

# A FASCINATING FUSION OF ROCK ART IN A.P.'S RUDRAGIRI

Rudragiri hillock, located in the village of Orvakallu, Atchampet mandal, in Guntur district of Andhra Pradesh, boasts a celebrated historical past and remarkable archaeological monuments.

This site unveils a fascinating combination of prehistoric rock paintings from the Mesolithic period and exquisite artwork from the Kakatiya dynasty. D. Kanna Babu, former Superintending Archaeologist of the Temple Survey Project (Southern Region) at the Archaeological Survey of India, shared his discoveries with The Hindu, shedding light on the significance of this hidden gem.

Rudragiri, nestled amidst the Eastern Ghats, features five naturally formed rock shelters at its foothills, facing westward. These shelters served as living quarters for people during the Mesolithic age around 5000 B.C., and they bear witness to the luminous rock paintings of that era.

Interestingly, two natural caves at the southern end of the hillock also exhibit exceptional murals from the renowned Kakatiya kingdom.

## Artistic brilliance

Mr. Kanna Babu described the physical condition of the Kakatiya artworks.

"These caves showcase the artistic brilliance of the Kakatiya period. While many have suffered damage over time due to exposure to the elements, some sketches and outlines have managed to survive. The paintings, adorned with a variety of colours derived from white kaolin and different pigments, depict captivating scenes from the epic Ramayana. Despite the impact of nature's wrath, fragments of these paintings offer valuable insights into their creation during the 13th century A.D.," he said.

The first cave, starting from the southern end of the hillock, presents a narrative mural portraying the intense battle between the Vanara brothers — Vali and Sugriva.

In the middle cave, a grand sketch of Hanuman, accompanied by sacred symbols of the conch (Sankha) and the fire altar (Yagna Vedi), captures visitors' attention. Hanuman is depicted carrying the Sanjivani hill in his hand, symbolising his mission to save Lakshmana's life.

The third cave houses the prehistoric rock paintings from the Mesolithic era. Interestingly, the Kakatiya artist chose the same rock shelter to superimpose the elegant figure of Hanuman, who is portrayed in a unique 'Anjali' posture, folding his hands in a divine offering.



Remarkably, the Ramayana figures neither overshadow the Mesolithic drawings nor diminish their scenic beauty.

Visitors today can marvel at the ancient drawings from two distinct periods, appreciating the artistic techniques employed.

# INDIAN-ORIGIN DOCTOR IS CHAIRMAN-ELECT OF MYELOMA FOUNDATION

Dr. Rajkumar will take over from the current chairman, Brian G.M. Durie, who is not seeking reelection. Dr. Durie, the co-founder and chairman of the Board of Directors for 33 years, has said that he will not seek re-election as chairman when his current term ends in spring 2024. He will, however, remain a member of the Board, hold the position of chairman emeritus and continue to perform his current activities.

Dr. Rajkumar has also served as principal investigator of several clinical trials for the treatment of myeloma, including pivotal trials that led to the regulatory approval of thalidomide for the treatment of the disease in the U.S. He has published more than 480 peer-reviewed papers primarily in the field of multiple myeloma and related plasma cell disorders. Among Dr. Rajkumar's accolades include the Jan Waldenstrom Lifetime Achievement Award (2021), the Mayo Clinic Distinguished Investigator Award (2018) and the Robert A. Kyle Lifetime Achievement Award (2016).

## EXPRESS VIEW ON WRESTLING SELECTION CONTROVERSIES: LOSING THE GRIP

Wrestling selections are not immune to controversy. Every multi-disciplinary event arrives — this time the Asian Games — with its share of court cases and controversies. Vinesh Phogat and Bajrang Punia were granted exemption from trials and a direct entry into Asian Games as World Championship 2022 medallists. But other aspirants to the same spots have challenged the decision in court. Now the courts are looking up the laurels the duo have brought to the nation — a tough World Championship medal should suffice as a credential. Yet the question remains why the selection process often leads to controversies and rancour despite wrestling being one of India's Olympic medal hopes.

There are no perfect answers given the various permutations wrestling has tried over the years — sending the quota winner to Olympics, exempting some but not all the medallists, and holding trials in some categories but not others. When done arbitrarily, the selections leave a whiff of inconsistency and make it difficult to follow any particular process as a precedent. Trials are sacrosanct in wrestling powerhouses like the US and Japan, processes set in stone, with no exemptions offered even for defending Olympic champions. However, the system works because this is announced well in advance and no one wavers from the rules. It is said that trials in these strong grappling countries are as intense as Olympic finals.

A trial where Vinesh and Antim Panghal face off will serve them well — the current form of neither is known. Vinesh drubbed Antim 7-0 the last time, but that was some time back. Antim too should be tested for she sometimes struggles to make weight. For the sake of match fitness and their own conditioning and preparedness, a single trial closer to the Games would make perfect sense. Because finally, at stake, is that Asian Games medal and India is unsure who is best prepared to win the coveted medal.



# AN ANACHRONISM

With less than three years to go, the decision of the Government of Victoria, Australia, to withdraw from the hosting of the 2026 Commonwealth Games (CWG) has come as a mighty blow to the sporting movement. After Birmingham replaced Durban for the 2022 edition, this is the second consecutive occasion when the original host city is unable to host the games due to financial issues. Victoria, which had uniquely proposed to organise the games over a region, had initially estimated a budget of AUS\$2.6 billion, but its Premier, Daniel Andrews, said the costs could go beyond AUS\$6 billion, which to him is too much for a 12-day sporting event. Without federal funding and with Victoria struggling due to its increasing debts, he said he could not take money out of hospitals and schools in order to fund the event. Even though the development has come as a huge embarrassment for Australia, which has hosted five CWG editions (including 2018 Gold Coast), Prime Minister Anthony Albanese looked forward to hosting the women's football World Cup and 2032 Brisbane Olympics, which would run on a different revenue model over a longer period of time. Still, the country may have to deal with credibility issues in the run-up to Brisbane 2032. According to the Commonwealth Games Federation (CGF), which was given only an eight hours notice, the decision to add more sports and changed plans for venues added considerable expenses.

Commonwealth Games Australia chief executive Craig Phillips said that the costs overrun was a gross exaggeration while Victoria's Leader of Opposition John Pesutto termed the cancellation 'a massive humiliation'. The development has put a question mark over the future of big-ticket multisport events because of the staggering financial burden involved with the hosting. While the hosts have been looking at ways of controlling cost escalation, the rising expenses have made the conduct of such games virtually a privilege for bigger economies. That only five countries have staged 18 out of 22 editions of the CWG, which began as the British Empire Games (1930), and no African nation has ever hosted the Olympics, point to this. The uncertainty surrounding the CWG will disappoint the Indian sportspersons, who have done well in these games, including in 2010 when Delhi hosted it. Thousands of athletes from 72 Commonwealth nations and territories will hope that the CGF succeeds in the onerous task of finding an alternative host. But questions will continue to be asked on the need for what many might consider an anachronistic event, a coming together of nations on the basis of shared colonial history, and not geography.

# DreamIAS



# **BUSINESS & ECONOMICS**

#### THE INDIA-UAE DEAL TO TRADE WITH RUPEES

#### The story so far:

During Prime Minister Narendra Modi's recent visit to the UAE, the Reserve Bank of India (RBI) and its Abu Dhabi-headquartered counterpart the Central Bank of the UAE signed two memoranda of understanding (MoUs). While the first established a framework to promote the use of local currencies for cross-border transactions, the other was for interlinking payment systems.

#### How will local currencies be promoted?

The first of the two MoUs aims to establish a Local Currency Settlement System (LCSS) to promote the use of rupee and the dirham bilaterally. It will cover all current and permitted capital account transactions. This, the RBI said, would enable exporters and importers to send invoices and pay in their respective domestic currencies, which in turn would help the development of the INR-AED foreign exchange market. It would also help promote investments and remittances between the two countries. Broadly, the arrangement would help optimise transaction costs and settlement time for transactions, including for remittances from Indians residing in UAE.

#### Why is it significant for exporters?

The focus on denominating export contracts and invoices in the local currency helps avert exchange-rate risks (such as when a third currency is being used as a standard), which further facilitates the scope to discover competitive pricing. Moreover, it could also lead to enhanced avenues for cooperation among the banking systems of the two countries, thereby contributing to the expansion of trade and economic activity for both. The major items of export from India to the UAE include mineral fuels, mineral oils and products, bituminous substances, mineral waxes, followed by pearls, precious stones and metals, electrical machineries and equipment, among other things. The major items imported by India are petroleum crude and petroleum related products. India-UAE trade rose to \$85 billion in 2022. Furthermore, the UAE was India's third largest trading partner and second-largest export destination in FY2022-23. Conversely, India was the UAE's second largest trading partner.

#### What about the interlinking of payment systems?

The second of the two MoUs links India's Unified Payments Interface (UPI) with its UAEcounterpart Instant Payment Platform (IPP). This is alongside the linking of card switches, that is, RuPay switch and UAESWITCH. Card switches entail facilitating communications and transactions between different payment service providers. The agreement would also explore linking of payment messaging systems of the two countries. The apex banking regulator in India said that the UPI-IPP linkage would enable users in either country to "make fast, convenient, safe, and costeffective cross-border fund transfers". As for card switches, the regulator stated, it will "facilitate mutual acceptance of domestic cards and processing of card transactions." This is relevant to 3.5 million resident Indians living in the UAE (figure as of 2021).

#### How will this help?

One of the several issues with sending remittances back home, especially for low wage earners, is the high costs of transactions. This may entail fees and exchange rate margins, among other



potential costs. In fact, the International Monetary Fund (IMF), in a larger context, had stated in a November 2022 report, "Because formal remittances involve high fixed costs and hence are expensive to provide, low-income individuals refrain from remitting, or are incentivised to use cheaper informal alternatives," it stated. It is challenges like these that the UPI-IPP linkage would try to address in real-time.

The development follows up on similar endeavours undertaken in the recent past. In March, the National Payments Corporation of India (NPCI) finalised a collaboration with Singapore's PayNow for facilitating cross-border real time money transfers. In fact, it was noted by officials at the Monetary Authority of Singapore (MAS) that facilitating remittances would become 10% cheaper.

Furthermore, the NPCI had in January permitted non-resident accounts with international numbers to be onboarded into the UPI ecosystem. At the onset, it included users from 10 countries — Singapore, Australia, Canada, Oman, Qatar, the U.S., Saudi Arabia, the UAE, the U.K and Hong Kong.

The World Bank noted in the 2023 Migration and Development Brief that India experienced a 24.4% increase in remittances to \$111 billion in 2022 on a year-over-year basis. This represented 3.3% of the GDP. It further stated that at present, remittance inflows from GCC (Gulf Cooperation Council) countries, which accounts for about 28% of the country's total remittance inflows, also soared in 2022. "High energy prices favoured the employment and incomes of the less-skilled Indian migrants in the GCC countries, while the GCC governments' special measures to curb food price inflation shielded migrants' remitting potential," the report argued. About 36% of the remittances were attributed to high-skilled and largely high-tech Indian migrants in the U.S., the U.K., and Singapore, the report pointed out.

# WILL 28% GST ON ONLINE GAMING AFFECT ITS GROWTH?

#### The story so far:

At the recently concluded 50th GST Council meeting, it was decided that online gaming would be taxed at 28% on the full-face value of the placed bets. Elaborating on the move, Finance Minister Nirmala Sitharaman clarified that the idea was not to hurt the industry. However, she stated, there was a moral question: whether the industry (also including casinos, horse racing) can be endowed greater encouragement than essential goods. The Minister also stated that the endeavour was to simplify the mechanism, eradicate complexity and imbibe transparency. The decision was not greeted with enthusiasm.

#### How will the taxation work?

Gaming platforms charge an entry fee from the user to allow them to participate in a particular game. Say, the amount is ₹100. The platform operator deducts a certain amount of this entry fee to run the game and the overall platform, known as the gross gaming revenue (GGR). The rest is transferred to the prize pool. In our example, let us peg the GGR at ₹20. Till now, GGR was liable to be taxed at 18% — this implied the operator would have to pay ₹3.6 as taxes. However, the latest provision means that tax will be levied on the entry bet (that is, the ₹100 in our example) at 28%, taking the taxation amount to ₹28. Broadly, this will translate to lesser money to charge the necessary platform fee from, and also, lowered available resources for the prize pool. A further disincentive, the industry argues, is the existing 30% taxation that is levied on the user on their final winnings.



#### What are the other concerns?

Malay Kumar Shukla, secretary at the industry body E-Gaming Federation, termed the decision "extremely unfortunate", saying "a tax burden where taxes exceed revenues will not only make the online gaming industry unviable but also boost black-market operators at the expense of legitimate tax-paying players, further undermining the industry's image and capacity to survive." The move also raises concerns about its growth trajectory. For perspective, a combined report (published in April 2023) by consulting firm Deloitte and the Federation of Indian Fantasy Sports had noted that the industry grew 31% to ₹6,800 crore in FY2022. It is estimated to touch ₹25,240 crore by FY2027. With respect to its contribution to the Indian economy, it noted that the industry attracted ₹15,000 crore in foreign direct investments (FDI) till FY2022 and is expected to invite ₹25,000 crore in FDI by FY2027.

Roland Landers, CEO at the All-India Gaming Federation (AIGF), told The Hindu, the steep rise in GST will discourage both domestic and foreign investors from considering the domestic ecosystem as a viable investment destination. "Marquee investors are already placing their decisions on hold amid the regulatory uncertainty," he claimed. According to Pearl Agarwal, Founder and Managing Director at Eximius Ventures, "reduction in winnings available for gamers will lower engagement and revenue of gaming platforms, severely impacting the current valuation several large gaming companies have raised." Other than this, concerns also exist about the potential loss of employment opportunities in the sector.

#### Why are we discussing games of skill versus games of chance again?

The government has stated that it would be making suitable amendments to include online gaming and horse racing in Schedule-III of the Central Goods and Services Tax Act (2017), deeming them as taxable actionable claims. This will bunch online gaming together with gambling. For perspective, the legislation deals with "activities or transactions which shall be treated neither as a supply of goods nor a supply of services". It excludes lottery, gambling and betting. The debate about game of skills versus chance deals with an evaluation of the attributes of the game in question. One of the key attributes of a skill-based game is the reliance on psychological or physical abilities than luck for a favourable outcome. While an element of chance is involved in games of skill, each player's unique set of skills determine their success rate. This is unlike a game of chance where the outcome is totally dependent on luck. The user cannot influence the outcome.

At present, such classification of games rely on state legislation and court judgments, lacking quantifiable methods for evaluation. The industry at large maintains that online gaming is different from gambling, pointing to the various Supreme Court and High Court judgments that have "reaffirmed the states of online skill-based games as legitimate business activity protected as fundamental right under the Constitution."

# MISSING NUMBERS

The Ministry of Statistics and Programme Implementation has formed a new Standing Committee on Statistics (SCoS) to advise on official data, including the household surveys carried out by the National Sample Survey Office (NSSO). Headed by India's first Chief Statistician, Pronab Sen, the SCoS replaces a similar panel set up in December 2019 to advise on economic statistics. While Mr. Sen also headed the incumbent panel, the SCoS formed now has a broader mandate to help design surveys for all types of data, identify data gaps that must be plugged, and conduct pilot surveys for new data sets. With 14 members, the new panel is also leaner and more likely to deliver quality



guidance. The 28-member economic data review panel may have found it tougher to establish a coherent consensus. One of the new panel's first tasks will likely pertain to the results of the Household Consumption Expenditure Survey (HCES) by the NSSO over the past year, and it must sensitise users on the methods deployed and interpretational nuances they necessitate.

The HCES is critical not only to ascertain people's living standards over time but also the key to revising economic indicators such as the Consumer Price Index and the Gross Domestic Product used to measure the economy's output. The last survey, with another quinquennial employment survey, was conducted in 2017-18, but the government had opted to junk the findings in November 2019, citing data quality issues. Then, top government mandarins sought to discredit the official statistical machinery's methods to dispute reports that the NSSO's consumption and employment surveys reflected elevated economic distress in households. Now, members of the Economic Advisory Council to the Prime Minister have revived such critiques, perhaps as a preemptive move to deflect from any adverse outcomes that the latest HCES may throw up. That is, if its results are published. Data from the 2017-18 Survey released by Maharashtra indicates that households' spending power and access to amenities had improved since 2011-12, despite the demonetisation shock, although inequality widened on some fronts. So, that data was not all bad news after all. Whether data is fit for release should be left to the independent National Statistical Commission that was reconstituted late last year but is still marred by vacancies. Simply destroying the credibility of one's own systems may achieve short-term obfuscation goals, but it also leaves one clutching at straws to prove governance outcomes. The SCoS can pro-actively try to bridge the trust deficit between India's once-revered statistical system and data users, which has led to the current vacuum of official data. The end result of such a vacuum is that government policy neither acknowledges nor addresses some ground realities that warrant intervention.

# EXPRESS VIEW ON EMPLOYMENT: THE STRESS SIGNALS

Even as the Indian economy is growing at a seemingly healthy rate, and the RBI expects growth at 8 per cent in the first quarter (April-June) of the ongoing financial year, more and more individuals/households are seeking work under the rural employment guarantee scheme. In June, the number of households that availed work under the scheme touched 3.04 crore. This is 10 per cent more than those who did so over the same period last year. In fact, as reported in this paper, this is only the third time since April 2014 that the monthly number of households has crossed three crore. Some have attributed this sharp rise to the uneven rainfall pattern in June which could have affected kharif sowing. However, the data also points to a steady rise in the number of individuals seeking and availing work under the scheme over the years. This is a worrying sign.

In 2015-16, the number of individuals who worked under MGNREGA stood at 7.2 crore. By 2019-20, this number had risen to 7.88 crore. Demand for work under the scheme surged during the pandemic years, of course, touching 11.19 crore in 2020-21 and 10.61 crore in 2021-22. However, while it fell thereafter to 8.76 crore in 2022-23, it remained higher than the pre-pandemic level, pointing towards a trend of more and more individuals relying on the scheme. In 2022-23, the average wage rate per person per day under the scheme was Rs 218 — this has risen to Rs 233. Considering that earnings of casual labour, engaged in works other than public works, were Rs 368 during April-June 2022 as per the periodic labour force, the high demand for work under MGNREGA is an indicator of the limited avenues for more productive forms of employment in rural areas.

There are signs of stress in urban areas as well. Even as the unemployment rate has fallen from the highs observed during the pandemic, it remains high among the youth. During January-March **3<sup>RD</sup> FLOOR AND 4<sup>TH</sup> FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR** 



2023, the unemployment rate for those in the age group of 15-29 years stood at 17.3 per cent in urban areas, as per the periodic labour force survey. Among males it was estimated at 15.6 per cent, while for females it was pegged to be higher at 22.9 per cent. This paper has reported a rise in defaults in the credit card segment — bad loans rose to Rs 4,073 crore at the end of 2022-23, up from Rs 3,122 crore the year before. The RBI's report had pointed out that impairments in credit card receivables had risen. The report also noted that even though bad loans in the retail category were low, loans where the principal or interest payments were overdue (special mention accounts) were high at 7.4 per cent. Going ahead, these areas, where signs of stress are clear and visible, need to be closely monitored.

# NITI AAYOG REPORT SAYS 13.5-CR. PEOPLE LIFTED OUT OF MULTIDIMENSIONAL POVERTY

India has registered a significant decline of 9.89 percentage points in the number of multidimensionally poor, from 24.85% in 2015-16 to 14.96% in 2019-2021, says the "National multidimensional poverty index: a progress review, 2023", released by NITI Aayog here on Monday. The study says nearly 13.5 crore people came out of multidimensional poverty during the period, assessed by identifying "acute deprivations in health, education and standard of living" using United Nations-approved parameters.

The report said rural areas witnessed the fastest decline in poverty from 32.59% to 19.28%, mainly due to a decrease in number of multidimensionally poor in States such as Bihar, Uttar Pradesh, Madhya Pradesh, Odisha, and Rajasthan. Delhi, Kerala, Goa, and Tamil Nadu have the least number of people facing multidimensional poverty, along with the Union Territories. Bihar, Jharkhand, Meghalaya, Uttar Pradesh, and Madhya Pradesh top the chart where the percentage of population which is multidimensionally poor is high.

Multidimensional poverty in urban areas, during the same period, saw a decrease from 8.65% to 5.27%. "Uttar Pradesh registered the largest decline in number of poor with 3.43 crore people escaping multidimensional poverty," the NITI Aayog said in a statement.

The report has been prepared based on the latest National Family Heath Survey of 2019-21 and is the second edition of the National Multidimensional Poverty Index (MPI). It said 12 parameters of health, education, and standard of living are examined in the report. "These include nutrition, child and adolescent mortality, maternal health, years of schooling, school attendance, cooking fuel, sanitation, drinking water, electricity, housing, assets, and bank accounts," the release said.

According to the report, between 2015-16 and 2019-21, the MPI value has nearly halved from 0.117 to 0.066 and the intensity of poverty has reduced from 47% to 44%. "With our own national MPI, India is poised to gain a deeper understanding of poverty's complexities and forge solutions that ensure inclusivity for all. The district-wise estimation of the national MPI will also prioritise reaching out to the furthest behind first through focused efforts on specific indicators and dimensions. The results and findings of the index provide valuable insights for both policymakers and the wider community," Mr. Beri said adding that it will help the country to achieve the target of reducing multidimensional poverty as per UN's Sustainable Development Goals.

# EXPRESS VIEW ON RAJASHTHAN'S MINIMUM INCOME GUARANTEE: LIMITS OF WELFARE

The Rajasthan Minimum Guaranteed Income Bill 2023, tabled by the Ashok Gehlot led government on Tuesday, has taken a rights-based approach towards building a social security net. First announced in the state's budget earlier this year, the framework centres around three areas:

# 3<sup>RD</sup> FLOOR AND 4<sup>TH</sup> FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



The right to minimum guaranteed income, right to guaranteed employment, and a right to guaranteed social security pension. However, the state government's welfarist agenda doesn't end here. In its budget, it had also proposed a Gig Workers Welfare Act, under which a gig workers welfare and development fund would be set up. Such policies, when seen in conjunction with others — this would include the provision of free or heavily subsidised foodgrains, health insurance and cash payments — reflect a concerted attempt on the part of both the Centre and the states to put in place a more expansive and far reaching social security net.

The Rajasthan state government intends to operationalise the guarantee of minimum income and employment by providing eligible individuals work in both rural and urban areas through the employment guarantee schemes. It has also sought to guarantee 125 days of work in both areas. For those unable to work — this category includes the specially disabled, single women, widows and the old — it seeks to provide a pension. While the idea of ensuring a minimum income for citizens is desirable, the approach taken — operationalising it through an urban employment guarantee scheme — is perhaps not the best way to go about it. Such schemes can face several issues. For instance, demand for work in urban areas is not seasonal in nature, unlike demand in rural areas that is met through MGNREGA. This tends to complicate the design of the scheme. There are also questions over the kind of public works available in urban areas and the capacity constraints of urban local bodies.

Though this welfarist agenda may have wide popular appeal, there are fiscal constraints to contend with. Rajasthan is amongst the states with the highest debt burden in the country. The state allocates less on more productive forms of spending. A report by the RBI had estimated that the state announced freebies worth 8.6 per cent of its own tax revenue in 2022-23. While such policies are well intended, they reflect the inability of the economy to create productive forms of employment at the scale required to alleviate social pressures for fiscally stressed states. The focus should be to create greater employment opportunities, especially at the low end of the skill spectrum, ensure access to health and education, and provide paths for upward mobility.

# EXPRESS VIEW ON GRAIN PRICES: WAR AND WHEAT

Global grain prices hardened on Tuesday after Russia fired cruise missiles targeting Ukraine's Odesa port as "retribution" for the latter's attack damaging a key road bridge to the Crimean Peninsula. The day before, Russia terminated a deal allowing Ukraine to export produce from designated Black Sea ports. The markets seemed to have then shrugged off Moscow's announcement that it would no longer guarantee safe passage for vessels moving through the specially-created maritime corridor under the Black Sea Grain Initiative. The deal, brokered by the United Nations and Turkey, had enabled Ukraine to ship out nearly 33 million tonnes of corn, wheat, sunflower (including oil and meal), barley, rapeseed and other grain in the last one year. By striking, Russia has conveyed a clear message.

That being said, the world is better positioned than a year ago to absorb any fresh supply shocks from the Ukraine-Russia front. One reason is that Ukraine's corn and wheat exports are anyway expected to fall 30-40 per cent this year over 2022-23. The war has taken a toll on the country's production, which the markets have already factored in. Secondly, the reduced supplies from Ukraine should be more than covered by Brazil, US and Argentina in corn and Russia in wheat. The latter has, in fact, become the world's biggest wheat exporter, much of it going to the Middle East, North Africa and Central Asia, even as Ukraine's own grain has been increasingly moving via the Danube River and land route to Europe. Thirdly, even with respect to vegetable oils, enhanced availability of soyabean (from Brazil and Argentina), palm (from Indonesia and Malaysia) and **3**<sup>RD</sup> FLOOR AND 4<sup>TH</sup> FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR



rapeseed (from Canada) should help stave off any disruptions from the expiry of the Black Sea agreement. Moreover, Russia has indicated willingness for the deal's renewal if the rules for selling its own produce and fertilisers in the international market were eased. That's a call the West would have to take.

Simply put, the world is relatively awash with grain today. As far as India goes, the threats to food inflation are likely to be more from domestic than global factors. While the monsoon has been good so far, its performance over the next one month will matter, especially in a scenario where the Food Corporation of India's warehouses aren't overflowing like before and supply pressures are building up in vegetables and pulses. The government should closely monitor the kharif crop's progress, while keeping the window open for imports as insurance against any production shortfalls.

# EXPRESS VIEW ON CURBS ON RICE EXPORTS: AGAINST THE GRAIN

India, in 2022-23, exported 22.3 million tonnes (mt) of rice valued at over \$11.1 billion. The Narendra Modi government's decision on Thursday to ban all non-basmati white rice shipments will effectively take away some 9.9 mt from the world market. Henceforth, only two categories of rice — basmati and parboiled non-basmati, aggregating 12.4 mt and worth \$7.8 billion in the last fiscal — will be allowed to go out. The move has both domestic and global implications. The world's total rice exports was 55.6 mt in 2023-23, with India's share at more than 40 per cent, according to the US Department of Agriculture. India's role in the global rice trade is, in many ways, similar to that of Indonesia and Malaysia in palm oil. While rice has more suppliers — Thailand, Vietnam, Pakistan, US and Myanmar — they cannot fill the vacuum left by India. A surge in world prices is, therefore, inevitable.

The latest decision follows a series of actions, starting with a ban on exports of wheat last May and then on broken rice in September, which was accompanied by a 20 per cent duty levied on other non-parboiled non-basmati shipments. Exports of sugar have also been stopped after May this year. All these measures — retrograde no doubt — have been in response to domestic supply concerns. The Modi government is clearly worried about the current rice crop, given the subnormal monsoon rainfall in major growing states. While some — including Telangana, Andhra Pradesh, Odisha and Chhattisgarh — have received good rains in the past one week, the effects of delayed plantings on yields remains to be seen. No less a source of uncertainty is El Niño, which can impact the monsoon's second-half performance and, in turn, the fortunes of the kharif rice as well as the upcoming rabi wheat.

While imposing export curbs may be justified under exceptional circumstances, the government must be mindful of two things. The first is credibility. Why ban exports of wheat and much of rice if India's production of both cereals touched all-time-highs in 2022-23, as per the Agriculture Ministry? It raises questions on the reliability of official output estimates. Remember how last year's export ban on wheat came not long after claims about India "feeding the world". The second is its image as a reliable global supplier, including to countries in Africa and West, South and Southeast Asia. Building markets takes time and effort, which can be undone by just the stroke of a pen. If at all exports are to be discouraged in order to contain domestic inflation, the right way is to impose a tariff or a minimum price below which shipments aren't permitted. Blanket export bans hurt more than help.



# WHY ARE TOMATO PRICES STILL HIGH?

#### The story so far:

As prices of tomatoes hover between ₹100 and ₹200 in various parts of the country, the Reserve Bank of India's latest monthly bulletin has highlighted that the volatility of tomato prices has historically contributed to overall inflation levels in the country.

#### How is tomato produced in India?

Tomato production in the country is concentrated regionally in the States of Andhra Pradesh, Madhya Pradesh, Karnataka, Odisha, and Gujarat, which account for close to 50% of total production. There are two major crops of tomato annually — kharif and rabi. The rabi crop hits the market between March and August annually while the kharif crop comes to markets from September. Some regions in Maharashtra and Himachal Pradesh's Solan are able to grow tomatoes during the monsoon months, while in the summer, Andhra Pradesh's Madanapalle region alone accounts for tomato cultivation in the entire country. As for tomato production, it peaked in 2019-20 at 21.187 million tonnes (MT) and has been declining since. In 2021-22, it dropped to 20.69MT and 20.62MT in 2022-23.

#### What is fuelling the price rise?

There are multiple factors for the dip in overall tomato production this year, with the two key reasons being extreme weather conditions and low commercial realisation of the crop for farmers in the months before June as well as last year.

The heatwaves and high temperatures in April and May along with delayed monsoon showers in southern India and Maharashtra led to pest attacks in tomato crops. As a result, inferior-quality varieties came to markets earlier this year, fetching farmers prices ranging as low as ₹6 to ₹11 per kg between December last year and April 2023. A lot of farmers resorted to selling whatever crop they had at these prices while some abandoned their crops. This led to a crunch in supply. Later, incessant rains in tomato-growing regions further affected the new crop. The fact that July-August is a lean production period for tomato, as it falls between yields, compounded the problem. Reports show that many farmers in the Kolar district of Karnataka, which is usually responsible for sizeable tomato supplies, shifted to beans owing to the higher prices it fetched last year.

#### Is it a seasonal issue?

The Centre has called this sudden and sharp price rise in tomatoes a "seasonal" and temporary issue. Consumer Affairs Ministry Secretary Rohit Kumar Singh stated that there is a seasonality to tomatoes, adding that the data on tomato prices of the last five years showed that the rates had risen every year at this time.

However, policy experts over the years, and now the RBI and the National Bank for Agriculture and Rural Development (NABARD), have expressed concerns over this high seasonal price volatility of tomatoes and its impact on the overall Consumer Price Index (CPI). A NABARD study from last month notes that tomato is the most volatile out of all the three TOP (tomato, onion, potato) agri-commodities. While the weightage of the food and beverages component in the combined CPI is 45.86, vegetables account for a relatively small part of this at 6.04, and the TOP commodities are even lesser at 2.20. Even with such a low weightage, the contribution of TOP to the overall CPI has been quite volatile. In June 2022, at 8.9%, tomato had the largest contribution



among 299 commodities in the CPI basket. There are multiple reasons behind this starting with how it is more perishable than onion and potato. Supply chain issues in transporting the vegetable from areas where it is grown to regions where it is not compound the problem. A July 2022 study by ICRIER notes how tomato prices have been following a cyclical phenomenon, with the same situation arising every alternate year. The year 2021 also saw prices drop to as low as 2-3 per kg for farmers. This led to a lot of them cultivating tomatoes in lesser land area and shifting to other crops, which resulted in a glut.

# How can volatility be controlled?

Policy experts say high volatility can be tamed by making some improvements. First, since tomato is highly perishable, improved value and supply chains can help with the problem. An organised value chain involves a market-focussed collaboration of a set of entities working in tandem to produce, process and market products and services in an effective and efficient manner. An ICRIER study suggests increasing the processing capacity for tomatoes. Building more processing units and linking tomato value chains to processing of at least 10% of tomato production into tomato paste and puree during peak seasons, and using them in the lean season when fresh tomato prices spike can be a solution. The development of integrated cold chains has also been suggested.

A 2022 study estimated that farmers' share of what consumers pay for tomatoes is only 32%. Eliminating middlemen and encouraging Farmer Producers Organisations to sell produce directly, as well as amending rules of Agricultural Produce Market Committees to reduce commission and other fees has been suggested.

# GOVT. OPENS PORTAL TO REFUND SMALL INVESTORS OF SAHARA

Union Home and Cooperation Minister Amit Shah on Tuesday launched a portal to refund the money of around four crore small-time investors of four cooperative societies linked to the Sahara group of companies.

Two Sahara Group entities are being investigated by several agencies including the Enforcement Directorate (ED) for alleged money laundering and foreign exchange rules violations. Launching the portal on the Ministry's website, Mr. Shah said that 1.7 crore investors will benefit in the first phase and claims up to ₹10,000 will be settled first. The money will be returned to the Aadhaar-linked bank accounts of the investors within 45 days, he said.

The four cooperative societies Sahara Credit Cooperative Society Limited, Saharayan Universal Multipurpose Society Limited, Hamara India Credit Cooperative Society limited and Stars Multipurpose Cooperative Society located in Lucknow, Bhopal, Kolkata and Hyderabad, respectively, were registered under the Multi-State Cooperative Societies Act, 2002 between March 2010 and January 2014. "There are crores of people whose hard-earned money was stuck in the four cooperative societies. As investigation was ordered and properties were attached, the small-time investors were ignored. Whenever such a scam takes place, there is a multi-agency seizure and even Lord Brahma cannot lift the restrictions. This led to a feeling of distrust in the cooperative societies," Mr. Shah said.

#### Small investors affected

"Small investors are hit the most. Take the example of Sahara, case dragged on for many years, several agencies seized their assets. We invited all stakeholders including SEBI, ED, CBI, SFIO.

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Telegram: <a href="http://t.me/DreamIAS\_Jamshedpur">http://t.me/DreamIAS\_Jamshedpur</a>



Asked, can we devise a system for the benefit of small investors? All agencies filed a petition in Supreme Court which took a landmark decision that if all agencies agree, a committee under retired SC judge will monitor the reimbursement," Mr. Shah said.

On March 29, the Supreme Court ordered the refund from Sahara-SEBI refund account to about 10 crore investors of the four cooperative societies. The court was requested that ₹5,000 crore from the Sahara-SEBI Refund Account may be used to pay depositors

# CAR DAMAGED IN FLOODS/RAIN: WHAT KIND OF INSURANCE SHOULD YOU OPT FOR?

Many parts of northern India are facing heavy rainfall leading to waterlogging, landslides and road cave-ins. Several areas, including plush localities in cities, are partially submerged in water, causing damage to properties, cars and two-wheelers. The extent of damage will be known once the water recedes. For car owners, whose vehicles are damaged by floods, repair costs can be an expensive affair. However, with proper insurance coverage, one can recover a significant portion of that cost.

#### How can floods damage cars?

Flood-damaged cars can have serious problems such as engine failure, damage to electrical and electronic systems, rust and odour. Excessive exposure to water can also lead to malfunction of the gearbox. When water enters a parked vehicle, it could also damage a car's interior. Some of these problems are apparent immediately but a few can crop up over some time.

# Do all car insurance policies cover flood-related damages?

"A comprehensive policy covers all types of accidents due to fire, flood and theft," says T A Ramalingam, Chief Technical Officer, Bajaj Allianz General Insurance.

A comprehensive car insurance policy provides cover for all damages due to floods, subject to depreciation based on the age of the car. For all plastic and rubber parts, a 50 per cent depreciation is applicable, which means only half of the total repair cost will be reimbursed and the policyholder would have to bear the balance amount. However, a standalone comprehensive car insurance policy may not protect against all the damages caused by floods.

#### Can an insurance company deny claims related to flood damage?

Though a basic comprehensive car insurance policy provides coverage for all flood-related damages, insurance companies can refuse to reimburse if there is damage to the car due to the driver's intentional action.

"If your car is parked in a basement and it gets drowned, and you report directly to the insurance company and tow it to a service centre or garage then there is no problem. But if you try to start your car after it was drowned, then your engine will go into hydrostatic lock. In that scenario, the insurance company will not cover the engine failure because it is consequential damage due to an intentional action," says Nitin Kumar, Business Head – Motor Insurance, Policybazaar.com.

A hydrostatic lock occurs when the car engine comes in contact with water. The engine gets damaged when water enters into a running engine. In case the engine is not running and water ingresses, then there may be no damage, but it is advisable to get professional assistance before starting the engine.



#### What types of car insurance coverage should one opt for?

In a standalone car insurance plan, damage to the engine due to water ingression is not covered but if one takes an add-on cover for engine failure, they can claim a significant amount of repair expenses, he said.

One can also opt for consumables cover, which protects against the cost incurred for the replacement of engine parts, including engine oils and lubricants. Other add-ons include roadside assistance, key and lock cover and loss of personal belongings.

#### THINKING BEFORE BUYING

Companies spend a lot of capital to establish their brands. Brands have customers' trust and provide standard services. According to French sociologist Jean Baudrillard, brands have a "sign value", which makes them different from unbranded products. So, in the age of conspicuous consumption, do unbranded products stand a chance?

Over time, we have been conditioned to behave in a corporate-friendly way. Branded products are expensive and exclusive. We don't pay for the product, we pay for the brand. We pay for the complex supply chains and immense resources required to run them. Most people are willing to pay extra for a product to feel exclusive. But most of the time, exclusivity is not about the quality of the product; it is just about the marketing. Furthermore, how sensible is it to pay extra for feeling that exclusivity? In the words of Ernest Hemingway, "There is nothing noble in being superior to your fellow beings. True nobility lies in being superior to your former self."

During medieval times, most Indian villages were largely self-sufficient. Though this selfsufficiency also caused a sort of stagnancy, today, isolation is not only detrimental but also hard to achieve. U.S. author Donald Miller has said, "In the age of information, ignorance is a choice." Moreover, our lifestyles today require various specialised goods and services that can only be arranged by big companies. So the new question is whom do we rely upon to satisfy our needs? If earning is a necessity, spending is a responsibility. We must be thoughtful about how we spend our money. Most of the profits go to the top management in the companies and it does not help in the upward mobility of the common people. They do create employment, but that does not seem to be proportional either. It is utilised to diversify their brand portfolio mostly. But there are a lot of individual hawkers, micro, small and medium enterprises, women's self-help groups, tribal groups and so on which provide goods at affordable prices. They do not have the luxury of advanced marketing, but they have great products to offer. Unfortunately, various traditional arts are fading away without support. This is not just about their livelihoods but also about our heritage. Not all products could be bought from them, but certain products such as edibles, khadi textiles, attar, artefacts and so on could definitely be bought from them.

Products that come from complex supply chains are not only expensive but also have a larger ecological footprint than those that come from traditional methods. In the wake of the health and ecological crisis, western consumers are turning to minimalist, vegan and organic products. This must inspire us to find our own creative ways of dealing with such issues. India has a long history of creating responsible products which enjoyed a great market prior to the Industrial Revolution. But such industries were damaged to make way for European goods. Indian philosophy never persuaded us to fill the gaps in our personalities by relying upon commodities. This does not mean that brands should be ditched at once. Rather, several brands have started making more responsible products and they do deserve attention. All we need to do is to think before we buy.



# LIFE & SCIENCE

#### WEBB SPACE TELESCOPE REDISCOVERS STAR-FORMING REGION

NASA has released an image obtained by the James Webb Space Telescope of the Rho Ophiuchi cloud complex, the closest star-forming region to earth, as the space agency marked one year since it unveiled the telescope's first scientific results.

The Webb telescope was launched in 2021 and began collecting data last year.

The Rho Ophiuchi image was an example, showing a nebula, a humongous cloud of interstellar gas and dust that serves as a nursery for new stars, located in the Milky Way galaxy, roughly 390 lightyears from earth. The nebula is only about a million years old.

"Here, we see how new suns are forming, along with planet-forming disks appearing as small dark silhouettes. These are very similar to what we think the solar system looked like more than 4.5 billion years ago," former Webb project scientist Klaus Pontoppidan, now a research scientist at the Jet Propulsion Laboratory, said.

"As the stars and planetary systems assemble, they blow apart the dusty cocoon from which they formed in violent outbursts, as seen in red jets ploughing through the cloud ... The Rho Ophiuchi core is completely obscured by huge amounts of dust, so it is essentially invisible to telescopes working in visible light, like the Hubble telescope. Yet, Webb peers through the dust to reveal the young stars within, showing the very first stages in the life of every star," Dr. Pontoppidan added.

The image, obtained by April, shows how the jets of material emanating from young stars affect the surrounding gas and dust while lighting up molecular hydrogen. In one part of the image, a star is seen inside a glowing cave that its stellar winds carved out in space.

Since becoming operational, Webb has revealed the existence of the earliest-known galaxies and black holes. It has observed large and mature but remarkably compact galaxies teeming with stars that had formed within a few hundred million years of the Big Bang event – far sooner than scientists had considered possible.

The orbiting observatory was designed to be more sensitive than the Hubble space telescope. Webb looks at the universe mainly in the infrared, while Hubble has examined it primarily at optical and ultraviolet wavelengths. Webb is able to look at greater distances and thus farther back into time.

"In just one year, the James Webb Space Telescope has transformed humanity's view of the cosmos, peering into dust clouds and seeing light from faraway corners of the universe for the very first time," NASA Administrator Bill Nelson said in a statement.

# OPPENHEIMER: FATHER OF ATOM BOMB WHO FOUND SOLACE IN THE GITA

Oppenheimer, Christopher Nolan's hugely anticipated film, will be released on July 21. The film explores the life and personality of the American theoretical physicist J Robert Oppenheimer, best known for his contribution towards creating the atomic bomb.



As Director of the Los Alamos Laboratory in New Mexico, Oppenheimer led the so-called 'Manhattan Project' — and the team of scientists who worked to harness 20th-century advances in nuclear physics for the purposes of war.

However, after witnessing firsthand the devastating potential of nuclear weapons, Oppenheimer became one of the strongest voices against their proliferation and the growing nuclear arms race between the United States and the (erstwhile) Soviet Union.

This is the story of how the so-called 'Father of the Atomic Bomb' became one of the most vocal advocates for nuclear non-proliferation.

# The dawn of the Atomic Age

History took a dramatic and momentous turn on July 16, 1945, when the first atomic bomb was tested roughly 340 km south of Los Alamos. It was known as the 'Trinity Test', and it was the culmination of years of work by the group of scientists Oppenheimer put together and led.

Less than a month later, the US dropped two atomic bombs on the Japanese cities of Hiroshima — on August 6 — and Nagasaki — on August 9. The bombs caused catastrophic devastation, flattened the two cities, and killed more than 2 lakh people — mostly civilians — by the end of 1945, including many who suffered for weeks and months due to exposure to high levels of radiation.

The bombings brought an end to World War II in the eastern theatre, with Emperor Hirohito announcing Japan's surrender on August 15. (The war in Europe had ended more than three months earlier, with the suicide of Hitler on April 30, the surrender of Nazi Germany on May 8, and the subsequent surrenders of the Nazi army in Eastern European battlefields on May 10 and 11.)

The bombings of Hiroshima and Nagasaki remain the only times that atomic weapons have been used in military conflict. But they set in motion a nuclear arms race that was to change global geopolitics forever.

The Soviets tested their first atomic bomb in 1949, the British in 1952, the French in 1960, and the Chinese in 1964. Over time, the bombs became bigger and more devastating, with potential nuclear conflict providing just one, damning certainty: mutually assured destruction.

# Oppenheimer and the Bhagavad Gita

Despite the job that he did, Robert Oppenheimer always had doubts about "bestowing humanity the possible means for its own annihilation". After witnessing the Trinity Test, his reservations were amplified manifold. And like so many others, he sought the meaning of his actions in the philosophy of the Bhagavad Gita.

In 1965, speaking on the first-ever detonation of an atomic bomb, he quoted the Gita. "Vishnu (Krishna) is trying to persuade the Prince (Arjuna) that he should do his duty, and to impress him [He] takes on his multi-armed form and says, 'Now, I am become Death, the destroyer of worlds'," Oppenheimer said.

Today, Oppenheimer's "I am become Death" quote has become inextricably tied to the nuclear age, an apt description of the terrifying and awesome destructive potential of nuclear weapons. It also provides insight into how Oppenheimer himself understood the atomic bomb and his role in creating it.



In his paper 'The Gita of J Robert Oppenheimer' (Proceedings of the American Philosophical Society, 2000), the American historian James A Hijiya wrote that Oppenheimer used the Bhagavad Gita "as an anodyne for the pangs of conscience".

"For an uncertain soldier like Oppenheimer, nervously fashioning his own atomic 'arrow', Arjuna sets a good example," Hijiya wrote. "If it was proper for Arjuna to kill his own friends and relatives in a squabble over the inheritance of a kingdom, then how could it be wrong for Oppenheimer to build a weapon to kill Germans and Japanese whose governments were trying to conquer the world?" he wrote.

#### An advocate against nuclear weapons

After President Harry S Truman decided to use the atomic bomb on Japan, which was already "essentially defeated", Oppenheimer was very upset. According to some reports, he even told President Truman that both he and the President have "blood on their hands".

In a paper published in 1946, Oppenheimer would describe the atomic bomb as "a weapon for aggressors", with "the elements of surprise and of terror...intrinsic to it". "It is a practical thing to recognise... [the] completely common peril that atomic weapons constitute for the world, to recognise that only by a community of responsibility is there any hope of meeting the peril," he would write.

This was the beginning of Oppenheimer's active opposition to nuclear weapons and their unchecked proliferation.

Immediately after the War ended, Oppenheimer became chairman of the General Advisory Committee of the newly created United States Atomic Energy Commission. During his chairmanship, he worked hard towards curtailing the proliferation of atomic weapons in the US. In 1949, the US still had only 30-odd atomic bombs.

# Political persecution in Cold War times

All this changed after 1949 when the USSR conducted its first successful test. The US now sought to not only produce more bombs, but also a much more potent bomb — a "super" bomb, as some called it.

This thermonuclear weapon or the hydrogen bomb would have 1000 times the potency of the gun-type uranium bomb (nicknamed Little Boy) that was dropped on Hiroshima. Oppenheimer was convinced that an H-bomb had no real military purpose, was "morally repugnant", and a "weapon of genocide". His opposition angered many within the US military establishment.

As a result, Oppenheimer would soon be accused of "aiding communists". He lost his security clearance after a high-profile trial in 1954. While he would continue to write and speak against nuclear weapons, he had effectively lost his political influence.

"It was Dr Oppenheimer's opposition to the H-bomb, more than anything else, that made his opponents into enemies and fuelled their suspicions of his loyalty," academic and retired Democratic US Senator from New Mexico Jeff Bingaman wrote in 'Oppenheimer and the Manhattan Project' (ed. Cynthia C Kelly 2005).

It was only in 2022, 54 years after his death, that the US government nullified its 1954 decision, and affirmed his loyalty. President Joe Biden's Energy Secretary, Jennifer M Granholm, said the



decision to revoke Oppenheimer's clearance was the result of a "flawed process", and that with time, "more evidence has come to light of the bias and unfairness of the process that Dr Oppenheimer was subjected to while the evidence of his loyalty and love of country have only been further affirmed."

The cautionary tale of Oppenheimer

# So, how do we view Oppenheimer today?

For a long time, amidst the "Red Scare" in the US, Oppenheimer was seen as a divisive figure. Now, that has changed. Today he is seen — as he should be — as a brilliant scientist, an inspirational leader, and a man who ultimately stood against his own brilliant creation for the greater good of humanity.

Oppenheimer's story also continues to be a cautionary tale for scientists around the world.

"The message that the state seemed to be sending to its scientists in the Oppenheimer case was, 'We value your necessary inventions, but not your unwanted advice'," the American historian Gregg Herken wrote in 'Oppenheimer and the Manhattan Project'. Herken argues that Oppenheimer's persecution ultimately disillusioned many scientists from working for the state, and brought an end to "the era when scientists were blindly willing to follow orders — even in wartime."

# BIRD OR DINOSAUR? CHINESE RESEARCHERS UNEARTH BIZARRE FOSSIL THAT RAISES QUESTIONS ON EVOLUTION

There is a generally accepted consensus among scientists that birds evolved from dinosaurs. However, according to the Chinese Academy of Sciences palaeontologists are yet to comprehend the extent of this dramatic evolution. Now, a 120-million-year-old fossil has further complicated the contentious subject. The recently discovered fossil seems to have a dinosaur-like head and a body that resembles a bird.

A study published in Nature Ecology & Evolution this month documents how the Cratonavis zhui has a body similar to a bird while having a "surprisingly elongated" scapula and first metatarsal bones, which makes it stand out from all other birds, including those that were discovered as fossils.

In the aviation evolutionary tree, the Cratonavis is positioned somewhere between the reptile-like dinosaur Archaeopteryx and the Ornithothoraces. The latter group had already evolved many of the characteristics that we see in modern birds.

# Studying the fossil

In order to study the fossil, the researchers first used high-resolution CT scanning while the fossil was still enclosed in its rocky resting place. Later, they digitally removed the bones and reconstructed the original shape and function of the skull. At this point, it was observed that the fossil's skull is nearly identical to that of dinosaurs like the T.rex, instead of being bird-like.

The Cratonavis could not move its upper bill independently of its skull and the lower jaw. "The primitive cranial features speak to the fact that most Cretaceous birds such as Cratonavis could not move their upper bill independently with respect to the braincase and lower jaw, a functional

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innovation widely distributed among living birds that contribute to their enormous ecological diversity," said Li Zhiheng, co-lead author of the study, in a press statement.

According to co-lead author Wang Min, the peculiar nature of the scapula (bone in the shoulder) allowed the species to better rotate its wing, compensating for its underdeveloped flight capabilities.

Also, according to the study, the transition from dinosaur to birds favoured a shorter first metatarsal bone until it reached its optimal size, which is less than a quarter of the length of the second metatarsal.

# AS GLOBAL TEMPERATURE SOARS, COOLING NEEDS WILL INCREASE

Switzerland, the U.K. and Norway will experience the largest relative surge in cooling needs if the increase in global mean temperature passes 1.5 degree C and rises to 2 degree C above preindustrial levels, according to a modelling study published in Nature Sustainability. The findings also suggest that countries in sub-Saharan Africa will have the greatest increase in cooling requirements. The Paris Agreement aims to limit the rise in the global mean temperature to 1.5 degree C.

Rising temperatures are already driving cooling demand, and it has been estimated that by 2050 the energy required by cooling could be the equivalent of the combined electricity capacity of the U.S., the European Union and Japan in 2016, as reported by the International Energy Agency (IEA).

Based on a global atmospheric General Circulation Model and historical climate data for 2006-2016, the researchers have estimated the annual changes in cooling degree days (CDDs) if the 1.5 degree C limit is overshot and warming increases to 2 degree C. The cooling degree days compare the mean outdoor temperature of a region to a standard baseline temperature (in this case 18 degree C), to determine temperature exposure and cooling requirements.

The results show that regions surrounding the Equator, particularly the sub-Saharan countries (Central African Republic, Burkina Faso, Mali, South Sudan and Nigeria) would have the greatest increase in cooling demand.

According to the study, the results of relative changes in CDDs show that countries in the Global North (Switzerland, the U.K., Scandinavian countries, Austria, Canada, Denmark, and Belgium), which traditionally experienced cooler temperatures, will experience largest relative increases in the number of days that require cooling. "Eight of ten are European nations, which are unprepared for high temperatures and will require large-scale adaptation to heat resilience," they write.

The authors note that there are still uncertainties regarding when these temperature increases will occur across different countries and the role that changes in other parameters, such as humidity, will play. However, they conclude that their results indicate that even small changes in temperatures will affect heat exposure and cooling demand, driving the need for adaptations. "Immediate and unprecedented adaptation interventions are required worldwide to be prepared for a hotter world," they write.

# POLLUTION EFFECT

A study has found that an insect's ability to find food and a mate is reduced when its antennae are contaminated by particulate matter from industry, transport, bushfires, and other sources of air

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pollution. Using a scanning electron microscope, the researchers found that as air pollution increases, more particulate material collects on the sensitive antennae of houseflies. This material comprises solid particles or liquid droplets suspended in air and can include toxic heavy metals and organic substances from coal, oil, petrol, or woodfires. They exposed houseflies for 12 hours to varying levels of air pollution in Beijing and then placed the flies in a Y-shaped tube 'maze'. Uncontaminated flies chose the arm of the Y-maze leading to a smell of food or sex pheromones, while contaminated flies selected an arm at random, with 50:50 probability. Neural tests confirmed that antenna contamination compromised their capacity to detect odours, says a release.

# CORAL BLEACHING

Record temperatures around the world have left animals, including humans, in dire straits. Of them, corals are particularly vulnerable: when the water around them becomes too warm, they are susceptible to bleaching.

When corals lose their vibrant colours and turn white, they have bleached. This appearance-based definition is valuable because, just by the corals' pallor, an observer can say that the surrounding water has changed somehow. There is more to bleaching, however: most corals are home to a type of algae called zooxanthellae, which give the corals their colours as well as have a symbiotic relationship with them. The zooxanthellae provide amino acids and sugars, and receive many minerals and carbon dioxide in return.

When the ocean environment changes – for example, if its temperature rises beyond a point, it becomes too acidic, or it becomes too bright – the zooxanthellae living within the coral leave. As they do, the coral fades until it appears to have been bleached; if the corals continue to be stressed, they won't welcome the algae back and eventually die. Other stressors include low tides and water pollution, as well as ecosystem changes wrought by the climate crisis.

Bleaching is not always a death knell. Some colonies have been known to survive a bleaching event, like, famously, one near Japan's Iriomote Island: it was bleached in 2016 but showed signs of recovery in 2020.

# EXPRESS VIEW ON UNAIDS REPORT: AIDS AND INEQUALITY

At a UN General Assembly Meet seven years ago, countries agreed to a bold target of eliminating AIDS by 2030. Since then, research on the disease has made remarkable headway and AIDS mortality has come down appreciably. But the medical knowledge does not seem to be equally distributed. An UNAIDS annual update released last week highlights that poverty and gender inequality remain barriers to achieving the 2030 target. HIV patients from poor and marginalised communities are not only left behind but they continue to be stigmatised. The skew against the most vulnerable is particularly high in parts of West Asia and large parts of Africa. The report highlights that though lower and middle-income countries have substantially increased their overall health budgets, their AIDs related expenditure is largely reliant on external funds — and these are not enough.

There is no cure for AIDs, but there have been stray reports of people getting cured of HIV — the viral infection that leads to AIDS. Advances in medical sciences have made it possible for HIV patients to live long and healthy lives with very little chance of transmitting the virus. Globally, about 70 per cent of people with HIV had suppressed viral loads in 2022. But the picture gets



complicated because "hyper-masculinity" prevents many heterosexual men from getting tested for HIV or seeking treatment for it. At the same time research has also shown that in several areas, women patients are less likely to receive optimal HIV treatment. The UNAIDS data also highlights the need to bring down the gender disparity in access to medical care — 76 per cent of men patients have the more contained form of the disease compared to 67 per cent of women with HIV. The viral suppression rate amongst children is an abysmal 46 per cent. There are still major gaps in basic HIV prevention programmes and supportive programmes for adolescent girls and young women in most of the countries with high HIV burdens, the report points out. Studies by the Global HIV prevention coalition, for instance, show that in sub-Saharan Africa, a little more than 40 per cent of the districts with high HIV incidence are covered with dedicated prevention programmes.

The report highlights that anti-AIDS programmes have succeeded the most when they have used an adroit mixture of science and gender-equality communication, public health extension and community involvement. Civil society organisations, for example, have played an important role in bringing down India's HIV infection rate. But the country has also seen patient protests, including last year, over drug shortages. Like several other nations, India has work to do in enabling the poor and marginalised patients.

# UNETHICAL TO CONTINUE USING POLIO-CAUSING ORAL VACCINES

In 1988, the World Health Assembly declared WHO's commitment to global eradication of polio by 2000. But in 1993, the goalpost was shifted — the goal was to eradicate only wild poliovirus globally by 2000. That meant eradicating vaccine-derived poliovirus (VDPV) and vaccine-associated paralytic poliomyelitis (VAPP) was no longer the objective.

The reason — developing countries using oral polio vaccine reported many vaccine-derived or vaccine-associated polio cases annually. Meanwhile, the developed countries switched to inactivated polio vaccine thus eradicating polio decades ago.

# Vaccine dilemma

Though the last case of type 2 wild poliovirus was reported in October 1999 from India (and declared eradicated globally in 2015), more than 90% of vaccine-derived poliovirus outbreaks are due to type 2 virus present in oral polio vaccines. Also, 40% of VAPP are caused by type 2 oral polio vaccine. Similarly, the last case of type 3 wild poliovirus was reported in November 2012 (and declared eradicated in 2019). But many cases of VAPP from type 3 virus occur in countries using the vaccine.

Surprisingly, the Global Polio Eradication Initiative (GPEI) has never reported VAPP cases throughout the 34 years of polio eradication efforts. And the Indian government does not count VAPP as polio as such cases are sporadic and pose little or no threat to others.

This is concerning as the number of VAPP-compatible cases showed an increasing trend in India from 1998 to 2013, so much so that they outnumbered the polio cases caused by wild poliovirus since 2004, as per a 2014 report in the International Journal of Infectious Diseases.

According to a 2015 Perspective piece in Indian Pediatrics, VAPP cases occur at a frequency of two-four cases per million birth cohort per year in countries that use oral polio vaccine. Based on this incidence rate, an estimated 50-100 children might suffer from VAPP every year in India. Despite India not maintaining any record of VAPP cases, the incidence of such cases for three years — 181, 129 and 109 in 1999, 2000 and 2001, respectively — have been reported.



With type 2 wild poliovirus being eradicated and all type 2 polio cases being vaccine-derived, there was a global switch from trivalent (containing all three variants) to bivalent (type 1 and type 3) oral polio vaccine in 2016 to prevent any more type 2 vaccine-derived poliovirus.

WHO's SAGE said in 2015 that switching from trivalent to bivalent OPV vaccine and introducing one dose of IPV will reduce the occurrence and ultimately eliminate all vaccine-derived type 2 poliovirus cases.

Yet, the number of vaccine-derived type 2 poliovirus outbreaks have only increased sharply after the global switch to bivalent oral polio vaccine. From only two countries reporting outbreaks that caused 96 VDPV type 2 cases in 2017, the number of outbreaks increased to five in 2018.

The number of VDPV type 2 cases increased further to 251 from 15 countries in 2019. In 2020, the VDPV type 2 cases peaked at 1,081 from 26 countries, many of which were previously polio-free. In 2021, 682 such cases were reported and 675 cases in 2022.

# Type 2 novel OPV

A type 2 novel oral polio vaccine that is genetically modified such that is to less likely to revert to neurovirulence unlike the Sabin vaccine and therefore cause less type 2 vaccine-derived poliovirus cases was authorised by WHO under Emergency Use Listing in November 2020 and first used in the field in March 2021. But as of May 2023, the novel vaccine, which is to be used only in type 2 VDPV outbreak situations, has already caused three type 2 VDPV cases.

"All available clinical and field evidence continues to demonstrate that type 2 novel oral polio vaccine is safe and effective and has a significantly lower risk of reverting to a form that causes paralysis in low immunity settings when compared to monovalent oral polio vaccine type 2 (mOPV2)," says an April 20, 2023 WHO report. However, this vaccine does not address VAPP cases arising from continued use of oral polio vaccine.

#### **Expert appeals**

"For achieving zero incidence of polio by 2000, the GPEI should have transitioned to the IPV in low- and middle-income countries and phased out the oral polio vaccine, since it causes vaccineassociated paralytic polio," virologist Dr. Jacob John and three others write in The Lancet. "Since the future polio-eradicated world can use only the IPV, transition to IPV is the sensible way forward."

# A NEW DIARRHOEA-CAUSING PARASITE FOUND

A three-year surveillance study from March 2017 to February 2020 in Kolkata has found an amoeba pathogen that previously did not cause any amoebiasis (a form of diarrhoea) in humans has now become pathogenic. Surprisingly, a team of researchers from the Kolkata-based National Institute of Cholera and Enteric Diseases (ICMR-NICED) found that not only had the amoeba pathogen — Entamoeba moshkovskii — turned pathogenic, it was the leading cause of amoebic infections in humans; more than half of the amoebic infections were caused by this. The researchers studied the stool samples of diarrheal patients in Kolkata. Of particular concern is the fact that infections caused by E. histolytica, which used to be the predominant amoeba pathogen that caused amoebiasis, were decreasing and the newly pathogenic E. moshkovskii was taking its place. The researchers identified a few mutations that signify an essential role of the new



pathogenic parasite in adapting to the gut environment of humans or in acquiring other enteric pathogens.

Diarrhoea can be caused by bacteria, viruses and amoeba pathogens. In the study, the team of researchers led by Dr. Sandipan Ganguly of NICED found nearly 5% of patients with diarrhoea that was caused by different Entamoeba species and over 3% of patients were infected with E. moshkovskii. While there were no statistically significant differences between infections in males and females, the infections were most predominant in children aged 5-12 years.

# THE LINK BETWEEN ENDOMETRIOSIS AND AN INFECTIOUS BACTERIUM

Endometriosis, a reproductive disease affecting one in 10 women worldwide, involves the growth of lesions on pelvic organs such as the ovaries.

These lesions are composed of endometrium, a layer of tissue lining the uterus. It causes infertility, chronic pain during periods, pelvic pain, bloating, nausea and fatigue and is also associated with depression and anxiety. A new study points to a link between a bacterium associated with infections in the oral cavity, and endometriosis.

#### Retrograde menstruation

Scientists worldwide have come up with different ideas of the disease's cause. One is retrograde menstruation – when some part of the menstrual blood flows backwards, into the abdominal region, instead of flowing out of the vagina. But this is common, occurring in close to 90% of menstruating women, whereas endometriosis affects only 10%.

Another possibility: The inability of the immune system to detect and eliminate blood cells from retrograde menstruation, allowing it to persist in the pelvic region, points to some dysfunction in the immune system.

The condition has also been linked to genetic and metabolic factors.

But for all their efforts, scientists are yet to identify the root cause of endometriosis. So treatment options are limited to hormone therapies, contraceptive pills and laparoscopic surgery to remove the lesions. (The last can control the symptoms but can't prevent the lesions from growing back.)

#### Link to gut microbes

There's a link between inflammatory bowel disease – among others – with endometriosis; the latter's proximity to the gut has had scientists asking whether a bacteria could be the problem.

An October 2022 paper co-authored by Dr. Kommagani reported that people with endometriosis had gut dysbiosis – an imbalance in the various microbe populations in the gut. He said that the altered microbiota (range of microorganisms) could help endometriosis progress, but also that more research will be required on this front.

Fusobacterium already has known links to infections of the gum, vagina, and rectum – yet it isn't commonly found in meaningful quantities in the gut. Experts have suggested that it could be moving to the abdomen through the bloodstream or to the vaginal region from the rectum.

Endometriosis currently takes six years on average to be diagnosed. And even after a diagnosis, few treatment options are available.

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#### INDIA REPORTS A RECORD 93% DPT3 IMMUNISATION COVERAGE IN 2022: WHO

The WHO and UNICEF estimates for national immunisation coverage for 2022, released on Tuesday, showed that in the WHO South-East Asia Region, the coverage rate for DPT3 recovered to the pre-pandemic level of 91%, a sharp increase from the 82% recorded in 2021. The region also witnessed a 6% improvement in the coverage of the measles vaccine, rising to 92% in 2022 from 86% in 2021.

The number of zero-dose children (those that have not received even the first dose of DPT vaccine) halved to 2.3 million in 2022 from 4.6 million in 2021. Similarly, the number of partially vaccinated children (those that have received at least one dose of DPT vaccine but did not complete the primary series of three doses) reduced to 6.5 lakh in 2022 from 1.3 million in 2021.

The region had the best immunisation recoveries among all the WHO regions. This can be majorly attributed to the efforts being made by India and Indonesia. Indonesia reported a DPT3 coverage of 85% in 2022, the same as in 2019, but rising sharply from the 67% recorded in 2021. Bhutan recorded 98% and the Maldives 99%, surpassing their pre-pandemic rates. Bangladesh with 98% and Thailand 97% demonstrated consistency in routine immunisation coverage throughout the COVID-19 pandemic and beyond, the report said.

# CAN YOU HAVE ASPARTAME IN YOUR TEA, DIET COLA? TOP DIABETOLOGISTS DECODE WHO REPORT

What the two international committees of the WHO, which have been analysing the health impacts of aspartame, have done is to alert us to health risks of aspartame, help us make conscious choices and confine its use within safe limits.

One of the committees classified the artificial sweetener as "possibly carcinogenic to humans," meaning exposure to aspartame may cause cancer though there isn't any definitive proof to show that it was indeed linked to the development of specific cancers. The second committee, tasked with determining the safe levels of consumption, said that there was no evidence to show that the already established acceptable daily intake (ADI) needed to be reduced.

#### Does this mean that I can get cancer from taking aspartame?

No. At least, not in the quantities that are usually consumed. Adding a couple of pellets of aspartame to your tea or coffee or drinking a diet soda every once in a while are unlikely to cause cancer. Says Dr V Mohan, chairman of Dr Mohan Diabetes Speciality Centre in Chennai, "My suggestion to people, who are taking aspartame, is to continue to use it but not in too large a quantity. Contrary to expectations that there would be strong evidence for aspartame being procarcinogenic, the WHO report concluded that in the permissible quantities aspartame may be continued. The report suggested that only if consumed in overdoses — much above the permissible dose of aspartame — could there be a possible carcinogenic effect. And, even this was based on a low level of evidence."

Maintaining his recommendation that diabetics continue to use the commonly available aspartame in moderation, Dr Ambrish Mithal, Chairman and Head of Endocrinology and Diabetes at Max Healthcare, says, "The report is very detailed, taking into account all available evidence. But the conclusion is that anything in moderation is not harmful. It is easy for scientific papers to say don't use artificial sweeteners, but when you are interacting with patients in the real world,

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that is not possible. We cannot even recommend moving away from aspartame to something else as it is one of the most commonly available sweeteners. Besides, what would you switch to? Sucralose seems to be okay, but again there is some evidence to suggest that it alters the gut microbiota. There is no evidence of adverse events with stevia. However, that could just be because the product is relatively newer and more studies are needed," he says.

Still, the WHO report, feels Dr Anoop Misra, Chairman, Fortis-C-DOC Centre of Excellence for Diabetes, Metabolic Diseases and Endocrinology, is significant. "The WHO report says that there is limited evidence that aspartame could be carcinogenic. But this announcement is very important. That is because people should be aware of what they are consuming — they shouldn't keep on eating or drinking products with such artificial sweeteners thinking that it is completely safe. It can be consumed in limited quantities but people shouldn't go overboard with it. People should also be aware that sometimes the packaged products contain more than one sweetener, then the impacts of the other should also be considered. For example, sucralose has been shown to produce chemicals that can damage DNA and cause leaky gut in laboratory studies or how erythritol has been linked to increased risk of cardio-vascular diseases. It is also known that intensely sweet, zero-calorie products may also lead to obesity, diabetes, and heart disease in the long run because it makes people crave for other calories," he says.

#### What does WHO say about consumption of sugars and artificial sweeteners, including aspartame?

With obesity and associated non-communicable diseases on the rise, the WHO recommends cutting down on consumption of free sugars — sugar added to foods by manufacturers, in the kitchen, or on the table. The inter-government body strongly recommends reducing the consumption of free sugars to 10 per cent of the total energy intake, which translates to roughly about 12 teaspoons a day. A further reduction to five per cent of total energy intake or six teaspoons of sugar a day will provide additional health benefits, it says. The challenge with keeping a count of this sugar is that a lot of it comes from added sugars in packaged foods.

A couple of months ago, the WHO came out with the recommendation that artificial sweeteners such as aspartame not be used for achieving weight control or reducing the risk of non-communicable diseases. Its report said that artificial sweeteners in the long run did not help keeping the weight in check and possibly increased the risk of Type 2 diabetes, cardiovascular diseases and premature death.

# WHY ARE HOLLYWOOD WRITERS AND ACTORS ON STRIKE?

#### The story so far:

On July 14, Hollywood actors joined the ongoing strike of the Writers Guild of America (WGA), after their contract negotiations with studios broke down. This is Hollywood's biggest labour fight in six decades and marks the first dual strike of both writers and actors since 1960.

#### Why did writers go on strike?

The WGA is the union of almost all screenwriters behind Hollywood shows, films, and other television dramas. The board of the union, on behalf of its 11,500 writers negotiates a contract every three years with the Alliance of Motion Picture and Television Producers (AMPTP), comprising all big Hollywood studios including Warner Bros. Discovery, NBC Universal, Paramount Pictures and all streaming services from Netflix to Peacock. The contract negotiations cover issues like deciding base pay for writers, pension benefits, residual payments, and so on.



This time around, the WGA's contract with the AMPTP expired on May 1, and six weeks of negotiations leading up to the deadline did not see a consensus over the writers' demands and what studios were willing to offer. Therefore, the WGA announced on May 2 that its members would go on strike.

#### What are writers demanding?

The current strike is largely about the era of streaming and its ripple effects on the screenwriting profession. According to the WGA, while the profits of the entertainment industry has ballooned from \$5 billion (combined entertainment operating profits of Disney, Fox, Paramount, NBC, Universal) in 2000 to a whopping \$30 billion in 2019 with the addition of Netflix, what writers earn has actually shrunk. The Guild notes that the average pay of the writer-producer position has gone down by 4% over the past decade. Adjusted for inflation, it says, this is a 23% decline. This is also because streaming has meant fewer guaranteed weeks of paid work for writers. A traditional network television season calendar would give writers about 42 weeks of work in 2000, but as seasons of shows get shorter, an average writer has just about 20 weeks of work for streaming shows, The Washington Post points out.

Another major issue highlighted by the WGA is the concept of downsizing known as "mini rooms", that has come about in recent years, increasingly replacing traditional writers' rooms. Traditionally, multiple writers with different levels of experience would form a writer's room that would be involved throughout the process of a show or film's production. However now, studios and streaming platforms are creating mini rooms where writers first work on writing the whole show and once it is approved and production begins, only a few of them are retained through production.

Residual payments are another concern. Residuals are additional payments writers get each time a show or film is aired again or licensed. However, platforms like Netflix offer smaller residuals and do not disclose internal data about the viewership of a show with writers, but give fixed residuals.

# Why have actors joined the strike?

Talks between the Screen Actors Guild – American Federation of Television and Radio Artists (SAG-AFTRA) and the AMPTP also broke down on Thursday. The issues remain more or less the same — shorter seasons, lesser work and lower base pay, as well as residuals. Notably, AI has emerged as a crucial area where actors and writers want production houses to put guardrails so their professions are not endangered in the near future. Writers are demanding that AI not be used to create new and unpaid content from their original work and their scripts not be used to train AI like language learning models. As for the actors, they do not want studios to use their AI-created likeness or performances without their consent or without compensation.

#### How big is the economic impact?

It is patent to note that the dual strike does not just affect its participants but a large number of those employed in production related jobs and tertiary industries such as costume, catering, lighting, for hire location providers, and so on. The last writers' strike in 2007 which lasted 100 days cost \$2.1 billion to California's economy alone.